

# Chapter 10 Personal Financial Planning

**SOFTWARE  
ACTIVITY  
(OPTIONAL)**

## Spreadsheet Application

### Calculating and Analyzing Personal Investment Strategies

**Objective:** Illustrate the value of compounding and the importance of long-term saving and investment strategies.

#### Practice Situation

The following data presents two investment strategies. For strategy 1, assume that Beverly contributes \$1,000 annually to her investment account from age 18 through age 24. For strategy 2, Matt contributes \$1,000 annually to his investment account beginning at age 28 through age 65. For each strategy presented, assume that the investment will generate an average rate of return of 10 percent per year. Calculate the future values for both investment strategies at age 65, then answer the questions on the next page.

Strategy 1: Beverly		
Age	Annual Contribution	Year-end Value
18	1,000	
19	1,000	
20	1,000	
21	1,000	
22	1,000	
23	1,000	
24	1,000	
64	0	
65	0	
Summary Data:		
	Principal Invested	
	Future Value	
	Investment Return	

Strategy 2: Matt		
Age	Annual Contribution	Year-end Value
25	0	
26	0	
27	0	
28	1,000	
29	1,000	
30	1,000	
31	1,000	
64	1,000	
65	1,000	
Summary Data:		
	Principal Invested	
	Future Value	
	Investment Return	

Continue spreadsheet data from years 25 through 63.

**Spreadsheet Directions**

1. Start your spreadsheet software and open problem **SA01.xls**. Enter the data into the spreadsheet. For Strategy 1, invest \$1,000 annually from age 18 to age 24. For years 25 through 65, the annual investment equals \$0. In Strategy 2, do not invest anything until age 28. At this point, \$1,000 is invested each year through retirement at age 65.
2. Input the formulas to calculate the following:
  - Year-end values
  - Total principal invested
  - Total future value
  - Return on investment

Note: Format all dollar amounts to Currency, 2 decimals.

3. Perform the calculations, then save your work to a new file labeled **SA01\*\*\*.xls**. (Replace \*\*\* with your initials.)
4. Print out a copy of your work if your teacher has instructed you to do so.

**Interpreting Results**

1. What is the *total investment* for each investment strategy?  
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2. What are the *future values* associated with each strategy?  
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3. Which strategy would generate the largest return on investment at age 65?  
\_\_\_\_\_

**Drawing Conclusions**

1. Based on your calculations, which investor has executed the more favorable investment strategy? Explain.  
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\_\_\_\_\_
2. Why is it important for young adults to understand how to save, invest, and use money wisely?  
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