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Professor Billingsley's consulting to date has focused on two areas of expertise. First, he has acted extensively as an expert witness on financial issues. Second, he has taught seminars and published materials that prepare investment professionals for the CFA examinations. This has afforded him the opportunity to explore the relationships among diverse areas of investment analysis. His consulting endeavors have taken him across the United States and to Canada, Europe, and Asia. A primary goal of Professor Billingsley's consulting is to apply the findings of academic financial research to practical investment decision making and personal financial planning.

LAWRENCE J. GITMAN is an emeritus professor of finance at San Diego State University. He received his bachelor's degree from Purdue University, his M.B.A. from the University of Dayton, and his Ph.D. from the University of Cincinnati. Professor Gitman is a prolific textbook author and has more than 50 articles appearing in *Financial Management, The Financial Review,* the *Journal of Financial Planning,* the *Journal of Risk and Insurance,* the *Financial Services Review,* the *Journal of Financial Research, Financial Practice and Education,* the *Journal of Financial Education,* and other scholarly publications.

His major textbooks include *Introduction to Business,* co-authored with Carl McDaniel, et. al.; and *Fundamentals of Investing,* Thirteenth Edition, which is co-authored with Michael D. Joehnk and Scott B. Smart. Gitman and Joehnk also wrote *Investment Fundamentals: A Guide to Becoming a Knowledgeable Investor,* which was selected as one of 1988's 10 best personal finance books by *Money* magazine; and *Principles of Managerial Finance,* Sixth Brief Edition, co-authored with Chad J. Zutter.

An active member of numerous professional organizations, Professor Gitman is past president of the Academy of Financial Services, the San Diego Chapter of the Financial Executives Institute, the Midwest Finance Association, and the FMA National Honor Society. In addition, he is a Certified Financial Planner® (CFP®). Gitman formerly served as a director on the CFP® Board of Governors, as vice-president–financial education for the Financial Management Association, and as director of the San Diego MIT Enterprise Forum. Gitman has two grown children and lives with his wife in La Jolla, California, where he is an avid bicyclist.

MICHAEL D. JOEHNK is an emeritus professor of finance at Arizona State University. In addition to his academic appointments at ASU, Professor Joehnk spent a year (1999) as a visiting professor of finance at the University of Otago in New Zealand. He received his bachelor's and Ph.D. degrees from the University of Arizona and his M.B.A. from Arizona State University. A Chartered Financial Analyst (CFA), he has served as a member of the Candidate Curriculum Committee and of the Council of Examiners of the Institute of Chartered Financial Analysts. He has also served as a director of the Phoenix Society of Financial Analysts and as secretary/treasurer of the Western Finance Association, and he was elected to two terms as a vice-president of the Financial Management Association. Professor Joehnk is the author or co-author of some 50 articles, five books, and numerous monographs. His articles have appeared in *Financial*

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In addition to co-authoring several books with Lawrence J. Gitman, Professor Joehnk was the author of a highly successful paperback trade book, *Investing for Safety's Sake.* Dr. Joehnk was also the editor of *Institutional Asset Allocation*, which was sponsored by the Institute of Chartered Financial Analysts and published by Dow Jones-Irwin. He was a contributor to the *Handbook for Fixed Income Securities* and to *Investing and Risk Management,* Volume 1 of the Library of Investment Banking. In addition, he served a six-year term as executive co-editor of the *Journal of Financial Research.* He and his wife live in Prescott, Arizona.

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1 Understanding the Financial Planning Process

JGI/Jamie Grill/Blend Images/Getty Images

LEARNING OBJECTIVES

After studying this chapter, you will be able to…

- **1-1** Identify the benefits of using personal financial planning techniques to manage your finances.
- **1-2** Describe the personal financial planning process and define your goals.
- **1-3** Explain the life cycle of financial plans, their role in achieving your financial goals, how to deal with special planning concerns, and the use of professional financial planners.
- **1-4** Examine the economic environment's influence on personal financial planning.
- **1-5** Evaluate the impact of age, education, and geographic location on personal income.
- **1-6** Understand the importance of career choices and their relationship to personal financial planning.

After finishing this chapter go to **PAGE 26** for **STUDY TOOLS**

HOW WILL THIS AFFECT ME?

The heart of financial planning is making sure your values line up with how you spend and save. That means knowing where you are financially and planning on how to get where you want to be in the future no matter what life throws at you. For example, how should your plan handle the projection that Social Security costs may exceed revenues by 2034? And what if the government decides to raise marginal tax rates to help cover the federal deficit? An informed financial plan should reflect such uncertainties and more.

This chapter describes the financial planning process and explains its context. Topics include how financial plans change to accommodate your current stage in life and the role that financial planners can play in helping you achieve your objectives. After reading this chapter you will have a good perspective on how to organize your overall personal financial plan.

1-1 THE REWARDS OF SOUND FINANCIAL PLANNING

LO1 What does living "the good life" mean to you? Does it mean having the flexibility to pursue your dreams and goals in life? Is it owning a home in a certain part of town, starting a company, being debt free, driving a particular type of car, taking luxury vacations, or having a large investment portfolio? Today's complex, fast-paced world offers a bewildering array of choices. Rapidly changing economic, political, technological, and social environments make it increasingly difficult to develop solid financial strategies that will improve your lifestyle consistently. Moreover, the financial crisis of 2007–2008 dramatizes the need to plan for financial contingencies. No matter how you define it, the good life requires sound planning to turn financial goals into reality.

The best way to achieve financial objectives is through *personal financial planning,* which helps define your financial goals and develop appropriate strategies to reach them. And being financially self-aware provides more insight into the range of available financial choices and their trade-offs. Your comfortable retirement should not depend solely on employee or government benefits—such as steady salary increases or adequate funding from employer-paid pensions or Social Security. Creating flexible plans and regularly revising them is the key to building a sound financial future.

Successful financial planning also brings rewards that include greater flexibility, an improved standard of living, wiser spending habits, and increased wealth. Of course, planning alone does not guarantee success; but having an effective, consistent plan can help you use your resources wisely. Careful financial planning increases the chance your financial goals will be achieved and that you will have sufficient flexibility to handle such contingencies as illness, job loss, and even financial crises.

The goal of this book is to remove the mystery from the personal financial planning process and replace it with the tools you need to take charge of your personal finances. To organize this process, the text is divided into six parts, as follows:

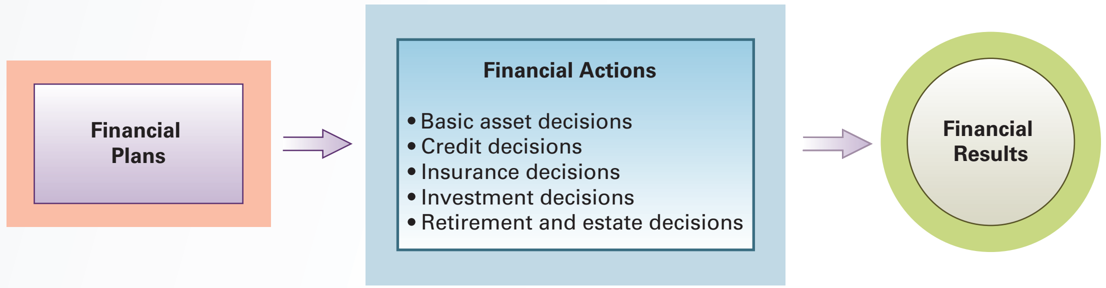
- **Part 1:** Foundations of Financial Planning
- **Part 2:** Managing Basic Assets
- **Part 3:** Managing Credit
- **Part 4:** Managing Insurance Needs
- **Part 5:** Managing Investments
- **Part 6:** Retirement and Estate Planning

Each part explains a different aspect of personal financial planning, as shown in Exhibit 1.1. This organizational

Exhibit 1.1

Organizational Planning Model

This text emphasizes making financial decisions regarding assets, credit, insurance, investments, and retirement and estates.



scheme revolves around financial decision making that's firmly based on an operational set of financial plans. We believe that sound financial planning enables individuals to make decisions that will yield their desired results.

1-1a Improving Your Standard of Living

With personal financial planning we learn to acquire, use, and control our financial resources more efficiently. It allows us to gain more enjoyment from our income and thus to improve our **standard of living**—the necessities, comforts, and luxuries we have or desire.

Our quality of life is closely tied to our standard of living. Although other factors—geographic location, public facilities, local cost of living, pollution, traffic, and population density—also affect quality of life, wealth is commonly viewed as a key determinant. Material items such as a house, car, and clothing as well as money available for health care, education, art, music, travel, and entertainment all contribute to our quality of life. Of course, many so-called wealthy people live "plain" lives, choosing to save, invest, or support philanthropic organizations with their money rather than indulge in luxuries.

One trend profoundly affecting our standard of living is the *two-income family.* What was relatively rare in the early 1970s has become commonplace today, and the incomes of millions of families have risen sharply as a result. About 75 percent of married adults say that they and their mate share all their money. Two incomes not only buy more, but they also require greater responsibility to manage the money wisely.

1-1b Spending Money Wisely

Using money wisely is a major benefit of financial planning. Whatever your income, you can either spend it now or save some of it for the future. Determining your current and future spending patterns is an important part of personal money management. The goal, of course, is to spend your money so that you get the most satisfaction from each dollar.

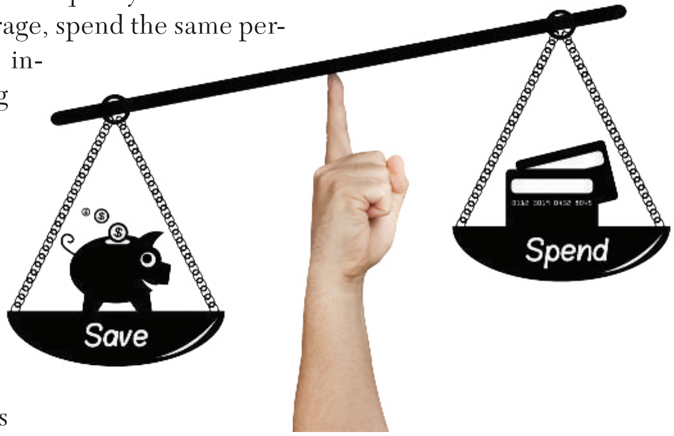
Current Needs Your current spending level is based on the necessities of life and your **average propensity to consume**, which is the percentage of each dollar of income, on average, that is spent for current needs rather than savings. A minimum level of spending would allow you to obtain only the necessities of life: food, clothing, and shelter. Although the quantity and type of food, clothing, and shelter purchased may differ among individuals depending on their wealth, we all need these items to survive.

Some people with high average propensities to consume earn low incomes and spend a large portion of it on basic necessities. On the other hand, individuals earning large amounts quite often have low average propensities to consume, in part because the cost of necessities represents only a small portion of their income.

Still, two people with significantly different incomes could have the same average propensity to

standard of living the necessities, comforts, and luxuries enjoyed or desired by an individual or family

average propensity to consume the percentage of each dollar of income, on average, that a person spends for current needs rather than savings consume because of differences in their standard of living. The person making more money may believe it is essential to buy better-quality items or more items and will thus, on average, spend the same percentage of each dollar of income as the person making far less.



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Future Needs A carefully developed financial plan should set aside a portion of current income for future spending. Placing these funds in various savings and investment vehicles allows you to earn a return on your funds until you need them. For example, you may want to build up a retirement fund to maintain a desirable standard of living in your later years. Instead of spending the money now, you defer actual spending until the future when you retire. Nearly 35 percent of Americans say retirement planning is their most pressing financial concern. Other examples of deferred spending include saving for a child's education, a primary residence or vacation home, a major acquisition (such as a car or home entertainment center), or even a vacation.

The portion of current income we commit to future needs depends on how much we earn and also on our average propensity to consume. Many affluent Americans say they need at least $5 million to feel rich. And more generally, most people say that it would take about twice their current net worth to feel wealthy. The more we earn and the less we devote to current spending, the more we can commit to meeting future needs. Regardless of income or wealth, some portion of current income should be set aside regularly for future use. Doing so creates good saving habits and provides for your future needs.

1-1c Accumulating Wealth

In addition to using current income to pay for everyday living expenses, we often spend it to acquire assets such as cars, a home, or stocks and bonds. Our assets largely determine how wealthy we are. Personal financial planning plays a critical role in the accumulation of wealth by directing our financial resources to the most productive areas.

One's **wealth** is the net total value of all the items that the individual owns. Wealth consists of financial and tangible assets. **Financial assets** are intangible, paper assets such as savings accounts and securities (stocks, bonds, mutual funds, and so forth). They are *earning assets* that are held for their expected future returns. **Tangible assets**, in contrast, are physical assets such as real estate and automobiles. These assets can be held for either consumption (e.g., your home, car, artwork, or jewelry) or investment purposes (e.g., a duplex purchased for rental income). The goal of most people is to accumulate as much wealth as possible while maintaining current consumption at a level that provides the desired standard of living. To see how you compare with the typical American in financial terms, check out the statistics in Exhibit 1.2.

Financial Planning Tips

BE SMART IN PLANNING YOUR FINANCIAL GOALS

Success is most likely if your goals are:

Specific: What do I want to achieve? What is required of me, and what are my constraints?

Measurable: How much money is needed? How will I know if I am succeeding?

Attainable: How can I do this? Is this consistent with my other financial goals?

Realistic: Am I willing and able to do this?

Timely: What is my target date? What short-term goals must be achieved along the way to achieve my longer-term goals?

Inspired by Paul J. Meyers, *Attitude Is Everything*, The Meyer Resource Group, 2003.

wealth the total value of all items owned by an individual, such as savings accounts, stocks, bonds, home, and automobiles

financial assets intangible assets, such as savings accounts and securities, that are acquired for some promised future return

tangible assets physical assets, such as real estate and automobiles, that can be held for either consumption or investment purposes

Exhibit 1.2

The Average American, Financially Speaking

This financial snapshot of the "average American" gives you an idea of where you stand in terms of income, net worth, and other measures. It should help you set some goals for the future.

	Income and Assets
What Do We Earn? (*median*)	
All families	$52,700
What Are We Worth? (*median*)	
All families	$97,300
Home Ownership (*median*)	
Value of primary residence	$185,000
Mortgage on primary residence	111,000
How Much Savings Do We Have? (*median*)	
Pooled investment funds (excluding money market)	$114,000
Stocks	25,000
Bonds	100,000
Bank accounts/CDs	24,500
Retirement accounts	60,000

Source: Adapted from Jesse Bricker, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Lindsay Jacobs, Kevin B. Moore, Sarah Pack, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle, "Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances," Board of Governors of the Federal Reserve System, Washington, D.C. (September 2017, vol. 103, no 3.), Data is for 2016. https://www.federalreserve.gov/publications/files/scf17.pdf, Tables 1–4, accessed November 2018.

1-2 THE PERSONAL FINANCIAL PLANNING PROCESS

LO2 Many people mistakenly assume that personal financial planning is only for the wealthy. However, nothing could be further from the truth. Whether you have a lot of money or not enough, you need personal financial planning. If you have enough money, planning can help you spend and invest it wisely. If your income seems inadequate, taking steps to plan your financial activities will lead to an improved lifestyle. **Personal financial planning** is a systematic process that considers the important elements of an individual's financial affairs and is aimed at fulfilling his or her financial goals.

Whether you have a lot of money or not enough, you need personal financial planning.

personal financial planning a systematic process that considers important elements of an individual's financial affairs in order to fulfill financial goals

Everyone—including recent college graduates, young married couples, and others—needs to develop a personal financial plan. Knowing what you need to accomplish financially, and how you intend to do it, gives you an edge over someone who merely reacts to financial events as they unfold. Just think of the example provided by the financial crisis of 2007–2008. Do you think that a financial plan would have helped in weathering the financial storm?

1-2a Steps in the Financial Planning Process

The financial planning process translates personal financial goals into specific financial plans, which then help you implement those goals through financial strategies. The financial planning process involves the six steps shown in Exhibit 1.3.

You start with financial goals, formulate and implement financial plans and strategies to reach them, monitor and control progress toward goals through budgets, and use financial statements to evaluate the plan and budget results. This leads you back to redefining your goals so that they better meet your current needs, and to revising your financial plans and strategies accordingly.

Exhibit 1.3

The Six-Step Financial Planning Process

The financial planning process translates personal financial goals into specific financial plans and strategies, implements them, and then uses budgets and financial statements to monitor, evaluate, and revise plans and strategies as needed. This process typically involves the six steps shown in sequence here.

1. Define financial goals.
2. Develop financial plans and strategies to achieve goals.
3. Implement financial plans and strategies.
4. Periodically develop and implement budgets to monitor and control progress toward goals.
5. Use financial statements to evaluate results of plans and budgets, taking corrective action as required.
6. Redefine goals and revise plans and strategies as personal circumstances change.

Let's now look at how goal setting fits into the planning process. In Chapters 2 and 3, we'll consider other information essential to creating your financial plans: personal financial statements, budgets, and taxes.

1-2b Defining Your Financial Goals

Financial goals are the results that an individual wants to attain. Examples include buying a home, building a college fund, and achieving financial independence. What are your financial goals? Have you spelled them out? It's impossible to effectively manage your financial resources without financial goals. We need to know where we are going, in a financial sense, to effectively meet the major financial events in our lives. Your financial goals or preferences must be stated in monetary terms because money and the satisfaction it can bring are an integral part of financial planning.

The Role of Money About 75 percent of Americans believe that money is freedom. **Money** is the medium of exchange used to measure value in financial transactions. It would be difficult to set specific personal financial goals and to measure progress toward achieving them without the standard unit of exchange provided by the dollar. Money, as we know it today, is the key consideration in establishing financial goals.

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Yet it's not money, as such, that most people want. Rather, we want the **utility**, which is the amount of satisfaction received from buying quantities of goods and services of a given quality, that money makes possible.

financial goals results that an individual wants to attain, such as buying a home, building a college fund, or achieving financial independence

money the medium of exchange used as a measure of value in financial transactions

utility the amount of satisfaction received from purchasing certain types or quantities of goods and services

BEHAVIOR MATTERS

Practicing Financial Self-Awareness

Are you aware of your financial behavior, its causes, and its consequences? For example, are you routinely relying too heavily on your credit card? Are you saving enough to buy a new car or to fund your retirement? And the bottom line: Are you continuing the same financial behavior you have in the past and yet expecting different results?

The first decisive step in taking control of your life is to be aware of what you're thinking, feeling, and doing. Be financially self-aware: observe your own thoughts, feelings, and behavior concerning your finances. Take notes on things that affect how you feel, and what you do about financial decisions. Watch yourself, and be honest about your feelings concerning money and your future.

Then ask yourself two critically important questions:

- **Have I clearly stated the financial goals that are important to me and, if so, what am I doing today to make sure I achieve them?** The heart of financial planning is determining where you are today and where you want to be in the future. This implies the need for a financial plan: limited resources sometimes bring painful trade-offs.

- **Is the way I spend money consistent with what I believe?** Effective financial planning takes the time to develop a plan that lines up your values and your use of money.

Source: Adapted from Carl Richards, "Practicing Radical Self-Awareness," Behaviorgap.com, https://us2.campaign-archive.com/?u=23ce2ac179e8158f7583c4e3f&id=86f42577bc&e=b50e826a9e, accessed November 2018.

People may choose one item over another because of a special feature that provides additional utility. For example, some people will pay more for a car with satellite radio than one with only an audio player. The added utility may result from the actual usefulness of the special feature, from the "status" it's expected to provide, or from both. Regardless, people receive varying levels of satisfaction from similar items, and their satisfaction isn't necessarily directly related to the cost of the items. We, therefore, need to consider utility along with cost when evaluating alternative qualities of life, spending patterns, and forms of wealth accumulation.

Go to Smart Sites

Is getting the lowest price important to you? Where can you search for the best prices? MindTap includes "Smart Sites," a list of resources and sites that offer additional information on topics in the PFIN text.

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The Psychology of Money Money and its utility are not only economic concepts; they're also closely linked to the psychological concepts of values, emotion, and personality. Your personal value system—the important ideals and beliefs that guide your life—will also shape your attitude toward money and wealth accumulation. If you place a high value on family life, you may choose a career that offers regular hours and less stress or choose an employer who offers flextime rather than a higher-paying position that requires travel and lots of overtime.

You may have plenty of money but choose to live frugally and do things yourself rather than hire someone to do them for you. Or you may spend a high proportion of your current income on acquiring luxuries. Financial goals and decisions should be consistent with your personal values. You can formulate financial plans that provide the greatest personal satisfaction and quality of life by identifying your values.

Money is an important motivator of personal behavior because it has a strong effect on self-image. Each person's unique personality and emotional makeup determine the importance and role of money in his or her life. You should become aware of your own attitudes toward money because they are the basis of your "money personality" and money management style.

Some questions to ask yourself include: How important is money to me? Why? What types of spending give me satisfaction? Am I a risk taker? Do I need large financial reserves to feel secure? Knowing the answers to these questions is a prerequisite for developing realistic and effective financial goals and plans. Trade-offs between current and future benefits are strongly affected by values, emotions, and personality. Effective financial plans are both economically and psychologically sound. They must not only consider your wants, needs, and financial resources but must also realistically reflect your personality and emotional reactions to money.

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1-2c Money and Relationships

The average couple spends between 250 and 700 hours planning their wedding. While most couples spend less than $10,000 on the big day, the average cost has risen to over $33,000, depending on where they live. But with all the hoopla surrounding the wedding day, many couples overlook one of the most important aspects of marriage: financial compatibility. Money can be one of the most emotional issues in any relationship, including that with a partner, parents, or children. Most people are uncomfortable talking about money matters and avoid such discussions, even with their partners. However, differing opinions on how to spend money may threaten the stability of a marriage or cause arguments between parents and children. Learning to communicate with your partner about money is a critical step in developing effective financial plans.

The best way to resolve money disputes is to be aware of your partner's financial style, consistently communicate openly, and be willing to compromise. It's highly unlikely that you can change your partner's style, but you can work out your differences. Financial planning is an especially important part of the conflict resolution process. You need to work together to develop your financial goals.

1-2d Types of Financial Goals

Financial goals cover a wide range of financial aspirations: controlling living expenses, meeting retirement needs, setting up a savings and investment program, and minimizing your taxes. Other important financial goals include having enough money to live as well as possible, being financially independent, sending children to college, and providing for retirement.

Financial goals should be defined as specifically as possible. Saying that you want to save money next year is not a specific goal. How much do you want to save, and for what purpose? A goal such as "save 10 percent of my take-home pay each month to start an investment program" states clearly what you want to do and why.

Because they are the basis of your financial plans, your goals should be realistic and attainable. If you set a savings goal too high—for example, 25 percent of your take-home pay when your basic living expenses already account for 85 percent of it—then your goal is unattainable and there's no way to meet it. But if savings goals are set too low, you may not accumulate enough for a meaningful investment program. If your goals are unrealistic, they'll put the integrity of your financial plan at risk and be a source of ongoing financial frustration.

It's important to involve your immediate family in the goal-setting process. When family members "buy into" the goals, it reduces the likelihood of future conflicts and improves the family's chances for financial success. After defining and approving your goals, you can prepare appropriate cash budgets. Finally, you should assign priorities and a time frame to financial goals. Are they short-term goals for the next year, or are they intermediate or long-term goals that will not be achieved for many more years? For example, saving for a vacation might be a medium-priority, short-term goal, whereas buying a larger

Financial Planning Tips

BUSTING COMMON FINANCIAL PLANNER MYTHS

- **Myth 1: My finances aren't complicated—I can do this on my own.** While most people can likely pay down credit cards, set up an IRA, and do some basic investing, professionals can handle the nuances of financial planning better. Your finances may well be more complicated than you realize. For example, many parents with young kids realize they need to buy life insurance. But they often overlook disability insurance, which covers some lost income if one or both parents are unable to work. Professionals are more likely to keep the big picture in mind and second opinions can be helpful.
- **Myth 2: Only the rich need financial planners.** Financial planning is needed by all who want to set money goals and design a plan to achieve those goals. Many people wrongly assume that a good financial planner will charge more than they can afford. In fact, there are planners who work with younger people and price-sensitive families under fixed-fee or hourly arrangements.
- **Myth 3: Financial planners provide only investing advice.** While investing advice is important, many planners can provide good advice on broad areas that include insurance, estate and retirement planning, and budgeting.
- **Myth 4: Once I've hired a financial planner, I'm good to go for life.** A good planner will help you get your finances organized and help you monitor them. But you do the heavy-lifting of contributing more to your 401(k) plan, changing your withholding taxes when needed, and deciding whom to name as insurance and investment account beneficiaries. A good financial planner listens to the client over the entire financial life cycle and provides accountability.
- **Myth 5: Credentials don't matter much.** Not true. You want a planner who has passed rigorous certification exams that require him or her to apply financial skills to practical situations. For example, holders of the Certified Financial Planner (CFP®) designation pass comprehensive exams on investment management, insurance, tax planning, employee benefits, and retirement and estate planners. And holders of the Chartered Financial Analyst (CFA®) designation have passed three levels of exams on comprehensive investment management. Looking over a group of well-trained planners and investment advisors for the best personal fit is the way to go.

Source: Adapted from Sheryl Nance-Nash, "6 Common Myths About Financial Planning – Busted," LearnVest, https://www.learnvest.com/2014/10/common-myths-about-financial-planning, accessed November 2018.

home may be a high-priority, intermediate goal and purchasing a vacation home a low-priority, long-term goal. Normally, long-term financial goals are set first, followed by a series of corresponding short-term and intermediate goals.

1-2e Putting Target Dates on Financial Goals

Financial goals are most effective when they are set with goal dates. **Goal dates** are target points in the future when you expect to have achieved or completed certain financial objectives. They may serve as progress checkpoints toward some longer-term financial goals and/or as deadlines for others.

goal dates target dates in the future when certain financial objectives are expected to be completed

EXAMPLE: Target Dates for Financial Goals
Harry and Olivia Williams are both 28 and have been married for one year. They have set financial goals of buying a boat for $3,000 in 2020, accumulate a net worth of $20,000 by 2024, and accumulate a net worth of $50,000 by 2032.

Long-Term Goals Long-term financial goals should indicate wants and desires for a period covering about 6 years out to the next 30 or 40 years. Although it's difficult to pinpoint exactly what you will want 30 years from now, it's useful to establish some tentative long-term financial goals. However, you should recognize that long-term goals will change over time and that you'll need to revise them accordingly. If the goals seem too ambitious, you'll want to make them more realistic. If they're too conservative, you'll want to adjust them to a level that encourages you to make financially responsible decisions rather than squander surplus funds.

Short-Term and Intermediate Goals Short-term financial goals are set each year and cover a 12-month period. They include making substantial, regular contributions to savings or investments in order to accumulate your desired net worth. Intermediate goals bridge the gap between short- and long-term goals. And of course, both intermediate and short-term goals should be consistent with your long-term goals.

Short-term goals become the key input for the cash budget, a tool used to plan for short-term income and expenses. To define your short-term goals, consider your immediate goals, expected income for the year, and long-term goals. Short-term planning should also include establishing an emergency fund with at least six months' worth of income. This special savings account serves as a safety reserve in case of financial emergencies such as a temporary loss of income.

DO IT NOW: Start a List of Your Financial Goals Yogi Berra summed it upwell: "If you don't know where you're going, you might not get there." And so it is with your financial goals. Pick up some paper now and start a list of your financial goals. Maybe it's as simple as saving $25 by the end of the month or as lofty as saving $200,000 for retirement by the time you're 50. You'll never achieve your goals if you don't know what they are, much less know whether they're realistic. Go ahead and dream. List your goals (short-term, intermediate, and long-term) and start laying out how you'll get there. You can **do it now**.

Unless you attain your short-term goals, you probably won't achieve your intermediate or long-term goals. It's tempting to let the desire to spend now take priority over the need to save for the future. But by making some short-term sacrifices now, you're more likely to have a comfortable future. Worksheet 1.1 is a convenient way to summarize your personal financial goals. It groups them by time frame (short term, intermediate, or long term) and lists a priority for each goal (high, medium, or low), a target date to reach the goal, and an estimated cost.

We have filled out the form showing the goals that Jack and Lily Taylor set in December 2019. The

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Taylors were married in 2016, own a condominium in a Midwestern suburb, and have no children. Because Jack and Lily are 28 and 26 years old, respectively, they have set their longest-term financial goal 33 years from now, when they want to retire. Jack has just completed his fifth year as a marketing representative for a large pharmaceutical company. Lily, a former elementary school teacher, finished her MBA in May 2018 and began working at a local advertising agency. Jack and Lily love to travel and ski. They plan to start a family in a few years, but for now they want to develop some degree of financial stability and independence. Their short-term goals include purchasing assets (clothes, furniture, and car), reducing debt, reviewing insurance, increasing savings, and planning for retirement.

1-3 FROM GOALS TO PLANS: A LIFETIME OF PLANNING

LO3 How will you achieve the financial goals you set for yourself? The answer, of course, lies in the financial plans you establish. Financial plans provide the road map for achieving your financial goals. The six-step financial planning process (introduced in Exhibit 1.3) results in separate yet interrelated components covering all the important financial elements in your life.

Some elements deal with the more immediate aspects of money management, such as preparing a budget to help manage spending. Others focus on acquiring major assets, controlling borrowing, reducing financial risk, providing for emergency funds and future wealth accumulation, taking advantage of and managing employer-

WORKSHEET 1.1 SUMMARY OF PERSONAL FINANCIAL GOALS

Set financial goals carefully and realistically, because they form the basis for your personal financial plans. Each goal should be clearly defined and have a priority, time frame, and cost estimate.

Personal Financial Goals

Name(s) Jack and Lily Taylor Date December 27, 2020

Short-Term Goals (1 year or less)

Goal	Priority	Target Date	Cost Estimate
Buy new tires and brakes for Honda	High	Feb. 2021	$ 500
Take Utah ski trip	Medium	Mar. 2021	1,800
Buy career clothes for Lily	High	May 2021	1,200
Buy new work clothes for Jack	Medium	June 2021	750
Replace stereo speakers	Low	Sept. 2021	1,100

Intermediate Goals (2 to 5 years)

Goal	Priority	Target Date	Cost Estimate
Start family	High	2022	–
Take 2-week European vacation	Medium	2022–23	5,000
Repay all loans except mortgage	High	2023	$ 7,500
Trade Focus and buy larger car	High	2023	10,500
Review insurance needs	High	2023	–
Buy new bedroom furniture	Low	2025	4,000
Accumulate $100,000 net worth	High	2025	–

Long-Term Goals (6 + years)

Goal	Priority	Target Date	Cost Estimate
Begin college fund for children	High	2026	? /year
Diversify/increase investment portfolio	High	2027	Varies
Take Hawaiian vacation	Low	2028	$ 10,000
Increase college fund contributions	High	2028	–
Buy larger home	High	2030	$ 250,000
Retire from jobs	High	2058	?

sponsored benefits, deferring and minimizing taxes, providing for financial security when you stop working, and ensuring an orderly and cost-effective transfer of assets to your heirs.

In addition to discussing your financial goals and attitudes toward money with your partner, you must allocate responsibility for money management tasks and decisions. Many couples make major decisions jointly and divide routine financial decision making on the basis of expertise and interest. Others believe it is important for their entire family to work together as a team to manage the family finances. They hold family financial meetings once every few months to help their children understand how the household money is spent.

1-3a The Life Cycle of Financial Plans

Financial planning is a dynamic process. As you move through different stages of your life, your needs and goals will change. Yet certain financial goals are important regardless of age. Having extra resources to fall back on in an economic downturn or period of unemployment should be a priority whether you are 25, 45, or 65. Some changes—a new job, marriage, children, moving to a new area—may be part of your original plan.

More often than not, you'll face unexpected "financial shocks" during your life: loss of a job, a car accident, divorce or death of a spouse, a long illness, or the need to support adult children or aging parents. With careful planning, you can get through tough times and prosper in good times. You need to plan ahead and take steps to weather life's financial storms successfully. For example, setting up an emergency fund or reducing monthly expenses will help protect you and your family financially if a setback occurs.

As we move from childhood to retirement age, we go through different life stages. Exhibit 1.4 illustrates the various components of a typical *personal financial planning life cycle* as they relate to these different life stages. While the exhibit shows more detail, the life cycle involves three general stages: (1) wealth accumulation, (2) wealth preservation, and (3) wealth transfer. It shows that the young tend to borrow, the middle-aged tend to save the most, and when we get older we run down our savings to fund retirement. This exhibit presents the organizing framework of the entire financial planning process. We will refer to it throughout the book—and we suggest you do so for the rest of your life.

As we pass from one stage of maturation to the next, our patterns of income, home ownership, and debt also change. From early childhood, when we rely on our parents for support, to early adulthood, when we hold our first jobs and start our families, we can see a noticeable change in income patterns. For example, those in the pre-retirement 45–64 age group tend to have higher income than those younger than age 45. Thus, as our emphasis in life changes, so do the kinds of financial plans we need to pursue.


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New career strategies—planned and unplanned job changes—may require that financial plans be revised. Many young people focus on their careers and building a financial base before marrying and having children. The families of women who interrupt their careers to stay home with their children, whether for six months or six years, will experience periods of reduced income. A divorce, a spouse's death, or remarriage can also drastically change your financial circumstances. Many people in their 30s, 40s, and 50s find themselves in the "sandwich generation": supporting their elderly parents while still raising their own children and paying for college. And some people must cope with reduced income due to jobs lost because of corporate downsizing or early retirement.

1-3b Plans to Achieve Your Financial Goals

Financial goals can range from short-term goals, such as saving for a car, to long-term goals, such as saving enough to start your own business. Reaching your particular goals requires different types of financial planning.

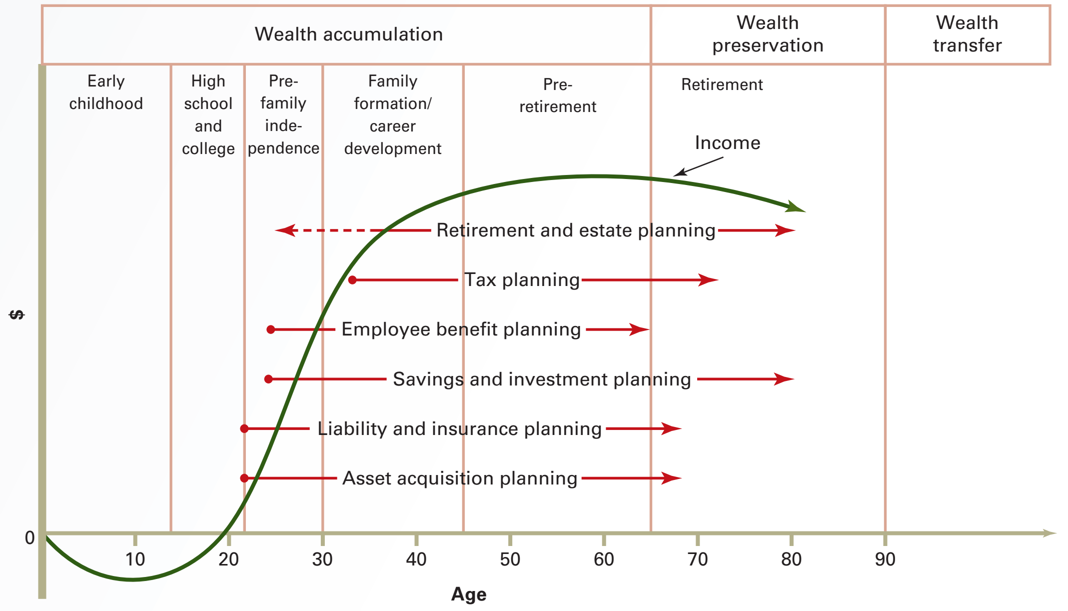
Asset Acquisition Planning One of the first categories of financial planning we typically encounter is asset acquisition. We accumulate *assets*—things we own—throughout our lives. These include *liquid assets* (cash, savings accounts, and money market funds) used to pay everyday expenses, *investments* (stocks, bonds, and mutual funds) acquired to earn a return on our money, *personal property* (movable property such as automobiles, household furnishings, appliances, clothing, jewelry, home electronics, and similar items), and *real property* (immovable property; land and anything fixed to it, such as a house). Chapters 4 and 5 focus on important considerations for managing liquid assets and other major assets such as automobiles and housing.

As our emphasis in life changes, so do the kinds of financial plans we need to pursue.

Exhibit 1.4

The Personal Financial Planning Life Cycle

As you move through life and your income and living cost patterns change, you'll typically have to pursue a variety of financial plans. For instance, after graduating from college, your focus likely will be on buying a car and a house, and you'll be concerned about health and automobile insurance to protect against loss.



Liability and Insurance Planning Another category of financial planning is liability planning. A *liability* is something we owe, which is measured by the amount of debt we incur. We create liabilities by borrowing money. By the time most of us graduate from college, we have debts of some sort or another—examples include education loans, car loans, credit card balances, and so on. Our borrowing needs typically increase as we acquire assets like a home, furnishings, and appliances. Whatever the source of credit, such transactions have one thing in common: *the debt must be repaid at some future time.* How we manage our debt burden is just as important as how we manage our assets. Managing credit effectively requires careful planning, which is covered in Chapters 6 and 7.

Obtaining adequate *insurance coverage* is also essential. Like borrowing money, obtaining insurance is often introduced relatively early in our life cycle (usually early in the family formation stage). Insurance is a way to reduce financial risk and protect both income (life, health, and disability insurance) and assets (property and liability insurance). Most consumers regard insurance as absolutely essential—and for good reason. One serious illness or accident can wipe out everything

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you have accumulated over many years of hard work. But having more insurance than necessary can be costly too. We'll examine how to manage your insurance needs in Chapters 8, 9, and 10.

Savings and Investment Planning As your income begins to increase, so does the importance of saving and investment planning. Initially, people save to establish an emergency fund for meeting unexpected expenses.

Eventually, however, they devote greater attention to investing excess income as a means of accumulating wealth, either for major expenditures, such as a child's college education, or for retirement. Individuals build wealth through savings and subsequently making various investments: common or preferred stocks, government or corporate bonds, mutual funds, real estate, and so on. The higher the returns on the investment of excess funds, the greater the wealth they accumulate.

Exhibit 1.5 shows the impact of two different rates of return on accumulated wealth. The graph shows that if you had $1,000 today and could keep it invested at 4 percent, then you would accumulate a considerable sum of money over time. For example, at the end of 40 years, you'd have $4,801 from your original $1,000. Earning a higher rate of return provides even greater rewards. Some might assume that earning, say, only 2 percentage points more (e.g., 6 percent rather than 4 percent) would not matter much. But it certainly would! Observe that if you could earn 6 percent over the 40 years, then you'd accumulate $10,286, which is more than twice as much as you'd accumulate at 4 percent. This powerful observation is important to keep in mind when comparing competing investment and savings alternatives.

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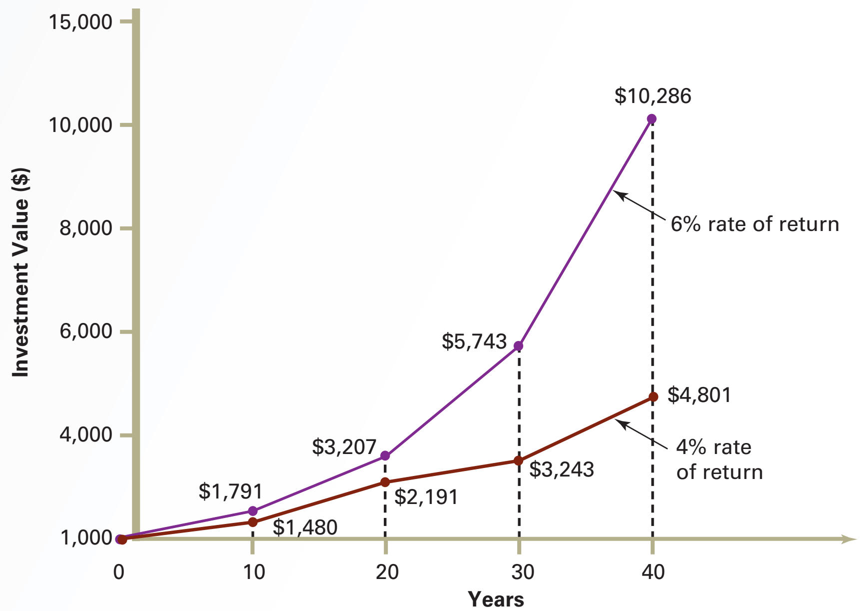
As we'll explore in Part 5 on managing investments, seemingly small differences in various investment management fees can also translate into significant differences in net investment returns over long periods of time. The length of time you keep your money invested is just as important as the rate of return you earn on your investments. You can accumulate more than twice as much capital by investing for 40 rather than 30 years with either rate of return (4 percent or 6 percent). This is the magic of compound interest, which explains why it's so important to create strong savings and investment habits early in life. We'll

Exhibit 1.5

How a $1,000 Investment Grows over Time

Four or 6 percent: How big a deal is a 2-percent difference? The deal is more than twice the money over a 40-year period! Through the power of compound interest, a higher return means dramatically more money as time goes on.



examine compounding more fully in Chapter 2, savings in Chapter 4, and investments in Chapters 11,12, and 13.

Employee Benefit Planning Your employer may offer a wide variety of employee benefit plans, especially if you work for a large firm. These could include life, health, and disability insurance; tuition reimbursement programs for continuing education; pension, profit-sharing, and 401(k) retirement plans; flexible spending accounts for child care and health care expenses; sick leave, personal time, and vacation days; and other miscellaneous benefits such as employee discounts and subsidized cafeterias or parking.

Managing your employee benefit plans and coordinating them with your other plans is an important part of the overall financial planning process. Especially in today's volatile labor market, you can no longer assume that you'll be working at the same company for many years. If you change jobs, your new company may not offer the same benefits. So your personal financial plans should include contingency plans to replace employer-provided benefits as required. We'll discuss employee benefits in greater detail in this chapter under Special Planning Concerns and in Chapters 2 (planning); 3 (taxes); 8, 9, and 10 (insurance); and 14 (retirement).

Tax Planning Despite all the talk about tax reform, our tax code remains highly complex. Income can be taxed as active (ordinary), portfolio (investment), passive, tax-free, or tax-deferred. Then there are tax shelters, which use various aspects of the tax code (such as depreciation expenses) to legitimately reduce an investor's tax liability. Tax planning considers all these factors and more. It involves looking at your current and projected earnings and then developing strategies that will defer and minimize taxes. Tax plans are closely tied to investment plans and will often specify certain investment strategies. Although tax planning is most common among individuals with high incomes, people with lower incomes can also obtain sizable savings. We'll examine taxes and tax planning in Chapter 3.

Retirement and Estate Planning While you're still working, you should be managing your finances to attain those goals you feel are important after you retire. These might include maintaining your standard of living, extensive travel, visiting children, frequent dining at better restaurants, and perhaps a vacation home or boat. Retirement planning should begin long before you retire.

Most people don't start thinking about retirement until well into their 40s or 50s. This is unfortunate, because it usually results in a substantially reduced level of retirement income. The sooner you start, the better off you'll be. Take, for instance, the traditional IRA (individual retirement account), whereby certain wage earners were allowed to invest up to $6,500 per year in 2018. We'll look at IRAs and other aspects of retirement planning in Chapter 14.

EXAMPLE: The Sooner You Start an IRA, the Better If you start investing for retirement at age 40, put only $2,000 a year in an IRA earning 5 percent for 25 years, you will have $95,454 at age 65. However, if you start the same retirement plan 10 years earlier at age 30, you'll have $180,641 at age 65!

Accumulating assets to enjoy in retirement is only part of the long-term financial planning process. As people grow older, they must also consider how they can most effectively pass their wealth on to their heirs, an activity known as *estate planning*. We'll examine this complex subject—which includes such topics as wills, trusts, and the effects of gift and estate taxes—in Chapter 15.

1-3c Special Planning Concerns

Students may not think that they need to spend much time on financial planning—not yet, anyway. However, the sooner you start, the better prepared you'll be to adapt your plans to changing personal circumstances. Such changes include changing or losing a job, relocating to a new state, getting married, having children, being in a serious accident, getting a chronic illness, losing a spouse through divorce or death, retiring, or taking responsibility for dependent parents. These and other stressful events are "financial shocks" that require reevaluation of your financial goals and plans.

Go to Smart Sites

Would you like to know about free educational programs and tutorials on financial planning? The Federal Reserve Bank of Chicago has put together a number of resources for self-help on many topics.

Managing Two Incomes Did you know that the earnings of the average dual-income family will add up to more than $1 million over the wage earners' lives?

Today, two-income couples account for the majority of U.S. households, and many depend on the second income to make ends meet. Often, however, a second income doesn't add as much as expected to the bottom line. Higher expenses such as child care, taxes, clothing, dry cleaning, transportation, and lunches may consume a large part of the second paycheck. And two-income families tend to spend what they earn rather than save it.

Spouses should decide together how to allocate income to household expenses, family financial goals, and personal spending goals. Will you use a second income to meet basic expenses, afford a more luxurious lifestyle, save for a special vacation, or invest in retirement accounts? Some couples place all income into a single, joint account. Others each contribute *equal* amounts into a joint account to pay bills but retain individual discretion over remaining income. Still others contribute a *proportional* share to finance joint expenses and goals. In any case, both spouses should have money of their own to spend without accountability. For examples of managing two incomes, see the worksheets in Chapter 2.

Managing Employee Benefits If you hold a full-time job, then your employer probably provides various employee benefits, ranging from health and life insurance to pension plans. These valuable benefits can have a major financial impact on family income. Most American families depend solely on employer-sponsored group plans for their health insurance coverage and also for a big piece of their life insurance coverage and retirement needs.

Today's employee benefits packages cover a full spectrum that may include:

- Health and life insurance
- Disability insurance
- Long-term care insurance
- Pension and profit-sharing plans
- Supplemental retirement programs such as 401(k) plans
- Dental and vision care
- Child care, elder care, and educational assistance programs
- Subsidized employee food services

Some companies and industries are known for generous benefit plans; others offer far less attractive packages. In general, large firms can afford more benefits than small ones can. Because employee benefits can increase your total compensation by 30 percent or more, you should thoroughly investigate your employee benefits to choose those appropriate for your personal situation. Be sure to coordinate your benefits with your partner's to avoid paying for duplicate coverage. Companies change their benefit packages and many are shifting more costs to employees. Although an employer may pay for some benefits in full, typically employees pay for part of the cost of group health insurance, supplemental life insurance, long-term care insurance, and participation in voluntary retirement programs.


Clownbusiness/Shutterstock.com

Due to the prevalence of two-income families and an increasingly diverse workforce, many employers are replacing traditional programs, where the company sets the type and amount of benefits, with **flexible-benefit (cafeteria) plans**. In flexible-benefit programs, the employer allocates a certain amount of money to each employee and then lets the employee "spend" that money for benefits that suit his or her age, marital status, number of dependent children, level of income, and so on. These plans usually cover everything from child care to retirement benefits, offer several levels of health and life insurance coverage, and have some limits on the minimum and maximum amounts of coverage. Within these constraints, you can select the benefits that do you the most good. In some plans, you can even take part of the benefits in the form of more take-home pay or extra vacation time!

Managing Your Finances in Tough Economic Times Tough economic times can be due to broad macroeconomic trends like a recession, or they can be brought on by more personal, local developments. The effects of recessions and financial crises divide people into three groups: (1)

flexible-benefit (cafeteria) plans the employer allocates a certain amount of money to each employee and then lets the employee "spend" that money on the benefits that suit his or her age, marital status, number of dependent children, and level of income

Financial Planning Tips

PLANNING FOR IMPORTANT LIFE EVENTS

Just like you, financial plans go through stages and must adapt to changes over your lifetime. Here are some of the critical life events that may make you reconsider and possibly revise an existing financial plan.

- **Marriage.** Finances must be merged, and there may be a need for life insurance.
- **Children.** It's time to start a college saving plan and revise your budget accordingly. A will is needed that makes provisions for guardianship if both parents die while the children are minors.
- **Divorce.** Financial plans based on two incomes are no longer applicable. Revised plans must reflect any property settlements, alimony, and/or child support.
- **Moving into middle age.** Although having started a savings and investing plan early in life should be paying off, the number of working years is declining, along with future earning ability. The shorter time horizon implies that you may want to take less risk by keeping less money in the stock market. While the greater safety is appealing, the reduced expected returns are also sobering. In addition, this could be the time to consider long-term care insurance for possible use in retirement.
- **Death of a parent.** The estate must be settled, and help may be needed in managing a possible inheritance.
- **Retirement.** Hopefully, your financial plan provided the amount needed to fund retirement fully. During retirement, you will try to preserve your capital and will rely on the income generated by your investments to fund your living expenses. Investment risk should be reduced greatly and inflation risk must be managed. Money will be withdrawn from tax-deferred retirement accounts and taxes will be due. The risk of increases in future tax rates can be managed, in part, with Roth IRAs, which are retirement accounts where your *original* contributions are not tax-deductible but your *earnings* on the account are not taxed. Estate planning and long-term care issues should also be addressed.

those who are directly and severely hurt through job loss, (2) those who are marginally hurt by reduced income, and (3) those who are not directly hurt. If you are in either of the first two groups, then you must make significant lifestyle changes to reduce spending. Even if you are in the last group, a recession affects you indirectly. For example, retirement accounts typically drop in value, and financial plans must be revised. And everyone's expectations are at least temporarily affected, which causes most people to be more cautious about their expenditures during a recession or crisis.

The financial crisis of 2007 and 2008, and the subsequent long period of high employment, was a macroeconomic challenge of historic, global proportions. It drives home the benefits of having a sound financial plan—and dramatized the cost of not having one. The precipitous decline in stock and home prices, and the number of people laid off from their jobs, made everyone think a lot more about financial planning in general and how to survive a financial crisis in particular. Although we all hope such broad crises will be rare, it is important to plan for a possible recurrence. All of the financial planning principles explained in this book remained valid during the global financial crisis of 2007–2008 and should continue to serve us well in any future similar situations.

So how do you best plan to survive a broad-based financial crisis? First, you remind yourself of the key principles of financial planning presented in this book:

- Spend less than you earn.
- Keep investing so your money continues to work toward your goals.
- Know where you are and plan for the unexpected. You cannot know where you are financially unless you carefully—and frequently—update your family's budget. And it is important to set aside money for an emergency fund. As discussed earlier in this chapter, you should set aside enough cash to last six months.

Second, don't panic when financial markets crash! This means that you shouldn't try to time the market by buying when the experts say it's at a low or by selling when they say it's at a high. Continue to invest for the long term but keep in mind how close you are to achieving your financial objectives. For example, if you pull all of your money out of the stock market when it has fallen, you will not be positioned to take advantage of its eventual recovery. Recessions and financial crises can be challenging. A financial plan that considers such contingencies will help you weather the storm. Part 5 of the book focuses on investment management.

DO IT NOW: Start Building an Emergency Fund What would happen if you lost your job, got hurt, or had an unexpected big expense? Even if you're not making much money now, you could start building an emergency fund by putting aside even $10 a month. As this chapter points out, your goal is to eventually set aside enough to last at least 6 months. Considering the risk of not doing so, you can **do it now**.

1-3d Using Professional Financial Planners

Most financial planners fall into one of two categories based on how they are paid: by commissions or by fees. *Commission-based planners* earn commissions on the financial products they sell, whereas *fee-only planners* charge fees based on the complexity of the plan they prepare. Many financial planners take a hybrid approach and charge fees and collect commissions on products they sell, offering lower fees if you make product transactions through them.

1-4 THE PLANNING ENVIRONMENT

LO4 Financial planning takes place in a dynamic economic environment created by the actions of government, business, and consumers. Your purchase, saving, investment, and retirement plans and decisions are influenced by both the present and future states of the economy. Understanding the economic environment will allow you to make better financial decisions.

Consider that a strong economy can lead to high returns in the stock market, which in turn can positively affect your investment and retirement programs. The economy also affects the interest rates you pay on your mortgage and credit cards as well as those you earn on savings accounts and bonds. Periods of high inflation can lead to rapid price increases that make it difficult to make ends meet. Here we look at two important aspects of the planning environment: the major financial planning players and the economy.

1-4a The Players

The financial planning environment contains various interrelated groups of players, each attempting to fulfill certain goals. Although their objectives are not necessarily incompatible, they do impose some constraints on one another. There are three vital groups: government, business, and consumers. Exhibit 1.6 shows the relationships among these groups.

Government Federal, state, and local governments provide us with many essential public goods and services, such as police and fire protection, national defense, highways, public education, and health care. The federal government plays a major role in regulating economic activity. Government is also a customer of business and an employer of consumers, so it's a source of revenue for business and of wages for consumers. The two major constraints from the perspective of personal financial planning are taxation and regulation.

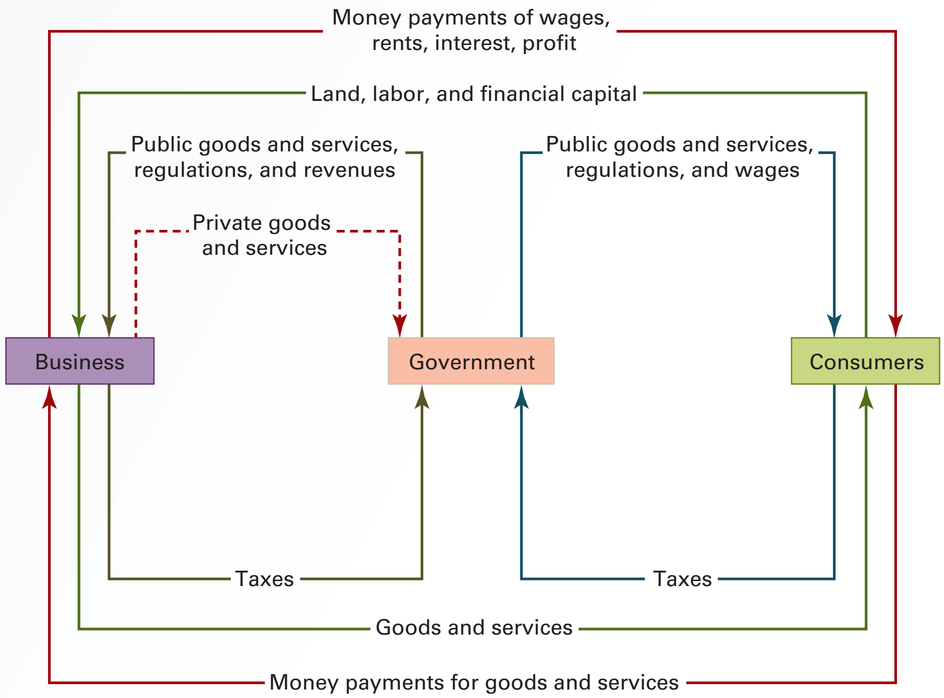
Business As Exhibit 1.6 shows, business provides consumers with goods and services and in return receives payment in the form of money. Firms must hire labor and use land and financial capital (economists call these *factors of production*) to produce those goods and services. In return, firms pay out wages, rents, interest, and profits to the various factors of production.

Anthony Correia/Shutterstock.com

Exhibit 1.6

The Financial Planning Environment

Government, business, and consumers are the major players in our economic system. They interact with one another to produce the environment in which we carry out our financial plans.



Thus, businesses are an important part of the circular flow of income that sustains our free-enterprise system. In general, they create a competitive environment in which consumers may select from an array of goods and services. All businesses are limited in some way by federal, state, and local laws.

Consumers The consumer is the central player in the financial planning environment. Consumer choices ultimately determine the kinds of goods and services that businesses will provide. The consumer's choice of whether to spend or save also has a direct impact on present and future circular flows of money. Cutbacks in consumer spending are usually associated with a decline in economic activity, whereas increases in consumer spending help the economy to recover.

1-4b The Economy

Our economy is influenced by interactions among government, business, and consumers as well as by world economic conditions. Through specific policy decisions, the government's goal is to manage the economy to provide economic stability and a high level of employment. Government decisions have a major impact on the economic and financial planning environment.

The federal government's *monetary policy*—programs for controlling the amount of money in circulation (the money supply)—is used to stimulate or moderate economic growth. For example, increases in the money supply tend to lower interest rates. This typically leads to a higher level of consumer and business borrowing and spending that increases overall economic activity. The reverse is also true. Reducing the money supply raises interest rates, which reduces consumer and business borrowing and spending and thus slows economic activity. The historically low interest rates in the wake of the financial crisis of 2007–2008 and beyond reflect the efforts of the Federal Reserve (Fed) to bolster the sagging economy and decrease unemployment.

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The government's other principal tool for managing the economy is *fiscal policy*—its programs of spending and taxation. Increased spending for social services, education, defense, and other programs stimulates the economy, whereas decreased spending slows economic activity. Increasing taxes, on the other hand, gives businesses and individuals less to spend and, as a result, negatively affects economic activity. Conversely, decreasing taxes stimulate the economy. The importance of fiscal policy is illustrated by the government's massive spending to stimulate the U.S. economy in 2008 as a way to address the greatest financial crisis since the Great Depression of the 1930s in the United States.

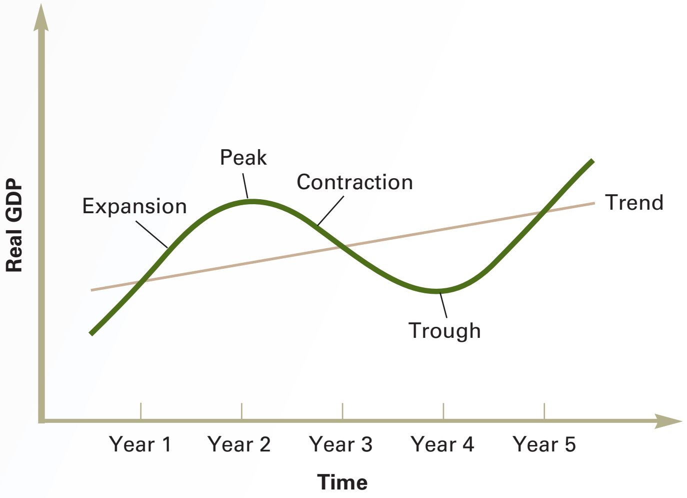
Economic Cycles Although the government uses monetary and fiscal policy to manage the economy and provide economic stability, the level of economic activity changes constantly. The upward and downward movement creates *economic cycles* (also called *business cycles*), which vary in length and in extent. An economic cycle typically contains four stages: *expansion, peak, contraction,* and *trough.*

Exhibit 1.7 shows how each of these stages relates to real (inflation-adjusted) gross domestic product (GDP), which is an important indicator of economic activity. The stronger the economy, the higher the

Exhibit 1.7

The Business Cycle

The business cycle consists of four stages: expansion, peak, contraction, and trough.



Source: Adapted from William Boyes and Michael Melvin, *Economics*, 8th ed. (Cengage, 2011), p. 135.

levels of real GDP and employment. During an **expansion**, real GDP increases until it hits a **peak**, which usually signals the end of the expansion and the beginning of a **contraction**. During a contraction (also known as a recession), real GDP falls into a **trough**, which is the end of a contraction and the beginning of an expansion. For about 75 years, the government has been successful in keeping the economy out of a depression, although we have experienced periods of rapid expansion and high inflation followed by periods of deep recession. And some would argue that the financial crisis of 2007–2008 came close to precipitating a depression.

Inflation, Prices, and Planning As we've discussed, our economy is based on the exchange of goods and services between businesses and their customers—consumers, government, and other businesses—for a medium of exchange called money. The mechanism that facilitates this exchange is a system of *prices.* The price of something is *the amount of money a seller is willing to accept in exchange for a given quantity of some good or service*—for example, $3 for a pound of meat or $10 for an hour of work.

The economy is said to be experiencing a period of **inflation** when the general level of prices *increases* over time. The most common measure of inflation, the **consumer price index (CPI)**, is based on changes in the cost of consumer goods and services. At times, the rate of inflation has been substantial. In 1980, for instance, prices went up by a whopping 13.6 percent. Fortunately, inflation has dropped dramatically in this country, and the annual rate of inflation has remained below 5 percent every year since 1983, except in 1990, when it was 5.4 percent. While there was mild deflation of −0.34 percent in 2009, inflation moved up to about 3.2 percent in 2011, and has remained below or modestly above 2 percent since then.

Be sure to look at what you earn in terms of its purchasing power, not simply in terms of absolute dollars.

expansion the phase of the economic cycle when real GDP increases until it hits a peak

peak the phase of the economic cycle when an expansion ends and a contraction begins

contraction the phase of the economic cycle when real GDP falls

trough the phase of the economic cycle when a contraction ends and an expansion begins

inflation a state of the economy in which the general price level is increasing

consumer price index (CPI) a measure of inflation based on changes in the cost of consumer goods and services

purchasing power the amount of goods and services that each dollar buys at a given time

EXAMPLE: Impact of Inflation on Financial Planning Grace earned $50,000 in 2019, and expected to receive annual raises that would bring her salary to $54,000 by 2022. While the annual growth rate in her salary is 2.6 percent, assume that inflation averaged 3 percent per year. Grace's salary needs to grow to $54,636 just to keep pace with inflation. So, her *real* salary will decline.

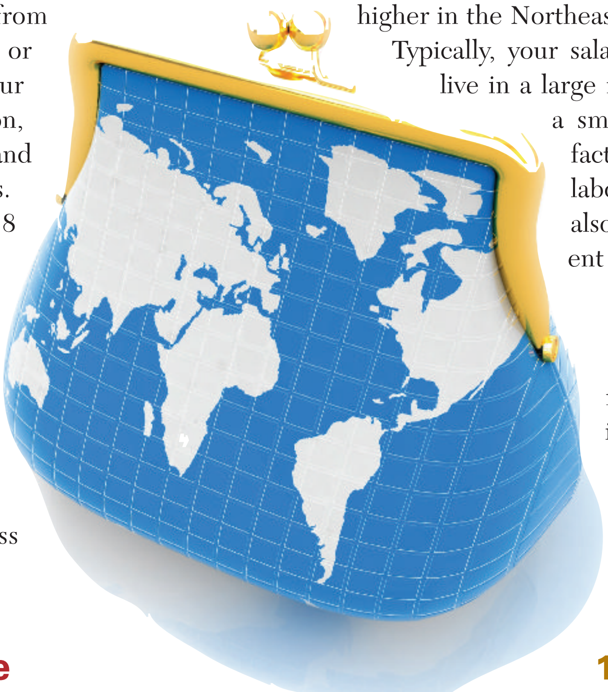
Inflation is of vital concern to financial planning. It affects not only what we pay for our goods and services but also what we earn in our jobs. Inflation tends to give an illusion of something that doesn't exist. That is, though we seem to be making more money, we really aren't. As prices rise, we need more income because our **purchasing power**—the amount of goods and services that each dollar buys at a given time—declines. So be sure to look at what you earn in terms of its purchasing power, not simply in terms of absolute dollars.

Inflation also directly affects interest rates. High rates of inflation drive up the cost of borrowing money as lenders demand compensation for the eroding value of the loan payments they are to receive. Higher interest rates mean higher mortgage payments, higher monthly car payments, and so on. High inflation rates also have a detrimental effect on stock and bond prices. Finally, sustained high rates of unexpected inflation can have devastating effects on retirement plans and other long-term financial goals. Indeed, for many people, inflation can put such goals out of reach.

1-5 WHAT DETERMINES YOUR PERSONAL INCOME?

LO5, LO6 An obvious and important factor in determining how well we live is the amount of income we earn. In the absence of any inheritance or similar financial windfall, your income will largely depend on such factors as your age, marital status, education, geographic location, and choice of career. A high level of income—whether derived from your job, your own business, or your investments—is within your reach if you have the dedication, commitment to hard work, and well-thought-out financial plans.

The data in Exhibit 1.8 show how income changes with age and education. For example, people with low incomes typically fall into the very young or very old age groups. Heads of households who have more formal education earn higher annual incomes than do those with less education.


Guru 3D/Shutterstock.com

1-5a Where You Live

Geographic factors can also affect your earning power. Salaries vary regionally, tending to be higher in the Northeast and West than in the South. Typically, your salary will also be higher if you live in a large metropolitan area rather than a small town or rural area. Such factors as economic conditions, labor supply, and industrial base also affect salary levels in different areas.

Living costs also vary considerably throughout the country. You'd likely earn more in San Francisco than in Cincinnati, Ohio, but your salary would probably not go as far owing to the much higher cost of living in San Francisco.

1-5b Your Career

A critical determinant of your lifetime earnings is your career. The career you choose

Exhibit 1.8

How Age and Education Affect Annual Income

The amount of money you earn is closely tied to your age and education. Generally, the closer you are to middle age (45–64) and the more education you have, the greater your income will be.

Annual Income

Age	Median Annual Income ($)
25–34	41,236
35–44	51,272
45–54	52,208
55–64	50,440
65 and over	47,372
Education	**Median Annual Income ($)**
Doctoral degree	90,636
Professional degree	95,472
Master's degree	72,852
Bachelor's degree	60,996
Associate's degree	43,472
Some college, no degree	40,248
High school diploma	37,024
Less than a high school diploma	27,040

Source: Adapted from U.S. Bureau of Labor Statistics, Median usual weekly earnings of full-time wage and salary workers by age, race, Hispanic or Latino ethnicity, and sex, 1st quarter 2018 averages, not seasonally adjusted, Table 3, https://www.bls.gov/news.release/pdf/wkyeng.pdf, accessed November 2018; and U.S. Bureau of Labor Statistics, Unemployment rates and earnings by educational attainment, 2017, https://www.bls.gov/emp/tables/unemployment-earnings-education.htm, accessed November 2018.

Financial Planning Tips

FINDING AN OBJECTIVE FINANCIAL PLANNER

When interviewing a prospective financial advisor, you should be aware of potential conflicts of interest:

How is the advisor compensated? Financial advisors can be compensated by product sale commissions and/or by client-paid fees. Client-paid fees can include an hourly fee, an annual retainer, a fee that is based on the amount invested with the advisor, or a flat fee for each service provided. Some advisors are paid using a combination of commissions and fees.

Conflicts of interest. While most advisors are honest, opportunities for conflicts of interest abound. Advisors who get a commission have an incentive to sell you the products that generate the most money for them, but those are not necessarily the best products for you. Advisors who are paid an hourly fee have an incentive to add hours to your bill. And advisors who earn a fee based on the amount of assets under management tend to encourage you to invest more with them.

Good questions to ask. Ask a prospective advisor how he or she is compensated. If an advisor receives commissions, ask for a description of the commissions on their products. Alternatively, ask a fee-paid advisor for a schedule of fees for each type of service provided. It would be helpful to use the questionnaire provided on the National Association of Personal Financial Advisors (NAPFA) website, **www.napfa.org.** It has good questions to ask when interviewing a prospective advisor and provides a form that your advisor can use to disclose the commissions he or she receives.

is closely related to your level of education and your particular skills, interests, lifestyle preferences, and personal values. Social, demographic, economic, and technological trends also influence your decision as to what fields offer the best opportunities for your future. Although not a prerequisite for many types of careers (e.g., sales, service, and certain types of manufacturing and clerical work), a formal education generally leads to greater decision-making responsibility—and consequently increased income potential—within a career. Exhibit 1.9 shows the differences in average compensation among selected college-educated majors over the course of their associated careers.

1-5c Planning Your Career

Career planning and personal financial planning are closely related activities, so the decisions you make in one area affect the other. Like financial planning, career planning is a lifelong process that includes short- and long-term goals. Since your career goals are likely to change several times, you should not expect to stay in one field, or to remain with one company, for your whole life.

The average American starting a career today can expect to have at least 10 jobs with five or more employers, and many of us will have three, four, or even more careers during our lifetimes. Some of these changes will be based on personal decisions; others may result from layoffs or corporate downsizing. For example, a branch manager for a regional bank who feels that bank mergers have reduced her job prospects in banking may buy a quick-print franchise and become her own boss. Job security is practically a thing of the past, and corporate loyalty has given way to a more self-directed career approach that requires new career strategies.

Go to Smart Sites

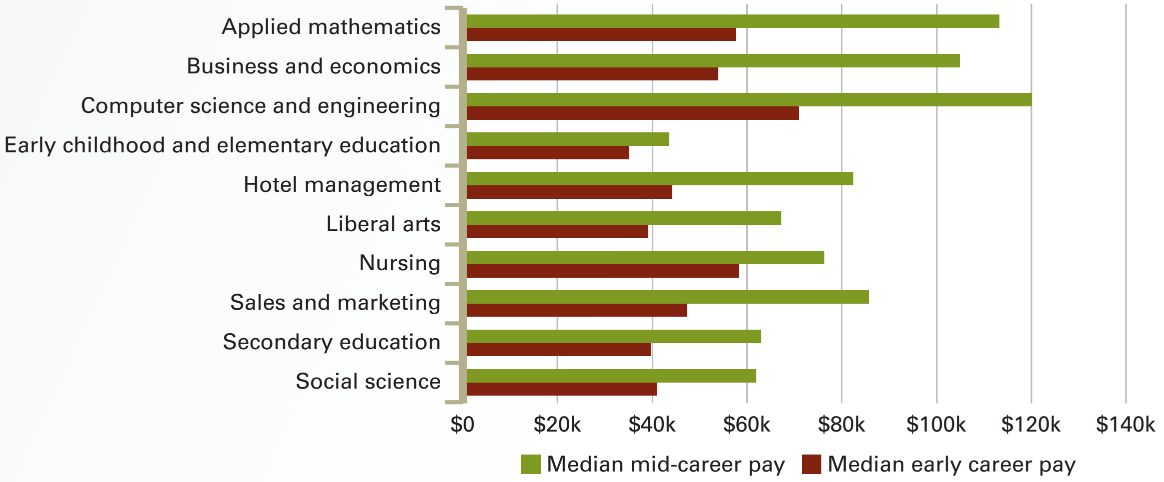
The U.S. News & World Report Career Center has material on a variety of career topics ranging from internships and résumés to the hottest careers and benefits.

Go to Smart Sites

One of the first steps in the job search process is to assess your personality. Link to the Keirsey Temperament Sorter®-11 as a starting point.

Exhibit 1.9

Median Annual Salaries for College Majors*



* Early career includes alumni with 0 to 5 years of experience while mid-career includes alumni with 10+ years of experience.

Source: Adapted from the *2017–2018 College Salary Report,* "Highest Paying Bachelor Degrees by Salary Potential," https://www.payscale.com/college-salary-report/majors-that-pay-you-back/bachelors, accessed November 2018.

Careful career planning can improve your work situation and help you gain greater personal and professional satisfaction. Some of the steps are similar to the financial planning process described earlier:

- Identify your interests, skills, needs, and values.
- Set specific long- and short-term career goals.
- Develop and use an action plan to achieve those goals.
- Review and revise your career plans as your situation changes.

A personal portfolio of skills, both general and technical, will protect your earning power during economic downturns and advance it during prosperous times. It's important to keep your skills current with on-the-job training programs and continuing education. Adding proficiency in technology or languages puts you ahead of the pack in dealing with changing workplace requirements.

Good job hunting skills will serve you well throughout your career. Learn how to research new career opportunities and investigate potential jobs, taking advantage of online resources as well as traditional ones. Develop a broad base of career resources, starting with your college placement office, the public library, and personal contacts such as family and friends. Know how to market your qualifications to your advantage in your résumé and cover letters, on the phone, and in person during a job interview.

FINANCIAL IMPACT OF PERSONAL CHOICES

Jacob Cuts Back on Lattes


NorGal/Shutterstock.com

Jacob buys lunch out most days and buys a latte every morning. He believes he could cut back a bit and save $5 a day, which is $35 a week and $140 a month. What is the impact of this seemingly modest cutback?

If Jacob invests his $35 savings a week every month at 5 percent, he will have the following in the future:

- 20 years: $57,545
- 30 years: $116,516
- 40 years: $213,643

The seemingly small act of investing only $5 a day would have a dramatic long-term effect on Jacob's future accumulated wealth.

STUDY TOOLS 1

LOCATED AT BACK OF THE TEXTBOOK

☐ Chapter Review Card

LOCATED IN MINDTAP

☐ Review Key Term flashcards and create your own cards.

☐ Increase your comprehension with online homework.

☐ Watch ConceptClip videos.

Financial Planning Exercises

LO1 1. **Benefits of Personal Financial Planning.** How can using personal financial planning tools help you improve your financial situation? Describe changes you can make in at least three areas.

LO2, 3 2. **Personal Financial Goals and the Life Cycle. Use Worksheet 1.1.** Fill out Worksheet 1.1, "Summary of Personal Financial Goals," with goals reflecting your current situation and your expected life situation in 5 and 10 years. Discuss the reasons for the changes in your goals and how you'll need to adapt your financial plans as a result.

LO2 3. **Personal Financial Goals.** Recommend three financial goals and related activities for someone in each of the following circumstances:

a. A junior in college

b. A 28-year-old computer programmer who plans to earn an MBA degree

c. A couple in their 30s with two children, ages 5 and 9

d. A divorced, 50-year-old man with a 16-year-old child and a 78-year-old father who is ill

LO3 4. **Life Cycle of Financial Plans.** Explain the life cycle of financial plans and their role in achieving your financial goals.

LO4 5. **Impact of Economic Environment on Financial Planning.** Summarize current and projected trends in the economy with regard to GDP growth, unemployment, and inflation. How should you use this information to make personal financial and career planning decisions?

LO4 6. **Effects of Inflation.** How does inflation affect interest rates, security prices, and financial planning?

LO5 7. **Effect of Age and Geography on Income.** Evaluate the impact of age, and geographic location on personal income.

LO6 8. **Career Choices and Financial Planning.** Assume you graduated from college with a major in marketing and took a job with a large, consumer-products company. After three years, you are laid off when the company downsizes. Describe the steps you'd take to "repackage" yourself for another field.

LO5, 6 9. **Career Planning.** Leo Johnson, a 52-year-old retail store manager earning $90,000 a year, worked for the same company during his entire 25-year career. Leo was laid off and is still unemployed 10 months later, and his severance pay and unemployment compensation have run out. Because he adopted careful financial planning practices, he now has sufficient savings and investments to carry him through several months of unemployment. Leo is actively seeking work but finds that he is overqualified for available, lower-paying jobs and underqualified for higher-paying, more desirable positions. There are no openings for positions equivalent to the manager's job he lost. He lost his wife several years earlier and is very close to his two grown children, who live in the same city.

Leo has these options:

- Keep looking for a new job.
- Move to another area of the country where store manager positions are more plentiful.
- Accept a lower-paying job for two or three years and then go back to school evenings to finish his college degree and qualify for a better position.
- Consider other types of jobs that could benefit from his managerial skills.

a. What important career factors should Leo consider when evaluating his options?

b. What important personal factors should he consider when deciding among his career options?

c. What recommendations would you give him in light of both the career and personal dimensions of his options noted above?

d. What career strategies should today's workers use in order to avoid Leo's dilemma?

LO5, 6 10. **Income and Education.** Using Exhibit 1.8, discuss the relationship between annual income and the highest level of education completed. Provide specific examples of the difference between having no high school diploma and having a bachelor's degree, and between having a bachelor's degree and a professional degree.

2 Using Financial Statements and Budgets

JGI/Jamie Grill/Blend Images/Getty Images

LEARNING OBJECTIVES

After studying this chapter, you will be able to...

- **2-1** Understand the relationship between financial plans and statements.
- **2-2** Prepare a personal balance sheet.
- **2-3** Generate a personal income and expense statement.
- **2-4** Develop a good record-keeping system and use ratios to evaluate personal financial statements.
- **2-5** Construct a cash budget and use it to monitor and control spending.
- **2-6** Apply time value of money concepts to put a monetary value on financial goals.
- **2-7** Understand the relationship between inflation and nominal interest rates and calculate the real interest rate.

After finishing this chapter go to PAGE 52 for STUDY TOOLS

HOW WILL THIS AFFECT ME?

A recent survey shows that more than half of adult Americans could not cover six months of living expenses or the cost of medical emergencies. And younger millennials between the ages of 18 and 24 are the least prepared.* This is scary . . . and this chapter explains what you can do to avoid being part of that alarming statistic.

Everyone knows it's hard to get where you need to go if you don't know where you are. Financial goals describe your destination, and financial statements and budgets are the tools that help you determine exactly where you are in the journey. This chapter helps you define your financial goals and explains how to gauge your progress carefully over time.

2-1 MAPPING OUT YOUR FINANCIAL FUTURE

LO1 On your journey to financial security, you need navigational tools to guide you to your destination: namely, the fulfillment of your financial goals. Operating without a financial plan is like traveling without a road map (or GPS). Financial plans, financial statements, and budgets provide direction by helping you work toward specific financial goals. **Financial plans** are the roadmaps that show you the way, whereas *personal financial statements* let you know where you stand financially. *Budgets*, detailed short-term financial forecasts that compare estimated income with estimated expenses, allow you to monitor and control expenses and purchases in a manner that is consistent with your financial plans. These tools provide control by bringing the various dimensions of your personal financial affairs into focus.

Operating without a financial plan is like traveling without a road map (or GPS).

2-1a The Role of Financial Statements in Financial Planning

Before you can set realistic goals, develop your financial plans, or effectively manage your money, you must understand your current financial situation. You'll also need tools to monitor your progress. **Personal financial statements** are planning tools that provide an up-to-date evaluation of your financial well-being, help you identify potential financial problems, and help you make better-informed financial decisions. They measure your financial condition so you can establish realistic financial goals and evaluate your progress toward those goals. Knowing how to prepare and interpret personal financial statements is a cornerstone of personal financial planning.

The **balance sheet** describes your financial position—the assets you hold, less the debts you owe, equal your net worth (general level of wealth)—at a *given point in time*. In contrast, the **income and expense statement** measures financial performance *over* time. **Budgets** are *forward* looking; they allow you to monitor and control spending because they

financial plans describe financial goals and provide the action plans to their achievement

personal financial statements *balance sheets* and *income and expense statements* that serve as planning tools that are essential to developing and monitoring personal financial plans

balance sheet a financial statement that describes a person's financial position at a *given point* in time

income and expense statement a financial statement that measures financial performance *over* time

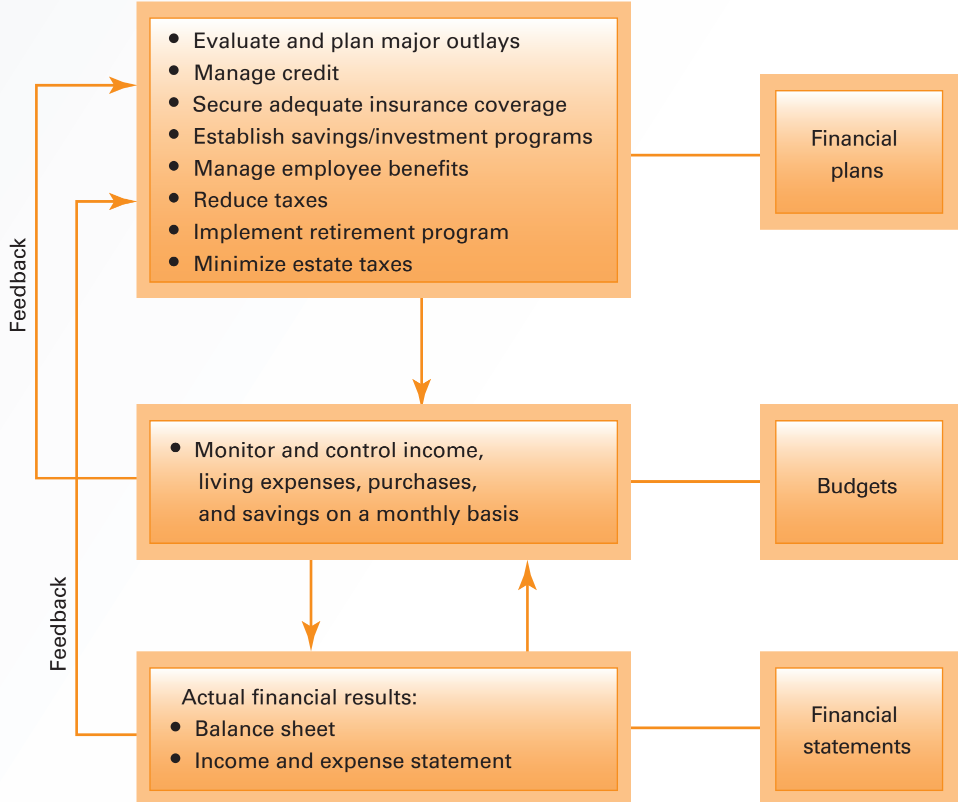
budget a detailed financial report that looks *forward*, based on expected income and expenses

*Cameron Huddleston, "Most Americans Lack Savings to Pay for These Huge Emergencies," https://www.gobankingrates.com/saving-money/savings-advice/americans-average-emergency-fund-amount/, accessed November 2018.

Exhibit 2.1

The Interlocking Network of Financial Plans and Statements

Personal financial planning involves a network of financial reports that link future goals and plans with actual results. Such a network provides direction, control, and feedback.



are based on expected income and expenses. Exhibit 2.1 summarizes the various financial statements and reports and their relationship to each other in the personal financial planning process. *Financial plans* provide direction to annual budgets.

2-2 THE BALANCE SHEET: HOW MUCH ARE YOU WORTH TODAY?

LO2 Preparing a personal *balance sheet*, or *statement of financial position*, helps you get a handle on your financial well-being. Think of a balance sheet as a snapshot taken of your financial position on one day out of the year.

A balance sheet has three parts that, taken together, summarize your financial picture:

- **Assets:** What you own
- **Liabilities, or debts:** What you owe
- **Net worth:** The difference between your assets and liabilities

The accounting relationship among these three categories is called the *balance sheet equation* and is expressed as follows:

$$\text{Total assets} = \text{Total liabilities} + \text{Net worth}$$

and

$$\text{Net worth} = \text{Total assets} - \text{Total liabilities}$$

EXAMPLE: The Balance Sheet Identity Charlotte has total liabilities of $150,000 and a net worth of $75,000. This implies that she has total assets of $225,000 (total liabilities of $150,000 + net worth of $75,000 = $225,000 in total assets).

Let's now look at the components of each section of the balance sheet.

2-2a Assets: The Things You Own

Assets are the items you own. An item is classified as an asset whether it was purchased with cash or financed using debt. A useful way to group assets is on the basis of their underlying characteristics and uses. This results in four broad categories: liquid assets, investments, real property, and personal property.

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- **Liquid assets**: Low-risk financial assets held in the form of cash or instruments that can be converted to cash readily and quickly, with little or no loss in value. Cash on hand or in a checking or savings account, money market deposit accounts, money market mutual funds, or certificates of deposit that mature within one year are all examples of liquid assets.
- **Investments**: Assets acquired to earn a return rather than provide a service. These assets are mostly intangible *financial assets* (stocks, bonds, mutual funds, and other types of securities), typically acquired to achieve long-term personal financial goals. Business ownership, the cash value of life insurance and pensions, retirement funds, and other investment vehicles such as commodities, financial futures, and options represent still other forms of investment assets.
- **Real and personal property**: Tangible assets that we use in our everyday lives. **Real property** refers to immovable property: land and anything fixed to it, such as a house. Real property generally has a relatively long life and high cost, and it may *appreciate*, or increase in value. **Personal property** is movable property, such as automobiles, recreational equipment, household furnishings, and similar items. The left side of Worksheet 2.1 lists some of the typical assets you'd find on a personal balance sheet.

In personal financial analysis, it is important for all assets, regardless of category, to be recorded on the balance sheet at their current **fair market value**, which may differ considerably from their original purchase price. Fair market value is either the actual value of the asset (such as money in a checking account) or the price for which the asset can reasonably be expected to sell in the open market (as with a used car or a home). Under generally accepted accounting principles (GAAP), the accounting profession's guiding rules, assets appear on a company's balance sheet at *cost*, not *fair market value.*

2-2b Liabilities: The Money You Owe

Liabilities represent an individual's or a family's debts. They could result from department store charges, bank credit card charges, installment loans, or mortgages on housing and other real estate. A liability, regardless of its source, is something that you owe and must repay in the future.

Liabilities are generally classified according to maturity.

- **Current, or short- term, liabilities**: Any debt currently owed and due within one year of the date of the balance sheet. Examples include charges for consumable goods, utility bills, rent, insurance premiums, taxes, medical bills, repair bills, and total **open account credit obligations**—the outstanding balances against established credit lines (usually through credit card purchases).
- **Long-term liabilities**: Debt due one year or more from the date of the balance sheet. These liabilities typically include real estate mortgages, most

assets items that one owns

liquid assets assets that are held in the form of cash or can readily be converted to cash with little or no loss in value

investments assets such as stocks, bonds, mutual funds, and real estate that are acquired in order to earn a return rather than provide a service

real property tangible assets that are immovable: land and anything fixed to it, such as a house

personal property tangible assets that are movable and used in everyday life

fair market value the actual value of an asset, or the price for which it can reasonably be expected to sell in the open market

liabilities debts, such as credit card charges, loans, and mortgages

current (short-term) liabilities any debt due within one year of the date of the balance sheet

open account credit obligations current liabilities that represent the balances outstanding against established credit lines

long-term liabilities any debt due one year or more from the date of the balance sheet

WORKSHEET 2.1 BALANCE SHEET FOR JACK AND LILY TAYLOR

A balance sheet is set up to show what you own on one side (your assets) and how you paid for them on the other (your debt or net worth). As you can see, the Taylors have more assets than liabilities.

BALANCE SHEET

Name(s) Jack and Lily Taylor Date December 31, 2020

ASSETS		
Liquid Assets		
Cash on hand	$ 150	
In checking	575	
Savings accounts	760	
Money market funds and deposits	800	
Certificates of deposit		
Total Liquid Assets		$ 2,285
Investments		
Stocks	3,750	
Bonds Corp.	1,000	
Certificates of deposit		
Mutual funds	2,250	
Real estate		
Retirement funds, IRA	4,000	
Other		
Total Investments		$ 11,000
Real Property		
Primary residence	$ 225,000	
Second home		
Other		
Total Real Property		$ 225,000
Personal Property		
Auto(s): '13 Toyota Corolla	$ 10,600	
Auto(s): '11 Ford Focus	6,700	
Recreational vehicles		
Household furnishings	3,700	
Jewelry and artwork	1,500	
Other		
Other		
Total Personal Property		$ 22,500
(I)Total Assets		$ 260,785

LIABILITIES		
Current Liabilities		
Utilities	$ 175	
Rent		
Insurance premiums		
Taxes		
Medical/dental bills	125	
Repair bills		
Bank credit card balances	425	
Dept. store credit card balances	165	
Travel and entertainment card balances	135	
Gas and other credit card balances		
Bank line of credit balances		
Other current liabilities	45	
Total Current Liabilities		$ 1,070
Long-Term Liabilities		
Primary residence mortgage	$160,000	
Second home mortgage		
Real estate investment mortgage		
Auto loans	4,350	
Appliance/furniture loans	800	
Home improvement loans		
Single-payment loans		
Education loans	3,800	
Margin loans		
Other long-term loans (from parents)	4,000	
Total Long-Term Liabilities		$ 172,950
(II) Total Liabilities		$ 174,020
Net Worth [(I) – (II)]		$ 86,765
Total Liabilities and Net Worth		$ 260,785

consumer installment loans, education loans, and margin loans used to purchase securities.

Although most loans will fall into the category of long-term liabilities, *any loans, or any portion thereof, that come due within a year should be shown as current liabilities.* Examples of short-term loans include a six-month, single-payment bank loan, and a nine-month consumer installment loan for a refrigerator.

Go to Smart Sites

What's the fair market value of your car? The personal watercraft your uncle gave you? MindTap includes "Smart Sites," a list of resources and sites that offer additional information on topics in the PFIN text.

STARTING A BUDGET PLAN

The 50/30/20 Rule is a productive way to start thinking about a budget. The Rule builds a budget by allocating spending across three categories—each of these are the *maximum* you should spend out of your *after-tax* income:

- **50 percent** of income goes to *living expenses and necessities* (needs), which include rent, utilities, groceries, insurance, and transportation.
- **30 percent** of income goes to flexible spending (wants), which includes everything you want but don't need to buy. Examples are spending money on eating out, movies, and travel.
- **20 percent** of income goes to meeting financial goals, which are achieved through saving, investments, building up and maintaining an emergency fund, and payments to reduce debts.

The Rule works because it simplifies your personal finances. It helps you plan to pay bills, add to savings, and retain some flexibility.

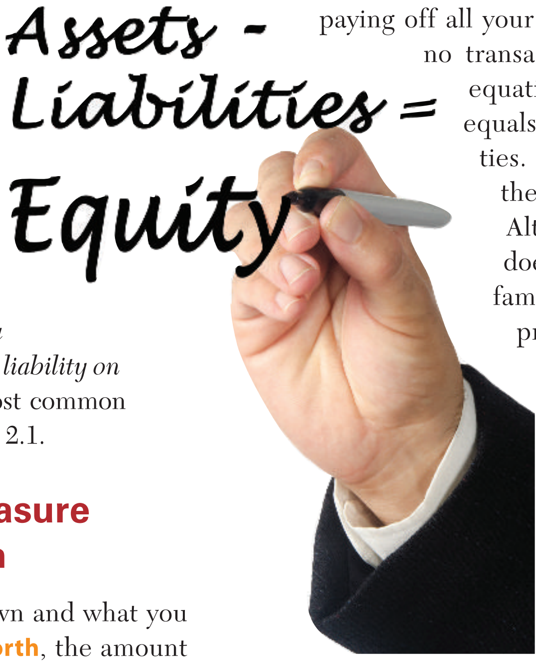
Consider an example of the 50/30/20 Rule. Assume your monthly take-home pay is $4,000. Using the Rule, you should spend no more than $2,000 (50 percent of income) on your needs each month. So that means you cannot afford to pay rent of $1,800 per month. The Rule also indicates you should spend no more than $1,200 per month (30 percent of income) on your "wants." Otherwise, you won't have enough left over for the 20 percent allocated to pursuing your financial goals. From time-to-time, it also makes sense to reconsider the allocation of spending categories between "wants" and "needs" for the plan to be sustainable. After allocating no more than 50 percent to your needs and 30 percent to your wants, you can spend up to $800 per month (20 percent of income) of your after-tax income on savings, investments, building and maintaining an emergency fund, and paying off your debts.

The simplicity of the 50/30/20 Rule provides a great starter budget that you can build into a more comprehensive plan as you gain budgeting experience.

Sources: Adapted from Paula Pant, "The 50/30/20 Rule of Thumb for Budgeting," https://www.thebalance.com/the-50-30-20-rule-of-thumb-453922, and Trulia, Forbes Contributor, "New to Budgeting? Why You Should Try the 50-20-30 Rule," https://www.forbes.com/sites/trulia/2016/07/11/new-to-budgeting-why-you-should-try-the-50-20-30-rule/; both accessed November 2018.

Regardless of the type of loan, *only the latest outstanding loan balance should be shown as a liability on the balance sheet*. This is because at any given time, it is the balance still due that matters, not the *initial* loan balance.

Another important and closely related point is that *only the outstanding principal portion of a loan or mortgage should be listed as a liability on the balance sheet.* You'll find the most common categories of liabilities on Worksheet 2.1.



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2-2c Net Worth: A Measure of Your Financial Worth

Now that you've listed what you own and what you owe, you can calculate your **net worth**, the amount of actual wealth or **equity** that an individual or family has in its owned assets. It represents the amount of money you'd have left after selling all your owned assets at their estimated fair market values and paying off all your liabilities (assuming there are no transaction costs). Rearranging this equation, we see that net worth equals total assets minus total liabilities. If net worth is less than zero, the family is *technically insolvent*. Although this form of **insolvency** doesn't necessarily mean that the family will end up in bankruptcy proceedings, it likely shows insufficient financial planning. Net worth typically increases over the life cycle of an individual or family, as Exhibit 2.2 illustrates.

net worth an individual's or family's actual wealth; determined by subtracting total liabilities from total assets

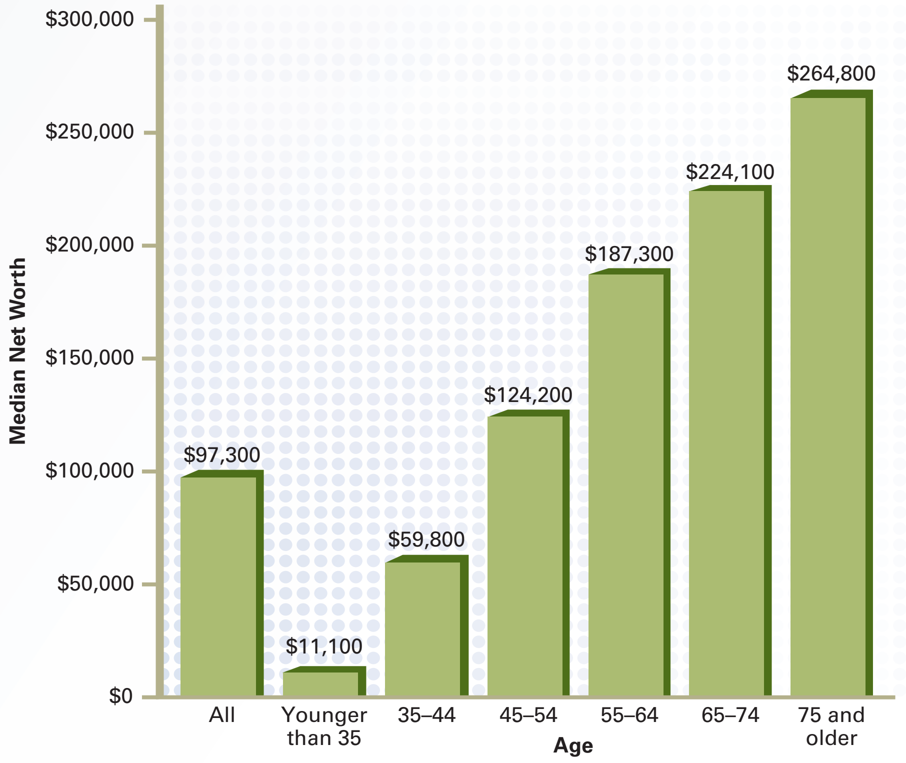
equity the actual ownership interest in a specific asset or group of assets

insolvency the financial state in which net worth is less than zero

Exhibit 2.2

Family Median Net Worth by Age

Median net worth generally increases with age. It usually hits a plateau for the oldest age groups relative to the near-retirement age groups, which reflects a pattern of saving over the life cycle.



Source: Adapted from Jesse Bricker, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Lindsay Jacobs, Kevin B. Moore, Sarah Pack, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle, "Changes in U.S. Family Finances from 2015 to 2016: Evidence from the Survey of Consumer Finances," Board of Governors of the Federal Reserve System, Washington, D.C. (September 2017, vol. 103, no. 3), https://www.federalreserve.gov/publications/files/scf17.pdf, Table 2, accessed November 2018.

EXAMPLE: Calculating Net Worth The Campbell family has total assets of $225,000 and total liabilities of $175,000. Net worth is total assets of $225,000 less total liabilities of $175,000, which equals $50,000. This is effectively the amount of assets the Campbells "own" after paying off its liabilities. It is also referred to as the family's equity.

2-2d Balance Sheet Format and Preparation

You should prepare your personal balance sheet at least once a year, preferably every three to six months. Here's how to do it, using the categories in Worksheet 2.1 as a guide:

1. **List your assets at their fair market value as of the date you are preparing the balance sheet.** You'll find the fair market value of liquid and investment assets on checking and savings account records and investment account statements. Estimate the values of homes and cars using published sources of information, such as advertisements for comparable homes and the *Kelley Blue Book* for used car values (see www .kbb.com).
2. **List all current and long-term liabilities.** Show all outstanding charges, *even if you haven't received the bill*, as current liabilities on the balance sheet.

3. **Calculate net worth.** Subtract your total liabilities from your total assets. This is your net worth, which reflects the equity you have in your total assets.

2-2e A Balance Sheet for Jack and Lily Taylor

What can you learn from a balance sheet? Let's examine a hypothetical balance sheet as of December 31, 2020, prepared for Jack and Lily Taylor, the young couple (ages 28 and 26) we met in Chapter 1 (see Worksheet 2.1). Here's what this financial statement tells us about the Taylors' financial condition:

- **Assets:** Given their ages, the Taylors' asset position looks quite good. The dominant asset is their house. They also have $11,000 in investments, which include retirement funds, and appear to have adequate liquid assets to meet their bill payments and cover small, unexpected expenses.
- **Liabilities:** The Taylors' primary liability is the $160,000 mortgage on their townhouse. Their equity, or actual ownership interest, in the townhouse is $65,000 ($225,000 market value minus $160,000 outstanding mortgage loan). Their current liabilities are $1,070, with other debts of $12,950 representing auto, furniture, and education loans as well as a loan from their parents to help with the down payment on their home.
- **Net worth:** The Taylors' net worth ($260,785 in total assets minus total liabilities of $174,020) is $86,765—especially considering their ages, an amount that is enviably above the median for their age group shown in Exhibit 2.2.

Comparing the Taylors' total liabilities to their total assets gives a more realistic view of their current wealth position than looking at just assets or just liabilities in isolation.

2-3 THE INCOME AND EXPENSE STATEMENT: WHAT WE EARN AND WHERE IT GOES

LO3 When facing a lack of funds, the first question people ask themselves is, "Where does all the money go?" Preparing an *income and expense statement* answers this question. Think of this statement as a motion picture that not only shows actual results over time but also lets you compare them with budgeted financial goals.

The income and expense statement has three major parts: *income*, *expenses*, and *cash surplus* (or *deficit*). A cash surplus (or deficit) is merely the difference between income and expenses. The statement is prepared on a **cash basis**, which means that *only transactions involving actual cash inflows or actual cash outlays are recorded.* The term *cash* is used in this case to include not only coin and currency but also checks and debit card transactions drawn against checking and certain types of savings accounts. Income and expense patterns change over the individual's or family's life cycle.

2-3a Income: Cash In

Common sources of **income** include earnings received as wages, salaries, self-employment income, bonuses, and commissions; interest and dividends received from savings and investments; and proceeds from the sale of assets such as stocks and bonds or a car. Other income items include pension, annuity, and Social Security income; rent received from leased assets; alimony and child support; scholarships or grants; tax refunds; and miscellaneous types of income. Worksheet 2.2, Jack and Lily Taylor's Income and Expense Statement, has general categories for recording income. Note also that the proper figure to use is *gross* wages, salaries, and commissions, which constitute the amount of income you receive from your employer *before* taxes and other payroll deductions.

Go to Smart Sites

For current surveys and trends on consumer spending, check out the Consumer Expenditure Survey at the Department of Labor's Bureau of Labor Statistics.

2-3b Expenses: Cash Out

Expenses represent money used for outlays. Worksheet 2.2, Jack and Lily Taylor's Income and Expense Statement, categorizes them by the types of benefits they provide: (1) living expenses (such as housing, utilities, food, transportation, medical, clothing, and insurance), (2) tax payments, (3) asset purchases (such as autos,

cash basis a method of preparing financial statements in which only transactions involving actual cash receipts or actual cash outlays are recorded

income earnings received as wages, salaries, bonuses, commissions, interest and dividends, or proceeds from the sale of assets

expenses money spent on living expenses and to pay taxes, purchase assets, or repay debt

WORKSHEET 2.2 INCOME AND EXPENSE STATEMENT FOR JACK AND LILY TAYLOR

The income and expense statement shows what you earned, how you spent your money, and how much you were left with (or, if you spent more than you took in, how much you went "in the hole").

INCOME AND EXPENSE STATEMENT

Name(s) Jack and Lily Taylor

For the Year Ended December 31, 2020

INCOME

Wages and salaries	Name: Jack Taylor	$ 65,000
	Name: Lily Taylor	18,350
	Name:	
Self-employment income		
Bonuses and commissions	Jack-sales commissions	3,050
Investment income	Interest received	195
	Dividends received	120
	Rents received	
	Sale of securities	
	Other	
Pensions and annuities		
Other income		
	(I) Total Income	$ 86,715

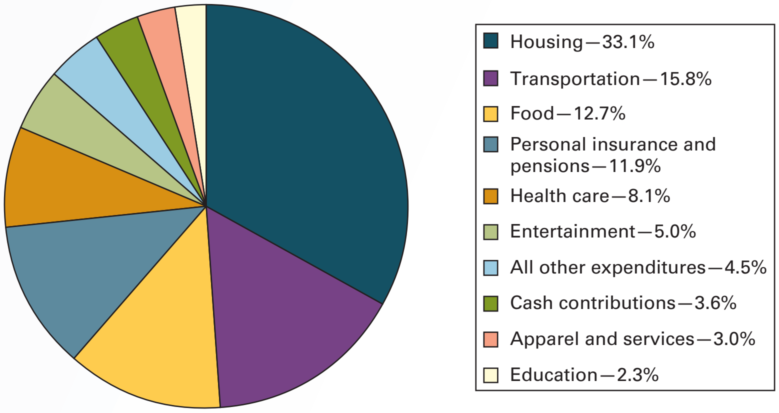
EXPENSES

Housing	Rent/mortgage payment (include insurance and taxes, if applicable)	$ 11,820
	Repairs, maintenance, improvements	1,050
Utilities	Gas, electric, water	1,750
	Phone	480
	Cable TV and other	240
Food	Groceries	2,425
	Dining out	3,400
Transportation	Auto loan payments	2,520
	License plates, fees, etc.	250
	Gas, oil, repairs, tires, maintenance	2,015
Medical	Health, major medical, disability insurance (payroll deductions or not provided by employer)	2,250
	Doctor, dentist, hospital, medicines	305
Clothing	Clothes, shoes, and accessories	1,700
Insurance	Homeowner's (if not covered by mortgage payment)	1,200
	Life (not provided by employer)	1,865
	Auto	1,780
Taxes	Income and social security	18,319
	Property	2,100
Appliances, furniture, and other major purchases	Loan payments	800
	Purchases and repairs	450
Personal care	Laundry, cosmetics, hair care	700
Recreation and entertainment	Vacations	2,000
	Other recreation and entertainment	2,630
Other items	Tuition and books: Lily	1,400
	Gifts	215
	Loan payments: Education loans	900
	Loan payments: Parents	600
	(II) Total Expenses	$ 65,164
	CASH SURPLUS (OR DEFICIT) [(I) - (II)]	$ 21,551

Exhibit 2.3

How We Spend Our Income

Over 80 percent of average annual expenditures fall into one of five categories: housing, transportation, food, personal insurance and pensions, and health care.



Source: "Consumer Expenditures Midyear Update -July 2016 Through June 2017 Average," Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics, News Release, USDL-18-0636, based on Table A, April 26, 2018, accessed November 2018.

furniture, appliances, and loan payments on them), and (4) other payments for personal care, recreation and entertainment, and other expenses. Some are **fixed expenses**—usually contractual, predetermined, and involving equal payments each period (typically each month). Examples include mortgage and installment loan payments, insurance premiums, and cable TV fees. Others (such as food, clothing, utilities, entertainment, and medical expenses) are **variable expenses**, because their amounts change from one time period to the next.

Exhibit 2.3 shows the average annual expenses by major category as a percentage of after-tax income. It's a useful benchmark to see how you compare with national averages. However, your own expenses will vary according to your age, lifestyle, and where you live. For example, it costs considerably more to buy a home in Seattle than in Atlanta. Similarly, if you live in the suburbs, your commuting expenses will be higher than those of city dwellers.

2-3c Cash Surplus (or Deficit)

The third component of the income and expense statement shows the net result of the period's financial activities. Subtracting total expenses from total income gives you the cash surplus (or deficit) for the period. At a glance, you can see how you did financially over the period. A positive figure indicates that expenses were less than income, resulting in a **cash surplus**. A value of zero indicates that expenses were exactly equal to income for the period, while a negative value means that your expenses exceeded income and you have a **cash deficit**.

EXAMPLE: Calculating a Cash Surplus or Deficit

Reuben had cash income this year of $50,000 and cash expenses of $47,500. Consequently, his cash surplus is $2,500, which is income of $50,000 less expenses of $47,500. Had Reuben's expenses been $51,200 while earning the same income, he would have generated a cash deficit of $1,200, which is $50,000 minus $51,200.

2-3d Preparing the Income and Expense Statement

As shown in Worksheet 2.2, the income and expense statement is dated to

fixed expenses contractual, predetermined expenses involving equal payments each period

variable expenses expenses involving payment amounts that change from one time period to the next

cash surplus an excess amount of income over expenses that results in *increased* net worth

cash deficit an excess amount of expenses over income, resulting in insufficient funds as well as *decreased* net worth define the period covered. To prepare the statement, follow these steps:

1. **Record your income from all sources for the period.**
2. **Establish meaningful expense categories.** Those shown on Worksheet 2.2 are a good starting point.
3. **Subtract total expenses from total income to get the cash surplus (a positive number) or deficit (a negative number).** This "bottom-line" summarizes the *net cash flow* resulting from your financial activities during the period.

Finally, when making your list of expenses for the year, remember to include the amount of income tax and Social Security taxes withheld from your paycheck as well as any other payroll deductions (health insurance, savings plans, retirement and pension contributions, and professional/union dues). These deductions (from gross wages, salaries, bonuses, and commissions) represent personal expenses, even if they don't involve a direct cash payment. You might be shocked when listing what's taken out of your paycheck. Even if you're in a fairly low federal income tax bracket, your paycheck could easily be reduced by more than 25 percent for taxes alone.

2-3e An Income and Expense Statement for Jack and Lily Taylor

Jack and Lily Taylor's balance sheet in Worksheet 2.1 shows us their financial condition as of December 31, 2020. Their income and expense statement for the year ending December 31, 2020, in Worksheet 2.2, was prepared using the background material presented earlier, along with the Taylors' balance sheet. This statement shows how cash flowed into and out of their "pockets":

- **Income:** Total income for the year ending December 31, 2020, is $86,715. Jack's wages clearly represent the family's chief source of income, although Lily has finished her MBA and will now be making a major contribution. Other sources of income include $195 in interest on their savings accounts and bond investments, and $120 in dividends from their common stock holdings.
- **Expenses:** Total expenses for the year of $65,164 include their home mortgage, food, auto loan, clothing, and income and Social Security taxes. Other sizable expenses during the year include home repairs and improvements, gas and electricity, auto license and operating expenses, insurance, tuition, and education loan payments.

TRACKING SPENDING THE OLD-FASHIONED WAY

If you don't track your spending, how will you know where your money went? Many of us turn to an app or a website that tracks spending for us. You can even use an app to scan receipts and automatically download your transactions. So, isn't the tracking spending problem solved and it's time to move on to bigger financial issues?

Perhaps using apps that automatically track spending is a problem itself. Automatically tracking spending is the opposite of self-aware tracking because it removes the opportunity to reflect on where your money is going . . . as it's going. Writing down your expenses allows you to consider the *context* of your purchases and think about whether your budget is realistic or in need of adjustment. Replacing automatic tracking with an old-fashioned hand-written list of expenditures gives you the chance to evaluate your decision to spend money that way.

Consider some provocative related evidence in education. Students who typed notes in college lectures didn't do as well on conceptual questions as those who wrote out their notes longhand. Researchers found that typists tended to take notes verbatim in an *automatic* way. In contrast, note takers *processed* what they heard in lectures and then translated the ideas into their own words.

Automatic spending tracking is analogous to typing lecture notes, and maybe handwritten tracking provides additional cognitive processing that enhances understanding of our spending habits. No doubt, there are many attractive, convenient apps and websites that track spending. Yet the old-fashioned approach to tracking spending may just foster a more mindful, informed approach to managing our personal finances after all. It's at least worth another try.

Source: Adapted from Carl Richards, "A Slow-Tech Approach to Tracking Spending," https://www.nytimes.com/2014/05/12/your-money/household-budgeting/a-slow-tech-approach-to-tracking-spending.html?smprod=nytcore-ipad&smid=nytcore-ipad-share, accessed November 2018.

goodluz/Shutterstock.com

- **Cash surplus:** The Taylors end the year with a cash surplus of $21,551 (total income of $86,715 minus total expenses of $65,164). The Taylors can use their surplus to increase savings, make more investments, bonds, or other vehicles, or make payments on some outstanding financial debts. If they had a cash deficit, the Taylors would have to withdraw savings, liquidate investments, or borrow an amount equal to the deficit to meet their financial commitments (i.e., to "make ends meet"). With their surplus of $21,551, the Taylors have made a positive contribution to their net worth.

2-4 USING YOUR PERSONAL FINANCIAL STATEMENTS

LO4 Whether you're just starting out and have a minimal net worth or are further along the path toward achieving your goals, your balance sheet and income and expense statements provide insight into your current financial status. You now have the information you need to examine your financial position, monitor your financial activities, and track the progress you're making toward your financial goals. Let's now look at ways to help you create better personal financial statements and analyze them to better understand your financial situation.

2-4a Keeping Good Records

Although record keeping doesn't rank high on most "to do" lists, a good record-keeping system helps you manage your personal financial affairs effectively. It's best to prepare your personal financial statements at least once each year, ideally when drawing up your budget. Yet many people update their financial statements every three or six months. You may want to keep a *ledger*, or financial record book, to summarize all your financial transactions. The ledger has sections for assets, liabilities, sources of income, and expenses; these sections contain separate accounts for each item.

Managing Your Financial Records Your system doesn't have to be fancy to be effective. Start by taking an inventory. Make a list of everything you own and owe. Check it at least once a year to make sure it's up to date and to review your financial progress. Then, record transactions manually in your ledger or with financial planning software. You'll want to set up separate files for tax-planning records, with one for income (paycheck stubs, interest on savings accounts, and so on) and another for deductions, as well as for individual mutual fund and brokerage account records. You can develop a good record-keeping system using spreadsheet software like Excel.

2-4b Tracking Financial Progress: Ratio Analysis

Each time you prepare your financial statements, you should analyze them to see how well you're doing on your financial goals. For example, with an income and expense statement, you can compare actual financial results with budgeted figures to make sure that your spending is under control. Likewise, comparing a set of financial plans with a balance sheet will reveal whether you're meeting your savings and investment goals, reducing your debt, or building up a retirement reserve. You can compare current performance with historical performance to find out if your financial situation is improving or getting worse.

Calculating certain financial ratios can help you evaluate your financial performance over time. What's more, if you apply for a loan, the lender probably will look at these ratios to judge your ability to carry additional debt. Four important money management ratios are (1) solvency ratio, (2) liquidity ratio, (3) savings ratio, and (4) debt service ratio. The first two are associated primarily with the balance sheet; the last two relate primarily to the income and expense statement. Exhibit 2.4 defines these ratios and illustrates their calculation for Jack and Lily Taylor.

Balance Sheet Ratios When evaluating your balance sheet, you should be most concerned with your net worth at a given time. The **solvency ratio** shows, as a percentage, your degree of exposure to insolvency, or how much "cushion" you have as a protection against insolvency. Jack

solvency ratio total net worth divided by total assets; measures the degree of exposure to insolvency

Exhibit 2.4

Ratios for Personal Financial Statement Analysis

Ratio	Formula	2020 Calculations for the Taylors
Solvency ratio	$\frac{\text{Total net worth}}{\text{Total assets}}$	$\frac{\$86,765}{\$260,785} = 33.3\%$
Liquidity ratio	$\frac{\text{Total liquid assets}}{\text{Total current debts}}$	$\frac{\$2,285}{\$17,710^{(a)}} = 12.90\%$
Savings ratio	$\frac{\text{Cash surplus}}{\text{Income after taxes}}$	$\frac{\$21,551}{\$86,715 - \$20,419^{(b)}} = \frac{\$21,551}{\$66,296} = 32.5\%$
Debt service ratio	$\frac{\text{Total monthly loan payments}}{\text{Monthly gross (before-tax) income}}$	$\frac{\$1,387^{(c)}}{\$7,226^{(d)}} = 19.2\%$

(a) You'll find the Taylors' total liquid assets ($2,285) and total current liabilities ($1,070) on Worksheet 2.1. The total current debt totals $17,710: current liabilities of $1,070 (from Worksheet 2.1) plus loan payments due within 1 year of $16,640 (from Worksheet 2.2). Note that loan payments due within 1 year consist of $11,820 in mortgage payments, $2,520 in auto loan payments, $800 in furniture loan payments, $900 in education loan payments, and $600 in loan payments to parents.

(b) Total taxes of $20,419 consist of the tax on income and social security ($18,319) and property tax ($2,100).

(c) On an annual basis, the Taylors' debt obligations total $16,640 ($11,820 in mortgage payments, $2,520 in auto loan payments, $800 in furniture loan payments, $900 in education loan payments, and $600 in loan payments to parents; all from Worksheet 2.2). The Taylors' total monthly loan payments are about $1,387 ($16,640 ÷ 12 months).

(d) Dividing the Taylors' annual gross income (also found in Worksheet 2.2) of $86,715 by 12 equals $7,226 per month.

and Lily's solvency ratio is 33.3 percent, which means that they could withstand about a 33-percent decline in the market value of their assets before they would be insolvent. Consider that the stock market, as measured by the S&P 500 index, fell about 37 percent during the financial crisis of 2008. Also, the average home's value fell about 18 percent during that crisis year, as measured by the S&P/Case-Shiller U.S. National Home Price Index. The value of Jack and Lily's solvency ratio suggests that they are in good shape but may want to consider increasing it a bit in the future to manage a potential decline in the value of their assets even better.

Although the solvency ratio indicates the potential to withstand financial problems, it does not deal directly with the ability to pay current debts. This issue is addressed by the **liquidity ratio**, which shows your ability to pay current debts (any bills or charges that must be paid *within one year*) with existing liquid assets.

The calculated liquidity ratio indicates that the Taylors can cover only about 13 percent of their existing one-year debt obligations with their current liquid assets. In other words, they have about 1.6 months of coverage (a month is one-twelfth, or 8.3 percent, of a year). If an unexpected event cut off their income, their liquid reserves would quickly be exhausted. Although there's no hard-and-fast rule for what this ratio should be, it seems too low for the Taylors. They should consider strengthening it along with their solvency ratio. They should be able to add to their cash surpluses now that Lily is working full-time.

liquidity ratio total liquid assets divided by total current debts; measures the ability to pay current debts

savings ratio cash surplus divided by net income (after tax); indicates relative amount of cash surplus achieved during a given period

The amount of liquid reserves will vary with your personal circumstances and "comfort level." Another useful liquidity guideline is to have a reserve fund equal to at least six to nine months of after-tax income available to cover living expenses. The Taylors' after-tax income for 2020 was $5,700 per month ([$86,715 total income − $18,319 income and Social Security taxes] ÷ 12). Therefore, this guideline suggests they should have at least $34,200 [6 × $5,700] in total liquid assets, which is much more than the $2,285 on their latest balance sheet. In troubled economic times, you may want to keep even more than six months of income in this fund as protection in case you lose your job.

Income and Expense Statement Ratios When evaluating your income and expense statement, you should ultimately focus on the bottom line, which shows the cash surplus (or deficit) resulting from the period's activities. You can relate the cash surplus (or deficit) to income by calculating a **savings ratio**, which is done most effectively with after-tax income.

Jack and Lily saved about a third of their after-tax income, which is excellent. (American families, on average, save about 5 percent to 8 percent). How much to save is an important personal choice.

Although maintaining an adequate level of savings is obviously important to personal financial planning, so is the ability to pay debts promptly. In fact, debt payments have a higher priority. The **debt service ratio** allows you to make sure you can comfortably meet your debt obligations. This ratio excludes current liabilities and considers only mortgage, installment, and personal loan obligations.

Monthly loan payments account for about 19 percent of Jack and Lily's monthly gross income. This relatively low debt service ratio indicates that the Taylors should have little difficulty in meeting their monthly loan payments. In your financial planning, try to keep your debt service ratio under 35 percent or so, because that's generally viewed as a manageable level of debt. Of course, the lower the debt service ratio, the easier it is to meet loan payments as they come due.

2-5 CASH IN AND CASH OUT: PREPARING AND USING BUDGETS

LO5 Many of us avoid budgeting as if it were the plague. Yet preparing, analyzing, and monitoring your personal budget are essential steps for successful personal financial planning.

After defining your short-term financial goals, you can prepare a cash budget for the coming year. Recall that a *budget* is a short-term financial planning report that helps you achieve your short-term financial goals. You increase your ability to control your expenses by comparing actual with budgeted expenses. A cash budget is a valuable money management tool that helps you:

- Maintain the necessary information to monitor and control your finances
- Decide how to allocate your income to reach your financial goals
- Implement a system of disciplined spending—as opposed to just existing from one paycheck to the next
- Reduce needless spending so you can increase the funds allocated to savings and investments
- Achieve your long-term financial goals

Just as your goals will change over your lifetime, so too will your budget as your financial situation becomes more complex. Typically, the number of income and expense categories increases as you accumulate more assets and debts and have more family responsibilities. This process does not become simpler until retirement for most people.

Preparing, analyzing, and monitoring your personal budget are essential steps for successful personal financial planning.

2-5a The Budgeting Process

Like the income and expense statement, *a budget should be prepared on a cash basis*; thus, we call this document a **cash budget** because it deals with estimated cash income and cash expenses, including savings and investments, that are expected to occur in the coming year.

The cash budget preparation process has three stages: forecasting income (cash in), estimating expenses (cash out), and finalizing the cash budget. When you're estimating income and expenses, take into account any anticipated changes in the cost of living and their impact on your budget components. If your income is fixed—not expected to change over the budgetary period—then increases in various expense items will probably decrease the purchasing power of your income. Worksheet 2.3, the Taylors' "Annual Cash Budget by Month," has separate sections to record income (cash receipts) and expenses (cash disbursements) and also lists the most common categories for each.

Forecasting Income The first step in preparing your cash budget is to forecast your income (cash in) for the coming year. Include all income expected for the year: the take-home pay of both spouses, expected bonuses or commissions, pension or annuity income, and investment income—interest, dividend, rental, and asset (particularly security) sale income. Unlike the income and expense statement, in the cash budget you should use *take-home pay* (rather than gross income). Your cash focuses on those areas that you can control—and most people have limited control over things like taxes withheld, contributions to company insurance and pension plans, and the like. Take-home pay is the amount of *disposable income* you receive from your employer.

Forecasting Expenses The second step in the cash budgeting process is by far the most difficult: preparing a schedule of estimated expenses for the coming year. This is commonly done using actual expenses (cash out) from previous years (as

debt service ratio total monthly loan payments divided by monthly gross (before-tax) income; provides a measure of the ability to pay debts promptly

cash budget a budget that takes into account estimated monthly cash receipts and cash expenses for the coming year

WORKSHEET 2.3 THE TAYLORS' ANNUAL CASH BUDGET BY MONTH

The projected annual cash budget shows several months in which substantial cash deficits are expected to occur. The Taylors can use this information to develop plans for covering those monthly shortfalls.

ANNUAL CASH BUDGET BY MONTH

Name(s) Jack and Lily Taylor

For the Year Ended December 31, 2021

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total for the Year
INCOME													
Take-home pay	$4,800	$4,800	$4,800	$4,800	$4,800	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$60,400
Bonuses and commissions						1,350						1,300	2,650
Pensions and annuities													
Investment income			50			50			50			50	200
Other income													
(I) Total Income	$4,800	$4,800	$4,850	$4,800	$4,800	$6,600	$5,200	$5,200	$5,250	$5,200	$5,200	$6,550	$63,250
EXPENSES													
Housing (rent/mtge, repairs)	$1,185	$1,485	$1,185	$1,185	$1,185	$1,185	$1,185	$1,185	$1,185	$1,185	$1,185	$1,185	$14,520
Utilities (phone, elec., gas, water)	245	245	245	175	180	205	230	245	205	195	230	250	2,650
Food (home and away)	696	696	1,200	696	696	696	696	696	696	696	696	696	8,856
Transportation (auto/public)	375	620	375	355	375	375	575	375	375	425	375	375	4,975
Medical/dental, incl. insurance	50	50	50	50	50	75	50	50	50	50	50	50	625
Clothing	150	150	670	200	200	200	300	600	200	300	300	300	3,570
Insurance (life, auto, home)				660	1,598					660	1,598		4,516
Taxes (property)		550						550					1,100
Appliances, furniture, and other (purchases/loans)	60	60	60	60	60	60	60	60	60	60	60	60	720
Personal care	100	100	100	100	100	100	100	100	100	100	100	100	1,200
Recreation and entertainment	250	300	3,200	200	200	400	300	200	200	200	200	2,050	7,700
Savings and investments	575	575	575	575	575	575	575	575	575	575	575	575	6,900
Other expenses	135	200	175	135	510	180	135	235	235	135	405	325	2,805
Fun money	200	200	230	130	200	200	200	200	200	200	200	230	2,390
(II) Total Expenses	$4,021	$5,231	$8,065	$4,521	$5,929	$4,251	$4,406	$5,071	$4,081	$4,781	$5,974	$6,196	$62,527
CASH SURPLUS (OR DEFICIT) [(I)-(II)]	$779	($431)	($3,215)	$279	($1,129)	$2,349	$794	$129	$1,169	$419	($774)	$354	$723
CUMULATIVE CASH SURPLUS (OR DEFICIT)	$779	$348	($2,867)	($2,588)	($3,717)	($1,368)	($574)	($445)	$724	$1,143	$369	$723	$723

found on income and expense statements and in supporting information for those periods) along with predetermined short-term financial goals.

Whether or not you have historical information, when preparing your budget, *be aware of your expenditure patterns and how you spend money.* After tracking your expenses over several months, study your spending habits to see if you are doing things that should be eliminated. For example, you may become aware that you are going to the ATM too often or using credit cards too freely. You'll probably find it easier to budget expenses if you group them into several general categories rather than trying to estimate each item. Worksheet 2.3 is an example of one such

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grouping scheme, patterned after the categories used in the income and expense statement.

Don't forget an allowance for "fun money," which family members can spend as they wish. This gives each person some financial independence and may help family members feel more comfortable with being on a budget.

Finalizing the Cash Budget After estimating income and expenses, finalize your budget by comparing projected income to projected expenses. Show the difference as a projected surplus or deficit. In a *balanced budget*, the total income for the year equals or exceeds total expenses. If you find that you have a deficit at projected year end, you'll have to *go back and adjust your expenses.* If you have several months of large surpluses, you should be able to cover any shortfall in a later month, as explained later. Budget preparation is complete once all projected monthly deficits are resolved and the total annual budget balances.

2-5b Dealing with Deficits

Even if the *annual* budget balances, in certain months expenses may exceed income, causing a monthly budget deficit. Likewise, a budget surplus occurs when income in some months exceeds expenses. Two remedies exist:

- Shift expenses from months with budget deficits to months with surpluses (or, alternatively, transfer income, if possible, from months with surpluses to those with deficits).
- Use savings, investments, or borrowing to cover temporary deficits.

Because the budget balances for the year, the need for funds to cover shortages is only temporary. In months with budget surpluses, you should return funds taken from savings or investments or repay loans. Either remedy is feasible for curing a monthly budget deficit in a balanced annual budget, although the second is probably more practical.

What can you do if your budget shows an *annual budget deficit* even after you've made a few expense adjustments? Here you have three options, as follows:

- **Liquidate enough savings and investments or borrow enough to meet the total budget shortfall for the year.** Obviously, this option is not preferred

BEHAVIOR MATTERS

How to Spend Less

Spending less often means changing your behavior:

- **Make a budget and use it to help set financial goals.** Decide how much less you want to spend and set a savings goal.
- **Use your savings account first and your checking account last.** Set up two bank accounts so that money can be transferred between them. Deposit your income into savings and transfer your budgeted amount into checking—not the other way around.
- **Spend cash—don't rely on credit cards.** It's harder to use cash for everything, so you'll spend less.
- **Have someone hold you accountable.** Let someone you trust—your spouse, friend, or parent, for instance—know your goals and have them follow your progress.
- **Before you buy, consider the alternatives.** Always wait at least two days before making a big purchase. Think about how it fits into your budget. Really think about your alternatives.

Source: Adapted from Brian Reed, "6 Jedi Mind Tricks To Help You Stop Overspending," https://www.businessinsider.com/trick-yourself-into-spending-less-money-2012-1, accessed November 2018.

because it violates the objective of budgeting: to set expenses at a level that allows you to enjoy a reasonable standard of living *and* progress toward achieving your long-term goals.

- **Cut low-priority expenses from the budget.** This option is clearly preferable to the first one. It balances the budget without using external funding sources by eliminating expenses associated with your least important short-term goals, such as flexible or discretionary expenses for nonessential items (e.g., recreation, entertainment, and some types of clothing).
- **Increase income.** Finding a higher-paying job or perhaps a second, part-time job is the most difficult option. This takes more planning and may result in significant lifestyle changes. However, people who can't liquidate savings or investments or borrow funds to cover necessary expenses may ultimately have to choose this route to balance their budgets.

2-5c A Cash Budget for Jack and Lily Taylor

Using their short-term financial goals (Worksheet 1.1 in Chapter 1) and past financial statements (Worksheets 2.1 and 2.2), Jack and Lily Taylor have prepared their cash budget for the 2021 calendar year. Worksheet 2.3 shows the Taylors' estimated total 2021 annual income and expenses by month as well as the monthly and annual cash surplus or deficit.

The Taylors list their expected total 2021 take-home income of $63,250 by source for each month. By using take-home pay, they eliminate the need to show income-based taxes, Social Security payments, and other payroll deductions as expenses. The take-home pay reflects Jack and Lily's expected salary increases.

In estimating annual expenses for 2021, the Taylors anticipate a small amount of inflation and have factored some price increases into their expense projections. They have also allocated $6,900 to savings and investments, a wise budgeting strategy, and included an amount for fun money to be divided between them.

During their budgeting session, Jack and Lily discovered that their first estimate resulted in expenses of $63,877, compared with their estimated income of $63,250. To eliminate the $627 deficit in order to balance their budget and to allow for unexpected expenses, they made these decisions:

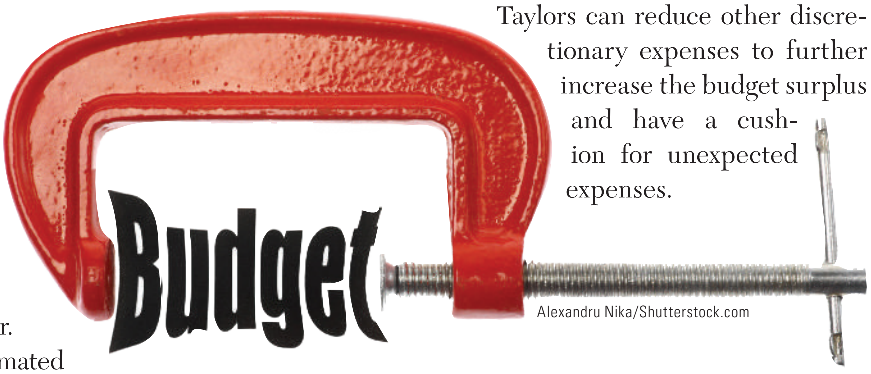
- Omit some low-priority goals: spend less on stereo components; take a shorter European vacation instead of the Utah ski trip shown in Worksheet 1.1.
- Reschedule some of the loan repayments to their parents.
- Reduce their fun money slightly.

YOU CAN DO IT NOW: Save Automatically

We all know we should save regularly. One way to create a savings "habit" is to literally make it automatic.

Open a savings account apart from your checking account. This will separate your savings from what you have available to spend. And then set up an *automatic* deposit from your checking to your savings account each month. This sets your "habit." You can **do it now**.

These reductions lower Jack and Lily's total scheduled expenses to $62,527, giving them a surplus of $723 ($63,250 − $62,527) and balancing the budget on an annual basis with some money left over. Of course, the Taylors can reduce other discretionary expenses to further increase the budget surplus and have a cushion for unexpected expenses.



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The Taylors' final step is to analyze monthly surpluses and deficits and determine whether to use savings, investments, or borrowing to cover monthly shortfalls. The bottom line of their annual cash budget lists the cumulative, or running, totals of monthly cash surpluses and deficits. Despite their $723 year-end cumulative cash surplus, they have cumulative deficits from March to August, primarily because of their March vacation and insurance payments.

To help cover these deficits, Jack and Lily have arranged an interest-free loan from their parents. If they had dipped into savings to finance the deficits, they would have lost some interest earnings, which are included as income. They could also delay clothing and recreation and entertainment expenses until later in the year to reduce the deficits more quickly. If they weren't able to obtain funds to cover the deficits, they would have to reduce expenses further or increase income. At year end, they should use their surplus to increase savings or investments or to repay part of a loan.