Personal Finance

Study Guide

Third Edition

Garman / Forgue

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Preface

To the Student

This study guide has been written for you. It is intended to provide you with a review of sufficient breadth and depth to help you become a confident and competent manager of your personal finances. Our intention is to provide a review that covers all the key concepts, terms, and procedures in the text at least once and—where appropriate—several times. Your careful reading of the text combined with a diligent completion of the exercises provided in the following pages will yield positive results in terms of both knowledge and classroom success. Our objective is your success.

How to Use This Study Guide

Summary Each chapter begins with a summary of the text chapter. These summaries are written in a crisp, clear style to bring out the key ideas and points for you. As you read the summary, reflect back on the text discussion, thinking through the logic and progression of the text passages.

Objectives Following the summary is a listing of the objectives from the text. As you read them again, ask yourself if you have understood each of them. If you feel less than confident of your level of understanding of a particular topic, make a mental note to pay close attention to it as you continue to work through the study guide exercises.

Key Terms and Concepts The list of key terms and concepts from the text is repeated in the study guide. It can serve two purposes for you. First, as with the list of objectives, your reading of the key terms can alert you to those that are not yet clear to you in their meaning and application. Second, the list is a prelude to the completion exercise that immediately follows.

Completion The completion exercise is intended to provide another summary of the text chapter, but with a twist: you are asked to complete the summary by providing missing terms. This exercise will help reinforce what you already do know and also help clarify concepts that still seem murky. Consequently, it is important that you do not defeat this effort by referring too quickly to the list of correct responses in the margin. Cover the list while you write the responses in the spaces provided. Only when you finish the page should you compare your answers with those provided. If you have made errors, consult the text to correct your misconception(s).

Problems and Applications The study of personal finance is not a mere read-and-memorize process. Terminology is important, but unless you can apply the knowledge, mastery is not complete. Each study guide chapter contains one or more problems to allow you to improve your competence in actually applying what you have learned. Sometimes the mathematics involved is a simple addition or subtraction or a calculation of a percentage. Other times the mathematics is more complicated, such as in the calculation of after-tax rates of return or interest rates. Regardless of the complexity, important skills and understandings of interrelationships among concepts have been enhanced.

True-False Each study guide chapter also provides a series of true-false questions. "True" items reinforce a key point from the text. "False" items tend to help you distinguish among terms and concepts by getting you to think about what a term *does not* mean or imply. This is only part of what you need to know, however, so we ask you to explain *why* the false items are false.

Multiple Choice A series of multiple-choice questions follows the true-false questions. It might help you to know how multiple-choice questions are constructed. You will notice that we ask you to select the one *best* answer, implying that more than one response has some validity. This is intentional. We want you to be able to make finer distinctions than can be asked for in a true-false question. Consequently, one of the four possible answers is a "distractor," an answer that might appeal to someone who is just guessing. Another answer is clearly not correct but is sufficiently related to the topic addressed to get you to think about why it is not the correct response, another is close to being the best and will help you refine your knowledge, and finally one response is the best. If you choose the wrong response, make sure you consult the text to find out why it is wrong. This will improve your understanding of both the correct and the incorrect responses.

Discussion Questions Many students understand the value of studying in groups and discussing with each other what they are learning. To help you in this effort, we have provided a series of discussion questions in each study guide chapter. These are not requests for a mere repetition of lists of concepts or facts. Instead they ask about how the material you are learning does or will apply in your life. Your discussions will add a sense of realism to and personalize your study efforts.

Answers Answers to all problems and applications, true-false questions, and multiple-choice questions are provided at the end of each study guide chapter. Don't peek. For mathematical questions, we have provided not only the answer but the calculations used to obtain the answer where appropriate. For the true-false questions we have indicated why false items are false.

Wishing You Success

It is probably obvious that we believe that your ability to manage your finances successfully is a key to your life satisfaction. Money isn't everything, but it is too often cited as a major reason for marital and interpersonal strife for it to be ignored. Further, all your efforts toward obtaining a high level of income will go for naught if you cannot manage your finances properly. It is likely that many of you will live into your eighties or even nineties and still maintain good health. The years ahead can be extremely satisfying if you have prepared for them adequately, but they can be miserable if your resources are low. We wish you the best—and we have designed this study guide to help you do your best.

Raymond E. Forgue
E. Thomas Garman

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1
The Importance of Personal Finance

Summary

Personal finance is the study of personal and family resources considered important in achieving financial success. As people go through life, they often make mistakes that reduce their financial security. Your reasons for completing this study guide should be not only to learn how to avoid financial mistakes but to do even better—to become a successful and effective personal financial manager. To do so, you must do some personal financial planning, developing and implementing long-range plans to reach financial success. This planning will help you acquire financial knowledge, use financial skills and tools, clarify your financial values and goals, and specify needs and wants that can be satisfied through financial resources. Not all planning is successful, however. The key is to practice effective personal financial management, which can be defined as planning, analyzing, and controlling financial resources successfully in order to reach goals.

A number of key concepts are crucial at this early stage in your study of personal finance. Knowledge is not enough for success. You also need to acquire financial skills, which are techniques of financial decision making, and you need to learn how to use various financial tools such as credit cards, insurance policies, and financial charts and tables. Your feelings about money and finances are also important and should reflect consciously developed attitudes and goals. You need to be able to distinguish between needs and wants and to set clear priorities to ensure that what is important gets done first. The end result will be improved success in reaching your financial goals.

Most people's financial aspirations revolve around two basic aspects of finances. The first aspect is wealth, which is the sum of all one's money, property and other assets. The second is lifestyle, which is one's way of living. Most people want to maximize wealth and live a comfortable, rewarding lifestyle. The key to success in both areas is generally to maximize earnings. Often there is a tradeoff between maximized wealth and a comfortable lifestyle because money spent to support a lifestyle cannot be saved to build wealth. Well-managed earnings can go the furthest toward reaching both goals. The outcome will be a comfortable feeling that your financial resources are enough to fulfill all your needs and most of your wants throughout your lifetime. Most people would define this state of affairs as financial security.

Factors outside your control affect your financial security. You can minimize these effects by forecasting such aspects of the economic environment as inflation, interest rates, and the state of the economy. Inflation is a condition in the economy characterized by rising prices in general for goods and services. During inflation, real income falls for most people unless their earnings rise at least as fast as prices. It is important to convert nominal income (as measured in current dollars) to real income, to reflect the effects of inflation on one's earnings. The most commonly cited measure for inflation is the consumer price index (CPI). If the CPI goes up 5 percent in a year, the average person would need a 5 percent raise to achieve the same real level of income. Generally, when the inflation rate is high, interest rates paid or earned on loans, savings, and investments are also high. It is important to subtract the inflation rate from an interest rate to obtain the real interest rate being paid or earned. Personal financial managers also need to be aware of the status of the economy and the movement of the business cycle over time. The economy typically goes through a cycle that includes expansion, recession, and recovery; a recession may be severe enough to be classified as a depression. These extremely severe conditions appeared, for example, in the 1930s. Most people look at changes in the economy's gross national product for clues as to where we are in the business or economic cycle. The government also publishes an index of leading economic indicators each month to help people to predict economic conditions for the next year or so.

Several other fundamental considerations are important in personal finance. Opportunity cost is the cost of a decision measured in terms of the value of the forgone alternative(s); in other words, what you could have done instead. Marginal cost is the additional (marginal) cost of the next good or service purchased. Marginal benefit is the benefit of the next good or service purchased. Economists call this benefit utility, and it is the basis for the concept of marginal utility. Generally the marginal benefit (utility) of the next item purchased, such as a third hamburger a person eats in one sitting, is lower than that of the second, which was lower than the first. A personal financial manager can improve decision making by taking opportunity cost, marginal cost, and marginal utility into consideration. Another application of the "marginal" concept is the use of the marginal tax rate to assess the tax impacts of financial decisions.

The people who do best in the financial arena are those who have a well-developed understanding of the time value of money. In its simplest form, this concept can be used to compare an asset's present value (what it is worth today) with its future value or with some alternative's future value (what it will be worth at some future date). Whatever method is used to make the comparisons, a key consideration is the difference between compound interest and simple interest. Compound interest involves letting interest that is earned remain in an account in order to earn interest on interest as well as on the original funds in the account. With simple interest, the interest on invested funds is withdrawn each time it is paid, and is not allowed to earn interest itself. Thus the investment never really grows but simply serves as a source of income. Using compound interest is the key to achieving wealth.

There are six steps in personal financial management:

1. Financial planning entails such tasks as career planning, recordkeeping, and budgeting and cash flow management.
2. Money management focuses on the management of cash and credit and the impact of taxes.
3. The management of expenditures involves gathering information and making decisions about buying goods (especially such big-ticket items as automobiles and housing) and services.
4. The protection of income and assets often entails purchasing insurance.
5. Investment planning provides a means of generating income and building wealth.

6. Retirement and estate planning provides financially for your nonworking, retirement years and allows you to pass the desired amount of wealth on to your heirs.

Objectives

After reading this chapter, you should be able to

1. Discuss what you will gain from the study of personal finance.
2. Describe the five goals of effective personal financial management.
3. Understand the economic environment of personal finance so you can forecast inflation, interest rates, and the state of the economy.
4. Recognize fundamental economic considerations that affect financial decision making.
5. Describe the six key steps to successfully achieve your personal financial goals.

Key Words and Concepts

alternative cost
basic calculation method
basic math method
business cycle
calculator method
compound interest
consumer price index (CPI)
depression
discount rate
economic cycle
economic growth
economy
effective personal financial management
expansion
financial security
financial skills
financial success
financial tools
forecasting
future value
gross national product (GNP)
inflation
index of leading economic indicators
interest rates
lifestyle
liquidity
marginal cost
marginal tax rate
marginal utility
money income
mortgage rate
needs
nominal income
opportunity costs
personal finance
personal financial planning
personal inflation rate
present value
prime rate
purchasing power
quality of life
real income
recession
recovery
simple interest
table method
three-month Treasury bill
time value of money
trade off
utility
wants
wealth

Completion

Use an answer mask to cover the correct response words in the left-hand column. Fill in the following blanks, and then compare your responses with the correct ones.

Personal finance	________ ________ is the study of personal and family re-
financial	sources considered important in achieving ________ success.
implementing	Achieving financial success involves developing and ________
personal	long-range plans. This process is called ________
financial	________ planning. The study of personal finance will help you
knowledge	(1) acquire financial ________, (2) develop your use of finan-
skills, tools	cial ________ and ________, (3) clarify your financial
values, goals	________ and ________, and (4) identify specific
needs, wants	________ and ________ that can be satisfied with financial
	resources.
	There are five broad goals of effective personal financial manage-
wealth	ment: (1) maximizing earnings and ________, (2) practicing ef-
consumption, satisfaction	ficient ________, (3) finding life ________, (4) reaching
security	financial ________, and (5) accumulating wealth for
retirement, estate	________ and an ________.
economic	You must understand the ________ environment to effective-
	ly manage your finances. Part of your task will be to engage in pre-
forecasting	dicting or ________ your income, income taxes, and living ex-
planning	penses. Then you can take some ________ actions to protect
	yourself from events in the economy that are beyond your control.
inflation	One very important event is a period of ________, which is a
goods	general rise in the prices of ________ and services. The result is
buying power	a decrease in the ________ ________ of the dollar. You
real	will want to focus on your ________ income rather than on your
money, nominal	________ or ________ income. The most commonly cited
consumer, index	measure of inflation is the ________ price ________. How-
purchasing	ever, you may wish to estimate your personal ________
power, interest	________. When inflation is rising or high, ________
	rates are also likely to be high, thereby forcing up the cost of
borrowing, savings	________ and the return on ________ and investments.
	Several interest rates should be watched closely by personal finan-

prime	cial planners including the ____________ rate charged by banks to
Treasury	their best corporate customers, the three-month ____________ bill
discount	rate, the ____________ rate charged by the Federal Reserve when it
	lends to banks, and current mortgage rates. The personal financial
	planner who wants to predict economic growth would do well to
economic indicators	watch the index of leading ____________ ____________. He or she
	would want to be always aware of the current and forecast stage of
cycle, expansion	the economic ____________. These stages are ____________, when
recession	production is at high capacity; ____________, when levels of pro-
depression	duction and consumption are declining; ____________, which is the
recovery	most severe stage; and ____________, as the economy rebounds
	from a lack of growth. The broadest measure of how much economic
gross, product	activity is occurring is the ____________ national ____________.
	Four additional economic concepts are important to the personal
opportunity	financial planner. First, ____________ cost (or alternative cost or
tradeoff	____________) is the cost of decision measured in terms of the value
marginal	of its foregone alternatives. Second, ____________ cost is the cost
	of one more of a good or service. This should be compared to the
utility	marginal ____________ or usefulness of the same good or service.
marginal	Third is the ____________ tax rate, which serves to help measure
time value	the tax impacts of a financial decision. Fourth is the ____________
	____________ of money, which helps us compare the present and
future	____________ values of an asset or two asset alternatives. Personal
compound	financial planners should always seek ____________ interest rather
investments	than simple interest in order to maximize ____________.
	There are six key steps in personal financial management. The
financial planning	first step is ____________ ____________, which encompasses such
	tasks as setting goals and priorities, and budgeting. Second comes
money management	____________ ____________, which includes cash management,
	credit, and taxes. The third step is managing expenditures, especially
housing	those for such big-ticket items as cars and ____________. The fourth
protect	step is to ____________ income and assets. This is quite often ac-
insurance	complished through the purchase of ____________. Fifth, the plan-
investments	ning of your ____________ allows you to build up wealth and earn a

retirement
estate

reasonable return on your money. The sixth and final step looks far into the future as you plan for your ___________ and the distribution of your ___________.

Problems and Applications

1. Assume that the consumer price index (CPI) was 133.5 at the end of 1990 and 141.8 at the end of 1991. Both figures were based on a CPI of 100 in 1984.
   a. What was the percentage change in prices from the end of 1990 to the end of 1991?
   b. How much did it cost in 1984 dollars to buy at the end of 1990 what it cost $100 to buy in 1984?
   c. How much did the purchasing power of the dollar decline from the end of 1990 to the end of 1991?
   d. How much did the purchasing power of the dollar decline from 1984 to the end of 1991?
2. Doreen Farin of Hazel Park, Michigan, took a job as systems analyst on January 1 four years ago at a salary of $25,600. She received a raise on January 1 of each of the next three years. The chart shown here illustrates her raise and subsequent salary for each year, as well as the inflation rate. It is now the beginning of the fifth year. Use the basic math method from the text to solve this problem.
   a. What would Doreen's salary need to have been at the beginning of the second, third, and fourth years to just keep up with inflation each year?
   b. What would her raise and salary need to be for the fifth year for her actual salary to simply keep up with inflation?
   c. If Doreen receives a $2,000 salary increase over her actual salary at the beginning of the fifth year, would she be ahead or behind after inflation and by how much money?

Beginning of Year	Inflation	Date	Raise	Salary
Year 1	5%	1–1–87	—	$25,600
Year 2	6%	1–1–88	$1,200	$26,800
Year 3	6%	1–1–89	1,400	28,200
Year 4	5%	1–1–90	1,650	29,850
Year 5		1–1–91	??	??

3. You have just received a $4,000 inheritance that you wish to invest at 9 percent compound interest.
   a. What would the inheritance be worth after five years, using the basic calculation method?
   b. What would the inheritance be worth after five years using the table method?
   c. Assuming you could only get 8 percent on your money, what would the inheritance be worth after six years using the table method?

d. At 9 percent, about how long would it take for your inheritance to double? (Hint: Look down the 9 percent column in Appendix A1 in the text.)

4. Assume that after finishing this study guide chapter you are going out with a friend to a local nightspot. On the way, the friend asks why you are taking this course. You simply reply, "Because I want to handle my money better." Your friend asks you to describe the reasons and benefits of studying personal finance. How would you respond?

True-False

Mark each of the following statements as either true or false. If it is false, indicate why it is false. Compare your responses to the answers at the end of this study guide chapter.

_____ T F 1. Personal financial planning is the process of developing and implementing long-range plans to achieve financial success.

_____ T F 2. Effective personal financial management includes planning, analyzing, and controlling financial resources to meet personal financial goals.

_____ T F 3. Financial tools are the forms and charts used in making personal management decisions.

_____ T F 4. Financial values change frequently during one's lifetime.

_____ T F 5. No one person's financial value system is correct for all.

_____ T F 6. Your financial goals should be set before clarifying your financial value system.

_____ T F 7. Financial needs are more basic than financial wants.

_____ T F 8. Food is an example of a need, and a diet cola is an example of a want.

_____ T F 9. Your way of living, as a reflection of your attitudes and values, is your lifestyle.

_____ T F 10. During times of inflation, the purchasing power of the dollar increases.

_____ T F 11. Inflation does not have an important impact because most people receive a raise now and then.

_____ T F 12. Your income before being adjusted for inflation is your real income.

_____ T F 13. Inflation raises nominal interest rates and lowers real interest rates.

_____ T F 14. The discount rate is the short-term interest rate on loans by banks to their large, most credit-worthy business customers.

_____ T F 15. Expansion is the stage of the business cycle that usually follows a recession.

_____ T F 16. The cost of a decision measured in terms of the value of its forgone alternative is its marginal cost.

_____ T F 17. The ability of a good or service to satisfy a human want or need is its utility.

_____ T F 18. The rate at which the last dollar you earned is taxed is your marginal tax rate.

_____ T F 19. Earning interest on interest as well as on the original amount invested is earning compound interest.

_____ T F 20. Simple interest is better than compound interest for building wealth.

Multiple Choice

Select the one *best* answer for each of the following questions. Compare your responses to the answers at the end of this study guide chapter.

1. Techniques of decision making in personal financial management are called
   a. financial skills.
   b. management expertise.
   c. financial tools.
   d. budgeting.

2. The forms and charts used in making personal financial management decisions are called
   a. financial skills.
   b. budgets.
   c. financial tools.
   d. paperwork.

3. The items that people find necessary in order to survive are
   a. wants.
   b. needs.
   c. credence goods.
   d. expensive.

4. A condition of increases in the prices of goods and services is known as
   a. recession.
   b. standard of living.
   c. the economic cycle.
   d. inflation.

5. Achieving financial aspirations that are desired, planned, or attempted is
   a. personal financial planning.
   b. financial success.
   c. decision making.
   d. efficient consumption.

6. Income adjusted for increases in the prices of goods and service is
   a. money income.
   b. nominal income.
   c. real income.
   d. permanent income.

7. If a measure of the changes in the prices of goods and services rises from 122.9 to 128.4 in one year, the percentage change in prices is
   a. +5.50 percent.
   b. +4.48 percent.
   c. –4.48 percent.
   d. +5.50 percent.

8. A commonly cited measure of the cost of living for Americans that tracks the prices of over four hundred goods and services is the
   a. producer price index.
   b. index of leading economic indicators.
   c. gross national product.
   d. consumer price index.

9. The price of money is represented by its
   a. inflation rate.
   b. marginal tax rate.
   c. opportunity cost.
   d. interest rate.

10. Which of the following rates is the rate that financial institutions are charged when they borrow funds from Federal Reserve banks?
    a. prime rate
    b. three-month Treasury bill rate
    c. discount rate
    d. mortgage rate

11. A condition of increasing production and consumption in the economy, resulting in increasing national income, is
    a. economic growth.
    b. inflation.
    c. recession.
    d. leading economic indicators.

12. What is the preferred phase of the business or economic cycle?
    a. expansion
    b. recession
    c. depression
    d. recovery

13. Which of the following is the best indicator of where the economy is headed over the next year or so?
    a. inflation rate
    b. gross national product
    c. index of leading economic indicators
    d. prime rate

14. The cost of a decision as measured by the other option lost or forgone is its
    a. marginal cost.
    b. marginal utility.
    c. present value.
    d. opportunity cost.

15. In economics, the word marginal means
    a. of limited value.
    b. of or for the next one.
    c. taxable.
    d. the average.

16. When making economic decisions, the tax impacts are best evaluated by applying the
    a. average tax rate.
    b. marginal tax rate.
    c. future value.
    d. taxes do not matter.