

# CHAPTER 2

## MONEY MANAGEMENT STRATEGY: FINANCIAL STATEMENTS AND BUDGETING

### CHAPTER OVERVIEW

Successful money management is based on organized financial records, accurate personal financial statements, and effective budgeting. This chapter offers a discussion of the importance and type of financial documents. This is followed by an explanation of the components and procedures for preparing personal financial statements—the balance sheet and the cash flow statement. Next, the chapter covers the basics of developing, implementing, and evaluating a budget. Finally, savings techniques for achieving financial goals are discussed.

### LEARNING OBJECTIVES

### CHAPTER SUMMARY

After studying this chapter, students will be able to:

<i>Obj. 1</i>	Recognize the relationships among financial documents and money management activities.	Successful money management requires effective coordination of personal financial records, personal financial statements, and budgeting activities.
<i>Obj. 2</i>	Create a system for maintaining personal financial records.	An organized system of financial records and documents is the foundation of effective money management. This system should provide ease of access as well as security for financial documents that may be impossible to replace.
<i>Obj. 3</i>	Develop a personal balance sheet and cash flow statement.	A personal balance sheet, also known as a net worth statement, is prepared by listing all items of value (assets) and all amounts owed to others (liabilities). The difference between your total assets and your total liabilities is your net worth. A cash flow statement, also called a personal income and expenditure statement, is a summary of cash receipts and payments for a given period, such as a month or a year. This report provides data on your income and spending patterns.
<i>Obj. 4</i>	Create and implement a budget.	The budgeting process involves four phases: (1) assessing your current personal and financial situation; (2) planning your financial direction by setting financial goals and creating budget allowances; (3) implementing your budget; and (4) evaluating your budgeting program.

- Obj. 5* Calculate savings needed to achieve financial goals. Future value and present value calculations may be used to compute the increased value of savings for achieving financial goals.

## **INTRODUCTORY ACTIVITIES**

- Ask students to comment on the opening case for the chapter.
- Point out the learning objectives in an effort to highlight the key points in the chapter.
- Ask students to provide examples of problems that could result from not having a definite system for storing personal financial records and documents.
- Point out common methods of budgeting that help a household achieve financial goals and prevent money problems.

## **CHAPTER 2 OUTLINE**

- I. Planning for Successful Money Management
  - A. Opportunity Cost and Money Management
  - B. Components of Money Management
- II. A System for Personal Financial Records
- III. Personal Financial Statements for Measuring Financial Progress
  - A. The Personal Balance Sheet: Where Are You Now?
  - B. The Cash Flow Statement: Where Did Your Money Go?
  - C. Evaluating Your Financial Position
- IV. Budgeting for Skilled Money Management
  - A. Starting the Budgeting Process
  - B. Characteristics of Successful Budgeting
- V. Savings Techniques to Achieve Financial Goals
  - A. Selecting a Savings Technique
  - B. Calculating Savings Amounts
  - C. Two-Income Households

## CHAPTER 2 LECTURE OUTLINE

---

### PLANNING FOR SUCCESSFUL MONEY MANAGEMENT

- **Money management** refers to the day-to-day financial activities necessary to handle current personal economic resources while working toward long-term financial security.

#### Opportunity Cost and Money Management

- Trade-offs are associated with every spending, saving, borrowing, and investing decision. Opportunity costs may be viewed in terms of both personal and financial resources. Time spent studying, working, or shopping cannot be used for other activities. Money allocated for one purpose cannot be used for another.

#### Components of Money Management

- Personal financial records, financial statements, and spending plans (budget) are the foundation for planning and implementing money management activities.

### A SYSTEM FOR PERSONAL FINANCIAL RECORDS

- Organized money management requires a system of financial records including the following categories:
  1. personal and employment records
  2. money management records
  3. tax records
  4. financial services records
  5. credit records
  6. consumer purchase and automobile records
  7. housing records
  8. insurance records
  9. investment records
  10. estate planning and retirement records

## Instructional Suggestions

---

- **Text Highlight:** A list points out trade-offs associated with money management activities and decisions.
  
- **Concept Check 2-1**
  
- **Exercise:** Have students suggest methods that could be used to organize and quickly access personal financial documents and records.
  
- **Concept Check 2-2**

## PERSONAL FINANCIAL STATEMENTS FOR MEASURING FINANCIAL PROGRESS

- A personal balance sheet and cash flow statement provide information about a person's or household's current financial position and a summary of current income and spending.
- **Discussion Question:** How accurate is a balance sheet for measuring the financial progress of an individual or household?

### The Personal Balance Sheet: Where Are You Now?

- A **balance sheet**, also known as a net worth statement or statement of financial position, specifies what you own and what you owe.
- Items of value minus amounts owed equals net worth.
- **Assets**, the first item on the balance sheet, are cash and other property that has a monetary value.
- **Liquid assets** are cash and items of value that can easily be converted into cash.
- **Real estate** includes a home, condominium, vacation property, or other land that a person or family owns.
- Personal possessions are the major portion of assets for most families.
- Investment assets consist of money set aside for long-term financial needs.
- **Liabilities** are amounts owed to others but do not include items not yet due, such as next month's rent.
- **Current liabilities** are debts that must be paid within a short time, usually less than a year.
- **Long-term liabilities** are debts that are not required to be paid in full until more than a year from now.
- Your **net worth** is the difference between your total assets and your total liabilities:  $\text{Assets} - \text{Liabilities} = \text{Net worth}$
- The balance sheet of a business is usually expressed as:  $\text{Assets} = \text{Liabilities} + \text{Net worth}$
- **Insolvency** is the inability to pay debts when they are due; it occurs when a person's liabilities far exceed his or her available assets.

### The Cash Flow Statement: Where Did Your Money Go?

- **Cash flow** is the actual inflow and outflow of cash during a given time period.
- A **cash flow statement** is a summary of cash receipts and payments for a given period, such as a month or a year.
- **Income** is the inflows of cash to an individual or a

household. For most people, the main source of income is money received from a job.

- Cash payments for living expenses and other items make up the second component of a cash flow statement.
  - **Fixed expenses** are payments that do not vary from month to month.
  - **Variable expenses** are flexible payments that change from month to month.
  - The difference between your income and your cash outflows can be either a positive (**surplus**) or negative (**deficit**) cash flow. A deficit exists if more cash goes out than comes in during a month. This amount must be made up by withdrawals from savings or borrowing.
  - **Take-home pay or disposable income** is a person's earnings after deductions for taxes and other items.
  - **Discretionary income** is money left over after payment for necessities such as housing and food has been made.
- **Discussion Question:** What information does a cash flow statement provide that is not available on a personal balance sheet?
  - **Exercise:** Have students list all the sources of income (cash inflows available for spending) for people in our society.
  - **Discussion Question:** What relationship exists between the balance sheet and cash flow statement?

### Analyzing Your Current Financial Situation

- A person or household experiences financial improvement if net worth increases over time.
  - **Debt ratio**—liabilities divided by net worth—may be used to indicate a person's financial situation; a low debt ratio is desired.
  - **Current ratio**—liquid assets divided by current liabilities—how well a person will be able to pay upcoming debts.
  - **Liquidity ratio**—liquid assets divided by monthly expenses—indicates the number of months that expenses can be paid if an emergency arises.
  - **Debt-payment ratio**—monthly credit payments divided by take-home pay—provides an indication of how much of a person's earnings goes for debt payments (excluding a home mortgage).
  - **Savings ratio**—amount saved each month divided by gross income—financial experts recommend a savings rate of about 10 percent.
- **Concept Check 2-3**

### BUDGETING FOR SKILLED MONEY MANAGEMENT

- A budget, or *spending plan*, is necessary for

2-5

successful financial planning. The main purposes of a budget are to help you

1. live within your income
2. spend your money wisely
3. reach your financial goals
4. prepare for financial emergencies
5. develop wise financial management habits

### Starting the Budgeting Process

- A personal balance sheet is an effective scorecard for assessing personal economic progress.
- Your **lifestyle** is how you spend your time and money and is strongly influenced by your career, family, and personal values.
- **Discussion Question:** Is every individual and household forced to budget, with some more organized and planned than others?
- **Exercise:** Have students suggest common financial goals.
- **Text Highlight:** Exhibit 2-6 provides budget share of major spending category by income quintile
- **Exercise:** Have students allocate budget categories (using percentages) for different household situations.

### Step 1. Setting Financial Goals

- Financial goals are plans for future activities that require you to plan spending, savings, and investing.
- How much you budget for various items will depend on current needs and plans for the future. Sources that can assist with planning your spending include:
  - \* your cash flow statement
  - \* sample budgets from government reports
  - \* articles in personal financial planning magazines
  - \* estimates of future income and expected inflation

### Step 2. Estimating Income

- Available money should be estimated for a given time period—such as a month.
- Income variations (due to seasonal work or sales commissions) should be based on the recent past and realistic expectations.

### Step 3. Budgeting Emergency Fund and Savings

- An emergency fund and savings for irregular payments should be first set aside to avoid not having anything left for savings.

### Step 4. Budgeting Fixed Expenses

- Definite obligations (rent, mortgage, and credit payments) should be allocated first.
- Assigning amounts to spending categories can be based on your cash flow statement, government data,

current magazine articles, and estimates of future income and expenses.

- A “spending diary” of past expenses can also assist with this task.

### Step 5. Budgeting Variable Expenses

- Planning for variable expenses is more difficult than fixed expenses.
- These expenses will fluctuate based on household situation, time of the year, health, economic conditions, and other factors.

### Step 6. Recording Spending Amounts

- A **budget variance** is the difference between amount budgeted and the actual amount received or spent. A **deficit** exists when actual spending exceeds planned spending. A **surplus** is when actual spending is less than planned spending.

### Step 7. Reviewing Spending and Saving Patterns

- The results of your budget may be obvious—having extra cash, falling behind in payments. Or the results may need to be reviewed in detail to determine areas of needed changes. The most common overspending areas are entertainment and food, especially away-from-home meals.
- At this point of the budgeting process, you should also evaluate, reassess, and revise your financial goals.

### Characteristics of Successful Budgeting

- A successful budget should be:
  - \* well-planned
  - \* realistic
  - \* flexible
  - \* clearly communicated
- **Discussion Question:** What factors can contribute to unsuccessful budgeting? How can these situations be avoided?
- **Concept Check 2-4**

### SAVING TO ACHIEVE FINANCIAL GOALS

- Common reasons for saving include:
  - \* to set aside money for irregular or unexpected expenses
  - \* to replace expensive items
  - \* to buy special items
  - \* to provide for long-term expenses
  - \* to earn interest for additional income
- **Current Example:** People unable to save regularly are usually:
  - \* individuals without specific savings goals
  - \* people who always seem to

### Selecting a Savings Technique

- Since most people find saving difficult, financial

advisers suggest several methods:

- \* write a check each payday and deposit it in a distant financial institution
- \* use payroll deduction
- \* save coins
- \* spend less on certain items

use up savings for

unexpected expenses

- \* those who overuse credit
- \* people who buy to have the same things as others
- \* individuals who lack common financial goals with other family members

### Calculating Savings Amounts

- To achieve financial objectives, you should convert your savings goals into specific amounts.
- Your use of an interest-earning savings plan is vital to the growth of your money and the achievement of your financial goals.

### Two-Income households

- Dual income households should convert to alternative budgeting strategies, such as:
  - \* Pool Incomes
  - \* Share bills
  - \* 50/50
  - \* Proportionate contributions

- **Concept Check 2-5**

## CONCLUDING ACTIVITIES

- Point out the chapter summary and key terms in the text margin.
- Discuss selected end-of-chapter Financial Planning Problems, Financial Planning Activities, and Life Situation Case.
- Use the Chapter Quiz in the *Instructor's Manual*.

## CHAPTER 2 QUIZ ANSWERS

### *True-False*

1. F
2. T
3. T
4. T
5. T
6. T
7. F
8. T

### *Multiple Choice*

9. A
10. C
11. D
12. B
13. C
14. B
15. C
16. B



**CHAPTER 2 QUIZ****TRUE-FALSE**

- \_\_\_\_1. Most financial records should be kept in a safe-deposit box.
- \_\_\_\_2. A personal balance sheet reports the financial position of a person or family on a given date.
- \_\_\_\_3. Current liabilities represent amounts owed to others that are intended to be paid within the next year.
- \_\_\_\_4. Planning your spending is essential to successful personal financial management.
- \_\_\_\_5. A budget deficit exists when actual spending exceeds projected spending.
- \_\_\_\_6. You have a positive net worth when the value of your assets is larger than the value of your debt.
- \_\_\_\_7. Financial advisors suggest that a good rule of thumb for an emergency fund is to have three to six weeks of living expenses saved.
- \_\_\_\_8. Spending less than your income will increase net worth.

**MULTIPLE CHOICE**

- \_\_\_\_9. A(n) \_\_\_\_\_ is a specific plan for spending.
- budget
  - balance sheet
  - income statement
  - bank statement
- \_\_\_\_10. An example of a liquid asset would be
- a home.
  - an automobile.
  - a bank account.
  - retirement account.
- \_\_\_\_11. \_\_\_\_\_ represent amounts owed to others.
- Current assets
  - Expenses
  - Mutual funds
  - Liabilities
- \_\_\_\_12. A personal cash flow statement presents
- amounts earned from savings.
  - income and payments.
  - assets and liabilities.
  - amounts owed to others.

- \_\_\_\_\_13. Which of the following will not increase your net worth?
- increasing savings.
  - decreasing spending.
  - reducing value of assets owned.
  - reducing amounts owed.
- \_\_\_\_\_14. Which of the following is part of the investment records you should keep?
- Home repair records
  - Records of mutual fund purchases
  - Warranties on major appliances
  - Checking account statements
- \_\_\_\_\_15. \_\_\_\_\_ are those liabilities that you do not have to pay in full for more than a year from now.
- Liquid Assets
  - Personal Possessions
  - Long term liabilities
  - Current liabilities
- \_\_\_\_\_16. Definite financial obligations are referred to as
- variable expenses.
  - fixed expenses.
  - equity.
  - investment assets.

## SUPPLEMENTARY LECTURE

### Financial Ratios to Measure and Evaluate Financial Progress

Type	Calculations	Example
<b>A. Debt ratio</b>	liabilities divided by net worth	$\$50,000/\$40,000 = 1.25$
<b>Interpretation:</b> These items express the relationship between your debts and personal net worth. A lower debt ratio is desired.		
<b>B. Current ratio</b>	liquid assets divided by current liabilities	$\$7,000/\$4,000 = 1.75$
<b>Interpretation:</b> Indicates how well you will be able to pay upcoming debts. A higher number is more desirable.		
<b>C. Liquidity ratio</b>	liquid assets divided by monthly expenses	$\$7,000/\$2,800 = 2.5$
<b>Interpretation:</b> Indicates the number of months a person will be able to pay expenses if an emergency arises. Again, a higher number is desired especially if uncertainty exists regarding continual employment.		

D. **Solvency ratio**                      total assets divided by total liabilities                       $\$98,000/\$67,000 = 1.46$

**Interpretation:** Shows the relationship between the value of assets and what is owed. A higher number is desired.

---

E. **Debt Payments ratio**                      monthly credit payments divided by monthly take                       $\$450/\$2,500 = 0.18$

**Interpretation:** Expresses portion of monthly earnings going for credit payments. A lower ratio is desired.

---

F. **Savings ratio**                      additions to savings plans divided by take-home pay                       $\$2,080/\$32,800 = 0.063$

**Interpretation:** Presents the portion of annual earnings that has been saved.

---

G. **Investment assets ratio**                      investment assets divided by net worth                       $\$77,000/\$101,000 = 0.76$

**Interpretation:** Indicates portion of net worth that contributes to long-term financial goals.

---

## **ANSWERS TO CONCEPT QUESTIONS, OPENING CASE QUESTIONS, FINANCIAL PLANNING PROBLEMS, FINANCIAL PLANNING ACTIVITIES, AND LIFE SITUATION CASE**

### **CONCEPT QUESTIONS**

#### **Concept Check 2-1**

1. What opportunity costs are associated with money management activities?
  - Spending money on current living expenses reduces the amount that can be used for saving and investing toward long-term financial security.
  - Saving and investing for the future reduce the amount that can be spent now.
  - Buying on credit results in payments later and a reduction in the amount of future income available for spending.
  - Using savings for purchases results in lost interest earnings and an inability to use savings for other purposes.
  - Engaging in comparison shopping can save money and improve the quality of purchases but uses up something of value that cannot be replaced—your time.
  - Non-monetary opportunity costs associated with money management activities include time and effort for creating and maintaining a financial record keeping system; a personal decision to have an organized financial existence; possible disagreements among family members due to poor financial records; or weak budgeting techniques.

2. What are the three major money management activities?
  - The three major money management activities are (1) storing and maintaining financial records and documents, (2) creating personal financial statements, and (3) creating and implementing a budget.

### **Concept Check 2-2**

1. What are the benefits of an organized system of financial records and documents?

The benefits of an organized financial record system are:

  - Handling daily business affairs, including paying bills on time.
  - Planning and measuring financial progress.
  - Completing required tax reports.
  - Making effective investment decisions.
  - Determining available resources for current and future buying.
2. What suggestions would you give for creating a system for organizing and storing financial records and documents?

Most financial documents will either be kept in a home file or a safe-deposit box depending on the importance and need to access the record. Documents that are difficult to replace (birth certificates, contracts, stock certificates) should be kept in a safe-deposit box. (Exhibit 2-2)
3. What influences the length of time you should keep financial records and documents?

If the documents will need to prove ownership or are related to certain tax matters, they should be kept almost indefinitely. Normally a tax audit will go back only three years, but under certain circumstances, the Revenue Canada may request information six years back.

### **Concept Check 2-3**

1. What are the main purposes of personal financial statements?
  - Report your current financial position in relation to the value of the items you own and the amounts you owe.
  - Measure your progress toward your financial goals.
  - Maintain information on your financial activities.
  - Provide data that you can use when preparing tax forms or applying for credit.
2. What does a personal balance sheet tell about your financial situation?

A balance sheet consists of assets (items of value), liabilities (amounts owed to others), and net worth (the difference between the total assets and total liabilities).
3. How can you use a balance sheet for personal financial planning?

Net worth can be used to measure overall progress of your personal financial planning activities. Reductions in your debts can also be an indication of financial progress.
4. What information does a cash flow statement present?

The cash flow statement summarizes actual inflows and outflows of cash during a given time period.

The cash flow statement is a report of your spending patterns and can be used to create budget amounts for various expense categories.

### Concept Check 2-4

1. What are the main purposes of a budget?

The main purposes of a budget are to help you:

- Live within your income.
  - Spend your money wisely.
  - Reach your financial goals.
  - Prepare for financial emergencies.
  - Develop wise financial management habits.
2. How does a person's life situation affect goal setting and amounts allocated for various budget categories?

Different life situations will affect household goals and plans for spending based on needs and desires of those involved. Delayed marriage might mean more spending for travel and leisure; deferred parenthood might be due to plans for advanced career training and returning to school; divorce will affect housing size needs and could mean child care expenses.

3. What are the main steps in creating a budget?

The main steps in creating a budget are (1) set financial goals, (2) estimate income, (3) budgeting emergency fund and savings, (4) budget fixed expenses, (5) budget variable expenses, (6) record actual cash inflows and outflows, and compare actual amounts to budgeted amounts, and (7) reviewing spending and saving patterns.

4. What are commonly recommended qualities of a successful budget?

A successful budget is usually well planned, realistic, flexible, and clearly communicated.

5. What actions might you take when evaluating your budgeting program?

An evaluation of a budget situation may require reduced spending or efforts to increase income.

### Concept Check 2-5

1. What are some suggested methods to make saving easy?

Suggested savings methods include "pay yourself first," payroll deduction, saving coins, and eliminating spending on a certain item.

2. What methods are available to calculate amounts needed to reach savings goals?

Future value and present value calculations may be used to determine amounts needed to reach savings goals.

## OPENING CASE QUESTIONS

1. What would Ben and Yolanda learn by sorting their expenses into various categories? What categories should they use?

This effort should give Ben and Yolanda information about their spending habits. Commonly used categories may be found in Exhibit 2-4.

2. How can knowing where the money goes help Ben and Yolanda plan their spending?

This process will help them decide if their spending is going for desired purchases. It could be the basis of planning their spending to meet specific financial goals.

3. What financial goals might Ben and Yolanda consider to address some of their money management concerns?

They might consider creating a budget, they may reduce spending or use of credit card, or develop a savings plan.

4. Locate a Web site that would help Ben and Yolanda improve their money management skills.

Many Web sites are available including [www.canadianfinance.com](http://www.canadianfinance.com), [www.quicken.com](http://www.quicken.com), and [www.webfin.com](http://www.webfin.com), as well as the Web sites of personal finance magazines.

## FINANCIAL PLANNING PROBLEMS

1. Based on the procedures presented in the chapter, prepare your current personal balance sheet and a cash flow statement for the next month.

A balance sheet represents the financial position of an individual or family on a given date; refer to Exhibit 2-3 for the process of preparing one and an example. A cash flow statement covers income and payments for a certain time period (such as a month); refer to Exhibit 2-4 for the process and an example.

2. Based on the following data, compute the total assets, total liabilities, and net worth.

Liquid assets, \$3,670  
Investment assets, \$8,340  
Current liabilities, \$2,670  
Household assets, \$89,890  
Long-term liabilities, \$76,230

Total assets = \$101,900 ( $\$3,670 + 8,340 + 89,890$ )

Total liabilities = \$78,900 ( $\$2,670 + \$76,230$ )

Net worth = \$23,000 ( $\$101,900 - \$78,900$ )

3. Use the following data and calculate the total assets, total liabilities, and the net worth. (Obj. 3)

Stock Investments = \$1,800  
Credit card balance = \$500  
Jewellery = \$1,000  
House furniture = \$800  
Consumer loan balance = \$600

Current value of automobile = \$6,000  
Cash in chequing account = \$1,200  
Balance in savings account = \$3,500  
Other liabilities = \$750

Total Assets = \$14,300 (\$1,800 + \$1,000 + \$800 + \$6,000 + \$1,200 + \$3,500)

Total Liabilities = \$1,850 (\$500 + \$600 + \$750)

Net Worth = \$12,450 (\$14,300 - \$1,850)

4. Use the following items to prepare a balance sheet and a cash flow statement. Determine the total assets, total liabilities, net worth, total cash inflows, and total cash outflows.

Rent for the month, \$650	Monthly take-home salary, \$1,950
Cash in chequing account, \$450	Savings account balance, \$1,890
Spending for food, \$345	Balance of educational loan, \$2,160
Current value of automobile, \$7,800	Telephone bill paid for month, \$65
Credit card balance, \$235	Loan payment, \$80
Auto insurance, \$230	Household possessions, \$3,400
Stereo equipment, \$2,350	Payment for electricity, \$90
Lunches/parking at work, \$180	Donations, \$70
Home computer, \$1,500	Value of stock investment, \$860
Clothing purchase, \$110	Restaurant spending, \$130

Total assets = \$18,250 (\$450 + 1,890 + 7,800 + 2,350 + 1,500 + 3,400 + 860)

Total liabilities = \$2,395 (\$235 + \$2,160)

Net worth = \$15,855 (\$18,250 - \$2,395)

Total cash inflows = \$1,950

Total cash outflows = \$1,950 (\$650 + 345 + 230 + 180 + 110 + 65 + 80 + 90 + 70 + 130)

5. For each of the following situations compute the missing amount:

- Assets \$45,000, liabilities \$16,000, net worth \$\_\_\_\_\_.  
\$29,000
- Assets \$76,500, liabilities \$\_\_\_\_\_, net worth \$18,700.  
\$57,800
- Assets \$34,280, liabilities \$12,965, net worth \$\_\_\_\_\_.  
\$21,315
- Assets \$\_\_\_\_\_, liabilities \$38,345, net worth \$52,654.  
\$90,999

6 Renée St. Clair is a 28-year-old occupational therapist living in the Annex district of Toronto. She recently graduated from the University of Toronto and now works as an independent contractor assessing the legitimacy of claims made by victims of car accidents. Like many students, Renée accumulated a large student debt during her years at university and plans to pay it off within the next five years.

Perform a ratio analysis of Renée's financial statements. What does your analysis reveal? (Obj. 3)

## Cash Flow Statement

### For the Year Just Ended

#### Income

Professional billings	\$58,205	
Less: Professional expenses and taxes	<u>(23,890)</u>	
Professional income net of expenses and taxes		\$34,315
Dividends (after taxes)		<u>130</u>
<b>Total Income</b>		<b>\$34,445</b>

#### Fixed Expenses

Rent		9,600
Student loan payments		<u>5,800</u>
<b>Total Fixed Expenses</b>		<b>\$15,400</b>

#### Variable Expenses

Utilities, personal, food, clothing and dental		\$12,785
Moving expenses		225
Credit card interest		1,010
Recreation/entertainment		1,890
Vacations		<u>6,200</u>
<b>Total Variable Expenses</b>		<b>\$22,110</b>
<b>Total Expenses</b>		<b>\$37,510</b>
<b>Surplus/(Deficit)</b>		<b>(\$ 3,065)</b>

### Personal Balance Sheet As of Today

#### Assets

Liquid Assets		
Bank account		\$ 1,540
Personal Possessions		\$10,280
Investment Assets		
BCE shares		<u>\$ 3,025</u>
<b>Total Assets</b>		<b>\$14,845</b>

#### Liabilities

Current Liabilities		
Credit card balances		\$ 7,855
Long-Term Liabilities		
Student loan		<u>20,580</u>
<b>Total Liabilities</b>		<b>\$28,435</b>
<b>Net Worth</b>		<b>(\$13,590)</b>



## Solution

### Debt to Asset ratio

$$\$28,435/\$14,845 = 1.915$$

Renée's net worth is negative. Her debts exceed her assets by \$13,590. This is not unusual for recent graduates embarking upon a career. One point of concern is the high credit card balance she carries. As we will see in Chapter 5, high-cost credit card balances should be paid off each month.

### Current ratio

$$\$1,540 \div \$7,855 = 0.20$$

Renée has 20 cents of liquid assets for every dollar of current liabilities. She is in serious danger of being unable to pay her immediate bills.

### Liquidity ratio

$$\$1,540 \div (\$37,510 \div 12) = 0.5 \text{ months}$$

Renée has only  $\frac{1}{2}$  of a month's expenses in liquid assets. Financial planners generally recommend a ratio of 3 to 6 months of expenses. In view of her status as a self-employed individual, she should likely keep 6 months of expenses in liquid assets.

### Debt-payments ratio

$$[\$5,800 + \$7,855] \div \$34,315 = 0.40 \text{ or } 40\%$$

Due to her high student loan payments and credit card balance, Renée debt-payments ratio is almost double the recommended level of 20%.

### Savings ratio

Renée does not have any systematic savings plan, including savings for retirement. In fact, her cash flow is in deficit, implying that she financed her spending habits by selling assets or, more likely, through the use of debt (credit cards). Such activity will worsen her net worth position over time. Renée should cut back on discretionary spending for recreation, entertainment and vacations (total of \$8,090). This would permit her surplus cash flows to pay down her credit card debt and build up an emergency fund.

### 7. Fran created the following budget:

Food, \$350

Transportation, \$320

Housing, \$950

Clothing, \$100

Personal expenses and recreation, \$275

She actually spent \$298 for food, \$337 for transportation, \$982 for housing, \$134 for clothing, and \$231 for personal expenses and recreation. Calculate the variance for each of these categories, and indicate whether it was a budget *deficit* or a budget *surplus*.

Food \$52 surplus; transportation \$17 deficit; housing \$32 deficit; clothing \$34 deficit; personal expenses \$44 surplus.

- 8.. Bill and Sally Kaplan have an annual spending plan that amounts to \$36,000. If inflation is 5 percent a year for the next three years, what amount would the Kaplans need for their living expenses?

$$\$36,000 \times 1.158 \text{ (FV\$1, 5\%, 3 years)} = \$41,688$$

9. Use future value and present value calculations (see tables in Appendix) to determine the following:
- The future value of a \$500 savings deposit after eight years at an annual interest rate of 7 percent.  
 $\$500 \times 1.718 = \$859$
  - The future value of saving \$1,500 a year for five years at an annual interest rate of 8 percent.  
 $\$1,500 \times 5.867 = \$8,800.50$
  - The present value of a \$2,000 savings account that will earn 6 percent interest for four years.  
 $\$2,000 \times .792 = \$1,584$

10. Hal wants to establish a savings fund from which a community organization could draw \$800 a year for 20 years. If the account earns 6 percent, what amount would he have to deposit now to achieve this goal?

$$\$800 \times 11.470 = \$9,176$$

## FINANCIAL PLANNING ACTIVITIES

1. Using Web sites, library sources, friends, relatives, and others, obtain information on common suggestions for successful money management.

This activity will provide students with an opportunity to expand their online research skills and to gain insight into various issues and topics related to money management.

2. Working with two or three others in your class, develop a system for filing and maintaining personal financial records.

This activity will help students become aware of common personal finance documents and develop a system for their various records.

3. Conduct a survey of people of various ages to determine the system they use to keep track of various financial documents and records.

Remind students not to ask specific details of budgeted amounts, but rather have them ask general questions about the methods used for budgeting and organizing their financial records.

4. Prepare a personal balance sheet and cash flow statement.

This will help students start thinking about the practical aspects of personal financial statements for their situations.

5. Refer to Exhibit 2-5 and prepare a monthly budget to cover the next six months. Pay particular

attention to variable but non-repetitive expenses, such as tuition fees, textbooks, and technology-related costs.

This exercise will permit students to apply the information given to them in the chapter to their own personal lives. It will help them to better grasp and conceptualize the concepts.

6. Using the Web or library research, find information about the assets commonly held by households in Canada. How have the values of assets, liabilities, and net worth of Canadian consumers changed in recent years?

This research activity will provide students with an opportunity to view the balance sheet elements commonly held in our society.

7. Use the World Wide Web, store visits, or advertisements to determine the application a person might use to prepare personal financial statements, create a budget, and monitor spending, saving, and investing.

As mentioned in Chapters 1 and 2, various software packages for financial planning are available. Samples of these may be obtained or viewed on the World Wide Web.

8. Discuss with several people how the budget in Exhibit 2-5 might be changed based on various budget variances. If the household faced a decline in income, what spending areas might be reduced first?

This activity can help students better understand problems associated with money management and cash flow. In addition, students can obtain practical advice on coping with this situation. Opinions on this item will vary. Students should be ready to accept different points of views that reflect a person's life situation, goals, and personal values.

9. Ask two or three friends or relatives about their budgeting systems. Obtain information on how they maintain their spending records. Create a visual presentation (video or slide presentation) that communicates wise budgeting techniques.

This activity will allow students to gain practical information about budgeting as well as provide them with an opportunity to develop communication skills.

10. Interview a young single person, a young couple, and a middle-aged person about their financial goals and saving habits. What actions do they take to determine and achieve various financial goals?

This activity can help students appreciate differences in money management activities based on differences in real life situations.

## **LIFE SITUATION CASE**

### **Out of Work but Not Out of Bills**

1. What budget items might the Weston's consider reducing to cope with their financial difficulties?

Common cutbacks occur in the areas of food, clothing, savings, and personal spending.

2. How should the Weston's use their savings and retirement funds during this financial crisis? What additional sources of funds might be available to them during this period of unemployment?

Savings funds should be used to pay fixed expenses and necessities. Retirement funds should only be used if a lengthy unemployment time is encountered or if large, expected expenses occur. Other sources of funds may include loans, sale of investments, or sale of no longer needed household items.

3. What other current and future financial actions would you recommend to the Westons?

Student answers will vary. Suggestions should include actions the family can take to meet current and future financial concerns.

**CONTINUING CASE**

**Financial Aspects of Career Planning**

**(Questions):**

1. According to the text, a *Personal Balance Sheet* is a statement of your net worth. It is an accounting of what you own as well as what you owe. Using the information provided, prepare a personal balance sheet for Jamie Lee.

**Solution:**

The formula for a *Personal Balance Sheet* is as follows:

**Items of Value** (*what you own*) - **Amounts owed** (*what you owe*) = **Your net worth** (*your wealth*)

<b>Assets (what you own)</b>	<b>minus</b>	<b>Liabilities (what you owe)</b>	<b>= Net Worth (your wealth)</b>
Checking account: \$1,250		Student loan: \$5,400	
Emergency Fund savings account: \$3,100		Credit card balance: \$400	
Car: \$4,000			
<b>\$8,350</b>	<b>-</b>	<b>\$5,800</b>	<b>= \$2,550</b>

Jamie Lee has a positive net worth of \$2,550.

2. Using the table found in *Ratios for Evaluating Financial Progress*, what is Jamie Lee’s debt ratio?

When comparing Jamie Lee’s liabilities and her net worth, is the relationship a favorable one?

**Solution:**

The formula for calculating her debt ratio is as follows:

$$\text{Liabilities/Net Worth} = \text{Debt Ratio}$$

$$\mathbf{\$5,800 / \$2,550 = 2.27}$$

Jamie Lee’s debt ratio is 2.27.

No, it is not a favorable relationship; her liabilities are over twice as much as her net worth.

3. Using the table found in *Ratios for Evaluating Financial Progress*, what is Jamie Lee’s savings ratio?  
Using the rule of thumb recommended by financial experts, is she saving enough?

**Solution:**

The formula for calculating her savings ratio is as follows:

$$\text{Amount Saved Each Month/ Gross Income} = \text{Savings Ratio}$$

$$\$175/ \$2,125 = 0.082$$

Jamie Lee’s savings ratio is .082 or 8.2%.

The amount to deposit in to savings per month, as recommended by financial experts, is between 5% and 10% of the gross income amount.

Jamie is saving 8% of her gross income amount, so she is in an optimal range.

4. Using *Exhibit 2-6 and 2-7 as a guide*, calculate the budget allocations for Jamie Lee, using her Net Monthly Salary (or After-Tax Salary) amount.

Is she within the recommended parameters for a student?

Budget Category	Recommendation % for Student	Jamie Lee’s Amount	Within recommended parameters?
Housing (Rent, Utilities)	0-25%	$(\$275+\$125)/\$1,560 = 26\%$	No
Transportation	5-10%	$\$100/\$1,560 = 6\%$	Yes
Entertainment and Recreation	5-10%	$\$85/\$1,560 = 5\%$	Yes
Savings	0-10%	$\$175/\$1,560 = 11\%$	No

Jamie Lee is within the recommended parameter set for a student life situation in the budget categories of transportation, and entertainment.

It appears that her savings is slightly over the recommendation of 10%, with her ratio calculating at 11%. Also, the parameter for housing is slightly over the recommendation of 25% with her ratio calculating at 26%.

Note: These calculations use after tax (Net Monthly Salary) amounts versus other ratios shown in the text that utilize gross monthly amounts.

**DAILY SPENDING DAIRY**

This activity will help students better plan their spending for both short-term and long-term financial decisions.