

The Financial Planning Process



Feature Story

Kayla and her friends, like most college students, saw college graduation as a big milestone, representing the beginning of their lives as independent adults. What they didn't anticipate was graduating in the middle of a major financial downturn, having trouble finding career employment, and moving back in with Mom and Dad.

Recent evidence suggests that as many as 20 percent of young adults are now living with their parents—about twice as many as did so in past decades. In fact, as more kids come home to roost with their Baby Boom parents, it's increasingly common to hear them called the “boomerang” generation.

The boomerang phenomenon in the United States is often the result of family financial decisions. Many college students have taken on significant debt in the form of credit cards, student loans, and car loans. In Kayla's case, she graduated college with \$30,000 in student loans and a small car loan. Although her new job pays \$40,000 per year, the student loan payment puts a big strain on her budget, so she's grateful that her parents are letting her live with them rent-free. Her plan is to put most of her earnings toward paying off her student loans as quickly as possible.

Personal financial success doesn't just happen—you have to put time and effort into educating yourself about important financial tools and products, and you need to take the time to put together a plan that can adapt to your changing life circumstances. This book will provide you with a roadmap for achieving your financial goals—everything from setting goals and developing a plan to buying insurance and investing for retirement. By the end of this course, you'll be able to put together a comprehensive financial plan that will take you from graduation to your future.

LEARNING OBJECTIVES	TOPICS	DEMONSTRATION PROBLEMS
<p>1.1 Describe the personal financial planning process, and explain how the elements of a comprehensive financial plan fit together.</p>	<p>1.1 What Is Personal Financial Planning?</p> <ul style="list-style-type: none"> • Why Study Personal Financial Planning? • The Personal Financial Planning Process • Elements of a Comprehensive Financial Plan 	

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LEARNING OBJECTIVES	TOPICS	DEMONSTRATION PROBLEMS
<p>1.2 Describe how individual characteristics and economic factors influence personal financial planning.</p>	<p>1.2 Factors That Influence Financial Planning Decisions</p> <ul style="list-style-type: none"> • Individual Characteristics and Your Financial Plan • Economic Factors and Your Financial Plan 	<p>1.1 Calculating Percentage Change</p>
<p>1.3 Create a prioritized list of short-term and long-term personal financial goals.</p>	<p>1.3 Setting Short-Term and Long-Term Financial Goals</p> <ul style="list-style-type: none"> • Why Goals Are Important • The Goal-Setting Process 	<p>1.2 What Monthly Payment Is Necessary to Pay Off Your Debt?</p>
<p>1.4 Know when and how to find qualified financial planning professionals.</p>	<p>1.4 Selecting Qualified Financial Planning Professionals</p> <ul style="list-style-type: none"> • When Do You Need a Financial Planner? • Factors to Consider in Choosing a Planner • How Are Planners Paid? 	
<p>1.5 Consider opportunity costs and marginal effects in making personal finance decisions.</p>	<p>1.5 Making Effective Decisions</p> <ul style="list-style-type: none"> • Make Reasonable Assumptions • Apply Marginal Reasoning • Consider Opportunity Costs • Use Sensitivity Analysis • Decision-Making Styles 	

1.1

What Is Personal Financial Planning?

LEARNING OBJECTIVE 1.1

Describe the personal financial planning process, and explain how the elements of a comprehensive financial plan fit together.

INTERACTIVE

You can also take this quiz in [WileyPLUS](#). See **Interactive: Financial Literacy Quiz**.

How much do you already know about personal finance? Complete **Interactive: Financial Literacy Quiz** to assess your financial literacy. If you know most of the answers, you're in better shape than the average person. Surveys show a relatively low level of financial literacy in the United States—with many people not even understanding basic concepts.

In this chapter, you will begin improving your financial literacy with some important background material. You'll learn about the importance of financial planning, the elements of a comprehensive financial plan, and the factors that influence financial decision making. After

INTERACTIVE **Financial Literacy Quiz** Test your knowledge of basic personal finance concepts by taking this quiz.

1. For a person's standard of living to improve, expenses must decrease.	True	False
2. If your total assets are \$10,000 and your total debts are \$11,000, your net worth is \$21,000.	True	False
3. If your taxable income falls in the lowest federal tax bracket, you pay no U.S. federal income tax.	True	False
4. A Roth IRA allows tax-free withdrawals at retirement.	True	False
5. Capital gains are taxed at a lower rate than ordinary income.	True	False
6. Checking your account balance at an ATM is now considered an effective way of balancing your checking account.	True	False
7. Making the minimum payment on a credit card bill each month is an effective way to be sure your balance will be paid back in a reasonable amount of time.	True	False
8. Fixed-rate mortgage loans usually have lower rates of interest than adjustable-rate loans.	True	False
9. Student loan debts cannot be discharged by a bankruptcy.	True	False
10. Young male drivers pay higher auto insurance rates than young women because they tend to be worse drivers.	True	False
11. If you are injured at work, your employer is required to pay your medical and rehab costs in most states.	True	False
12. The major advantage of term life insurance over permanent life insurance for young, healthy people is that it is very inexpensive to buy a lot of coverage.	True	False
13. A major difference between stock and bond investments is that bonds are usually less risky.	True	False
14. When you buy stock issued by a company, you become an owner of the company.	True	False
15. Index funds are generally expected to be low-risk investments.	True	False
16. A divorcee or widow who never worked outside the home is not eligible for Social Security benefits because she never paid into the system.	True	False
17. Money to be received in the future is not as available as money received today.	True	False

Answers: 1. F; 2. F; 3. F; 4. T; 5. T; 6. F; 7. F; 8. F; 9. T; 10. F; 11. T; 12. T; 13. T; 14. T; 15. F; 16. F; 17. T

reading this chapter, you'll know how to set goals, select financial planning professionals, and implement general strategies for making financial decisions.

Why Study Personal Financial Planning?

As a college student, you're likely to have made several important financial decisions already. **Table 1.1** includes a few of the questions you may already have asked.

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, tax-planning, insurance, and investments. Understanding these topics will help you in many

TABLE 1.1 Common Personal Finance Questions

Simple Decisions	Complex Decisions
What is the best way to fund my college education?	Is graduate school a good investment?
How can I reduce my credit card debt?	How much should I contribute to my 401(k) retirement plan?
Can I afford to replace my car's transmission?	Should I start a savings plan to fund my child's college education?
Where should I go to buy my auto insurance?	How do I decide among the employee benefit options that my employer offers?

ways. You'll make better decisions when you buy an automobile, 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. In this course, you'll learn the elements of personal financial planning and how to prepare your own financial plan. Unlike many classes you'll take in college, this course will help you to gain knowledge, skills, and abilities that have immediate application to your own life situation. Furthermore, these benefits will continue throughout your life. In short, mastering the subject matter in this course will provide you with the knowledge and skills you need to achieve personal financial success.

What Are the Benefits of Personal Financial Planning?

The primary goal of personal financial planning is to develop and achieve financial goals, such as buying a home, making a major consumer purchase, supporting a growing family, and saving for retirement. But people who have their finances in order gain important social and psychological benefits as well. Generally, they feel less stressed and experience improved relationships with friends, family, and coworkers. As many couples know, financial difficulties can be a major contributor to marital problems. Most people also find that being financially self-sufficient improves their self-esteem.

Why Do People Avoid Financial Planning?

Surveys indicate that most people recognize the need to manage their finances, but fall short of that goal. Why does this happen? One or more of the following reasons are often given as explanations:

- They don't believe their math and finance skills are adequate.
- They fear failure.
- They expect someone else to take care of it.
- They aren't interested.
- They don't know whom to trust.
- They are too busy.
- They are overwhelmed with the quantity of information and don't know where to start.

Reflection Question 1

Are there aspects of your personal finances that you have avoided dealing with? If so, what are your reasons?

If you've used some of these excuses yourself, rest assured that you're not alone. You might be able to relate to the all-too-common situation of David Keller. During his first year in college, David used his credit card for extras such as concert tickets, occasional pizzas, movie tickets, and music downloads. David wasn't employed, so the credit card balances grew, and he began to have trouble meeting his minimum payments. With late charges and over-limit fees, his situation quickly got out of control. David was too embarrassed to tell his parents, even when he started getting stomachaches from the stress. Fortunately, on the advice of a friend, David signed up for a personal finance course at the beginning of his second year in college. By establishing a budget and taking a part-time job to pay down his credit card debt, David was able to get things in order.

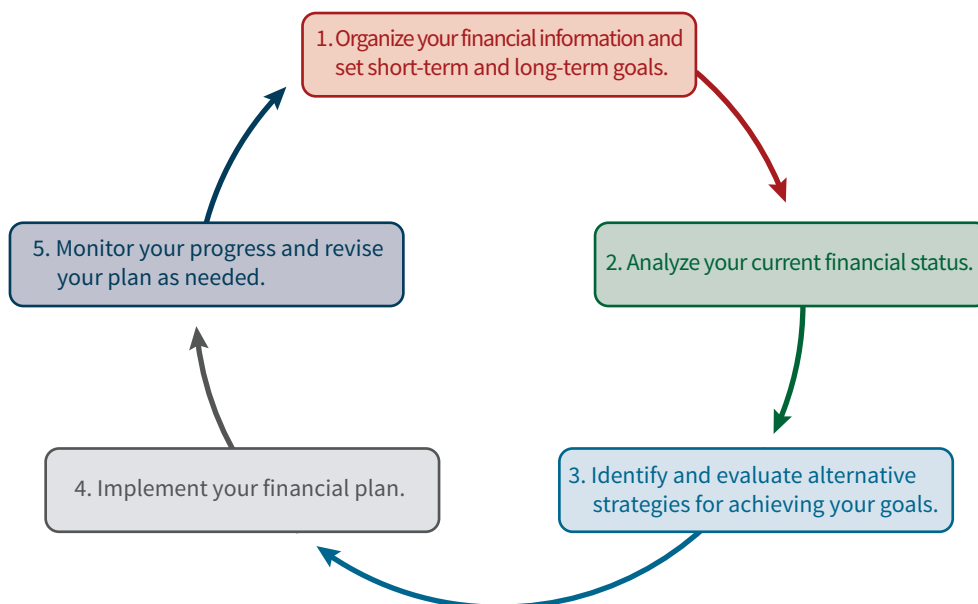
What Problems Can Be Caused by Poor Financial Planning?

What happens to people who don't manage their finances well or at all? David's example illustrates just a few of the many unfortunate outcomes—stress, worry, embarrassment, and difficulty in meeting current obligations. Individuals and households experiencing financial distress have trouble handling a financial emergency or unexpected job loss. They can end up as the victims of “get rich quick” scams. Their children may be unintended victims, because high-quality educational opportunities and extracurricular activities may not be affordable without advance planning. Many people suffer from anxiety or depression related to their finances and may, as a result, have difficulty maintaining personal relationships. Spouses who lack an understanding of household finances often find themselves in serious trouble upon divorce or widowhood. And adult children who mismanage their finances may end up living with their parents well into their 20s and 30s. For all these reasons, mastering the financial planning process is well worth your investment of time and effort.

The Personal Financial Planning Process

Figure 1.1 illustrates the five steps in the financial planning process. This process is fundamental to all aspects of financial planning, so we'll revisit it throughout the text as we apply it to different financial planning decisions. In each area of your financial plan, applying this process will help you to make better financial decisions.

FIGURE 1.1 The Financial Planning Process All personal financial decisions should be based on this process.



By the time you get to the end of this course, thinking in terms of the financial planning process will be second nature to you. You'll also know more about your own financial habits and attitudes. Personal financial planning will help you make better decisions about money, but its effect on your life will go much further than that. Nearly every aspect of life has a financial component.

Next, let's examine each of the steps in the personal financial planning process in a little more detail.

Step 1: Organize Your Financial Information and Set Short-Term and Long-Term Goals

Before you can move forward with your financial plan, you need to determine where you are starting from—where your money is coming from and where it is going. To do this effectively and efficiently, you first need to collect and organize your financial information. This step may be more difficult if you are “organizationally challenged,” but you'll learn more about how to accomplish it in the next chapter.

The process of setting goals should involve some introspective assessment of *why* you have the goals that you do. For example, are your objectives focused on your own needs or the needs of others? Are your objectives related to pressures from family or peers? Keep in mind, too, that short-term and long-term goals change over time and may be influenced by changes in economic circumstances.

Step 2: Analyze Your Current Financial Status

After you've collected all of your financial information, you'll need to have some way of evaluating how well you're doing. In Chapter 2, you'll learn how to create personal financial statements and how to quantitatively assess your current financial position to establish a baseline against which you can measure improvement. This step will also help you identify which areas you need to work on and what funds you may have available to apply to achieving your goals. Once you have this process in place, it will be easy to track your progress over time.

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

Although every person's goals and objectives are unique to that person's circumstances, the strategies for achieving them are similar. In general, in order to have more money available to attain current or future goals, you have to either reduce spending or increase income. You'll need to identify alternative strategies for achieving each of your goals and compare the costs and benefits of each strategy. In future chapters, we'll go into the details of specific strategies for each area of your financial plan. To effectively compare alternatives, you'll need to understand applicable tax rules and the time value of money.

Step 4: Implement Your Financial Plan

Using the information you developed in Step 3, you can decide on how best to achieve your goals. How do you make such decisions? How do you know which strategies are the best ones for achieving your goals? As you proceed through this course, you'll acquire fundamental knowledge and master analytical tools that will 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.

Step 5: Monitor Your Progress and Revise Your Plan as Needed

Many changes will occur over the course of your life. Not only will changes in your personal circumstances (graduation, a new job, marriage, children) affect your financial planning objectives and strategies, but changes in economic conditions may also necessitate revision of your

Case Study 1.1



theboone/iStock/Getty Images

The Naughtons Revise Their Financial Plan after Job Loss

Problem

Jack and Sandy Naughton had stretched their finances a little to buy a house. They also were planning to increase their retirement account contributions and save for a vacation trip. Then, unexpectedly, Jack was laid off from his job. Jack and Sandy needed to drastically change their goals, returning to Step 1 of the financial planning process. Instead of saving for retirement and vacations, their new goals were to pay their bills and find employment for Jack.

Strategy

In applying Step 2 of the financial planning process, Jack and Sandy evaluated how long they could pay their household bills and where they could cut back on expenditures. Thankfully, they had a small emergency fund, which allowed them to meet expenses in the short run. Jack found a new job, though his new lower salary was not enough to cover the couple's monthly expenses. To achieve the goal of meeting expenses, the two made the following list of alternative strategies:

- Find Sandy a job.
- Sell or refinance the house to reduce payments.
- Sell other assets (car?).
- Dip into savings.
- Borrow money.

Each of these strategies has costs and benefits. For example, selling the house would reduce their expenses, but the selling price might not be high enough for them to pay off their mortgage and cover the selling costs. Furthermore, although mortgage interest rates had declined, the Naughtons' lower household income meant that they wouldn't be able to qualify for a new loan on a smaller house.

Solution In the end, Sandy got a job as a cashier at a local retail store, and Jack took a second part-time job on the weekends.

plan. An effective financial plan must be adaptable to changing circumstances. Thus, Step 5 takes you continually back to Steps 1 through 4.

Interactive: Applying the Financial Planning Process will give you some practice in applying the financial planning process. To make the process a little more concrete, let's apply it to a specific household's situation in **Case Study 1.1**.

Although this is a hypothetical example, layoffs are common, particularly during economic downturns. Fortunately, the Naughtons had the financial capacity to make ends meet for a short period of unemployment, and both Jack and Sandy were able to find jobs. Many families live from paycheck to paycheck and have no emergency fund or savings to draw on in the event of a crisis.

INTERACTIVE

See **Interactive: Applying the Financial Planning Process** in **WileyPLUS**.

Elements of a Comprehensive Financial Plan

In this course, you'll begin the process of building a comprehensive, integrated financial plan. Critical to the success of this plan is that you approach its creation in a logical order. The steps to success in **Figure 1.2** illustrate the elements of a comprehensive financial plan.

These steps, and how they relate to the material presented in this book, are as follows:

- 1. Establish a firm foundation.** Setting goals, acquiring necessary tools and skills (Chapters 1–4).
- 2. Secure basic needs.** Short-term planning for security and liquidity (Chapters 5–6).
- 3. Build and protect wealth.** Long-term planning to protect income and wealth against losses (Chapters 7–9) and to meet future needs (Chapters 10–14).

Your first step toward success in reaching your personal financial goals will be to establish the necessary foundations by learning about the personal financial planning process, acquiring

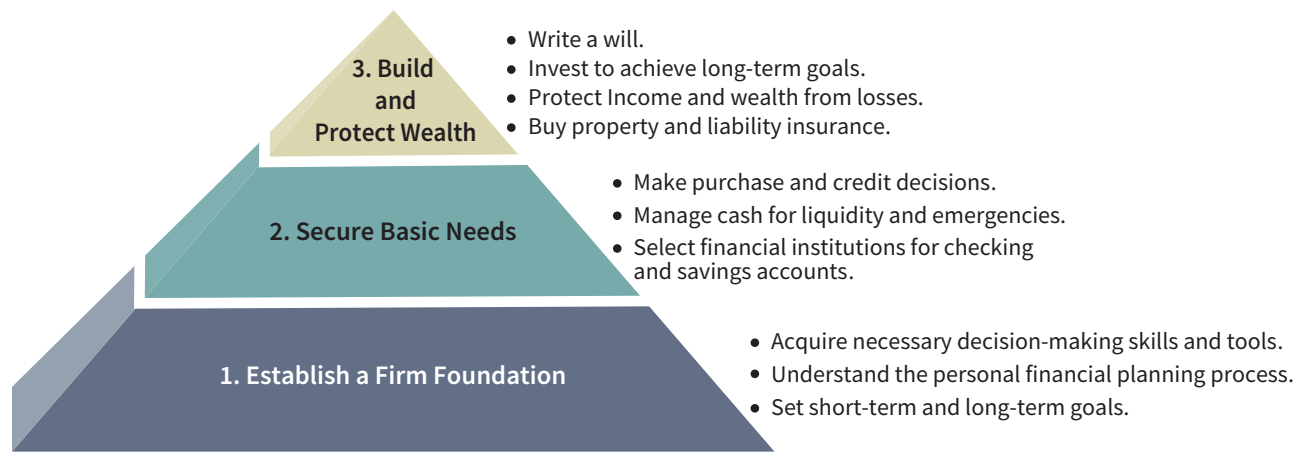


FIGURE 1.2 Elements of a Comprehensive Financial Plan To have the greatest chance of success, you should build your financial plan from the bottom up, completing the necessary activities for each part of your plan before jumping to the next.

the necessary tools, and considering the tax effects of your financial decisions. The second step involves securing your basic needs, such as a car and housing, setting aside funds for financial emergencies, and buying insurance. Once your basic needs have been taken care of, you can begin to think about long-term planning. This will include building wealth to meet future needs, such as retirement and college funding, as well as protecting wealth and income through life insurance, disability insurance, long-term care insurance, and estate planning.

1.2

Factors That Influence Financial Planning Decisions

LEARNING OBJECTIVE 1.2

Describe how individual characteristics and economic factors influence personal financial planning.

As you build your financial plan, you'll need to consider many factors that influence spending and saving. Some of these factors are unique to your household, such as your life cycle stage, your family makeup, your values, and your attitudes.

In addition, economic factors, such as inflation and interest rates, are important considerations for everyone who is developing and implementing financial plans. Both individual and economic factors can be expected to change over time, so your financial plan will need to be adaptable to new circumstances. In this section, we'll first discuss individual characteristics that influence financial planning and then describe some important economic factors that you should consider.

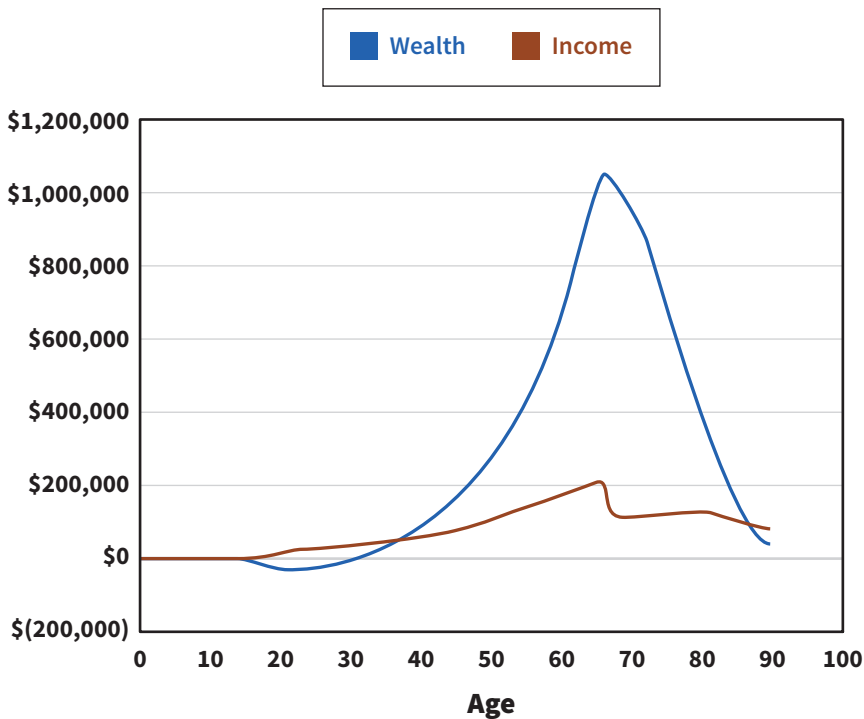
Individual Characteristics and Your Financial Plan

Every household is different and therefore has unique financial needs. A financial plan has to be tailored to your life cycle stage and the number of people in your family. It also needs to be consistent with your values and attitudes.

Life Cycle Factors

Your household will go through several phases over your life cycle, and your financial situation will change as well. **Figure 1.3** illustrates how a person's income and wealth can be expected to change over the life cycle.

FIGURE 1.3 Household Income and Wealth over the Life Cycle Your financial plan must adapt to changes in income and wealth over your life cycle.



The graph is not intended to imply that everyone's situation is the same. Rather, it is meant to illustrate the significant differences in planning needs over the life cycle. In general, your income level through your early 20s will be lower than it will be 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 currently 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. During this time, you will focus on setting goals, establishing savings, and protecting your family from unexpected negative events, such as a 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 late 60s.

As retirement approaches, most people in their 50s and 60s pay closer attention to planning for retirement income, managing health care, and preserving wealth for their heirs. The earlier you plan for these needs, the better off you will be once you get to that stage in the life cycle. During retirement, most likely starting in your mid- to late-60s, you'll begin to spend down your accumulated wealth. Your goals during retirement may include maintaining an active lifestyle, enjoying travel and leisure activities, and having sufficient income to support your needs. Without good planning, you risk running out of money in old age.

Demographic Characteristics

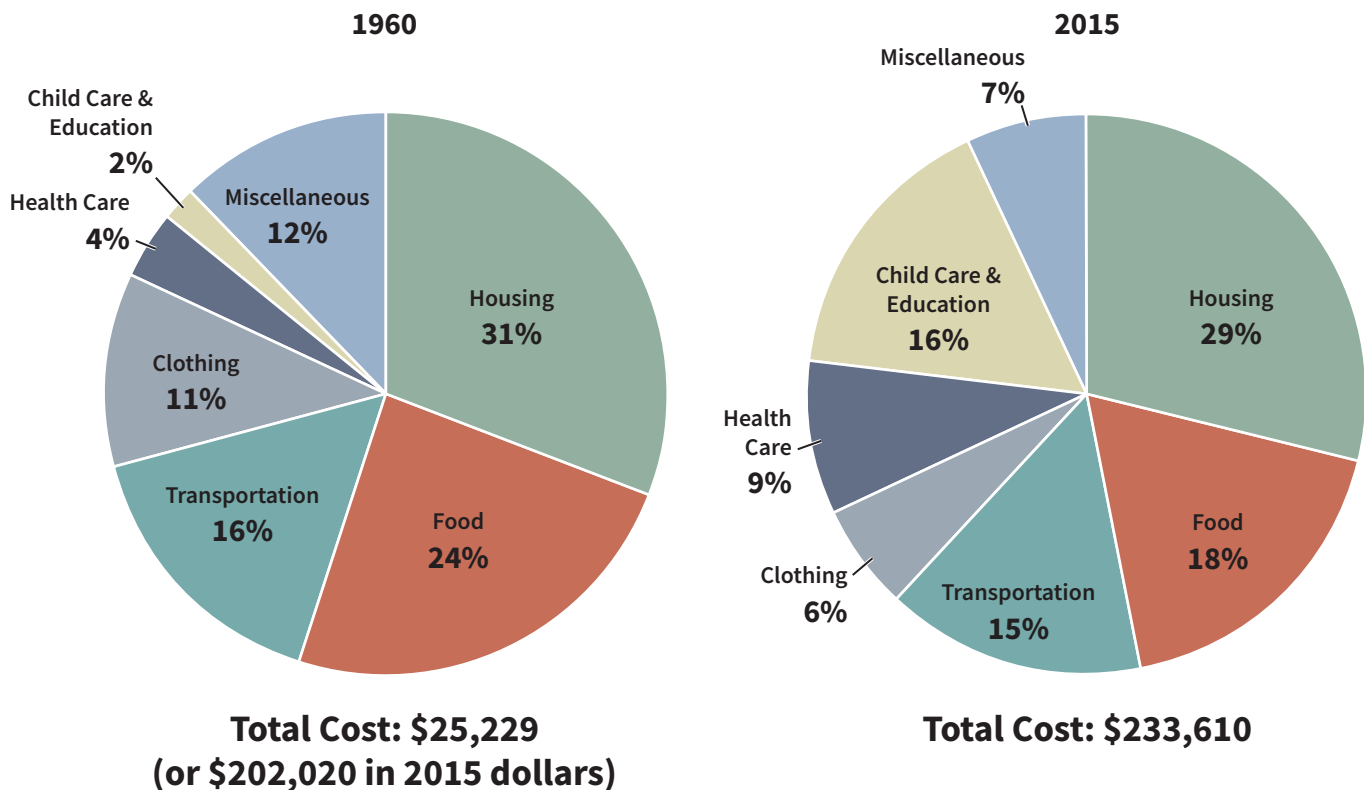
Family makeup and demographic characteristics—such as age, family size, income, and wealth—significantly affect financial planning. During child-rearing years, families tend to have higher expenses and, therefore, less ability to save. Over time, due to inflation and other factors, the increasing costs of health care, child care, and especially education have made it more expensive to raise a child.

How much do you think it costs for a middle-class family to raise one child from birth to age 17? **Figure 1.4** compares the breakdown of these costs in 1960 and 2015. Relative to 55 years ago, the cost of raising a child is about 16 percent higher, after adjusting for inflation. Most of the increase has been due to child care and health care expenses.

Given the extra expenses associated with having children, it isn't surprising that double-income couples without children tend to be financially better off than singles. Childless adults

FIGURE 1.4 The Total Cost of Raising a Child and Breakdown of Expenditures, 1960 vs. 2015

The average total cost for a middle-income, two-parent household to raise a child from birth to age 17 was \$25,229 in 1960. After accounting for inflation, that would be the equivalent of \$202,020 in 2015 dollars. According to the U.S. Department of Agriculture, the cost for a child born in 2015 is \$233,610,—an increase of 16 percent over the 1960 amount. The graphs below show the breakdown of these costs.



Source: USDA Center for Nutrition Policy and Promotion, Expenditures on Children by Families, 2015, Miscellaneous Report No. 1528-2015 (January 2017).

are able to focus on career goals and may move up the employment ladder more quickly. However, the financial and social support provided by children to their elderly parents may eventually be an offsetting benefit.

Most estimates of the cost of raising children do not count one of the biggest expenditures—higher education. As we’ll see in a later chapter, a college education at a public university can easily run \$50,000 per child or more, and private schools cost several times as much. This may be the most important investment a family can make, though, because education plays such a critical role in future financial success. College-educated people, particularly those with specialized skills (such as business, education, and engineering), tend to receive higher starting salaries and larger wage increases during their careers. They are also more likely to have retirement plans and fringe benefit packages.

Values and Attitudes

People have different values and attitudes regarding money and its use. Your money management style generally is 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 will also influence 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 under control. Thus, both “nature and nurture” help to form your values and attitudes concerning money. In fact, it is not uncommon for siblings raised in the same households to have very different money management styles.

Values are fundamental beliefs about what is important in life. What do you think is most important: family, friends, possessions, education, religious faith, financial success, fame, health, self-sufficiency? The weight you place on each will influence the goals that you set and the strategies that 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? Do you consider yourself a conservative or a liberal? Do you like to have everything planned out in advance or just go with the flow? Spontaneous and generous people may have more difficulty controlling spending than those who are more analytical. People who are natural “planners” are more inclined to set goals and follow through on their strategies for achieving them.

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 it is! To do this, though, you must first recognize what your values and attitudes are, particularly where they may run counter to achieving your goals. Remember David Keller from earlier in the chapter? David’s credit card problems in college didn’t come about by accident—he had learned bad money habits as a child. He grew up in a wealthy household with parents who were “spenders.” When he was a child, his parents bought him toys whenever they set foot in a store. As a teen, he didn’t need a part-time job like most of his friends, and he always had the latest video games and sports gear. When he went away to college, he didn’t really know *how* to control his spending. If you’re a spender like David, you will likely need to approach your budget differently than someone who is naturally inclined to be more conservative about spending.

Of particular importance to financial planning is your attitude toward **risk**, or uncertainty about the potential outcome of a decision. Although outcomes can be either good or bad, your financial plan needs to take into consideration the risk of *negative* outcomes, such as being injured or losing money on an investment. As we saw in Case Study 1.1, families also need to be prepared for unexpected job layoffs.

Are you a risk taker, or do you tend to avoid risk? We’ll look more closely at risk attitudes and how they impact personal financial decisions in later chapters. If you’re a natural risk taker, you’ll approach investing quite differently than someone who tends to avoid risk. To help you understand your own inclinations, answer the questions in **Excel Worksheet 1.1** (Personal Financial Planner: Money Attitudes Questionnaire). You may also find it interesting to compare your answers to those of other family members.

Demographic factors such as gender, age, income, and education have often been linked to risk attitudes. Researchers have looked at many dimensions of behavior to identify people who are inclined to take risks. While findings are not entirely consistent, some relatively consistent trends have emerged. In **Interactive: Socioeconomic Differences in Risk Attitudes**, you can find out whether your intuition regarding which types of people are more likely to be risk takers is correct.

EXCEL WORKSHEET

See **Excel Worksheet 1.1** (Personal Financial Planner: Money Attitudes Questionnaire) in **WileyPLUS**.

INTERACTIVE

See **Interactive: Socioeconomic Differences in Risk Attitudes** in **WileyPLUS**.

Economic Factors and Your Financial Plan

A fundamental truth about the economy is that it’s very unpredictable. Even the experts cannot say with certainty what the future may hold. Nevertheless, some economic factors have a known influence on personal finances, and it’s important for you to recognize these factors and incorporate them in your financial planning decisions. Throughout this course, you’ll be developing your knowledge about economic factors that affect financial planning. Some factors that are highly likely to affect your future are inflation, interest rates, employment conditions, political unrest, and global issues. We’ll discuss each of these in this section.

Inflation

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**, the change in general price levels over time. Normally, inflation refers to an *increase* in prices, like the inflating of a balloon. 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. If the prices of goods and services decline over a period of time, a rare event, we call this decline “deflation.”

Inflation affects nearly every aspect of your finances. Your grocery bills are probably higher this year than they were last year. You might be paying more for gasoline than in the past. Your monthly rent will probably go up next year, too. As prices get higher over time, you can only maintain your standard of living if your income also increases at a similar rate. For your standard of living to *improve*, your income must increase at a greater rate than the inflation rate. Inflation affects your investments as well. If the prices of goods and services rise at a rate of 3 percent, but your savings account is only paying an interest rate of 1 percent, then you are actually losing spending power.

In the United States, inflation is typically 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. **Table 1.2** illustrates the changing costs of various goods and services over the last three decades. Note that while costs have gone up in general, the cost of a college education at a public four-year institution has skyrocketed. Inflation has a serious impact on household budgets, particularly when prices rise faster than wages. You can see the effects of inflation over time by using **Excel Worksheet 1.2** (Personal Financial Planner: Inflation Calculator). Watch **Online Calculator Demonstration Video: Buying Power** to learn more about changes in costs over time.

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 high-demand areas of the country is more expensive than housing in less popular locations.

You’ll also need different goods and services at different stages in the life cycle. For example, health care costs, which have risen at a much faster rate than the costs of other elements of the CPI, are a bigger component of a retiree’s expenses. Housing costs, in contrast, have less importance for retirees, because many of them 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 will gradually decline.

The CPI Index in May 2019 was 256.1, compared with 251.6 in May 2018. Normally, when people talk about inflation, they are referring to the *percentage change* in the index, not the

EXCEL WORKSHEET

See **Excel Worksheet 1.2** (Personal Financial Planner: Inflation Calculator) in **WileyPLUS**.

ONLINE CALCULATOR DEMONSTRATION VIDEO

See **Online Calculator Demonstration Video: Buying Power** in **WileyPLUS**.

TABLE 1.2 Changes in Income and Prices over Time

Year	Median Household Income	Gallon of Gas	Loaf of White Bread	Dozen Grade A Eggs	College Tuition, Fees, Room & Board
1980	\$21,023	\$1.13	\$0.50	\$0.88	\$ 2,330
1985	27,735	1.15	0.55	0.75	3,680
1990	35,353	1.34	0.69	1.22	4,720
1995	40,611	1.08	0.77	0.88	6,620
2000	50,732	1.39	0.91	0.98	8,080
2005	56,194	2.19	1.05	1.35	11,380
2010	61,521	3.02	1.39	1.77	15,240
2015	58,476	2.77	1.46	1.96	18,930
2019	62,786*	2.90	1.29	1.36	21,370
% Increase					
1980 to 2019	199%	157%	158%	55%	817%
Annual Rate	2.8%	2.4%	2.5%	1.1%	5.8%

Sources: U.S. Census Bureau, U.S. Bureau of Labor Statistics, trends.collegeboard.org.

* Estimated from most recent reported census data.

index number itself. To calculate the percentage increase over a period of time, you can use either form of **Equation 1.1**:

$$\text{Percentage change} = \frac{\text{New value} - \text{Old value}}{\text{Old value}} \quad (1.1)$$

$$\text{Percentage change} = \frac{\text{New value}}{\text{Old value}} - 1$$

Thus, we can calculate inflation between 2018 and 2019 as follows:

$$\text{Percentage change} = \frac{256.1 - 251.6}{251.6} = 0.018, \text{ or } 1.8 \text{ percent}$$

If you're looking at changes over several years, you may want to convert the percentage change to an *annual percentage change* for the time period, as given in **Equation 1.2**:

$$\text{Annual percentage change} = (1 + \text{Percentage change})^{1/N} - 1 \quad (1.2)$$

where N = Number of years

Being able to calculate percentage change is useful not only for calculating inflation but also for calculating percentage increases in your salary and investments over time. **Demonstration Problem 1.1** gives you an opportunity to try this type of calculation.

Although inflation has averaged less than 4 percent per year since 1980, the annual rates of inflation have ranged from close to zero to more than 13 percent. Over that same period, the federal minimum wage rate increased from \$1.60 to its current rate of \$7.25, the equivalent

DEMONSTRATION PROBLEM 1.1 | Calculating Percentage Change

Problem

Your starting salary in Year 1 was \$24,000, and your new salary for Year 3 is \$27,500. What is the percentage change in your salary since you started working, and what is the annual percentage change?

Strategy

Use either form of Equation 1.1 to calculate the percentage change, and use Equation 1.2 to calculate the annual percentage change.

Solution

Calculate the percentage change by using either form of Equation 1.1—for example, as follows:

$$\begin{aligned} \text{Percentage change} &= \frac{\text{New value} - \text{Old value}}{\text{Old value}} \\ &= \frac{27,500 - 24,000}{24,000} = 0.1458, \text{ or } 14.58\% \end{aligned}$$

Calculate the annual percentage change using Equation 1.2, with N equal to 2 (the number of years since you started working):

$$\begin{aligned} \text{Annual percentage change} &= (1 + \text{Percentage change})^{1/N} - 1 \\ &= (1 + 0.1458)^{1/2} - 1 \\ &= 1.0704 - 1 \\ &= 0.0704, \text{ or } 7.04\% \end{aligned}$$

Note: Most calculators will allow you to raise a number to any power using the key labeled y^x . Enter the number you want to raise to the power (for example, enter 1.1458), push the y^x button, and then enter the power (for instance, 1/2 or 0.5).

of only 3.9 percent per year. These statistics illustrate an important economic reality—wages don't always keep up with prices. This is particularly true during periods of high inflation. Fortunately, inflation has been fairly low over the last decade, and many states have taken action to increase the minimum wage above the federal requirement.

Reflection Question 2

In what ways do you expect that inflation will affect you in the next few years? Which of your expenses do you expect to increase at a faster rate than others?

Interest Rates

An **interest rate** is a cost of money. Interest is usually expressed as a percentage of the amount loaned or borrowed. When you *borrow* money, the interest rate is a cost to you. When you *invest* money, the interest is a measure of your earnings, or return, on that investment. When interest is earnings to you, it's a cost to whoever is paying you.

An interest rate can also be thought of as a cost of consumption. How much additional money will you need to receive in the future to be willing *not* to spend a certain amount today on consumption? 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 him to pay you at that time? If you would have to take the money out of a savings account that pays you 2 percent interest per year, you would probably want him to pay you at least the \$1,000 plus the interest you would have earned. But what if lending him the money means that you will have to forgo that 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?

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 interest rates may go down.

In the United States, the **Federal Reserve** (commonly called the Fed) is the central banking system. The Fed controls the money supply in the economy in order to manipulate the rate of interest. For example, from 2008 to 2018, the Federal Reserve kept the **federal funds rate**, the rate that banks charge each other for short-term loans, near zero in an attempt to stimulate the economy out of recession. This kept business and mortgage loan rates at historic lows, making it easier for businesses to expand and people to buy homes. When the economy looked like it was on track for recovery, the Fed gradually took action to push interest rates up to more normal levels.

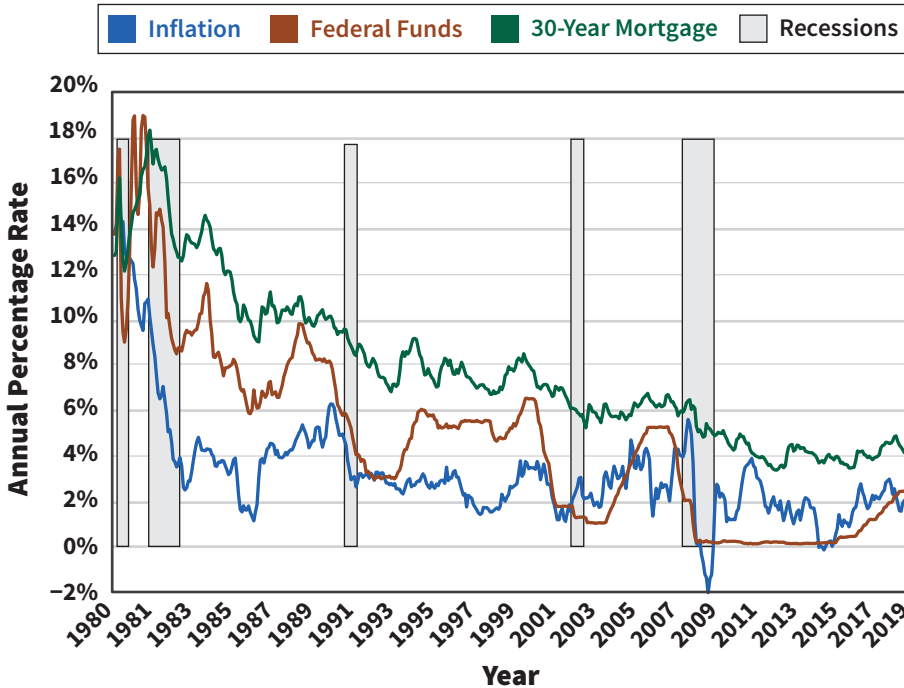
As you can see in **Figure 1.5**, the interest rates on different types of borrowing tend to track each other and the inflation rate. This occurs because they are all affected similarly by economic conditions.

Although the ups and downs in interest rates tend to track each other, there are always differences in interest rates on different types of loans at any given time. Why are some rates higher than others? The higher the risk of nonpayment, the higher the rate charged by lenders. Lenders consider the risk that payments will be late or that the loan will not be repaid. They also consider whether they have any way of collecting from borrowers if loans are not repaid as agreed. For example, credit card rates are always higher than car loan rates or home loans because the bank has the right to take back the car or the house in the event of nonpayment.

The Economy and the Job Market

Your personal finances will also be affected by cyclical business and employment conditions. Historically, the U.S. economy has experienced a pattern of ups and downs, commonly referred to as the **economic cycle**, or business cycle. 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. Recent recessions are indicated on Figure 1.5 by shaded areas. Although most of the recessions have been fairly short, lasting only a few months, the recession that

FIGURE 1.5 Inflation, Federal Funds Rate, and 30-Year Mortgage Rates, 1980–2019 This graph compares the 30-year mortgage rate, the federal funds rate (usually one of the lowest interest rates in the economy), and inflation. You can see that, even though rates changed a lot over the last three decades, all three rates tracked up and down together. The shaded periods on the graph indicate recessions.



occurred between December 2007 and June 2009 lasted longer than average and is commonly referred to as the “Great Recession.”

Periods of economic **expansion** are characterized by increased business investment and employment opportunities. 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 Unrest and Global Issues

It should be obvious that political and global factors can affect your personal finances. The continuing threat of terrorism, the aftermath of the 2008 financial crisis and the Great Recession, ongoing uncertainty in the global marketplace for oil, political disagreements about immigration, and tariffs on foreign goods are all important issues that impact personal finances.

Here are some other examples of how political and global factors have affected college students and U.S. households in recent years:

- Interest rates on student loans and car loans have been low, due to the Federal Reserve’s actions after the financial crisis, but are likely to rise as economic conditions improve.
- College tuition has been increasing, particularly at public institutions, which were subject to increasing costs and significant recession-related budget cuts by state legislatures.
- Changing immigration rules have impacted both undocumented students and exchange students from other countries.
- Families of military personnel have faced unexpected financial burdens due to repeated and lengthy deployments overseas.
- Due to the global oversupply of oil, gas prices have been low by historical standards, resulting in more money in consumers’ pockets.

Because no one can predict what the future may hold, it is extremely important to have a financial plan that is adaptable to changing circumstances. In addition, you should attempt to keep informed on changing economic conditions—reading the newspaper regularly or subscribing to a news or financial magazine—so that you can take appropriate actions when necessary.

1.3

Setting Short-Term and Long-Term Financial Goals

LEARNING OBJECTIVE 1.3

Create a prioritized list of short-term and long-term personal financial goals.

Have you ever noticed how a whole day can go by and you don't get anything accomplished? When you were a child, that was the best kind of summer day—nothing to do and no one to answer to. But now that you're an adult, and a student as well, you have many obligations—homework, housekeeping, yard work, and grocery shopping, to name a few. You have a million things you *should* do, but sometimes, you don't seem to get any of them done. In many cases, the reason that nothing gets done is because you didn't *plan* for anything to get done.

For many college students who are nearing graduation, one of the tasks that too easily slips to the bottom of the list is the job search. Even in a bad job market, students who invest a lot of effort in looking for a job are more likely to be employed at graduation. You can reduce the likelihood of having to move back in with your parents if you put more time into your job search and bolster your résumé with internships and volunteer activities.

Why Goals Are Important

For most people, the key to successfully accomplishing a set of tasks is to establish a set of specific goals and then to persistently plug away at achieving them. Have you ever looked at what some people accomplish on a regular basis and wondered if they somehow have more than 24 hours in a day? Such high productivity is just proof of the old saying “The more you do, the more you *can* do.” Unfortunately, the opposite is also true—if you *don't* do much, you won't get much done. The reason these statements are both true is that people who are very busy have no choice but to be organized in using their time and setting their objectives. And as they succeed in their short-term endeavors, they find themselves motivated to do even more.

Those of you who are athletes can appreciate the importance of goals better than anyone else. Whether you're a runner, a body builder, or a member of a sports team, you know that success in athletics requires setting goals and making a plan to achieve those goals: running a little farther each day, bench-pressing a few more pounds, or increasing speed, endurance, and accuracy in your chosen sport. Small successes each day add up to large successes in the long run.

Achieving financial success requires a similar approach. Without some specific goals, it's very easy to get nothing accomplished. But if you have a prioritized list of specific goals with measurable outcomes and a plan for how to achieve them, you'll be able to make progress toward financial success.

The Goal-Setting Process

Although goals are an essential component of everyone's personal financial plan, there is no magic formula for identifying and prioritizing your goals. No one can set your goals for you,

because they are unique to you and your household. However, most people's lists will have certain features in common. Categories that you may want on your list include:

- Consumer spending and borrowing
- Career advancement
- Education for yourself, your spouse, and your children
- Home purchase and maintenance
- Risk management
- Retirement planning
- Vacations and recreation
- Charitable giving
- Estate planning

Financial planning experts recommend that goals be specific, measurable, attainable, realistic, and time-specific. These characteristics are easy to remember because their first letters spell out the word SMART. **Figure 1.6** provides some guidelines to follow to help you develop SMART goals.

FIGURE 1.6 SMART Goals: Guidelines The key to setting effective financial goals is to make them specific, measurable, attainable, realistic, and time-specific.

Specific

Clearly identify what you want to achieve, including the who, what, where, when and why. Instead of just setting a general goal to save up to buy a house, you could set this specific goal: Save \$400 per month to accumulate \$20,000 for a down payment on a house within five years.

Measurable

How will you know if you have accomplished a goal? State each goal with a target so that you can measure progress, whether in money terms or by completion of certain activities. Example: Have your savings automatically deposited to a designated account. As you get your bank statements each month, you'll be able to track your progress.

Attainable

Setting impossible goals will only lead to discouragement. Evaluate your personal finances to determine what goals are within your means and time frame. Example: If you currently are barely able to cover necessary expenses, you can't set a goal to save \$300 a month for your child's college fund. But you could set a goal of seeking a better-paying job or taking a second job to obtain funds to save.

Realistic

Your goals need to be set with your current circumstances in mind. Everyone has existing demands on their time and money, so new goals require difficult choices. Example: Setting a goal of going to graduate school full-time might not be realistic when you are supporting a family, but going part-time at night could be.

Time-specific

When you set goals with specific due dates, they are much more effective. Our natural inclination is to put off difficult tasks, so we need to set near-term and long-term targets to be sure we stay on track. Example: I will pay off my \$2,000 credit card balance within two years by paying \$100 more than the minimum payment each month.

FIGURE 1.7 **Process of Developing Personal Financial Goals** Follow these steps to identify and prioritize your financial goals.

- Make a wish list.** Be specific and state in positive terms: “I will...” Include projected dates and a rough estimate of cost, in money and/or time.
- Prioritize your list.** It’s unlikely you’ll be able to achieve everything, so you need to decide which goals are most important to you and your family.
- Break large goals into subgoals.** You’ll be more likely to stick to your plan if you can see progress more quickly.
- Reevaluate regularly.**

Figure 1.7 leads you through a series of steps for developing your personal financial goals: make a wish list, prioritize your list, break large goals into subgoals, and reevaluate your list regularly. After working through the process, you should have your own prioritized list of SMART personal financial goals. These should include:

- *Short-term goals* that can reasonably be accomplished within the next year, such as buying a car or taking a vacation
- *Intermediate-term goals*, like paying off debt or saving for a down payment on a home, which will take up to five years to accomplish
- *Long-term goals* that will take much longer to achieve—retirement funding or saving for your children’s education, for example

Your goals will differ depending on your stage in the life cycle and your family makeup. Age, income, marital status, employment, and personal values will all influence your financial objectives. For example, a young couple’s primary goal may be to buy their first home, whereas families with children may be more focused on building a college fund. Retired couples may dream of taking a cruise to the Bahamas or setting up a trust for their grandchildren. To give you some ideas, **Table 1.3** suggests several goals in each category with rough estimates of the cost. As you proceed through this course, you’ll learn more about how to estimate the costs of attaining certain financial objectives, but a rough measure will be sufficient for now.

Excel Worksheet 1.3 (Personal Financial Planner: Prioritizing Goals) will help you create your own list and prioritize your goals. You’ll find that there will have to be trade-offs. The extra costs of having children may keep you from taking an annual vacation to Europe or buying a

EXCEL WORKSHEET

See **Excel Worksheet 1.3** (Personal Financial Planner: Prioritizing Goals) in **WileyPLUS**.

TABLE 1.3 Examples of Goals with Different Time Horizons

Short-term (less than 1 year)		Intermediate-term (1–5 years)		Long-term (more than 5 years)	
Goal	Cost	Goal	Cost	Goal	Cost
Vacation	\$1,000	Pay off credit cards	\$200/month	Comfortable retirement	\$1,000,000
Increase life insurance	\$500	Down payment on new car	\$3,000	Send kids to college	\$50,000
Eat out once per week	\$50/week	New roof for home	\$3,000	Remodel the house	\$30,000
Organize finances	–	Graduate school	\$5,000/year	Provide for surviving spouse	?
Emergency fund	\$40/week	Hire housecleaner	\$50/week	Buy vacation home	\$50,000
Create budget	–	Down payment on home	\$20,000	Leave inheritance for kids	?
Make a will	\$150	Learn about investing	–		
Work on career plan	–				

sports car. Your decision to go to graduate school may delay saving for retirement or purchasing a larger house. In some cases, you and your spouse may not agree on the relative priorities of different goals, so it's very important to discuss your list.

Once you have identified your most important goals, you can use **Excel Worksheet 1.4** (Personal Financial Planner: Breaking Large Goals into Subgoals) to break the larger goals into subgoals. **Case Study 1.2** gives a specific example of how a couple used the goal-setting process to help them make an important family decision.

EXCEL WORKSHEET

See **Excel Worksheet 1.4** (Personal Financial Planner: Breaking Large Goals into Subgoals) in **WileyPLUS**.

Case Study 1.2



ESB Professional/Shutterstock.com

FIGURE 1.8 The Riveras' Financial Goals By breaking their larger goals into smaller, more easily completed subgoals, the Riveras increase the likelihood of accomplishing them.

The Riveras Develop Prioritized Goals

Problem

Rosa and Mateo Rivera are both 34 years old. They have a son, age 14, from Rosa's previous marriage, and they are expecting a baby in the near future. Both currently work outside the home, and with the luxury of two incomes, they haven't worried much about financial planning. Now, though, they are trying to decide whether they can afford to live on one income after the baby is born. What should they do?

Strategy

Mateo and Rosa need to develop a prioritized list of short-term and long-term goals and subgoals. Developing and prioritizing goals will help them consider the costs, benefits, and trade-offs of having Rosa be a stay-at-home parent.

Solution A selected list of the Riveras' financial goals is shown in **Figure 1.8**. Mateo and Rosa have identified goals in all areas of their finances, but their highest priority is for Rosa to stay home with their new baby for a few years. Because they have a few months before the baby will be born, they decide to work on their other short-term goals while she is still working so they will be better able to live on only one income for a while.

●	Short-Term Goals
	Goal 1. Rosa quits work in 6 months.
	a. Cut down on current expenses.
	b. Save money over the next 6 months.
	Goal 2. Establish a household budget.
	a. Create a personal cash flow statement.
	b. Create a personal balance sheet.
	c. Estimate future income and expenses.
	Goal 3. Reduce credit card debt.
●	a. Calculate how much we need to pay.
	b. Stop using credit cards.
	c. Cut some of our other expenses and apply the money to the credit card debt.
	Long-Term Goals
	Goal 1. Increase retirement savings.
	a. Learn about tax rules for retirement saving.
	b. Start an IRA for Rosa.
	c. Determine how much we both need to be saving.
	Goal 2. Send kids to college.
●	a. Learn about college funding options.
	b. Start a college fund for the baby.

For many households, repayment of high-interest debt is an important financial goal. You can use **Table 1.4** to estimate the payments necessary to reduce an existing credit card debt to zero at various interest rates. To determine the amount more precisely using **Excel Worksheet 1.5** (Personal Financial Planner: Monthly Payment Necessary to Pay Off Debt), work through **Demonstration Problem 1.2**.

EXCEL WORKSHEET

See **Excel Worksheet 1.5** (Personal Financial Planner: Monthly Payment Necessary to Pay Off Debt) in **WileyPLUS**.

TABLE 1.4 Monthly Payments Necessary to Pay Off Specific Debt Amounts

Months to Pay	Interest Rate	Monthly Payments Necessary to Pay Off Debt in the Amount of:			
		\$1,000	\$2,500	\$5,000	\$10,000
12	12%	\$89	\$222	\$444	\$888
	15%	90	226	451	903
	18%	92	229	458	917
	21%	93	233	466	931
24	12%	47	118	235	471
	15%	48	121	242	485
	18%	50	125	250	499
	21%	51	128	257	514
36	12%	33	83	166	332
	15%	35	87	173	347
	18%	36	90	181	362
	21%	38	94	188	377
48	12%	26	66	132	263
	15%	28	70	139	278
	18%	29	73	147	294
	21%	31	77	155	310
60	12%	22	56	111	222
	15%	24	59	119	238
	18%	25	63	127	254
	21%	27	68	135	271
72	12%	20	49	98	196
	15%	21	53	106	211
	18%	23	57	114	228
	21%	25	61	123	245

DEMONSTRATION PROBLEM 1.2 | What Monthly Payment Is Necessary to Pay Off Your Debt?

Problem

You have accumulated \$4,000 in credit card debt, and although you've been making the minimum payments, you haven't been able to reduce the overall debt significantly. Your credit card interest rate is 18 percent per year. How much do you need to pay each month to eliminate the debt in two years?

Strategy

Use Excel Worksheet 1.5 to solve for the necessary monthly payment, given the amount of debt you want to repay, the number of months, and the interest rate on the debt.

Solution

As shown in the sample worksheet in [Figure 1.9](#), you can enter information about your debt, including the balance owed (\$4,000), annual interest rate (18 percent), and time in which you want to repay the debt in full (24 months). The worksheet solution tells you that you will need to pay about \$200 per month to reduce your \$4,000 debt to zero within 24 months.

FIGURE 1.9 Sample of Excel Worksheet 1.5: Monthly Payment Necessary to Pay Off Debt

	A	B	C	D	E	F	G	H	I
1			Debt #1		Debt #2		Debt #3		Totals
2	Creditor name		Credit card debt						
3									
4	Balance owed	PV	\$4,000						\$4,000
5									
6	Number of months to repay	N	24						
7									
8	Annual rate on the debt (APR)	I/YR	18%						
9									
10	Monthly payment	PMT	\$199.70						\$199.70
11									

1.4 Selecting Qualified Financial Planning Professionals

LEARNING OBJECTIVE 1.4

Know when and how to find qualified financial planning professionals.

Although a course in personal financial planning will provide you with the basic tools and knowledge to handle many aspects of your finances, you will by no means be an expert when you have completed the course. Many areas of personal finance, such as tax and estate planning, are fairly specialized and have complex rules that change over time.

As your life and finances become more complicated, you may need to consult with experts about some issues. Fortunately, you have many choices. Lawyers, accountants, insurance agents, and stockbrokers can all assist with aspects of your financial plan that are within their areas of expertise. Alternatively, rather than obtaining piecemeal help for a single issue at a time, you may want to hire a financial planner who has a broad education in all areas of financial planning. This type of professional can help you develop your plan from the outset and implement strategies to achieve your financial goals. Because virtually anyone can claim to be a financial planner, you'll need to carefully evaluate the educational credentials and certifications of any professional you are considering hiring. If you do consider hiring a financial planner, you can use interview questions similar to those in **Excel Worksheet 1.6** (Personal Financial Planner: Questionnaire for Interviewing a Financial Planner).

EXCEL WORKSHEET

See **Excel Worksheet 1.6** (Personal Financial Planner: Questionnaire for Interviewing a Financial Planner) in **WileyPLUS**.

When Do You Need a Financial Planner?

Not everyone needs—or can afford—the services of a professional financial planner. A person who earns less than \$50,000 a year, has little accumulated wealth, and has relatively uncomplicated taxes probably doesn't need to hire a professional. Even those with greater wealth and income may prefer to manage their own finances, hiring professionals only for special needs, such as drawing up legal documents or filing taxes.

Some people find that hiring a professional financial planner offers definite benefits. For wealthier people, if the advice given by the planner results in increased investment earnings or reduced taxes, these gains may offset the planner's fees. For others, the benefits may be largely psychological, because hiring a professional reduces the time and effort required to stay informed about financial matters such as investments, taxes, and insurance. Even if you hire a planner, though, you'll still have to be involved in the planning process to develop goals and decide among various strategies to achieve them.

The financial planning process followed by professional financial planners is much the same as the personal financial planning process that we outlined at the beginning of this chapter in Figure 1.1. The main difference is that planners have an additional step at the front end—they need to first establish and define the client–planner relationship. Don’t be surprised if your first meeting with a planner requires sharing of a lot of information about your financial situation, personal goals, and risk attitudes. The planner can’t do a good job for you without this background.

Factors to Consider in Choosing a Planner

In choosing a professional to help you with your personal finances, you should consider:

- Education
- Certification
- Experience
- Reputation
- Fees

Financial planners need a solid knowledge of law, finance, insurance, and tax accounting to ensure that they can handle all the components of your plan. Their education may have come from specific degree or certification programs, or it may have been gained through experience. In addition, any professional who sells financial products is required to pass examinations required by federal and/or state law.

Many organizations provide certifications attesting to the knowledge base of a professional planner, and new certifications are being created all the time. The most well-known certifications and the organizations that sponsor them are summarized in [Table 1.5](#).

The best-known and most rigorous certification is the Certified Financial Planner (CFP®) designation. Planners who have a CFP® mark after their names have passed a comprehensive examination covering all the topics considered necessary in the practice of financial planning, and they have at least three years’ work experience in the field. To maintain their certification, they must adhere to a rigorous code of ethics and fulfill regular continuing education requirements.

Because the integrity of the profession is essential to its long-term success, the Certified Financial Planner Board of Standards adheres to a stringent code of ethics to promote the highest principles and standards for certified financial planners, applicable to all their interactions with clients and others. Similar standards are required of Certified Public Accountants (CPAs), Chartered Financial Analysts (CFAs), and attorneys. Having a code of ethics doesn’t guarantee that all professionals are beyond reproach, but since the penalty for violation is loss of the professional credential, the code helps to minimize the risk of unethical behavior. Common examples of such behavior include steering a client to products and services that generate the highest commissions for the advisor rather than those that are best for the client and encouraging a client to replace existing insurance contracts when there is no net benefit to switching.

How Are Planners Paid?

With so many different types of professionals calling themselves financial planners, it should come as no surprise that there is some variation in the ways in which planners are paid. The two basic methods of compensation are commissions and fees. The most common arrangements are described in more detail here.

- **Fee only** The planner charges a fee to the client based on services provided. This may be a set fee for a particular service (such as \$150 to write a will), or an hourly fee for services rendered (\$50–\$200 per hour), or a percentage fee (1 percent per year of your investment portfolio).

TABLE 1.5 Financial Planning Organizations and Certifications

Sponsoring Organization	Designation	Requirements					Contact Information
		Courses (#) and Certification	Work Experience	Comprehensive Exam	Ethics Code	Continuing Education	
American Association of Certified Public Accountants	Certified Public Accountant (CPA)	Yes Undergraduate degree	Yes	Yes	Yes	40 hrs per year	www.aicpa.org
	Personal Financial Specialist (PFS)	Self-study	Yes (CPA)	Yes (or CFP, ChFC)	Yes (CPA)	60 hrs per 3 years	
American College	Chartered Financial Consultant (ChFC)	Yes (11)	Yes		Yes	30 hrs per 2 years	www.theamericcollege.edu
	Chartered Life Underwriter (CLU)	Yes (12)	Yes		Yes	30 hrs per 2 years	
	Retirement Income Certified Professional	Yes (3)	Yes		Yes	30 hrs per 2 years	
	Registered Health Underwriter (RHU)	Yes (3)	Yes		Yes	30 hrs per 2 years	
American Institute for CPCUs	Chartered Property and Casualty Underwriter (CPCU)	Yes	Yes	Yes	Yes		www.theinstitutes.org
CFA Institute	Chartered Financial Analyst (CFA)	Yes	Yes	Yes (3)	Yes	20 hrs per year	www.cfainstitute.org
Association for Financial Counseling and Planning Education (AFCPE)	Accredited Financial Counselor (AFC)	Yes (2)	Yes	Yes	Yes	30 hrs per 2 years	www.afcpe.org
CFP® Board of Standards	Certified Financial Planner, CFP®	Yes Undergraduate degree	Yes	Yes	Yes	30 hrs per 2 years	www.cfp.net
College for Financial Planning	Accredited Asset Management Specialist (AAMS)	Yes (1)		Yes	Yes	16 hours per 2 years	www.cffp.edu
	Accredited Wealth Management Advisor (AWMA)	Yes (1)		Yes	Yes	16 hours per 2 years	
	Chartered Retirement Planning Counselor (CRPC)	Yes(1)		Yes	Yes	16 hours per 2 years	
	Chartered Mutual Fund Counselor (CMFC)	Yes (1)		Yes	Yes	16 hours per 2 years	
Financial Industry Regulation Authority (FINRA)	Series 6 (Mutual Funds and Var. Annuities Representative)		Yes	Yes		Regulatory update every 3 years	www.finra.org
	Series 7 (General Securities Representative)		Yes	Yes		Regulatory update every 3 years	
International Association of Registered Financial Consultants	Registered Financial Consultant (RFC)	AAMS, CFA, CFP, ChFC, CLU, CPA, EA, JD	Yes		Yes	40 hrs per year	www.iarfc.org
Investment Management Consultants Association	Certified Investment Management Analyst (CIMA)	Yes	Yes	Yes		40 hrs per 2 years	www.imca.org
National Association of Personal Financial Advisors	Registered Financial Advisor (RFA)		Yes (must be fee-only planner)	Case or financial plan	Yes	60 hours 2 years	www.napfa.org
National Association of Estate Planners and Councils	Accredited Estate Planner, AEP	Yes (2) +JD, CFP, CPA, CFA, CLU, or ChFC	Yes		Yes	30 hrs per 2 years	www.naepc.org

- **Fee-based** The planner can charge fees for services, as in the fee-only example, but also can receive commissions for selling you investment and insurance products.
- **Commission only** The planner receives no payment for helping you develop your financial plan or managing your portfolio, but receives a commission when you buy or sell a financial product, such as mutual fund shares or an insurance policy. Although this may be the cheapest way to get a professional to help you with your financial plan, the planner has an inherent conflict of interest. That is, the planner may have an incentive to sell you high-commission products or to buy and sell more often than necessary. You must take this possibility into account before acting on the planner's recommendations.
- **Fee plus commission** The planner charges a fee for developing your financial plan and also receives commissions on any financial products sold to you. The fee for the plan may be lower than that charged in a fee-only arrangement.
- **Fee offset by commission** The planner charges a fee for services, as in a fee-only arrangement, but reduces the fee if commissions are later earned on products purchased by the client. This reduces the conflict of interest inherent in the commission-only arrangement, because the planner does not make extra money by selling you the financial products.

1.5

Making Effective Decisions

LEARNING OBJECTIVE 1.5

Consider opportunity costs and marginal effects in making personal finance decisions.

As you work on your financial plan, you'll be making many important decisions. Once you've identified your goals, you'll need to make decisions about consumption, education, savings, and investment alternatives. These decisions will help you achieve your goals more effectively if you use these decision-making strategies:

- Base your decisions on reasonable assumptions.
- Apply marginal reasoning.
- Consider opportunity costs.
- Use sensitivity analysis.

In this section, we'll examine each of the strategies in more detail.

Make Reasonable Assumptions

Most financial decisions require you to forecast, or predict, future events and economic circumstances: What will your needs be 5, 10, or 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 better over time? What will the rate of inflation be in the future? What rate of return 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 with certainty, you can still use available information to come up with a reasonable assumption. Being able to make reasonable assumptions is a critical component of successful decision making.

One of the biggest mistakes people make in their finances is that they are too optimistic in their assumptions. After the recession that ended in 2009, for example, the stock market

enjoyed a long period of strong growth. Investors who had never experienced a market downturn thought their investments would continue to earn high rates of return indefinitely. The following example illustrates the impact this flawed reasoning had on a married couple nearing retirement during that period.

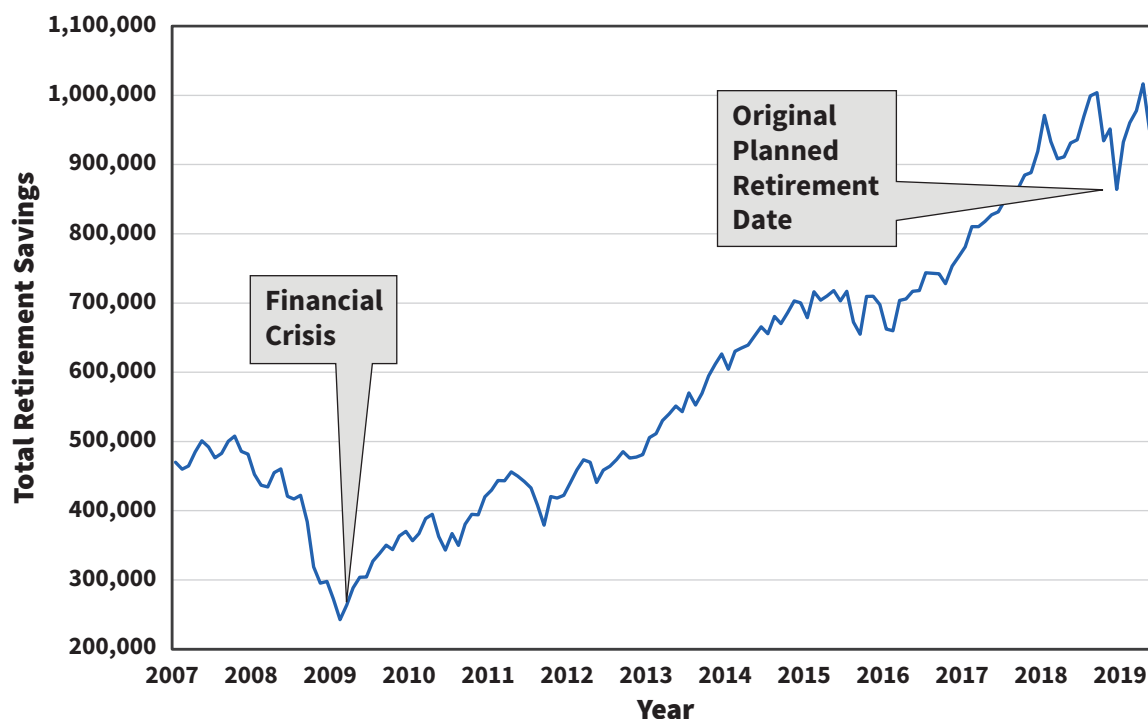
Karen and Luke Amato were planning to retire at the end of 2018, when both would reach the age of 65. Through regular monthly contributions to Luke's retirement plan at work, they had invested 4 percent of Luke's salary in the stock market throughout his working career. By mid-2018, the Amatos reached their retirement savings goal of \$1 million, an amount that they believed would allow them to maintain their standard of living in retirement. But late in 2018, investment values plummeted, and the Amatos' savings were substantially reduced. **Figure 1.10** shows the value of their portfolio beginning in 2009 after the financial crisis and going through the end of 2018. Although the 2018 market downturn was not as bad as the one in 2008, the Amatos' nest egg decreased by \$200,000 in the last three months of 2018.

Although the Amatos probably could have limited their losses by having a more diversified portfolio or by moving their money out of stocks at the first sign of trouble, they, like many other investors, had unrealistically clung to the hope that the stock market would recover. As a result of their overly optimistic assumptions, they had to retire a year later than originally planned.

Apply 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 or cost, that will result from the decision you make. For example, suppose you and your spouse share a car, and you're considering buying a second car. In applying marginal reasoning, you will 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'll consider how much *extra* benefit you would get from the more expensive of the two and balance that against the extra cost.

FIGURE 1.10 The Amatos' Retirement Fund (Invested 100% in Stocks) The Amatos optimistically assumed that strong stock market performance after the Financial Crisis would continue indefinitely.



Consider Opportunity Costs

Every financial decision you make has an **opportunity cost**—a measure of what you have to give up in order to take a particular action. The opportunity cost often is measured in dollars but may also include less quantifiable costs, like your time and effort. For example, suppose you must decide 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'll be giving up what you could have earned on that investment—this is a quantifiable opportunity cost. Other types of opportunity costs might be less tangible. For example, if you decide to work while attending school instead of taking money from savings, your cost will be the time you spend working instead of studying or taking part in other activities. Evaluating opportunity costs carefully results in better decisions.

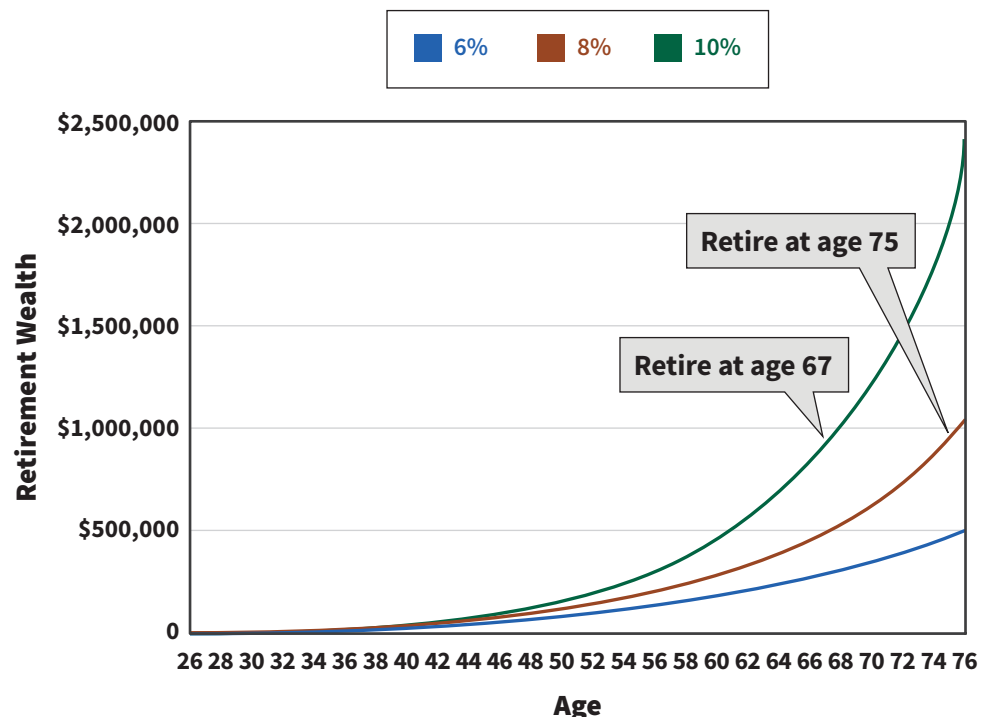
Use Sensitivity Analysis

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 getting 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 turn out to be wrong?” By considering the outcomes under different assumptions, you can reduce the risk that your plan will have an unexpected impact on your finances.

Sensitivity analysis can often be illustrated with a table or graph, showing the results under different sets of assumptions. For example, **Figure 1.11** shows the growth of a retirement portfolio over time under different assumptions about the rate of return on investment. Suppose you have decided that you need \$1 million to retire. The figure shows that you might be able to retire at age 67 or you might have to wait until age 75, depending on how well your investments do. Alternatively, you could invest more money each year to reach your \$1 million goal sooner.

FIGURE 1.11 Sensitivity of Investment Portfolio to Rate-of-Return Assumptions The greater your return on investment, the quicker you can reach your financial goals.



Note: Graph assumes tax-deferred annual investments, beginning with \$1,500 at age 25, increasing by 4 percent per year.

TABLE 1.6 Decision-Making Styles

Type of Decision Maker	Common Characteristics
• Rational decision maker	<ul style="list-style-type: none"> • Uses a systematic approach to making decisions • Weighs the pros and cons, often making careful lists for comparison
• Intuitive decision maker	<ul style="list-style-type: none"> • Spontaneous • Often makes “gut” decisions
• External decision maker	<ul style="list-style-type: none"> • Obtains opinions and confirmation from others before making decisions • Has trouble making decisions independently
• Agonizer	<ul style="list-style-type: none"> • Puts off making decisions as long as possible • Spends a lot of time thinking over alternatives, even for relatively inconsequential decisions • Is uncomfortable with change
• Avoiders	<ul style="list-style-type: none"> • Can’t or won’t make decisions • Delegates decision to others or ignores the problem, hoping it will go away

Decision-Making Styles

People exhibit different decision-making styles, and many of them result in less than optimal outcomes. Your style of decision making can have a big impact on how you approach your finances and on whether you are likely to get into financial trouble. Even if you are naturally inclined to make suboptimal financial decisions, you can still learn to apply the strategies and tools discussed in this section and throughout this course in order to make more effective decisions.

Psychologists often classify people on a continuum based on how they approach and solve problems. Some people have a natural inclination to think through decisions carefully before they take action, whereas others tend to make snap decisions without carefully considering the alternatives or the consequences. There are also people who prefer to avoid making decisions as much as possible. Several decision-making styles are described in [Table 1.6](#). You can take the assessment in **Interactive: What is Your Financial Decision-Making Style?** to help determine which one best describes you.

Although no method of decision making is perfect for everyone, there are advantages and disadvantages to each type. If you’re an avoider or if you’re overly spontaneous in making financial decisions, you may have trouble sticking to a budget, have too much debt, pay too much for major purchases, or incur personal costs from taking too many wrong turns in life. If you’re an overly “rational” decision maker or an agonizer, you may also suffer negative consequences. Taking too long to make a decision can result in reduced investment returns, missed career advancement opportunities, and increased personal costs.

Reflection Question 3

Based on your decision-making style, which aspects of financial planning are likely to be most difficult for you and why? What strategies could you use to overcome your difficulties?

INTERACTIVE

You can assess your own financial decision-making style using **Interactive: What is Your Financial Decision-Making Style?** in [WileyPLUS](#).

Summary

Learning Objectives Review

LEARNING OBJECTIVE 1.1 Describe the personal financial planning process, and explain how the elements of a comprehensive financial plan fit together.

Personal finance is the study of individual and household financial decisions. It includes such topics as budgeting, saving, tax planning, financing major purchases, buying insurance, and investing to achieve long-term goals.

- The **personal financial planning** process includes five steps: (1) Organize your financial information and set short-term and long-term goals, (2) analyze your current financial status, (3) identify and evaluate alternative strategies for achieving your goals, (4) implement your financial plan, and (5) monitor your progress and revise your plan as needed.
- To build a comprehensive financial plan, you need to (1) establish a firm foundation by acquiring necessary tools and skills; (2) secure your basic needs for security and liquidity through sound management of cash, credit, and insurance; and (3) develop a long-term plan for building and protecting wealth through saving, investing, insurance, and estate planning.

LEARNING OBJECTIVE 1.2 Describe how individual characteristics and economic factors influence personal financial planning.

Personal financial planning decisions are affected by both individual characteristics and general economic conditions.

- Individual characteristics that influence financial plans include individual differences in life cycle stage, demographic characteristics, and **values** and **attitudes**, including tolerance for **risk**.
- General economic conditions that affect household finances include inflation, interest rates, and economic cycles.
- **Inflation** in prices, which is measured by the annual percentage change in the **Consumer Price Index (CPI)**, can make it more difficult to maintain your standard of living over time. You can calculate the percentage change using **Equation 1.1**:

$$\text{Percentage change} = \frac{\text{New value} - \text{Old value}}{\text{Old value}}$$

$$\text{Percentage change} = \frac{\text{New value}}{\text{Old value}} - 1$$

You can use **Equation 1.2** when you need to convert the percentage change into annual percentage change to make comparisons over different periods:

$$\text{Annual percentage change} = (1 + \text{Percentage change})^{1/N} - 1$$

where N = Number of years

- **Interest rates** determine your cost of borrowing and your rate of investment return. They are strongly influenced by actions of the U.S. **Federal Reserve**, which controls the short-term interest rate called **federal funds rate**. Because this is the rate that banks charge each other for short-term loans, other loan rates, such as car loans and mortgages, are affected by it.
- The U.S. economy varies with stages in the **economic cycle**, which includes periods of **recession** and **expansion** that impact employment conditions and business performance.

LEARNING OBJECTIVE 1.3 Create a prioritized list of short-term and long-term personal financial goals.

Nothing happens without a plan.

- You should develop a list of personal financial goals that are SMART: specific, measurable, attainable, realistic, and time-specific. Your short term, intermediate-term, and long-term goals will change over your life cycle.
- The goal-setting process includes four general steps: (1) make a wish list, (2) prioritize your list, (3) break large goals into manageable subgoals, and (4) reevaluate your goals regularly.
- If your goals include debt reduction, you can use a table or worksheet to estimate the monthly payments necessary to pay off a debt in a specified period of time.

LEARNING OBJECTIVE 1.4 Know when and how to find qualified financial planning professionals.

Although you don't necessarily need professional help for personal financial planning, if you do decide to hire a financial planning professional, you should be sure that the planner fits your needs.

- Evaluation criteria include educational credentials, certifications, experience, reputation, and fee structure.
- A Certified Financial Planner (CFP®) will have completed specific coursework, passed a rigorous examination, and be subject to minimum professional experience and continuing education requirements.
- Financial advisors are compensated through some combination of fees for services rendered and commissions for products bought or sold.

LEARNING OBJECTIVE 1.5 Consider opportunity costs and marginal effects in making personal financial decisions.

You'll be more likely to achieve your personal financial goals if you use effective decision-making strategies.

- Base your decisions on reasonable assumptions.
- Use **marginal reasoning** to weigh the additional benefit to be received from one possible alternative action compared with another.
- In comparing multiple alternatives for achieving the same goal, always consider the **opportunity cost**, whether in time, effort, or money.
- Your decisions will also benefit by the application of **sensitivity analysis**, in which you evaluate what would happen if your initial assumptions are incorrect.

Excel Worksheets

1.1 Personal Financial Planner: Money Attitudes Questionnaire

1.2 Personal Financial Planner: Inflation Calculator

1.3 Personal Financial Planner: Prioritizing Goals

1.4 Personal Financial Planner: Breaking Large Goals into Subgoals

1.5 Personal Financial Planner: Monthly Payment Necessary to Pay Off Debt

1.6 Personal Financial Planner: Questionnaire for Interviewing a Financial Planner

Key Terms

attitudes 1-11

consumer price index (CPI) 1-12

economic cycle 1-14

expansion 1-15

federal funds rate 1-14

Federal Reserve 1-14

inflation 1-11

interest rate 1-14

marginal reasoning 1-25

opportunity cost 1-26

personal finance 1-3

personal financial planning 1-4

recession 1-14

risk 1-11

sensitivity analysis 1-26

values 1-11

WileyPLUS

Practice Questions to check your understanding, Peer-to-Peer Videos, Interactives, and many other resources are available in WileyPLUS.

Concept Review Questions

- Allen has just graduated from college and is considering the purchase of a new or used car. Describe how Allen can use the personal financial planning process in making this purchase.
- For each component of a comprehensive financial plan, identify a decision that must be made.
- Why is it important to establish a firm foundation and secure your basic needs before beginning to invest?
- Under what circumstances might the Federal Reserve take action to increase short-term interest rates?
- What are the steps in the goal-setting process?
- What factors should you consider in selecting a financial planning professional?
- What are the advantages of using a fee-only planner compared with a commission-based planner?
- Kenny and Ellen were married during their senior year in college. They planned and saved \$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. How might this change in life circumstances affect their current financial plan? If you were in their situation, would you change your honeymoon plans? Why or why not?
- Identify three areas of your personal financial plan that you expect will change when you graduate from college. For each area, give a specific example.
- How does your attitude toward risk affect your financial decisions?
- Give two examples of how general economic conditions can have a beneficial or adverse impact on your personal finances.

- 12.** For a college student who is single, what are two areas of financial planning that are particularly important?
- 13.** For a young married couple with two children under the age of 5, what are two areas of financial planning that are particularly important?

- 14.** For a double-income couple with children in college, what are two areas of financial planning that are particularly important?
- 15.** For a recently retired couple, what are two areas of financial planning that are particularly important?

Application Problems

- 1.** Your school just announced a tuition increase of 20 percent for next year. The annual tuition will increase from \$8,000 to \$9,600. If you expect that your other college-related expenses will increase with inflation from \$10,000 to \$10,400, what is the expected percentage increase in your total college costs for next year?
- 2.** If your expenses total \$20,000 in Year 1 and you expect the inflation rate to be 3 percent, how much more will you have to spend to buy the same goods and services in Year 2, assuming that all your expenses increase at the same rate as inflation?
- 3.** If the Consumer Price Index rose from 250 to 255 in one year, what was the approximate annual inflation rate for that year?
- 4.** Your starting salary in Year 1 is \$30,000. If you receive a raise of \$5,000 for Year 2, what is the percentage change in your salary?
- 5.** Use the inflation calculator in Excel Worksheet 1.2 to find out what a \$20,000 annual salary in 1983 would have been worth in 2019 dollars.
- 6.** Use the inflation calculator in Excel Worksheet 1.2 to find out what a movie ticket that cost 25 cents in 1970 would have cost in 2019 dollars. Have movie ticket prices increased at a faster or slower rate than other prices?
- 7.** The original Volkswagen Beetle sold for \$2,000 in 1970. Assuming that a new Beetle cost \$20,000 in 2012, did the price increase more or less than inflation? Use the inflation calculator in Excel Worksheet 1.2 to see what the inflation-adjusted price would have been in 2012.
- 8.** Janelle has asked her friend Danny to drive her to the airport, which is a 60-mile, two-hour round trip, so that she can save the \$20 cost of the shuttle bus. Danny will have to miss his personal finance

class in order to take her there. If Janelle is willing to pay Danny for this service, should Danny charge her more or less than the cost of the shuttle bus, taking into account his time in addition to the price of gas?

- 9.** Jamal would like to buy a car one year from now. He anticipates making a down payment of \$1,200 and borrowing the remaining \$10,000. Show how he can break this larger goal into several specific, smaller subgoals. Be sure to include an estimate of his required monthly allocation of funds to this goal.
- 10.** You have a friend who just graduated from college as a liberal arts major. He has a new job as a financial planner at a local brokerage firm. You are thinking of hiring a professional to help with your financial planning needs. Would your friend be a good choice? Why or why not?
- 11.** Your employer has just given you a 4 percent annual raise. You learned the following two pieces of information: (1) the average raise in the United States for people working in your profession was 3 percent this year, and (2) prices of goods and services, as measured by the national inflation rate, increased 5 percent since last year. Explain how your raise relates to these two pieces of information.
- 12.** Your friend tells you that her only financial goal is to become a millionaire. In what ways does this goal violate the requirements for SMART goals (Specific, Measurable, Attainable, Realistic, and Time-specific)?
- 13.** Fernando owes \$10,000 on a credit card that charges 18 percent interest. Use Table 1.4 to determine the monthly payment Fernando will have to make in order to pay back the debt within four years. If Fernando doubled the payment, would he be able to pay off his debt in 2 years? Why or why not?

Case Applications

- 1.** 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. And then disaster strikes. Her car breaks down, and the mechanic tells her the cost of fixing it will be \$350. What are Miranda's options? What are some ways that Miranda might lessen the impact of financial emergencies in the future?
- 2.** Sanjay is currently employed as an engineer at a major technology firm and earns \$50,000 a year. He thinks that an MBA will increase his chances of being promoted to a management position. He is trying to decide whether to enroll in a part-time evening MBA program that will take two years or in a one-year full-time MBA program.

- a.** Identify the factors that Sanjay should consider in making this decision.
- b.** What are the opportunity costs that Sanjay needs to consider?
- c.** Does Sanjay need any additional information to make an effective decision? If so, what information?
- d.** How can marginal reasoning be applied to this analysis?
- 3.** Lucy and Desi are expecting their first child. Although they had previously developed a prioritized list of personal financial goals, they expect that their new family circumstances will necessitate some changes.
- a.** Identify three goals that they are likely to add to their original list.
- b.** How might their priorities change after the birth of their child?