

SOLUTIONS MANUAL

GARMAN & FORGUE

**Personal
10e Finance**



Solutions Manual

Personal Finance

TENTH EDITION

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CHAPTER 1

UNDERSTANDING PERSONAL FINANCE

ANSWERS TO CHAPTER CONCEPT CHECKS

1.1

1. Financial success is the achievement of financial aspirations that are desired, planned, or attempted. Success is defined by the individual or family that seeks it. Financial success may be defined as being able to actually live according to one's standard of living.
2. Financial happiness is the experience you have when you are satisfied about money matters. People who are happy about their finances will see a spillover into positive feelings about life in general.
3. Financial building blocks include a foundation of a regular income for providing the means to support your lifestyle and save for desired goals in the future. The foundation supports a base of various banking accounts, insurance protection, and employee benefits. Then you can establish goals, a recordkeeping system, a budget, and an emergency savings fund. You will also manage various expenses such as for housing and transportation and the payment of taxes. You will also need to handle credit, savings, and educational costs. Finally, you invest in various alternatives such as mutual funds, stocks, and bonds, often for retirement. As a result of all of these building blocks, you are more apt to have a financially successful life.

1.2

1. The business cycle entails a wavelike pattern of economic activity as measured by the gross domestic product with phases including expansion, peak, contraction and trough.
2. Forecasting the state of the economy involves predicting, estimating, or calculating what will happen in advance. You need to be able to forecast the state of the economy, inflation, and interest rates so that you can have advance warning of the directions and strength of changes in economic trends since they will affect your personal finances. Two statistics you could watch are the consumer confidence index and the index of leading economic indicators.
3. Inflation reduces the purchasing power of the dollar. This means that your income will not go as far and, thus, in real terms will be lowered by inflation. Because items cost more, you will have to consume less and may cut back on some expenditures in order to be able to afford those with a higher priority.
4. The federal government measures inflation using two commonly watched statistics. Inflation in prices for items that consumers purchase is measured by the consumer price index, which tracks the price changes for a specific market basket of purchases from month to month. A producer price index also exists for prices paid by businesses for the items they buy .

1.3

1. The opportunity cost of a decision is measured as the value of the next-best alternative that must be forgone. If you, for example, put your retirement savings in a regular savings account instead of in a tax-sheltered retirement account, you may be forgoing the tax benefits associated with investing in retirement accounts such as IRAs or 401(k) plans. In another example, if you decide to borrow the maximum student loan amount for which you qualify in order to live a bit more comfortably while in college you will not be able to live as nicely, save as much for the

downpayment on a home or save for retirement once you graduate because of the higher loan payments.

2. Marginal analysis focuses on the next increment of usefulness or cost when making financial decisions. Marginal utility is the extra satisfaction derived from having one more incremental unit of a product or service. Marginal cost is the additional cost of that unit. When marginal utility exceeds marginal cost, and we compare the two, we can make better financial decisions. As an example, if you must fly to some destination, is the marginal cost of checking a bag rather using carry-on worth the marginal utility?
3. As your income rises, you will find yourself in higher and higher tax brackets. You can shelter part of your income from taxes by investing in, for example, a tax-exempt security instead of a taxable financial asset. An example of a tax-exempt security is a municipal bond. Also, you might want to invest through a 401(k) plan instead of keeping your retirement money in a savings account, which is taxable. Since most types of income are taxable, it is important that you understand the impact of income taxes on financial decisions. Of particular importance is the marginal tax rate (the tax rate at which your last dollar earned is taxed). If you are in the 27 percent marginal tax bracket, you will get to keep 73 percent (100 percent minus 27 percent) of your last taxable dollar earned. If the income is tax-free income, on the other hand, you would get to keep 100 percent of it. Therefore, it is important to know your marginal tax rate as well as what types of income are subject to federal income taxes. It is also important to remember the impact of state income taxes and Social Security taxes (currently 7.65 percent of earned income).

1.4

1. Simple interest is money paid on a principal amount for a given number of years. The interest is paid only on the principal. For example, you might put \$1000 in a bank savings account at 5 percent interest for one year. You would have accumulated \$50 in that year. Compound interest is interest paid on interest and principal. For example, if you leave your \$1000 on deposit and don't withdraw the \$50 interest at the end of the year, you will earn interest on both the deposit and the interest earned during the first year. This difference in the types of interest paid is important as it is the basic principle of accumulating wealth. If you invest regularly over time, your money will grow due to the power of compound interest.
2. The two components when figuring time value of money are what an investment will be worth after a period of time and how much must be put away today to provide some dollar amount at a specific point in the future.
3.
 - a. \$2000 at 5 percent for four years would equal \$2431 ($\2000×1.2155).
 - b. \$4500 at 9 percent for eight years would equal \$8966.70 ($\4500×1.9926).
 - c. \$10000 at 6 percent for 10 years would equal \$17,908 ($\$10,000 \times 1.7908$).

1.5

1. A high-deductible health plan would lower your health care premiums. To take advantage of this you would want to also set up and fund a health savings account (HSA) where you can place pre-tax dollars to await any deductibles or uncovered health care expenses that might occur later.
2. Depositing \$4000 into a 401(k) plan would reduce your taxes for the year by \$1000 if you were in the 25 percent tax bracket.
3. The first way would be to shelter any funds put into the programs. The second would be a sheltering of the income from interest or dividends earned by the assets invested in the plan.

1.6

1. Financial planners can be compensated solely from the commissions from the sale of financial products. They can be compensated by an up-front fee plus commissions from financial products they might sell. They can be compensated by an annual or hourly fee that might be offset if the client purchases financial products from the planner. Finally, they can be compensated solely from the fee they charge their clients for the services provided.
2. The two main professional certification programs for financial planners are the Certified Financial Planner (CFP) and Chartered Financial Consultant (ChFC) programs. Both require passage of an exam or exams, a minimum number of years of experience, continuing education in the field, and adherence to a code of ethics.

Let's Talk About It

1. Answers will vary depending on the student's own financial situation. Tax cuts may help students in the lower tax brackets. Efforts to revive the economy will help students keep or obtain jobs. Education related credits will help college students. Efforts to help people buy their first home will help students who might be so interested.
2. The economy is in a severe contraction at the time this edition was published. The gross domestic product is declining. Inflation is low. Interest rates are low but credit is hard to come by. The unemployment rate is high, and few new jobs are being created. Many people are concerned about layoffs in the manufacturing sector of the economy.
3. Eleven mistakes that people make in personal finance are failing to (1) engage in long-term personal financial planning, (2) engage in long-term budgeting, (3) engage in short-term budgeting, (4) establish a cash reserve in case of emergencies, (5) save at a rate that is sufficiently high, (6) establish adequate insurance protection, (7) manage income tax liabilities advantageously, (8) limit credit card debt, (9) manage expenditures so as to prevent unexpected expenditures on a credit card, (10) engage in investment planning, and (11) engage in retirement and estate planning. All eleven mistakes are important. The three most important are having too much credit card debt, saving at a rate that is too low, and inadequate retirement and estate planning. Too much credit card debt can literally cause bankruptcy. At the very least, you pay high finance charges on past purchases. This means that you can't pay cash for current purchases and a vicious circle of debt ensues. Americans generally save at a rate that is very low. If you save just 1 percent more of your pay, you will reap a high return at retirement. Also, if you withdraw money from your tax-sheltered retirement plan before retirement, you will have a substantial shortfall when it comes time to retire.
4. Examples of decisions in personal finance that have opportunity costs are
 - a. Returning to college for a graduate degree instead of working
 - b. Paying tuition for a semester of college instead of making a \$3000 down payment for a car
 - c. Saving money in an emergency fund instead of taking a cruise
 - d. Living in a college dormitory rather than in an off-campus apartment
 - e. Going into debt for a wedding rather than starting your financial life together with low debt levels.Out of these five choices, two, a and c, tie for being the most important personal financial planning choices in the long run.

Do The Math

1. Assuming an average inflation rate of 3 percent and an equal cost-of-living raise, Gwen's salary in 10 years will be \$45,692 ($\$34,000 \times 1.3439$). In 20 years she could anticipate earning \$61,407 ($\$34,000 \times 1.8061$). To make real economic progress, Gwen must receive raises greater than each year's rate of inflation. Otherwise, Gwen is essentially standing still because her raises will be required to compensate for the inflationary increase in the cost of living.
2.
 - a. Assuming a 6 percent increase over the next 3 years, Kathryn's tuition, fees, and books will cost \$14,292 ($\$12,000 \times 1.1910$).
 - b. Assuming an inflation rate of 3 percent, the scholarship is really worth \$4854 in today's dollars ($\$5000 \times 0.9709$).
 - c. With an annual contribution of \$2400 and an expected return of 6 percent, in 3 years Kathryn's savings will total \$7641 ($\2400×3.1836).
 - d. Assuming a 6 percent interest rate, the stream of payments from Kathryn's aunt is presently worth \$2673 ($\1000×2.6730).
3.
 - a. The future value of \$400 in 2 years, assuming a 5 percent rate of return, would be \$441 ($\400×1.1025).
 - b. Assuming a 7 percent return, \$1200 saved each year for 10 years would be \$16,580 ($\1200×13.8164).
 - c. The present value of \$2000 in 3 years assuming a 5 percent rate of return is \$1728 ($\2000×0.8638). Therefore, \$1728 would need to be deposited today.
 - d. One would need to deposit \$44,161 today in order to withdraw \$6000 annually for 10 years, assuming the account would earn 6 percent ($\$6000 \times 7.3601$).
 - e. \$8,000 in 5 years is the better choice because the future value of \$5000 in 5 years, assuming an 8 percent return, is \$7347 ($\5000×1.4693).
 - f. One would need to invest \$2289 now in order to have \$3000 in 4 years, assuming a 7 percent return ($\$3000 \times 0.7629$).
 - g. The difference between a 9 and a 10 percent return would make a \$2894 difference in a \$1200 annual investment over 15 years. The future value of \$1200 each year earning 9 percent is \$35,233 ($\1200×29.3609), while the future value at 10 percent is \$38,127 ($\1200×31.7725).
 - h. The \$50,000 investment will last approximately 12 years if it earns 6 percent and \$6000 is withdrawn annually ($\$50,000/\$6000 = 8.33$ —look for the factor 8.33 in the 6 percent column of the present value of a stream of equal payments table).
4. To calculate the years until an investment would double, divide the rate into 72. For 2 percent it would be 36 years, 4 percent would be 18 years, 6 percent would be 12 years, 8 percent would be 9 years, and 10 percent would be 7.2 years.

Financial Planning Cases

1. CASE 1: Reasons to Study Personal Finance

Lindsey will benefit from acquiring financial knowledge because this knowledge will enable her to make more intelligent decisions about how to spend or invest money and help her to eventually acquire some degree of personal wealth. Lindsey will learn about recordkeeping and budgeting, banking and credit use, saving and borrowing, protecting her income and assets, and planning for retirement and estate transfer.

2. CASE 2: A Closer Look at Financial Success

Financial success is defined by the individual or family that seeks it. Success is the achievement of financial aspirations that are desired, planned, or attempted. Financial happiness is the experience you have when you are satisfied about money matters. People who are happy about their finances will see a spillover into positive feelings about life in general.

A speaker could discuss the financial building blocks as including a foundation of a regular income to support your lifestyle and save for desired goals in the future. The foundation supports a base of various banking accounts, insurance protection, and employee benefits. Then you can establish goals, a recordkeeping system, a budget, and an emergency savings fund. You will also manage various expenses such as for housing and transportation and the payment of taxes. You will also need to handle credit, savings, and educational costs. Finally, you invest in various alternatives such as mutual funds, stocks, and bonds, often for retirement. As a result of all of these building blocks, you are more apt to have a financially successful life.

What Do You Recommend Now?

1. Se Ri should participate in her employer's plan because her contributions reduce her taxable income and will grow tax sheltered until withdrawn at retirement. By doing so, she will qualify for her employer contributions, thereby receiving additional tax-sheltered income that will go directly into her retirement account. If Se Ri contributed 6 percent of her salary, her employer would match it with 3 percent for a total of 9 percent. Her total contribution would be \$4050 based on her salary of \$45,000.
2. Se Ri should use her marginal tax rate to assess how changes in her income and the financial decisions she will make would be affected by taxes. For every extra dollar that she contributes to her retirement plan for example she will save \$0.25 in taxes if she is in the 25 percent tax bracket. Also, if she earns an extra dollar it will be taxed at her marginal rate.
3. Se Ri should stay informed about economic trends as indicated in changes in the gross domestic product, index of leading economic indicators, and consumer price index. She should also keep track of the federal funds rate as an indicator of interest rates in the economy. She should be able to make her own estimate for economic growth, inflation, and interest rates over the next couple of years.
4. Se Ri could use Appendix A.1 to calculate how much her IRA fund (currently \$2000) would grow in 40 years. She would need to assume a rate of return on the funds. An 8 to 10 percent rate would be appropriate given the investment opportunities available to him in her IRA. At 8 percent, her account would be worth about \$43,450, and at 10 percent, it would be worth \$90,520.
5. Se Ri could use Appendix A.3 to calculate how much her contributions would grow in 40 years. She would need to assume a rate of return on the funds. An 8 to 10 percent rate would be appropriate given the investment opportunities available to her in her 401(k). At 8 percent, her account would be worth about \$1,049,180, and at 10 percent, worth \$1,792,500.

CHAPTER 2

Career Planning

ANSWERS TO CHAPTER CONCEPT CHECKS

2.1.

1. A job is a position of employment. A career is broader and has a focus on a series of jobs in a progression of advancement with increase skills, responsibilities, and prestige.
2. It is impossible to do all things that might be desirable related to your career and balance your personal life, too. Thus, you must assess your values and emphasize those efforts that are most important to you and trade off those of higher importance for those of lesser importance.
3. It is important to take advantage of opportunities such as internships, volunteer opportunities, networking in professional associations, and getting the most you can out of your college courses.
4. Career plans include identifying employment that interest you and fits your abilities, skills, work style, and lifestyle. Career goals are short term, medium term, and long term. They are specific in terms of positions desired, responsibilities undertaken, and target dates.

2.2.

1. The three major parts of a work-style personality are work conditions, work purposes, and work relationships.

2.3.

1. Education level and age affect income positively. Those with higher levels of education have higher annual and lifetime total incomes. Income increases with age, and those with higher levels of education see their incomes stay high longer into their working years.
2. Salary offers in different cities must be adjusted to reflect the relative living costs in those cities. Several websites are available to provide indexes of the cost of living. To compare City 1 to City 2, multiply the City 1 salary times the result of dividing the index for City 2 by the index for City 1. If the result is higher than City 2, then City 1 has the better adjusted salary.
3. One way is to determine what it would cost to provide the benefit out of your own pocket. An example might be the cost of day care for your child if you had to buy it yourself. A second way would be to calculate the accumulated future value of the benefit. An example might be the accumulated value of a retirement plan contribution from an employer.
4. One career advancement tip would be to volunteer for new assignments. This would show your employer that you are willing to put your own job on the line for the good of the employer. A second tip would be to attend professional meetings and conferences in your field. This would show an employer that you are interested in learning as much as possible about your field and be a good ambassador for your employer. A third tip would be to take advanced college courses and/or complete a graduate degree. This would not only benefit your current employer but would also position you for promotions or better jobs with another employer.

2.4.

1. Networking provides you with contacts that can help you in your present job. You can call on the people you have come to know for tips and advice on how to do your job better. You can also call on them for career advice and recommendations.
2. Résumés should be developed according to one of three formats (chronological, skills, or functional) according to your assessment of the desires of prospective employers. Use key words from the job description in your résumé so that they can be picked up by a computer scan. A cover letter introduces you to a prospective employer. Whereas you might be able to send one résumé, to many different employers, each cover letter should be uniquely developed to fit the job description. It should be designed to “sell” you to the employer and obtain an interview.
3. Ways to learn of job opportunities include attendance at career fairs, classified ads in the newspaper or trade publications, using an employment agency, and searching the Internet.
4. The wording of student answers will vary. The essence should be to do research before the interview, compile personal stories that speak to skills and abilities, be prepared to ask questions, prepare responses to anticipated interviewer questions, and create positive responses to negative questions.

Let's Talk About It

1. During sluggish economic times employers will want to make especially sure that a new hire will be a successful addition to the team. To beat the other applicants for the job you must communicate that you are genuinely interested in the job and want to move up the ladder at the company.. Also let them know that you are a person with a positive attitude and a team player. Demonstrate that you have a thorough knowledge of the company and the challenges it is facing as well as that the skills you have that can help the company meet those challenges.
2. Common interview mistakes include not knowing enough about the prospective employing organization, being unprepared to sell yourself through your abilities, skills and experience, not having clear career plans and goals, a lack of enthusiasm and not making eye contact. Ten things people could do to enhance interview success include (1) researching the company history, (2) knowing its profitability and place among its competitors, (3) being able to ask the interviewer questions, (4) telling specific stories that illustrate your abilities and experiences, (5) being able to identify your strengths, (6) being able to tell about a particularly difficult problem on a previous job and how you handled it, (7) acknowledging weaknesses but explaining how you have taken steps to overcome them, (8) making a good positive impression with a firm handshake and confident tone of voice, (9) practicing your interview skills in advance, and, finally, (10) sending a warm thank-you note after the interview. You also want to display enthusiasm and look the interviewers in the eye.
3. Three trade-offs include urban/rural setting, near/far from relatives, and warm/cold climate. For the first you will likely have higher transportation costs for fuel if you live in the country but perhaps lower costs for parking and insurance. Psychic and life style trade-offs will depend on whether you prefer open spaces and natural surroundings or the hustle and bustle and richness of city life. For the second the economic aspects might relate to travel to family events. Psychic and life style trade-offs will depend upon the size and closeness of your family relationships. For the third, the economic trade-offs will include the cost of appropriate clothing and heating and cooling costs. Lifestyle tradeoffs will depend on your preference for leisure and physical recreation options specific to each climate.

8 Chapter 2: Career Planning

4. The five that are most difficult to accomplish will vary from student to student. While the question asks for the five that are the most difficult for people in general, the students will likely be revealing what they feel are the most difficult when they make their selections. Having them offer suggestions provides a way for them to begin their own self-improvement.

Do The Math

1.
 - a. The forgone lost future value of the \$15,000 is \$154,285 ($\$15,000 \times 10.2857$).
 - b. The forgone lost future value of the \$60,000 is \$617,142 ($\$60,000 \times 10.2857$).
2. $\$50,000 \times (114 \div 132) = \$43,182$. Thus, the Chicago salary as adjusted falls below the San Antonio salary and the San Antonio salary is the better offer.