

# Preface

Students earn a college degree to increase their earning potential. Most individuals dream of financial independence, the ability to live the life style of their choice. Personal financial planning is a critical step to efficiently obtaining that goal. The ability to manage money and make wise financial decisions is a learned skill which comes with knowledge and practice. This book is designed to provide students with information on how financial instruments work and to provide them with ample opportunity to practice making decisions using their acquired knowledge.

## Vision of Text

We designed *Personal Finance: An Interactive Applications Approach* to have its own unique personality.

**Student Oriented**—The book is written in an open, easy style. Our text is user friendly in its tone, content, and layout.

**Applications Approach**—The text incorporates case studies, personal financial planning, and reflective thought features. The case studies are inclusive and one is provided for both a college student and a new graduate. The personal financial planning features guide students through the process of creating his or her own financial plan. The reflective thought features ask thought provoking questions to help students incorporate their own personal beliefs as part of the planning process.

**Comprehensive**—The text provides the tools to allow students to prepare a complete financial plan.

**Timely**—The text was written with current information, and provides resources for constantly changing financial information.

## Organization

The text is organized to build on previously learned concepts and to systematically facilitate the student's ability to develop a financial plan.

Chapter 1 introduces the time value of money concepts critical to many problems in the following chapters. The concepts are explained and examples are used to demonstrate how to solve common financial problems with four popular methods: scientific calculators, financial calculators, tables, and spreadsheets.

Chapter 2 introduces students to the financial planning process. In this chapter students are asked to set goals and develop financial statements: cash flow statement, balance sheet, and budget.

Chapter 3 covers the issues related to housing. It compares and contrasts the benefits of renting versus buying a home. It offers tips for leasing and purchasing. It demonstrates how to determine how much mortgage you can afford and details the items associated with a mortgage payment and closing costs.

Chapter 4 introduces consumer credit. This chapter demonstrates both wise and unwise use of credit cards, explains the difference between revolving and closed end credit, and details the factors that affect your credit (FICO) score.

Chapter 5 introduces comparison shopping. This chapter explains how to comparison shop from the smallest purchases made in the grocery store to large purchases like purchasing an automobile.

Chapter 6 introduces taxes and explains the difference between income and non-income based taxes. It walks students through the process of filing a 1040 form. It highlights tax credits of interest to students and provides information for students to find additional credits through the IRS web site.

Chapter 7 introduces the concepts of insurance and explains how to determine your insurance needs for home and auto insurance.

Chapter 8 covers medical insurance. It starts by introducing the currently available medical care and disability plans and includes healthcare options available under the Affordable Care Act.

Chapter 9 covers life insurance and how to determine which type of policy best covers your personal needs for life insurance. It demonstrates how to select an amount of life insurance appropriate for the number of people you have depending on you for support.

Chapter 10 addresses the issue of how we earn our money. This chapter is titled entrepreneurship and asks the student to be the entrepreneur of their own life. This chapter includes a brief overview of how to write a financial plan, how to write a resume, and how to write a sponsorship request letter.

Chapter 11 introduces the basics of investing and explains the concepts of risk and return. The chapter details the differences among the many financial institutions and financial instruments available to us as investments.

Chapter 12 covers the basics of investing in stocks. It includes the basics of analyzing stocks and shows in examples how someone might analyze a real company.

Chapter 13 covers investing in bonds and interest-paying securities.

Chapter 14 explains investing in mutual funds. It covers the various types of funds and how an individual might select which funds are appropriate for investing.

Chapter 15 introduces real estate as an investment option. It covers some of the terms that are special to real estate investing and shows how even individual investors with a modest amount to invest can purchase an interest in real estate by investing in real estate investment trusts.

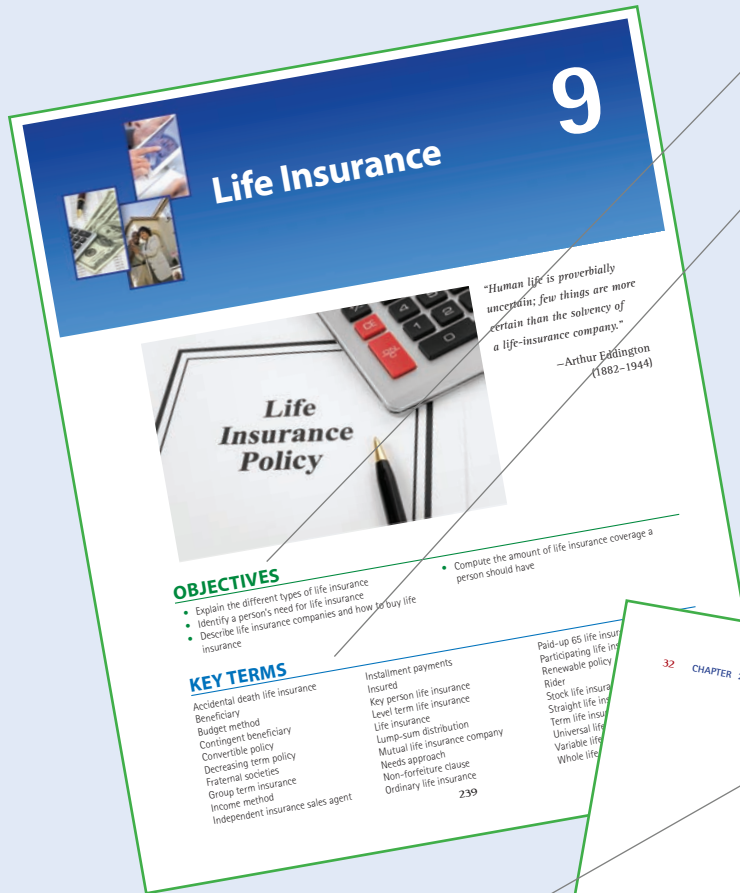
Chapter 16 demonstrates how to effectively plan for retirement by using tax-shielded investments and savings plans.

Chapter 17 introduces students to the concept of estate planning. It shows the tax ramifications of different trusts and explains the importance of planning for the final settlement of your estate.

## Text Philosophy

We believe financial planning is critical to success. The financial planning process requires accurate knowledge of an ever changing financial world. The best way to learn the skills of financial planning is to create, implement, and adjust a personal financial plan to meet changing desires and needs. This process also involves the ability to reflect on individual definitions of success, personal, moral, spiritual, and ethical beliefs. This text is designed to provide students with accurate information, clear guides, and thought provoking questions to allow them to integrate their personal beliefs into the planning process without requiring them to share that information with others.

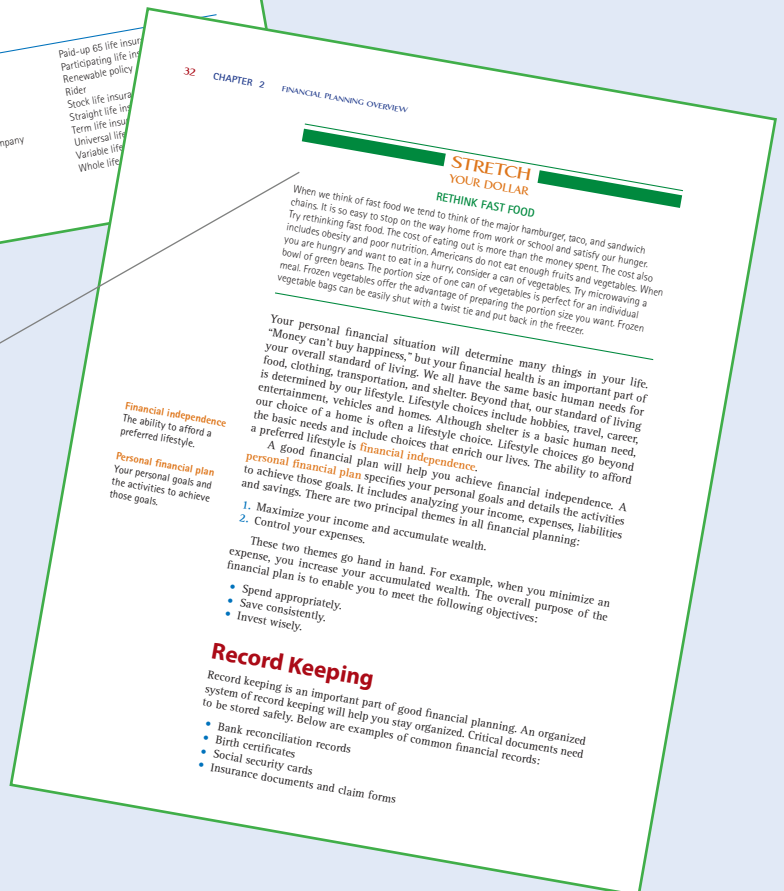
# Text Features



**Learning Objectives**—Each chapter opens with learning objectives.

**Key Terms**—Key terms appear throughout the chapter in bold type—including a running glossary.

**Stretch Your Dollar**—Each chapter includes tips to stretch your dollar. These are tips to make your budgeted dollar go farther.



**Financial Equations**—The text opens with a solid coverage of the time value of money concepts. We provide examples of how to solve these four main equations with scientific calculators, spreadsheets, tables, and financial calculators. The text provides additional examples of these equations throughout the following chapters. Where appropriate, additional mathematical equations relevant to personal finance are introduced.

16 CHAPTER 1 THE VALUE OF MONEY

### Present Value of a Series of Payments (An Annuity)

Present value of an annuity is often used to calculate how much you can afford to purchase when you know what you can afford as a payment. Let's look at an example.

Roman wants to upgrade his used car and take advantage of the "cash for clunkers" program. He lives at home and works part time. He knows he can afford a payment of \$300 per month, but he wants to know how much he can afford to pay for a car. His bank is offering a four-year loan at 5.25 percent. Let's help him figure out how much he can pay for a car.

What is the question?

- PV = ?

Write what you know:

- Annuity (series of deposits)
- FV = \$0 since he wants to pay off the loan, his FV is zero
- $i = 0.0525/12 = 0.004375$
- $N = 4$  (years)(12 months) = 48
- PMT = \$300 (out)

Pick the proper equation:

$$PV = PMT \frac{1 - (1+i)^{-N}}{i}$$

Solve the problem:

$$\$12,963.04 = \$300 \frac{1 - (1 + 0.004375)^{-48}}{0.004375}$$

Roman can afford to buy a car priced in the \$13,000 range and use the \$4,500 from the "cash for clunkers" program for other expenses or he can afford a car for \$17,500.

The present value of an annuity equation can also be used to determine what your payment will be on a loan. Let's look at another example.

**FINANCIAL CALCULATOR SOLUTION**

Present Value of a Series of Payments

Set your calculator to 12 payments per year. He will have 48 payments over the four years.

48	5.25	12,963.040	-300	0
[N]	[I/Y]	[PV]	[PMT]	[FV]

**Examples**—Problems are worked in the chapter to demonstrate how to use the equations and perform the calculations required in the financial decision making process.

CHAPTER 4 MANAGE YOUR CREDIT 101

### EXAMPLE 4.3

#### Keri's Installment Payment Loan

Keri wants to buy a used Nissan from her friend, Lisa. Her credit union offers loans on used vehicles at 4.9% interest. Lisa said she would sell her car for \$16,000. Keri wants to be able to pay off the loan in three years, how much will her payment be? You can calculate the payment in either a spreadsheet or with a financial calculator. Use the following parameters:

- Present value = \$16,000—the amount she is borrowing
- Future value = 0—because at the end of the three years she will have the loan paid off
- Rate =  $0.049/12$ —since her payments will be monthly we divided the annual rate by 12 months
- Number of payments = 36—the number of months in three years
- Payment = ?

If you don't have access to a financial calculator or a spreadsheet program you can use the following formula:

$$PV \left( \frac{i}{1 - (1+i)^{-n}} \right) = PMT$$

Where:  
 PV = present value—loan value  
 i = interest rate for period—in this case,  $0.049/12$   
 n = number of periods—in this case 36 months

$$\$16,000 \left( \frac{0.004083}{1 - (1.004083)^{-36}} \right) = \$478.82$$

Now that we know her payment, let's look at how the interest and principal are paid on an installment loan. Notice from her payment schedule that she pays the most interest in the first month, each month after that she pays a little less in interest charges and a little more toward principal, although her payment stays a consistent \$478.82. The last payment of an installment loan is often slightly higher or lower than all the other payments. This accounts for amounts so small to distribute evenly. Notice Keri has a balance of \$-0.25. In this case her last payment will be 25 cents lower than her regular payment. Her last payment will be \$478.57.

**Loan Collateral: Secured versus Unsecured Loans**

A lender secures a loan against default by holding an asset as collateral. A car is the collateral for a car loan; if the borrower fails to pay the loan back, the lender takes the car and sells it to pay off the loan. A loan is secured when it is backed by collateral. Collateral is any asset used to secure a loan.

256 CHAPTER 9 LIFE INSURANCE

### PERMANENT LIFE VERSUS TERM LIFE

Insurance agents often aggressively sell permanent life insurance over term insurance because they receive a significantly greater commission for permanent life. For most permanent life policies, an individual would be much better off buying an equivalent term policy and investing the difference in premium amounts.

Instead of purchasing permanent life, most professional financial planners recommend obtaining a term life insurance policy and setting up a separate investment account to save the difference in the premium cost of the two policies. For example, suppose that the difference between a whole life and term insurance policy is \$50 per month. A prospective policyholder should buy the term life insurance policy and then invest the \$50 each month in an investment account. This investment account will build value faster than the comparable whole life policy will build its cash value. In addition, with the separate investment account, policyholders have complete control over the investment account, compared to little or no control over the cash value of a whole life policy.

Permanent life insurance provides a mechanism for requiring the policyholder to save money since a portion of the premium is invested and becomes the cash value. People who have difficulty saving may find that different insurance policies are a viable option for accomplishing a savings goal. However, the fact remains that a person who can buy term life and save the difference will normally end up with a greater cash savings amount than another person who buys any type of permanent life insurance. Of the amount of life insurance purchased in the United States in 2007, about 27 percent was permanent life insurance (see Exhibit 9.7).

### VARIATIONS OF WHOLE LIFE INSURANCE

Because whole life policies are so much more expensive than term insurance companies now offer some variations in order to help sell policies. Two of these types of policies are universal life insurance and variable life insurance.

**EXHIBIT 9.7** INSURANCE PURCHASES IN THE UNITED STATES, 2011

Life Insurance Purchases by Plan Type

Plan Type	Percentage
Permanent Life Insurance	33.3%
Term Life Insurance	66.7%

Life Insurance by Participating Status

Participating Status	Percentage
Participating	17.2%
Non-participating	82.8%

Source: Life Insurers Fact Book, 2012.

**Exhibits**—Each chapter includes Exhibits to enrich the content. Exhibits contain graphs, charts, tips, or check lists to help the student distill the information in the chapter. In Chapter 3 the Exhibits include graphs of historical mortgage rates and checklists for making a home purchase.

**Review Questions**—They are provided to allow students to check their understanding of the material presented in the chapter.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**REVIEW QUESTIONS** **CHAPTER 12**

- List four advantages of marketable securities compared to other investments. Give an example of each advantage, comparing a marketable security to another investment.
   
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- Identify and explain the two types of corporate stock. As an investor who wants to profit from long-run growth, which type of stock would you prefer to own?
   
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- Contrast primary financial markets with secondary markets. Can one be successful without the other? Explain why, or why not.
   
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- Explain the difference between a bull market and a bear market.
   
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- Identify the four principal services offered by securities brokerage firms.
   
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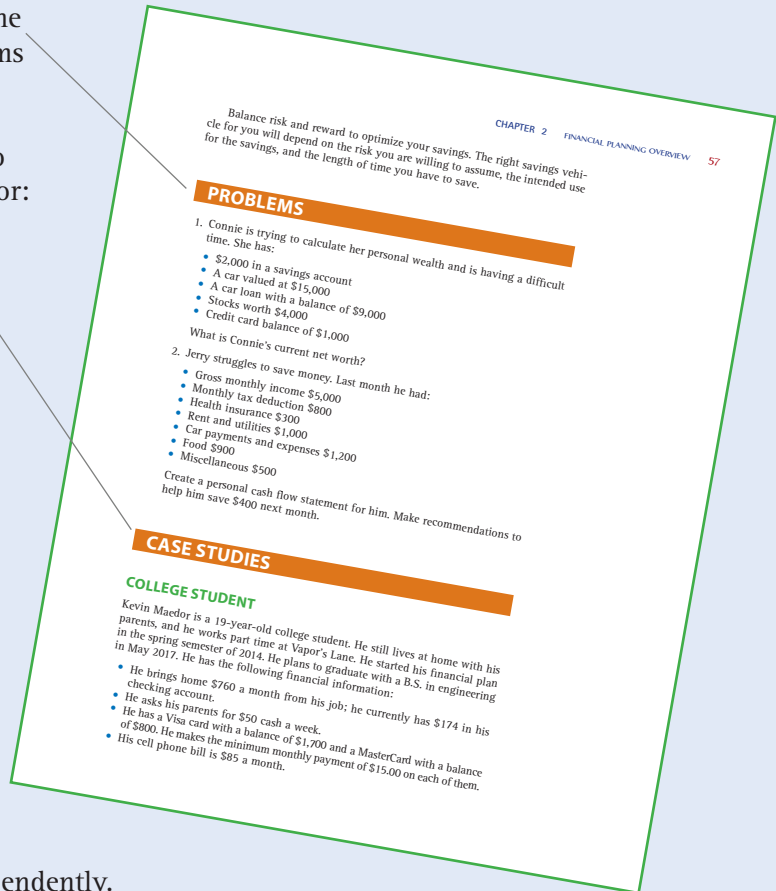
**Problems**—Allow the students to apply the concepts related to mathematical problems (quantitative analysis) discussed in each chapter.

**Case Studies**—Chapters 2–17 include two case studies each. There is a case study for:

- A new college student
- A new college graduate

The individuals are introduced in Chapter 2. Realistic occupation incomes, and expenditures are provided for each cases study. The students are asked to perform a task related to the text content, for example in Chapter 2 they are asked to create goals, cash flow statements, balance sheets and budgets. In Chapter 3 they are asked to qualify the individuals in their case study for a mortgage and help them select a home. Each chapter builds on the information covered previously. We have also included a recap of the financial information needed to make the decision for that chapter's case study so they can be assigned independently.

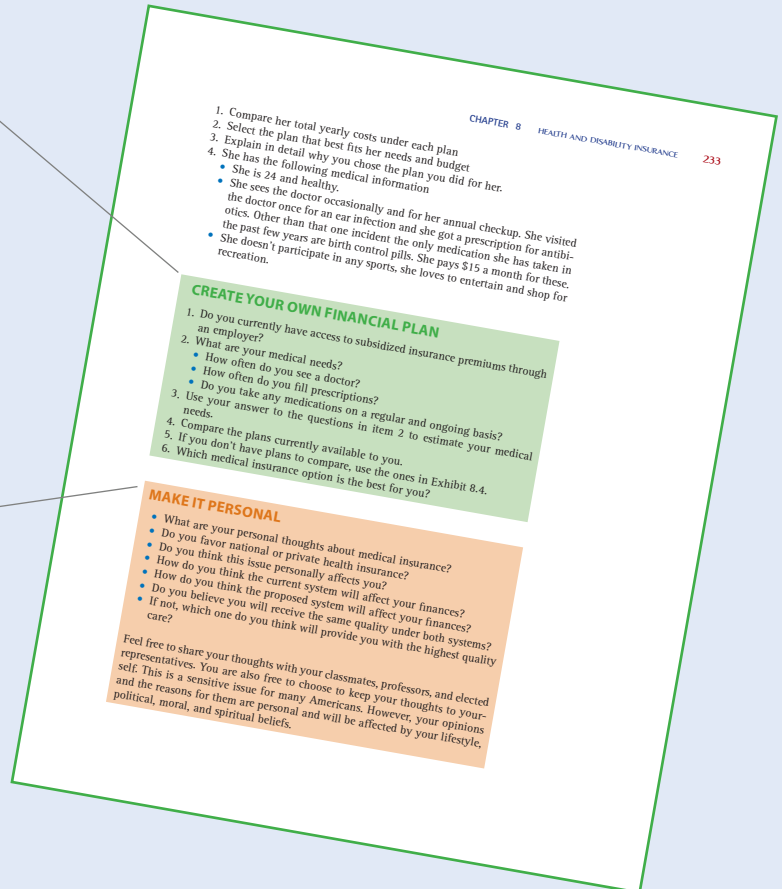
Cases contain a note asking students to use accumulated information if they are working the same case throughout the book. Each case was developed with poor financial management in Chapter 2 to stress the points of common financial mistakes people make. The instructor's manual includes complete recommended solutions for each case study. These can also be used as examples in lectures for instructors who want to demonstrate the concepts and use the development of a personal financial plan for student assignments.



### Create Your Financial Plan—

Chapters 2–17 contain activities designed to help students create their own financial plan. These can be used throughout the course as assignments. Instructors can use the case studies as group activities in class to demonstrate how to create a financial plan, then assign these activities for students to create their own plan. If instructors don't assign a personal financial plan, students can use these on their own.

**Make It Personal**—These are not found in every chapter, but they are found in key chapters in the text. They are thought provoking questions designed to allow students to incorporate their own personal values into their financial plan. They are reflective activities that encourage students to consider what is important to them from a personal, moral, spiritual or political point of view. They are not designed to be graded. Each one tells the student this is a private matter for their consideration and they should not feel obligated to share these. They are free to share them if they wish.



## Instructional Resources

We have developed an interactive website with:

**Survey Questions**—These are questions designed to answer chapter-specific questions. For example, in the chapter on housing, the survey questions provide students with feedback on the rent versus buy issues based on their answers to a set of question derived from their personal preferences.

**Poll Questions**—These are designed to provide the instructor feedback at the opening of a chapter. In Chapter 1 students are asked which they would rather have a penny that doubles in value everyday for a month or \$1,000,000.

**PowerPoint Presentation**—Chapter outlines are provided in a PowerPoint presentation.

**Interactive Exercises**—In Chapter 2 a drag and drop game is used to teach the skills of developing a financial statement. Students are given a set of financial items and asked to drag them to the appropriate financial statement. Students receive immediate feedback and can increase their ability to accurately write cash flow statements and balance sheets in a fun and entertaining way.

**Videos**—These are provided to explain complex information. For example, in Chapter 1 videos are provided to show students step-by-step how to set up an Excel spread sheet to solve time value of money problems. In Chapter 3 on housing, videos are provided to explain how to calculate how much mortgage a person can afford.

**Test Questions**—Both pre-test and post-tests are provided. Test questions for each chapter are provided in a variety of formats, true or false, multiple choice, essay and short answer.

**Sample Syllabi**—We have provided sample syllabi designed to be used with a standard 16-week course. We have provided them for both Monday/Wednesday/Friday and Tuesday/Thursday course schedules.

**Solutions**—We have provided complete solutions for all review questions, problems, and case studies.

**Stock Trak**—Each text comes with access to Stock Trak.