During your lifetime you've made—and will make—thousands of financial decisions. Should you rent a home or should you buy one? If you buy a home, when is a fixed-rate mortgage preferable to an adjustable-rate mortgage? Should you buy a new or a pre-owned car? Is a term life insurance policy a smarter choice than a permanent life insurance policy? How much life insurance do you need—and when do you need it? Are stocks a better investment in the long run than bonds? Should you buy shares in a mutual fund or, instead, should you buy the shares of the firms that the mutual funds own? Should you drink Grey Goose or Absolut vodka rather than Smirnoff or Popov, or some other generic or near-generic? How can you best protect yourself from a health care problem that could cost tens of thousands of dollars? How can you determine how much you need to save for a comfortable retirement? How can you best protect yourself from financial disasters, like the sharp decline in stock prices from 2001 to 2003 or the collapse of home prices in many states that began in 2007?

Some of your choices involve current consumption—the amounts you spend for food, housing, and transportation. Some are related to investments as you seek to increase your accumulated savings so you'll have the money for the down payment on a home, your children's education, and your retirement.

You have to deal with two types of uncertainty as you make these decisions. One type involves changes in your personal circumstances—the

size of your family, health issues, and changes in your employment or income. The second type of uncertainty centers on changes in the financial environment, including changes in the consumer price level and inflation rate and changes in the prices of real estate, bonds, and stocks. American household wealth declined by 10 percent between 2007 and 2009; millions of families that had recently purchased homes for the first time or had traded up to more expensive homes and had mortgage indebtedness that was 70 or 80 percent of the purchase price of their homes lost nearly all of their wealth as real estate prices declined.

America is one of the richest countries in the world as measured by the standard of living, the education its universities and colleges offer, the diversity of family vacations, the quality of housing, and the level of health care. Yet tens of millions of Americans are worried about their financial futures. Despite the country's great wealth, the incomes of more than 20 million Americans are below the poverty level. Many of those are below this level temporarily while they grapple with their bootstraps and search for new employment opportunities. Sadly, some millions will remain bogged below this level, perhaps because of the lack of skills. Many of those with poverty-level incomes are seniors who are partially or fully retired. You may have read that fewer than 15 percent of Americans save enough for a comfortable retirement, and you're concerned that you may be among the other 85 percent.

These apprehensions in part reflect U.S. economic uncertainties. The large U.S. imports of automobiles, electronics, and apparel and the country's massive trade deficit have led to concerns about a diminution of U.S. dominance in global competition. General Motors (GM) and Ford, once the icons of American production prowess, have stumbled, losing market share to firms headquartered in Japan, Germany, and South Korea; GM and Chrysler have become bankrupt and have received loans from the U.S. Treasury because their futures seemed so challenged that no private bank or institution would lend them any more money. The U.S. industrial hegemony strikingly evident in the first seventy-five years of the twentieth century has been challenged by the rapid expansion of Toyota, Sony, Canon, Daimler-Benz, and Hyundai. Increased dependency on imported energy has led to a sense of vulnerability, especially when prices at the gasoline pumps have climbed above \$4 a gallon. Many Americans once assumed that they would be part of a corporate family—IBM or the

Pennsylvania Railroad or Sears Roebuck or Eastman Kodak or Chase Manhattan Bank—for thirty or thirty-five years, but that kind of employment security has become a relic.

Once-great firms such as United Airlines, Delta Airlines, and Bethlehem Steel have gone bankrupt, and their pension obligations to their retired workers and their current workers have been shunted to the Pension Benefit Guaranty Corporation (PBGC), a U.S. government agency that had a deficit of more than \$11 billion at the end of 2008—a deficit that will surge when PBGC takes over responsibility for the pensions of the workers in the failed U.S. automobile firms and their suppliers. Tens of thousands of retired workers have taken "haircuts" on their anticipated pensions, which in some cases have been reduced by more than 70 percent. The health insurance coverage for hundreds of thousands of retirees has shrunk.

U.S. firms in an array of industries are shifting from defined-benefit pension plans to defined-contribution pension plans; formerly these firms guaranteed monthly payments of a specified amount and carried the investment risk so that they had to come up with more cash for the payments if the rates of return on their investments were below average. Now the employees carry the investment risk, and their pension benefit checks when they retire will depend on their choices among bonds, stocks, and mutual funds. The two major U.S. government programs for those over age 65, Social Security and Medicare, are financially challenged as the number of retired Americans increases relative to the number of active workers.

Individual Americans increasingly will be on their own as they move along the life cycle toward retirement, with less assistance from both their employer (unless their employer is the U.S. government) and from various government programs. If you're concerned about your financial future, this book is for you. It will help you make three basic types of financial management decisions—consumption and saving; investment choices among bonds, stocks, and mutual funds; and the financial planning that brings together the amount you will need to save in anticipation of retirement with the amount you think you will need to maintain your standard of living after you retire. These decisions are closely related. In these pages you'll learn how to develop a financial planning framework that will help you determine how much you need to save each year so you'll have enough money in retirement to maintain your standard of living.

Your investment decisions—your choices between bonds and stocks, and your reliance on mutual funds—have a big impact on how rapidly your savings accumulate; you'll be guided through these decisions. You'll learn a lot about the big dent that costs and fees charged by the mutual funds can make between the rates of return on bonds and on stocks, and the rates of return that you will earn as an owner of mutual funds that own bonds and stocks.

One of your major problems is that those who want to sell you something control much of the information. These sellers may be friendly and charming, but their primary commitments are to their families, not yours. The sellers control the information flow, and they are much more knowledgeable—they are specialists as sellers, and you are a generalist because you buy from sellers in so many different areas. You need to unbundle the source of information from the purchase decisions—a practice that has become much easier because of the tremendous amount of information available on the Internet. If you're interested in a mortgage, look up "The Mortgage Professor's Web Site" (www.mtgprofessor.com); if you want to know more about Social Security, look up "Social Security benefits."

This book will help you with the key spending and investment decisions as you move from your twenties to your forties, fifties, sixties, and seventies. You'll be able to determine the amount that you need to save each year when you're employed so that when you retire, the money available from your Social Security benefits, any employment-related pension, and your accumulated savings will be sufficient to maintain your standard of living. When you're in your twenties and thirties, saving is difficult because there are so many seemingly urgent consumption needs. Most individuals spend first, and the amount they save is like a "leftover" If you are to achieve your accumulated savings targets, you'll have to reverse the arrangement; follow the adage "pay yourself first," and initially save 10 percent of your income; as your income increases, save 20 percent of the increase. Paying yourself first means that you are likely to make more efficient consumption choices.

Saving and consumption are the flip sides of the same coin. More efficient consumption decisions help you to achieve the same level of satisfaction by spending fewer dollars, and a small increase in the efficiency of your consumption spending will allow you to double the amount you save each year with minimal effort. If you are going to accumulate the funds for

retirement, you'll need to become promiscuous (i.e., indiscriminate, less discerning) when choosing among national brands and store brands and generics. "Brand loyalty"—a habit encouraged by the marketing geniuses on Madison Avenue—can be very expensive to your efforts to increase the amount you save each year. Benjamin Franklin's portrait is on the \$100 bill because of the wisdom of his observation "A penny saved is a penny earned." He might have added, "A dollar saved is like having \$20 in the bank." If you follow the straightforward suggestions in Chapter 2, the annual savings on your consumption spending could easily match the interest income you might earn if you had \$250,000 in the bank.

The money you save from savvy consumption decisions becomes money you can invest. You've heard about the power of compound interest and the virtues of an early start—some wit said that Einstein said that "compound interest was the most powerful law in the universe." Probably not, but the idea is powerful. You've heard that the rates of return on stocks are higher than the rates of return on bonds, and that in turn the rates of return on bonds are higher than the rates of return on Treasury bills, certificates of deposit (CDs), and money market funds. You've seen the ads of the firms that own and manage mutual funds bragging about the rates of return on their funds in the last year, the last three years, and the last five years—although the number of these ads declined sharply after stock prices plummeted in 2008. One of your major investment choices is how much of your accumulated savings should be used to buy bonds and how much should be used to buy stocks; a related decision is when to increase and when to reduce the proportion of bonds in your portfolio. This book helps you sort through your investment options and avoid paying a financial advisor to make decisions that you can better and more thriftily make yourself.

Financial planning combines savings and investment choices. The framework in Part III of this book will help you estimate a target value for your accumulated savings on the date you plan to retire and some intermediate target values fifteen, ten, and five years prior to the retirement date. You can estimate the amount you need to save each year to achieve your target values for these various dates. Your need to tackle financial planning methodically would be less pressing if you had been born rich, but in reality being rich is a state of mind, a matter of matching your consumption expenditures to your income. Tragically, millions of Americans will never have enough income to pay for the minimum necessities.

But millions more—many millions more—have enough income so that they will develop a new sense of freedom once they gain control of their financial lives.

If you're like most Americans, your saving and investment decisions have been ad hoc and responsive to immediate opportunities. Some of these decisions have been impulsive and reflect whether you feel cash rich or cash poor at the moment. This book provides a more systematic approach than this ad hoc opportunism. The first step in gaining financial freedom is to develop a framework that should assist you with timeconsistent decisions so that the amount you save each year should be enough (together with the anticipated benefits from Social Security and employment-related pensions) to maintain your standard of living in retirement. That won't just happen. You need to position yourself so that a major surprise when you leave the active labor force will not have a detrimental impact on your ability to maintain your standard of living. Unless you win one of the major lotteries or marry someone who has, you will need a savings program. Having a savings program won't guarantee that you'll have a hassle-free retirement, but not having one will almost guarantee that you'll feel financially challenged.

Traditionally, 65 was the retirement age for Americans, and for seventy years it was the age at which Americans could begin to receive the full retirement Social Security benefits; when that age was set, life expectancy was in the low seventies. The increase in longevity in the last seventy years has been dramatic. The retirement age now is creeping up after having declined in the 1980s—and Social Security is ratcheting up the age at which it pays out full benefits. The life expectancy of the average American couple at age 65 is nearly twenty-five years—and increasing. Many will be retired for about as long as they were in the active labor force. An increase in your life span requires planning so you won't outlive your assets.

The income for Americans over age 65 comes from four principal sources. About 40 percent comes from Social Security, about 20 percent from employment-related pensions, and about 20 percent from personal savings. The remaining 20 percent comes from wages and salaries; more than 11 million Americans over age 65 continue to work, some because of the challenges and some to alleviate boredom, but most because they need more money. Too late they realized that they hadn't saved enough for retirement while they were in their forties and their fifties.

If you want to maintain your standard of living after you retire, you will need between 65 and 75 percent of your preretirement income. Your annual financial needs will be less than when you were actively employed because you will no longer have employment-related expenses. Moreover, you'll be on the receiving rather than the paying end of the Social Security program—although you may be one of the 10 million individuals who pay Social Security taxes at the same time that they receive Social Security benefits. Your home mortgage loan may be paid off—or it may be much smaller so that you can reduce your monthly payments by refinancing. You won't need to save for retirement because you'll already be retired. But you'll have more time to spend and to travel, and that might be expensive.

The bedrock program for paying the living costs of most Americans in retirement is Social Security. Ninety-five percent of Americans over age 65 receive Social Security retirement benefits; most of the remaining 5 percent receive some other type of government pension. There is a great deal of chatter in Washington and in the news predicting that the Social Security program will become bankrupt. Not to worry. The program is the biggest "profit center" in Washington because the taxes that employed Americans pay each year exceed pension and other benefits that the Social Security Administration pays to the retired. Social Security will remain a profit center for at least the next ten years. As Americans age and benefits increase relative to taxes, the rate of increase in benefits will be slowed and taxes will be increased. But even a perfectly healthy Social Security program is not sufficient for most Americans to maintain their standard of living once they retire.

Yogi Berra once said, "If you don't know where you're going, you'll end up someplace else." For most individuals, the ten or fifteen years prior to retirement are the high savings years. You need to develop target values for your accumulated savings on the date of retirement and intermediate targets for earlier dates, say, five and ten years before you plan to retire. Then you need to develop a "savings program" that is time-consistent between these target values, the feasible rates of return on your savings as they accumulated, and x dollars each month that must be added to these savings.

Planning your financial future isn't quite this formulaic, of course. It's complicated by financial uncertainty. The prices of bonds, stocks, and real estate are unpredictable; 2007 and 2008 were miserable years

because American household wealth declined by more than 10 trillion. U.S. stock prices had declined by 40 percent between 2000 and 2003, and half of the households that owned stocks experienced even larger losses. Then there's the U.S. inflation rate: the U.S. consumer price level in 2008 was five times higher than it was in 1965. Severe U.S. inflations have been episodic, almost one a generation. Finally, your personal circumstances are a wild card in your financial future. Your annual income, family size, and health may change abruptly. Forecasting your income and your family needs five years into the future is difficult, and yet the financial planning gurus want you to project your family circumstances ten, twenty, sometimes thirty years down the road. But if you don't map out the trip and head for a destination, you can be sure you won't arrive there.

The Range of Financial Decisions: Ten Big Questions

The menus in many Chinese restaurants provide a useful analogy for the range of decisions you'll make when you undertake financial planning. The number of individual dishes is the product of several primary ingredients, including chicken, beef, shrimp, and pork, and a number of sauces and complements. Some of your basic financial decisions are more or less comparable to such a mix-and-match menu. One set of decisions involves your consumption pattern and the amount you save each year; another set involves the allocation of your accumulated saving between bonds and stocks or whether instead you'll buy CDs from a bank. It's important to distinguish between the handful of decisions that are central to your financial well-being and the mass of decisions that are secondary.

Consider some of the more important decisions:

- —How much should I save each year to ensure that I will have a comfortable retirement?
- —How can I modify my everyday spending on food, shelter, and clothing to increase the amount that I can save comfortably each year?
- —When and how should I buy a home, and when is it more cost-effective to rent?
- —When is an adjustable-rate mortgage preferable to a fixed-rate mortgage?

- —When should I increase my life insurance, and when should I reduce it? When is term life insurance a better buy than permanent life insurance? Which types of insurance are rip-offs?
- —What proportions of my accumulated savings should be invested in bonds and in stocks, and when should I change these allocations?
- —When should I buy shares in a mutual fund, and when should I buy the bonds and the stocks that mutual funds buy?
- —How can I best protect my income and wealth against another surge in the U.S. inflation rate?
- -Should I buy an annuity to ensure that I will not outlive my assets?
- —When should I take more than the minimum annual distribution from tax-advantaged accounts, such as individual retirement accounts?
- —Are health care policies cost-effective, or are there less costly ways to ensure that I am well taken care of if I should become physically or mentally handicapped?

There are two ways to get comfortable answering these questions. You can develop and enhance your personal knowledge through reading and discussion, or you can rely on a financial professional—a broker for a large or small investment firm, a mutual fund salesperson, or a personal financial advisor. Most want to be paid for their services, either through a fixed annual fee or through a commission calculated according to the value of the assets they help you manage. Four thousand people considered Bernie Madoff their "best friend" and trusted advisor-before the Feds hustled him to prison. Bernie had a lot of company in his scamming activity—at least four other large Ponzi schemes surfaced in 2008. And there has been a massive amount of misrepresentation by those connected with the major financial institutions. You might rely on a personal financial advisor to help you choose mutual funds, and you might have to pay 1 percent to the advisor and another 1.5 percent to the manager of the mutual fund—a total of 2.5 percent. An awful lot of money compared to the price of this book.

This book has three major sections. The chapters in Part I (chapters 2–8) will help you save money as you avoid wasteful expenditures. They address the major consumption decisions, including the purchase of items for the home, housing, insurance, and college education. The chapters in Part II (chapters 9–11) focus on your investment decisions. Should you buy

bonds or stocks, and should you buy these securities directly or rely on one or several mutual funds? The chapters in Part III (chapters 12–17) deal with planning for your retirement, offering suggestions that will assist you in relating the amount you should save each year to your employment-related pension and to your Social Security benefits, deciding whether to purchase an annuity, and assessing the merits of a reverse mortgage.

This book will help you develop a framework for making basic decisions about your financial well-being using everyday language. A backmatter glossary explains the meaning and the relevance of technical terms, and there are shorter glossaries in boxes in the text. Most financial decisions involve trade-offs, and periodic "calculators," suggestions, and references are provided throughout the book to help you make the choice that's right for you.

You can read this book straight through or refer to chapters as they become pertinent to your financial decision making. If you're moving, read Chapter 4 as a guide to the rent-or-buy decision. If you're established in your home, you may want to read the section in that chapter on when to refinance the mortgage. Before you buy any more insurance and whenever you receive a policy renewal notice, you might want to read Chapter 5, on insurance. Read Chapter 10, on mutual funds, before you buy mutual funds and even if you own them; half of those who read that chapter will likely question whether they own the most appropriate funds. Should you buy a health care policy that would cover some of the cost of daily care if you require it in your senior years? Read Chapter 15.

This book won't tell you what decisions to make, but rather it will take you, step by step, through the decision-making process so that you'll arrive at the choice that's right for you. A one-size-fits-all approach to financial management—for example, "Buying is better than renting"—isn't the way to achieve the peace of mind that comes with knowing that your financial planning has been made with your individual interests in mind. Every now and then, however, you'll be nudged in a particular direction because the advantages of one choice over another seem overwhelming.

The message of the book is straightforward: you're an amateur continually competing against a range of professionals who have specialized in seeking to enhance their income at your expense. Be prepared, and know the data.

A Note on Terminology

The words "savings" and "investment" often are used to mean the same thing, namely, the securities or assets that you have accumulated.

In this book the word "savings" follows standard economics usage and means that portion or share of your annual income that is not spent on consumption of goods. "Investment" at the personal or household level involves purchasing bonds, stocks, real estate, and other assets with the cash you have acquired because your consumption spending has been less than your income. "Accumulated savings" is the sum of the assets that you have purchased and inherited.

Is your monthly payment on your home mortgage loan consumption or savings? The most likely answer is that the interest component of this payment is consumption and the loan-reduction component of this payment is savings. It gets a bit complicated because an inflation premium may be embedded in the interest rate on the mortgage; the counterpart of this statement is that the value of the house might increase.