*Each **Decision Analysis** section ends with a role-playing scenario to show the usefulness of ratios.*

These returns show an increase in its productive use of assets in recent years. We also compute Kraft Foods' returns in the third column of Exhibit 1.10. For every year, Nestlé's return exceeds Kraft Foods', and its average return is higher for this period.

Decision Maker

Answer—p. 26

Business Owner You own a small winter ski resort that earns a 21% return on its assets. An opportunity to purchase a winter ski equipment manufacturer is offered to you. This manufacturer earns a 19% return on its assets. The industry return for this manufacturer is 14%. Do you purchase this manufacturer?

*The **Demonstration Problem** is a review of key chapter content. The* Planning the Solution *offers strategies in solving the problem.*

Demonstration Problem

After several months of planning, Jasmine Worthy started a haircutting business called Expressions. The following events occurred during its first month:

a. On August 1, Worthy invested $3,000 cash and $15,000 of equipment in Expressions in exchange for its common stock.
b. On August 2, Expressions paid $600 cash for furniture for the shop.
c. On August 3, Expressions paid $500 cash to rent space in a strip mall for August.
d. On August 4, it purchased $1,200 of equipment on credit for the shop (using a long-term note payable).
e. On August 5, Expressions opened for business. Cash received from services provided in the first week and a half of business (ended August 15) is $825.
f. On August 15, it provided $100 of haircutting services on account.
g. On August 17, it received a $100 check for services previously rendered on account.
h. On August 17, it paid $125 cash to an assistant for working during the grand opening.
i. Cash received from services provided during the second half of August is $930.
j. On August 31, it paid a $400 installment toward principal on the note payable entered into on August 4.
k. On August 31, it paid $900 cash dividends to Worthy.

Required

1. Arrange the following asset, liability, and equity titles in a table similar to the one in Exhibit 1.7: Cash; Accounts Receivable; Furniture; Store Equipment; Note Payable; Common Stock; Dividends; Revenues; and Expenses. Show the effects of each transaction using the accounting equation.
2. Prepare an income statement for August.
3. Prepare a statement of retained earnings for August.
4. Prepare a balance sheet as of August 31.
5. Prepare a statement of cash flows for August.
6. Determine the return on assets ratio for August.

Planning the Solution

- Set up a table like Exhibit 1.7 with the appropriate columns for accounts.
- Analyze each transaction and show its effects as increases or decreases in the appropriate columns. Be sure the accounting equation remains in balance after each transaction.
- Prepare the income statement, and identify revenues and expenses. List those items on the statement, compute the difference, and label the result as *net income* or *net loss*.
- Use information in the Equity columns to prepare the statement of retained earnings.
- Use information in the last row of the transactions table to prepare the balance sheet.
- Prepare the statement of cash flows; include all events listed in the Cash column of the transactions table. Classify each cash flow as operating, investing, or financing.
- Calculate return on assets by dividing net income by average assets.

Solution to Demonstration Problem

1.

	Assets							=	Liabilities	+		Equity					
	Cash	+	Accounts Receivable	+	Furniture	+	Store Equipment	=	Note Payable	+	Common Stock	−	Dividends	+	Revenues	−	Expenses
a.	$3,000						$15,000				$18,000						
b.	− 600			+	$600												
Bal.	2,400	+		+	600	+	15,000	=			18,000						
c.	− 500															−	$500
Bal.	1,900	+		+	600	+	15,000	=			18,000					−	500
d.						+	1,200		+$1,200								
Bal.	1,900	+		+	600	+	16,200	=	1,200	+	18,000					−	500
e.	+ 825													+	$ 825		
Bal.	2,725	+		+	600	+	16,200	=	1,200	+	18,000			+	825	−	500
f.		+	$100											+	100		
Bal.	2,725	+	100	+	600	+	16,200	=	1,200	+	18,000			+	925	−	500
g.	+ 100	−	100														
Bal.	2,825	+	0	+	600	+	16,200	=	1,200	+	18,000			+	925	−	500
h.	− 125															−	125
Bal.	2,700	+	0	+	600	+	16,200	=	1,200	+	18,000			+	925	−	625
i.	+ 930													+	930		
Bal.	3,630	+	0	+	600	+	16,200	=	1,200	+	18,000			+	1,855	−	625
j.	− 400								− 400								
Bal.	3,230	+	0	+	600	+	16,200	=	800	+	18,000			+	1,855	−	625
k.	− 900											−	$900				
Bal.	$ 2,330	+	0	+	$600	+	$ 16,200	=	$ 800	+	$ 18,000	−	$900	+	$1,855	−	$625

2.

EXPRESSIONS
Income Statement
For Month Ended August 31

Revenues		
Haircutting services revenue		$1,855
Expenses		
Rent expense	$500	
Wages expense	125	
Total expenses		625
Net Income		$1,230

3.

EXPRESSIONS
Statement of Retained Earnings
For Month Ended August 31

Retained earnings, August 1*	$ 0
Plus: Net income	1,230
	1,230
Less: Dividend to owner	900
Retained earnings, August 31	$ 330

* If Expressions had been an existing business from a prior period, the beginning retained earnings balance would equal the retained earnings balance from the end of the prior period.

4.

EXPRESSIONS
Balance Sheet
August 31

Assets		Liabilities	
Cash	$ 2,330	Note payable	$ 800
Furniture	600	**Equity**	
Store equipment	16,200	Common stock	18,000
		Retained earnings	330
Total assets	$19,130	Total liabilities and equity	$19,130

5.

EXPRESSIONS
Statement of Cash Flows
For Month Ended August 31

Cash flows from operating activities		
Cash received from customers	$1,855	
Cash paid for rent	(500)	
Cash paid for wages	(125)	
Net cash provided by operating activities		$1,230
Cash flows from investing activities		
Cash paid for furniture		(600)
Cash flows from financing activities		
Cash from stock issuance	3,000	
Cash paid for dividend	(900)	
Partial repayment of (long-term) note payable	(400)	
Net cash provided by financing activities		1,700
Net increase in cash		$2,330
Cash balance, August 1		0
Cash balance, August 31		$2,330

6. Return on assets $= \dfrac{\text{Net income}}{\text{Average assets}} = \dfrac{\$1{,}230}{(\$18{,}000^{*} + \$19{,}130)/2} = \dfrac{\$1{,}230}{\$18{,}565} = \mathbf{6.63\%}$

* Uses the initial $18,000 investment as the beginning balance for the startup period only.

APPENDIX

Return and Risk Analysis

1A

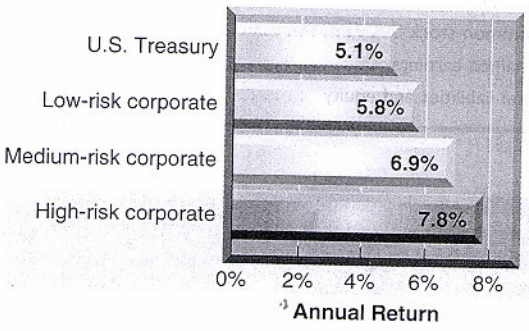
This appendix explains return and risk analysis and its role in business and accounting.

Net income is often linked to **return.** Return on assets (ROA) is stated in ratio form as income divided by assets invested. For example, banks report return from a savings account in the form of an interest return such as 4%. If we invest in a savings account or in U.S. Treasury bills, we expect a return of around 2% to 7%. We could also invest in a company's stock, or even start our own business. How do we decide among these investment options? The answer depends on our trade-off between return and risk.

A4 Explain the relation between return and risk.

Risk is the uncertainty about the return we will earn. All business investments involve risk, but some investments involve more risk than others. The lower the risk of an investment, the lower is our expected return. The reason that savings accounts pay such a low return is the low risk of not being repaid with interest (the government guarantees most savings accounts from default). If we buy a share of **Nike** or any other company, we might obtain a large return. However, we have no guarantee of any return; there is even the risk of loss.

Exhibit 1A.1
Average Returns for Bonds with Different Risks



The bar graph in Exhibit 1A.1 shows recent returns for 30-year bonds with different risks. *Bonds* are written promises by organizations to repay amounts loaned with interest. U.S. Treasury bonds provide a low expected return, but they also offer low risk since they are backed by the U.S. government. High-risk corporate bonds offer a much larger potential return but with much higher risk.

The trade-off between return and risk is a normal part of business. Higher risk implies higher, but riskier, expected returns. To help us make better decisions, we use accounting information to assess both return and risk.

APPENDIX

1B Business Activities and the Accounting Equation

C6 Identify and describe the three major activities in organizations.

This appendix explains how the accounting equation is derived from business activities.

There are three major types of business activities: financing, investing, and operating. Each of these requires planning. *Planning* involves defining an organization's ideas, goals, and actions. Most public corporations use the *Management Discussion and Analysis* section in their annual reports to communicate plans. However, planning is not cast in stone. This adds *risk* to both setting plans and analyzing them.

Point: Management must understand accounting data to set financial goals, make financing and investing decisions, and evaluate operating performance.

Financing *Financing activities* provide the means organizations use to pay for resources such as land, buildings, and equipment to carry out plans. Organizations are careful in acquiring and managing financing activities because they can determine success or failure. The two sources of financing are owner and nonowner. *Owner financing* refers to resources contributed by the owner along with any income the owner leaves in the organization. *Nonowner* (or *creditor*) *financing* refers to resources contributed by creditors (lenders). *Financial management* is the task of planning how to obtain these resources and to set the right mix between owner and creditor financing.

Investing *Investing activities* are the acquiring and disposing of resources (assets) that an organization uses to acquire and sell its products or services. Assets are funded by an organization's financing. Organizations differ on the amount and makeup of assets. Some require land and factories to operate. Others need only an office. Determining the amount and type of assets for operations is called *asset management.*

Point: Investing (assets) and financing (liabilities plus equity) totals are *always* equal.

Invested amounts are referred to as *assets.* Financing is made up of creditor and owner financing, which hold claims on assets. Creditors' claims are called *liabilities,* and the owner's claim is called *equity.* This basic equality is called the *accounting equation* and can be written as: Assets = Liabilities + Equity.

Operating *Operating activities* involve using resources to research, develop, purchase, produce, distribute, and market products and services. Sales and revenues are the inflow of assets from selling