Financial Decisions

Chapter Outline

Introduction: The Importance of Personal Financial Planning and Decision Making

The Cost of Financial Mistakes

Financial Literacy is an Essential Skill

Setting Financial Goals

The Importance of Doing the Math

Factors That Influence Financial Planning and Decision Making

Personal Values: Personal Finance is Personal

Life Situation: Planning for the Financial Life Cycle

Career Choice and Income

Why Economics Matters in Personal Finance

Three Questions to Help Guide Financial Planning and Decision Making

Financial Decision-Making Question 1: How Will This Decision Affect My Present Finances?

Case Study: Paul Buys a Television

Financial Decision-Making Question 2: How Will This Decision Affect My Future Finances?

Case Study: Buy Now, Pay Later

Financial Decision-Making Question 3: What Risk Will I Be Taking With This Decision?

Case Study: Sam Has an Accident

Chapter Summary

Chapter Learning Objectives

After reading this chapter, students will be able to:

- Explain the importance of good personal financial planning throughout the life cycle.
- Recognize the factors that influence financial planning and decision making.
- Apply the three questions for financial decision making to a range of financial decisions presented throughout the course and in their lives.

INTRODUCTION: THE IMPORTANCE OF PERSONAL FINANCIAL PLANNING AND DECISION MAKING

Sound personal financial planning is more important today than it has ever been. In the past several decades, the world of personal finance has changed significantly. Easy access to loans and credit makes it possible to engage in borrowing (for example, student loans or credit card debt). This can be an advantage if taking on that debt will lead to future gains that justify it, and make it possible to pay it off; but debt can be a major financial burden and dealing with it can be an obstacle to financial goals. In addition, the changing structure of workplace benefits means that people entering the workforce today are increasingly responsible for contributing to and making decisions about their own retirement funds, with the inevitable result that some will end up better off than others when retirement eventually comes. There is also a never-ending array of material possessions to be desired. Things like houses and cars are major expenses that—although enjoyable or necessary—bring the possibility of significant debt and headaches caused by mistakes in estimating their impact on personal or family budgets. Additionally, education expenses are increasing rapidly; individuals must decide whether and how to pay for college education for themselves, their children, and sometimes even their grandchildren.

In addition to changes in financial trends at the national level, for young people, entering the "real world" can be surprising. A survey of recent college graduates reveals some things that surprised them when they left college:

- How much money it takes to live on one's own
- How hard it is to save money
- How many financial decisions they have to make
- How hard it is to pay bills
- How challenging it can be to find a job[1]

In today's world, understanding financial concepts and having the skills, motivation, and confidence to apply that understanding to important financial decisions you face will help you make effective decisions in a range of financial contexts—from daily spending to planning for retirement many years in the future. Managing your personal finances can be a daunting task, but the goal of this textbook is to give you the knowledge, skills, guidelines, and practice that will help you make the financial decisions that are right for you throughout your life, starting now.

The Cost of Financial Mistakes

In managing finances—budgeting, saving, investing—it's easy to make mistakes. Financial mistakes can be very expensive, which is why it is important to know what you are doing early in your financial life. Everyone lives with the financial consequences of decisions they have made, perhaps even unconsciously. People who took out student loans without being sure what they would ultimately need to pay back, for example, may be living with unexpectedly high

[1] The 2009 Charles Schwab Young Adults and Money Survey.

monthly student loan payments. People nearing retirement who did not save and invest adequately to cover their living expenses in retirement may be working a second job to accumulate enough savings or facing a significantly lowered standard of living when they do retire.

While having student loan debt does not mean you’ve made a mistake (in fact, investing in your education can be one of the smartest financial moves you make), over half of people who currently have student loans say that they did not try to figure out their future monthly loan repayment amounts when they took out their loans. They also noted that if they could go through the process of taking out loans again, they would do things differently.[2] As of October 2016, estimated student loan debt in the United States was approximately $1.4 trillion dollars. (There is even a student loan debt clock that measures how debt increases each second: www.collegedebt.com). Of that $1.4 trillion, a sizeable share is in default, which means that it’s not being paid back, presumably because the people who hold the debt cannot afford to do so.

Today, many Americans are arriving at retirement age without enough money to live comfortably. They never sat down to figure out how much they would need to save in a retirement account and how to invest that money in order for it to grow to form a “nest egg” they could live off in retirement.[3]

Therefore, good financial decisions can have an enormous impact on all stages of life, from just out of college to retirement.

Financial Literacy Is an Essential Skill

Surveys conducted in the United States, as well as around the world, that ask people about their

[2] Findings are from the 2015 National Financial Capability Study, http://www.usfinancialcapability.org/
[3] See Lusardi and Mitchell (2011), Financial Literacy and Retirement Planning in the United States,” *Journal of Pension Economics and Finance*, October 2011, vol. 10(4), pp. 509-525.

financial habits and quiz them on their knowledge of financial concepts indicate that most people are not very good at dealing with money and not very knowledgeable when it comes to understanding concepts that relate to making financial decisions.[4] In the past twenty years, researchers have been trying to understand how much people know about finances—how **financially literate** people are—and whether being financially literate makes a difference in people's everyday lives. The set of questions below has been used to measure financial literacy in countries around the world. Do you know the answers?

- Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? More than $102, exactly $102, or less than $102?
- Imagine that the interest rate on your savings account is 1 percent per year and inflation is 2 percent per year. After one year, would the money in the account buy more than it does today, exactly the same or less than today?
- True or false: Buying a single company's stock usually provides a safer return than a stock mutual fund.

What researchers have found is that people are not very financially literate and that being financially literate *does* matter. If we are financially literate, we are better able to manage our money—whether we have a lot of it or not very much—and when we manage our money well, we are more likely to avoid problems with debt and to be financially stable when we retire. Rich, poor, or somewhere in between, one thing we all have in common is that we have to think about money. A truly poor person may not become rich through excellent money management, but

[4] See Lusardi and Mitchell (2014), The Economic Importance of Financial Literacy: Theory and Evidence," *Journal of Economic Literature*, March 2014, vol. 52(1), pp. 5-44, and OECD/INFE International Survey of Adult Financial Literacy Competencies, OECD, October 2016.

truly rich people can become poor by making enough bad choices with their money. For example, there are many cases of professional athletes, who are payed millions of dollars per year during their professional careers, going bankrupt a few years after retiring from play—often before they are 30 years old! Wherever you fall on the income spectrum, you potentially have a lot to lose or gain in terms of your finances, so your financial decisions matter and will impact your life.

Setting Financial Goals

Setting financial goals is the first important step for your financial journey. Your financial goals should be measurable and actionable. “I want to be really rich” is a vague goal. However, “I want to have $20,000 saved by the time I am 25” is a clear one. It’s measurable because you can tell whether you have saved $20,000; it’s actionable because you can create and act on a savings plan to achieve the goal. Thinking about your goals generally, and then laying out specifics gives you a time frame and numbers to work with that enable you to see if the goal is realistic given your current circumstances. If it is realistic, you can then make a plan that will get you to your goal. If it is not realistic, then you need to decide whether to change your goal or change your circumstances (and think in measurable and actionable terms when considering how to change your circumstances, too). Either way, you have something to work toward. Goal setting does not need to be an exercise in rigidity. Your goals can and will change over time.

Despite knowing that setting financial goals is important, not everyone does it. If you procrastinate, you might spend a number of years reacting to financial decisions as they come to you rather than proactively planning. Even so, the knowledge and information in this textbook can help you make decisions that keep you relatively on track. You might be working with rough "goals," for example, "I do not want to have too much debt." Even though this goal does not account for actionable and measurable benchmarks, it can still help to guide your decision making and is better than having no goals at all.

To reach your goals, whether vague or specific, you need a system for doing so, and this book is designed to help you create a system for managing your current financial situation, improving your future financial situation, and reducing financial risk.

The Importance of Doing the Math

Financial decisions can be very difficult to make, because the future is quite hard to predict. But once you've identified some financial goals to work toward and recognize the variety of decisions you have when you encounter a financial choice, there are some straightforward calculations you can learn to do that will give you the confidence to break complex decisions into manageable parts. Doing so will enable you to calculate future costs or benefits of financial decisions and understand the risks involved in various situations. Doing the math is an important part of managing your personal finance, and there are many tools available to help with these calculations. Equipped with these tools, you will be able to compare the available options in order to choose the one that is best for you and your circumstances.

FACTORS THAT INFLUENCE FINANCIAL PLANNING AND DECISION MAKING

There are four important factors that influence your financial planning and decision making: your personal values, your life cycle stage, your employment situation/career, and the economic environment. We will explore each factor in detail.

Personal Values: Personal Finance Is Personal

The word *personal* reflects a very important element of personal finance. Often there is not one "right" decision in personal financial decision making. You need to know what is important to you, what your goals are, and what your preferences are. Awareness of your preferences and financial situation combined with an understanding of key financial concepts, knowledge of where to find important information, and the ability to do some calculations will enable you to make financial decisions that you feel confident about and are appropriate for your circumstances.

At this very moment, you may be engaging in a financial decision that relates to your personal values. If you, or your family, are spending money on your education, that is an expression of personally valuing education. Investing in your education can have a significant impact on your finances for a lifetime, perhaps in terms of higher wages than you would otherwise earn without a degree, greater career satisfaction, or perhaps through many years of paying off student loan debt.

Once you are out of school and earning an income, your personal values might make you decide to donate a certain portion of your income to causes that you deem worthy. If so, you'll need to account for this spending on a regular basis. You might decide you have a preference for a rural lifestyle. Life in a rustic log cabin may mean that less of your income is spent on housing but more on a vehicle that can reliably travel rough roads and long distances. You might feel it's important to send any children you eventually have to private school. This means a family budget will need to make allowances for hefty tuition payments. Being aware of how your lifestyle preferences impact your finances can help as you enter into your adult life and start making decisions about how you want to live.

Life Situation: Planning for the Life Cycle

To engage in sound personal financial planning and decision making, it's important to see the bigger picture. A good way to do this is through awareness of the **life cycle**. This cycle is broken into three parts: laying a foundation for future financial security, building and establishing financial security by accumulating wealth, and relying on your financial resources to support yourself when you are no longer working. You can also consider the life cycle as the stages an individual goes through from birth to death in conjunction with the assets and resources accumulated or needed at each stage.

In the young adult life stages, approximately between the ages of 20 and 35, people are developing their economic earning potential, establishing their careers and families and managing the (often quite high) expenses that arise from doing so. At this stage, assets in the form of major consumer goods may be acquired; debt—often in the form of student loans—may be high, and financial security involving savings, investments, and insurance is being established.

The mid-life stage, approximately between the ages of 35 and 55, can be a period of strong earning power, although not always. This stage is often disrupted for people who are responsible for the care of young children or aging parents.

Late in life, people have to consider options for how to live without the security of a full-time job. This is where the saving for retirement that you did throughout your life can pay off in the form of a safe and comfortable old age.

Being aware of where you are in the life cycle can help make certain decisions and priorities clear. One very important element of life cycle planning involves long-term financial preparation for retirement. This is particularly important in countries like the United States in which employers often provide assistance with setting up and maintenance of retirement savings accounts and may contribute a certain amount to those accounts, but individuals are largely responsible for saving and investing decisions. As we will see in later chapters, failure early in the life cycle to engage in financial planning for retirement can result in severe financial limitations at the retirement stage of the life cycle.

Career Choice and Income

Now that you have a full picture of the financial life cycle, it's important to concentrate on the one you are most likely in right now: preparing to choose a career. We can't talk about money, decision making, and planning for the future without thinking about education. Your education plays a big part in determining your future job prospects, and your job determines how much you will earn and how much you can buy. Apart from requiring you to study and do homework, education and the knowledge you acquire through your efforts will affect your choice of professions several years from now. Thinking about your education now means you are thinking about your future financial well-being.

Different jobs pay different wages, and those wages allow you to buy and do different things. The decisions you make today have big implications for the future. When you think about the financial impact of your college education, its potential financial benefits are as important to consider as its costs.

You can use a variety of online resources to figure out what your likely earnings will be for the careers you are considering today. One place to start is the **Bureau of Labor Statistics (BLS)** website (www.bls.gov). The BLS is part of the **US Department of Labor** and is responsible for measuring what is happening in the US labor market—meaning it keeps track of information relating to jobs. The BLS website offers information on wages for over 800 occupations in approximately 400 different industries. You can find information for what these jobs pay in different parts of the country and what the outlook for a particular job is—for example, whether it's a growing area of employment—whether men or women can expect to make different wages in a particular job, and more. In chapter 9, you will learn more about the connection between education and your personal finances.

Why Economics Matters in Personal Finance

Your financial decisions are not made in a vacuum. The larger economic system that surrounds you has an important impact on your financial decision making. For example, if the economy is in a recession, it will be more difficult for you to find a job you like that pays your desired wage. It may make it difficult to find any job at all. Similarly, if interest rates are low, it will be more difficult to put your money to work and make it grow. Additionally, the global economy is just as important as the domestic economy. What happens in China, India, Brazil, or Europe may influence your personal finances. Because of different wages in some emerging countries, you are able to buy goods at much cheaper prices than if these goods were produced domestically. Or, you may find yourself working in Hong Kong, Dubai, South Africa, Frankfurt, or Colombia depending on where you are able to get the highest pay for your acquired skills and expertise. You may also find yourself investing in foreign financial assets, such as bonds and stocks in foreign markets.

To manage your personal finances well, you need to have a general understanding of the economy and how it works. An important market is the **money market**, where money is exchanged. In this market, the **Central Bank** is a key institution that creates and supplies money in the economy.

One consequence of Central Bank policies is changes in the **interest rate**. You can think of interest rates as the price of money, as determined by the exchanges within the money market. As we will discuss in chapter 2, positive interest rates allow money to grow over time, thus they are a critical element in making financial decisions.

Inflation is another very important aspect of the economy. **Inflation** is the rate at which prices of consumer goods, such as milk, eggs, clothes, and computers, increase over time. Economists have devised various measures of the price of consumer goods. One of these is the **consumer price index (CPI)**, which measures the change in the price of goods by taking a statistical sample of products that households buy regularly and tracking their prices over time. Inflation can also refer to the price of all the goods produced in an economy (the **Gross Domestic Product**). If prices increase over time, that means in the future, we can buy less of what we want with the same amount of money. Thus, understanding inflation is critically important to financial decision making; you have to make sure that your money grows at least as fast as inflation or you are becoming poorer over time. The actions taken by central banks are important when it comes to inflation. Many central banks around the world have devoted their policies to keeping inflation low, thus helping individuals preserve the value of money over time.

Another important market to be aware of is the labor a market, in which the supply of labor is determined by the number of workers in the economy and the demand for labor is determined by firms. In this market, wages (the price of labor) are determined. Whether wages are low or high depends on the behavior of this market, its structure, and the capacity of those who offer labor to find those who are offering employment. The unemployment rate in the economy measures the number of individuals who are actively seeking work but are unable to find it. The unemployment rate is an important number to consider as it indicates the chances of success of finding suitable employment.

THREE QUESTIONS TO HELP GUIDE FINANCIAL PLANNING AND DECISION MAKING

Now that you have a big-picture understanding of the importance of financial planning and decision making, and the associated influential factors, it's time to start gaining knowledge and information on specific topics and honing your ability to apply that knowledge to financial situations you will encounter. In this book, we will look at the decisions surrounding the purchases and investments you will make throughout your life and give you tools to help you make the best decisions for your personal situation. These tools include an understanding of some basic but very important calculations and principles of finance. Serving as a framework for the application of these tools are three key questions for financial decision making that you should learn to ask yourself every time you encounter a financial decision:

1. How will this decision affect my present finances?
2. How will this decision affect my future finances?
3. What risk will I be taking with this decision?

As you work your way through the chapters in this book, you'll gain understanding of the relevant calculations and principles that you need to understand and you'll have ample opportunities to practice applying them with the guidance of the three questions.

You may be asking yourself, "Why these questions rather than more specific rules and guidelines?" The answer is that your life is unique and the financial world can be complex and is subject to ups and downs. **Rules of thumb**, which are regarded as offering some rough guidance but are not intended to be scientifically accurate, may be good today, but not so good tomorrow. Blindly following these rules as well as advice generally offered by financial experts is not as good as doing your own thinking, although unbiased experts are certainly useful and their opinions can be very valuable and worth considering. However, nobody knows your personal situation better than you do. You need to be the principal architect of your financial future, because you are the one who is living it and the one who has the most to lose or gain. Getting in the habit of considering financial decisions in light of the influences discussed above, and with the specific answers you will arrive at by using the three questions to guide you, can help ensure that your financial planning and decision making suits your particular situation and keeps you on the financial course you have set for yourself.

Financial Decision-Making Question 1: How Will This Decision Affect My Present Finances?

The first of the three questions—how will this decision affect my present finances?—can appear to be pretty simple. However, if you find it hard to answer it might be because of some financial challenges that need to be addressed. In answering the question accurately, you might need to think beyond the purchase price. In considering how a financial decision affects your present finances, you must think about short-term cash flow, hidden costs and opportunity costs, and determine the actual worth of a purchase or investment.

If you are steadily employed, money will flow into your bank account every month. Soon enough it will flow out again, spent on necessities, investments, whims, and luxuries. If you keep good track of your **cash flow**—your cash or checks coming in and expenses being paid out—

then you probably have a good understanding of what you can spend in a month without going beyond your means. Those who do a good job of tracking their money usually rely on some kind of budget to keep from overspending.

Having a budget means that when you encounter a new or unexpected financial decision, you can immediately answer the question: How will this decision affect my cash flow? For example, if you receive a paycheck for $2,600 each month and have $2,500 budgeted for various expenses (rent, food, cell phone, haircuts, pet care, contribution to savings, health insurance, etc.), including $100 for clothing, it will be easy to know how the cash purchase of a $400 winter coat will affect your budget. (Of the $400, $100 can come from what is budgeted, $100 from the difference between actual inflow and budgeted outflow, leaving $200 that needs to be made up somehow.)

If you are in the habit of frequently using a credit card, and if you carry a balance on your credit card or if someone else pays your credit card bill, you may not have a good understanding of your cash flow. You will learn all about cash flow and budgets in chapter 3, but what is important here is that having a clear understanding of your cash flow gives you up-to-date knowledge of the state of your present finances, meaning that you know how a financial decision will impact them. If you find yourself answering “I don’t know” when asking yourself how a decision will affect your present finances, then reading chapter 3 and applying its guidance to your individual situation will be enormously helpful.

Most financial decisions involve consideration of hidden costs. You encounter **hidden costs** when the full cost of something is not reflected in the purchase price. Hidden costs can appear as additional items that need to be purchased (such as batteries to run an electronic device), unseen problems (a car that breaks down, causing you to miss work and incur repair expenses), or unintended consequences (a parking ticket received because you drove to pick up the pizza and parked for just five minutes in a tow zone to avoid paying garage fees).

Whenever you have a sum of money, you have choices regarding what to do with it. However, making one choice precludes making another. For example, if you decide to spend your money on a vacation, then you can't invest it in a retirement account and vice versa. This consequence is the **opportunity cost** of your decision.

And even when you decide where you will spend your money, there are choices: Is it better to buy a more cheaply made shirt that looks great but will probably only last two years? Or would it be better to buy a more expensive one that will last five years? As always, the answer is in the details, and sometimes these details are not easily seen. Suppose the cheap shirt is $20 and the expensive one is $50. If the inexpensive shirt lasts two years and the expensive one lasts five years (we'll assume interest rates are low enough that we can ignore their impact), both of them cost about $10 per year to own and use. Superficially, it appears that both cost the same amount over time and are of close to equal value.

However, there can be hidden costs to owning clothing. Suppose one of the two shirts requires dry cleaning, at about $5 per cleaning. If you plan to use the shirt frequently and have it cleaned once a month, the annual cleaning cost for the shirt is $60. Over the course of two years, that's $120. If it's the expensive shirt, that's $300 in extra expense during the five years you expect to use it. The cost of cleaning this clothing item completely swamps its purchase price, and that cost is not clearly stated on the sales tag.

Pet ownership is a decision full of hidden costs. If you get a kitten, there are annual veterinary, food, and necessities costs, like a litterbox, that you can predict. But then there are costs that are hard to imagine, such as the loss of a rental security deposit when you leave your apartment because the cat has shredded the carpet. Or perhaps you have to board the cat when you go away on vacation.

Even investments, which are supposed to make money for you, can have hidden costs. Private investment advisors will assist you in making financial decisions about how to invest your savings, but they charge a fee that can also eat up your earnings. This fee varies widely and is not always advertised clearly. You may be charged this fee whether your investment gains or loses money. Unless you are aware of it, that cost is hidden.

Taking hidden costs and opportunity costs into account when making a financial decision is very important as it can have a big impact on your finances, so you'll want to get in the habit of thinking beyond the obvious purchase price and considering what these costs would be.

Last but not least, when you make decisions to buy things, it's important to know if you are getting a good deal. Paying too much for both large and small purchases will have an immediate effect on your present finances. In Chapter 7, we will introduce you to some tools for determining a fair price for major consumer purchases, such as a car.

[Begin Case Study]

Case Study: Paul Buys a Television

Avid sports fan Paul wants to purchase a television. Let's consider the various ways this purchase can impact his present finances.

If he has saved up enough money in advance, taking a fixed amount from his budget each month, and set that money aside, he could just buy the television outright and meet his usual expenses. Prior to the purchase, however, setting money aside every month would have had an impact on his cash flow. It would have been a small monthly impact if he saved for a long time and a larger impact if he saved a lot each month for a shorter time.

Alternatively, perhaps he has not saved anything for a television but he has just received his paycheck and it's enough to cover the cost. What if he pays for it all at once? This will have a potentially large effect on his present finances. If he knows how his budget works, he will be able to tell if he can still meet all his payments with the money that remains after buying the television. If he doesn't know how his budget works, then he might run into trouble, perhaps finding he must skip a payment on a long-term loan or fail to pay a bill.

Yet another possibility is for Paul to use his credit card (which is essentially a loan from the credit card company) to purchase the television. In this case, he is using money that he doesn't actually have yet, and he will have to pay interest on the loan until it is paid off. This decision does not impact his present finances because using a credit card defers payment to the future. But this deferred payment can result in a larger total impact on his budget, because not only will he pay for the television but he will also pay the credit card company for the use of their money.

Paul's decision about how to purchase the television determines the impact on his present finances: minimal impact if he plans ahead; minimal to substantial impact if he purchases spontaneously—depending on his understanding of his cash flow; no impact now but greater potential impact later if he purchases on credit.

What about hidden or opportunity costs that Paul might encounter? Hidden costs of a television, especially if he did not have one previously, might include its impact on his electricity bill, associated cable or device hookups and subscriptions to various cable or streaming services, or the need for a piece of furniture to support the television or hardware to mount it to the wall.

If he decides after six months that the television is causing him to do nothing but stay at home and watch sports when he really needs to be at the gym or out playing sports himself, could he sell it and recoup the cost?

Discussion Questions

1. Paul has decided to buy a 72-inch, high-definition, state-of-the-art television. Use the internet to find the range of prices for this type of television. What do you think is a fair price, and how could you determine if you are getting a good deal?
2. Spending this amount of money on a television has an opportunity cost. With this amount of money available to spend, what would your priorities be?

[End Case Study]

Financial Decision-Making Question 2: How Will This Decision Affect My Future Finances?

Thinking about how a decision will affect your future finances is something most of us are not very good at but is something that can make a big difference in our lives. Why do we have so much trouble with this? What can we do about it? To start, we can gain a better understanding of the relationship between our present self and our future self. We can develop a better understanding of the costs of borrowing including using a credit card to make purchases, and we can better understand the value of a purchase or investment over time. We can also learn to calculate how financial decisions made now can affect long-term wealth.

When you borrow money (including the use of credit cards, which will be discussed in detail in chapters 6 and 7) to make a purchase or investment, you must pay interest to the lender. What you eventually pay for the purchase is more than the price of what you've bought. How much more depends on the interest rate, given as a percentage of the amount lent per year, and on the time it takes you to repay.

A loan should be considered a rental of money, just like a rental of a piece of equipment. You have to give back the equipment *and* you have to pay for the use of it. With equipment, you can be fairly sure it will still be there to return when the job is done. With money, you have to be more careful. A loan may last for a number of years, during which time changes can take place in your financial circumstances. Your ability to repay the loan must be considered in light of many possible alternative futures, and not just the most appealing one.

In considering any financial decision, it's important to recognize that the value of a purchase or investment will change with time: some purchases will increase in value; many will not. We will explore this concept in greater detail in chapter 2. By "value" we mean dollar value. The value of a purchased item or experience often extends well beyond its market value, giving it great usefulness (utility) in a variety of ways. Food, for example, has great value in that it impacts your health and survival. But in thinking strictly about your personal finances, you want to also consider financial value of any purchase or investment you make. The bagel you bought and ate for breakfast cannot be resold but the bicycle you bought last year can be.

Many of the consumer purchases we make are for items that will not gain value over time: for the most part, clothing, food, housewares, and vehicles do not increase in value. But these things decrease in value at different rates, and understanding this can be an important consideration. Homes and real estate can increase in value, sometimes quite a lot, but not always. Investments are designed to increase in value, and are thus an important consideration in making financial decisions relating to your future. Other purchases, such as insurance, do not carry cash value, but have the "value" of protecting you from financial disaster if your house were to burn down or if you were to incur a major medical expense.

One reason we don't always make good decisions in planning for our future has to do with the way we think of our future "self." Some psychologists explain that we think of our future self as someone separate from our present self—the same way we might think of a casual friend or acquaintance. Even if we can imagine our self in the future, that individual is somehow separate from our present self: and because he or she exists only in the future, they are not here *right now* to advocate for their needs. This makes it easy to ignore your future self, and that is why many of the decisions we make put our present self in conflict with our future self. Putting money in a retirement account today will benefit our faraway future self, but it takes money away from our present self, and that present self—being present and highly self-interested—can easily come up with an immediately gratifying use for the money.

Getting into the habit of thinking about the well-being of your future self can help to motivate financial decisions that your future self will thank you for.

This is a good place to note that in addition to tending to the needs of your future self, it's important to really know yourself and your preferences. Financial decisions depend on preferences. This is why we cannot always delegate financial decisions to others; only we know what we like, what we don't like, and what we care about.

[Begin Case Study]

Case Study: Buy Now, Pay Later

Rebecca is in the habit of using her credit card to buy a grande coffee and a muffin from Starbucks, and the total cost for her order is $6.00. Let's consider how that decision affects Rebecca's future finances. Her credit card statement indicates that her interest rate is 24% per year, meaning it is 2% per month (24/12 months = 2). Let's assume that Rebecca carries a balance on her card, so we can consider the cost of just one coffee and muffin purchase being carried as part of that balance for six months. Determining the impact of her decision to use a credit card for a single purchase can be worked out like this:

At the end of one month, she owes the $6.00, plus another 2%. In other words, 102% of $6.00, or 1.02 * $6.00. At the end of each month, she owes 102% of what she owed the previous month, so at the end of six months, she would owe $6.00 (1.02) * (1.02) * (1.02) * (1.02) * (1.02) * (1.02). In sum, the cost of renting just $6.00 for six months is $6.76, meaning that it cost her $0.76 to use her credit card to buy one cup of coffee and a muffin.

If Rebecca used her credit card for this purchase every day for a month, the impact on her future finances would be much greater. If she paid cash for the coffee and muffin each day for 30 days, she would have paid $180.00. But using her credit card (and carrying a balance) would mean that six months later, the amount owed would be $202.71, meaning that she essentially payed $22.71 for the "loan" of the money she used for that purchase over the course of 30 days.

Discussion Questions

1. How much does the use of Rebecca's credit card add to the price of every single cup of coffee? Do you think she is paying a fair price for her coffee and muffin?
2. Which do you think has a bigger impact on Rebecca's long-term wealth: her use of a credit card or her decision to buy a coffee and a muffin each day versus making it at home?

[End Case Study]

Financial Decision-Making Question 3: What Risk Will I Be Taking With This Decision?

The third question that can help guide your financial decision making has to do with risk. Risk in everyday life is often associated with unpleasant consequences—injuries, property damage, and the like. These sorts of risks are subjectively defined, meaning different people may think or feel differently about them. For some people, the risk of injury is worth the thrill of skiing at top speed down a snowy mountain. For others, it's not.

There are, however, ways to measure the likelihood of accidents or the behavior of an investment over time. It's important to estimate risk in everyday life, when you are buying or selling assets, when making investments with variable rates of return, and when evaluating the insurance you want to buy.

Attitude toward risk is another reason why personal finances are personal. For example, some of us are averse to risk and prefer to make decisions that are very safe, such as stock market investments that do not deliver big returns but do not generate big losses either. In investing, risk comes from variation in returns. Some of us are comfortable with risk and feel okay about investing in highly variable, but potentially high-return investments. You will learn much more about risk in chapters 12–14.

We have emphasized the importance of thinking about financial decisions in terms of the future, but risk is also an important consideration because the future is uncertain and no one can predict what will happen tomorrow. Our lives are full of "what ifs." What if I change my mind? What if I lose my job and can't make my car payments? What if I plan a vacation but can't get time off work? There is usually no immediate answer for these questions because they have to do with largely unknowable future events. But when you are considering a purchase or investment, you can ask yourself, "What exit strategy is available to me if I need it?" And as part of this consideration, “What would exiting a purchase or investment decision cost?” Sometimes, the answer is simple: If you decide you don’t like the shoes you bought and know ahead of time that the retailer has a 30-day, no questions asked, free shipping return policy, your exit strategy is straightforward and the only “cost” is the time it takes you to repackage the shoes and drop them in the mail. But exit strategies (and associated costs) from a lot of the purchases or investments you are likely to make in your lifetime can be much more complicated.

Investments also carry financial risks. When you make an investment, you do so knowing you may get back more than what you put in, but you may not. Your time, resources, and money are all things that can be invested. Take money, for example. Even if you have successfully saved a big pile of money and invested it wisely, there are still risks associated with your investment. The phrase “**return on investment**” refers to the increase in value of your investments over time. For example, if you own part of a company in the form of a single share of that company’s stock, the value of that share will go up and down on a daily basis. If you buy it for $5.00 and sell it a year later for $6.00, you have made $1.00 and the return on your investment is 20% because $1.00 is 20% of $5.00.

But the value of a share of stock fluctuates. Maybe you need the money and have to sell it, but at that moment it is only worth $4.99. Then you have lost money. Therefore, there are risks associated with this, and every, form of investment. Even the most accurate predictions of the future are just statements about what happens “on average,” not about what will happen when you try to sell your particular stock. The main risk in investing is that the value of an investment never stands still and doesn’t change in a completely predictable way. There are risks associated with investment, and ways to reduce those risks, which will be discussed in chapter 13.

Getting seriously ill is one of the most unexpected sources of financial disaster, especially if you have insufficient health insurance. Insurance is there to protect you from risk, and you will learn more about it in Chapter 12. Even if you are well insured, the loss of income due to illness or unemployment is also an unexpected financial blow. Some employers offer insurance against loss of income due to illness, but the protection against general forms of unemployment consists largely in your own financial soundness. Smaller unexpected financial problems such as major car repairs or replacement are entirely in your own hands. There are ways to be prepared for these smaller problems too, including having some savings easily available for emergencies, and having the "good credit rating" discussed in Chapter 5 that will allow you to borrow money if necessary.

[Begin Case Study]

Case Study: Sam Has an Accident

Sam feels he is a financially responsible person. He has an excellent health insurance policy. He owns two cars, both completely paid off. He considers one of them to be a valuable antique that he could sell if he ever needed extra money. He has a good job and has consistently put money into a stock market account with which he has purchased considerable stock in a few well-chosen companies. He keeps only about $1,000 in his personal bank account after all monthly bills are paid.

One day, through no fault of his own, Sam is in a bad car accident. The car is wrecked and Sam is in the hospital for a few weeks. Although he has excellent insurance, Sam will still owe about $2,000 in hospital bills, with the insurance company paying the remaining $25,000 in bills. In addition, his company does not provide short-term insurance for the loss of three weeks' work. Sam expects his household bills during this time to be about $3,000, with no income to pay them.

Sam considers his financial options while lying in the hospital bed under the influence of pain-killing drugs and tasty hospital pudding. He knows this is not an optimal moment to have to think these things through. Where will he come up with the $5,000 he estimates he needs to meet his financial emergency?

He has $1,000 in a bank account but would rather not spend it in case some other unexpected expense comes along. He has plenty of money invested in stock, but the market has turned down recently and his stock is worth less than he paid for it. If he sells $5,000 worth of stock he will actually lose $500 on the deal. He could sell the antique car easily for $7,000 but it would take a few weeks and he couldn't do it from the hospital bed. It would have to be sold after he gets well. And then he would have to buy another car to get to work. He also has a credit card, which he has used responsibly, paying off the entire amount every month. That card has $10,000 worth of credit that he can use but an interest rate of 15% per year. In other words, borrowing $5,000 for a year will cost approximately $750 extra.

Discussion questions

1. Sam tells you his story in the hope that you will help him make a good plan for paying off his $5,000 in obligations in the most cost effective manner. What suggestions would you make to him?
2. In addition to helping Sam with his current predicament, suggest some strategies for the future that would make dealing with such an emergency easier.

[End Case Study]

CHAPTER SUMMARY

For the rest of this book, you will practice making financial decisions. By working through case studies for individuals of a variety of backgrounds, you will gain insight into your own situation. As you practice your financial skills, remember these important points:

- Research shows that most people are not prepared to make fully informed financial decisions. You don’t want to be one of these people.
- Personal finance is personal. Individuals need tools and knowledge to make financial decisions in light of their own particular circumstances.
- When making a financial decision, you should ask yourself “How will this decision affect my present finances?” Included in this question is consideration of your cash flow, hidden costs, and whether you are getting a good deal.
- When making a financial decision, you should ask yourself “How will this decision affect my future finances?” Included in this question are issues of borrowing, opportunity costs, and changes in value of investments or possessions over time.
- When making a financial decision, you should ask yourself “What risk will I be taking with this decision?” Included are considerations of exit strategies, fluctuations in value of investments, and the consequences of being uninsured.

KEY TERMS

Bureau of Labor Statistics (BLS) A unit of the United States Department of Labor that is a governmental statistical agency that collects, processes, analyzes, and disseminates essential statistical data. The BLS also serves as a statistical resource to the Department of Labor, and conducts research into how much families need to earn to be able to enjoy a decent standard of living.

Cash flow Cash and cash equivalents entering and leaving a household.

Central Bank A country's central bank is the "bank of banks"; it oversees the nation's commercial banks and manages interest rates and money supply.

Consumer price index (CPI) A measure of the average change over time in the prices of consumer goods and services.

Life cycle Stages of a financial life characterizing the accumulation and decumulation of wealth.

Financial literacy Financial literacy is the ability to understand how money works in the world. Someone who is financially literate has the skills and knowledge to make informed and effective decisions with his or her financial resources.

Gross Domestic Product (GDP) The market value of goods and services newly produced within a fixed period of time in a particular country.

Hidden cost Costs that are not included in the purchase price of an item or are not immediately apparent.

Inflation The rate at which prices for goods and services is rising and, consequently, purchasing power of the currency is falling.

Interest rate The amount charged, expressed as a percentage, by a lender to a borrower for the use of money.

Money market Where financial instruments with high liquidity and very short maturities, such as money, are traded.

Opportunity cost An alternative that is given up when a decision is made.

Return on investment (ROI) Measures the amount of return, or financial gain, on an investment.

Rule of thumb A general principle regarded as roughly correct but not intended to be completely accurate.

US Department of Labor A department of the U.S. federal government responsible for occupational safety, wage and hour standards, unemployment insurance benefits, reemployment services, and some economic statistics.

CHAPTER HOMEWORK

Check Your Understanding

1. Why is taking out a loan or using a credit card like renting equipment?

2. Which of the following is not one of the three questions for financial decision making?

   a. What risk will I be taking with this decision?
   b. How will this decision affect my present finances?
   c. How will this decision increase my wealth?
   d. How will this decision affect my future finances?

3. A survey of recent college graduates revealed that they were surprised by

   a. How many financial decisions they have to make
   b. How challenging it can be to find a job
   c. How hard it is to save money
   d. All of the above

4. Which of the following is an example of an opportunity cost?

   a. You bought a car but now can't pay for a vacation
   b. You bought a car and now you have to pay for insurance
   c. You bought a car and now your roommate wants to borrow it

d. All of the above

Do the Math

1. Your mother loves her daily smoothie and wants to buy an expensive new piece of kitchen equipment that can make smoothies out of almost anything. It will cost her $350. Her favorite drink at the local smoothie shop is made of fresh carrots, kale, blueberries, and pineapple juice. Your mother goes to the local grocery store, spends $8 on ingredients, and creates a 16-ounce batch of smoothie. Premade 8-ounce smoothies cost $5. How many smoothies will she have to make to break even?

2. You borrow $1,000 from your father and agree to pay him back, with 5% interest in a year. This means that you owe him $1,000 plus 5% of $1,000. How much will you owe him?

3. Draw a graph that shows how you think your income will grow or shrink over the next 60 years.

Thinking Hard

1. How much do you think your college education is worth, and how would you go about finding out?
2. Why do you think people get into so much trouble with credit cards?
3. Do you think about your future self? What decisions are you making now that will impact your future self?
4. Have you ever bought something you didn’t really think you could afford? What was your reasoning behind the purchase—how did you justify it?

You Are Your Own CFO

Create three possible scenarios for the next 30 years of your life. What will you likely be doing for work? Where will you be living? What are other members of your family doing? Will they need your help? Give each scenario a title. For each scenario, sketch your career path, your geographic location, and your family circumstances, and then do some research that will help you assume realistic income levels for your career choice over time.

Estimate what your income will be at 10, 20, and 30 years for each of these three scenarios. How do you expect your income to change over time? What new expenses are you likely to have?

Once you've created these scenarios, hold on to them. Throughout this text, we will ask you to use these three scenarios as the basis for applying the three questions for financial decision making to your own future.