than the market value of the tables, chairs, ovens, and other assets. This additional amount you pay will be entered on the asset side of your balance sheet as goodwill.

Current liabilities are short-term debts such as accounts payable, which is money owed to suppliers for goods received but not yet paid for, or bank loans that will be paid back in less than one year. Long-term bank loans and the value of outstanding corporate bonds are *long-term liabilities.*

Key Terms

Present value, p. 227

Stockholders' equity, p. 233

7A Tools to Analyze Firms' Financial Information, pages 227–234

LEARNING OBJECTIVE: Understand the concept of present value and the information contained on a firm's income statement and balance sheet.

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Review Questions

7A.1 Why is money you receive at some future date worth less than money you receive today? If the interest rate rises, what effect does this have on the present value of payments you receive in the future?

7A.2 Give the formula for calculating the present value of a bond that will pay a coupon of $100 per year for 10 years and that has a face value of $1,000.

7A.3 Compare the formula for calculating the present value of the payments you will receive from owning a bond to the formula for calculating the present value of the payments you will receive from owning a stock. What are the key similarities? What are the key differences?

7A.4 How is operating income calculated? How does operating income differ from net income? How does net income differ from accounting profit?

7A.5 What's the key difference between a firm's income statement and its balance sheet? What is listed on the left side of a balance sheet? What is listed on the right side?

Problems and Applications

7A.6 (Related to *Solved Problem 7A-1* on page 229) If the interest rate is 10 percent, what is the present value of a bond that matures in two years, pays $85 one year from now, and pays $1,085 two years from now?

7A.7 The following is from an Associated Press story on the contract of baseball star Carlos Beltran:

> Beltran's contract calls for his $11 million signing bonus to be paid in four installments: $5 million upon approval and $2 million each this June 15, 2005, and on Jan. 15, 2006, and Jan. 15, 2007. He gets a $10 million salary this year, $12 million in each of the following two seasons and $18.5 million in each of the final four seasons, with $8.5 million deferred annually from 2008–11. The players' association calculated the present day value of the contract at $115,726,946, using a 6 percent discount rate (the prime rate [which is the interest rate banks charge on loans to their best customers] plus 1 percent, rounded to the nearest whole number). For purposes of baseball's luxury tax, which currently uses a 3.62 percent discount rate, the contract is valued at $116,695,898.

Briefly explain why the present value of Beltran's contract is lower if a higher interest is used to make the calculation than if a lower interest rate is used.

Source: "Like Pedro, Beltran Gets Suite on Road," Associated Press, January 18, 2005.

7A.8 (Related to *Solved Problem 7A-1* on page 229) Before the 2008 season, the New York Yankees signed second baseman Robinson Cano to a contract that would pay him the following amounts: $3 million for the 2008 season, $6 million for the 2009 season, $9 million for the 2010 season, and $10 million for the 2011 season, with an option for $14 million for the 2012 season and an option for $15 million for the 2013 season. Assume that Cano plays all six seasons for the Yankees and that he receives each of his six seasonal salaries as a lump-sum payment at the end of the season and he receives his 2008 salary one year after he signed the contract.

a. Some newspaper reports described Cano as having signed a $57 million contract with the Yankees. Do you agree that $57 million was the value of this contract? Briefly explain.
b. What was the present value of Cano's contract at the time he signed it (assuming an interest rate of 10 percent)?
c. If you use an interest rate of 5 percent, what was the present value of Cano's contract?

Source: Joel Sherman, "Robinson Cano Deal Final," *New York Post*, January 8, 2008.

7A.9 **(Related to *Solved Problem 7A-1* on page 229)** A winner of the Pennsylvania Lottery was given the choice of receiving $18 million at once or $1,440,000 per year for 25 years.

a. If the winner had opted for the 25 annual payments, how much in total would she have received?
b. At an interest rate of 10 percent, what would be the present value of the 25 payments?
c. At an interest rate of 5 percent, what would be the present value of the 25 payments?
d. What interest rate would make the present value of the 25 payments equal to the one payment of $18 million? (This question is difficult and requires the use of a financial calculator or a spreadsheet. *Hint:* If you are familiar with the Excel spreadsheet program, use the RATE function. Questions (b) and (c) can be answered by using the Excel NPV [Net Present Value] function.)

7A.10 **(Related to *Solved Problem 7A-1* on page 229)** Before the start of the 2000 baseball season, the New York Mets decided they didn't want Bobby Bonilla playing for them any longer. But Bonilla had a contract with the Mets for the 2000 season that would have obliged the Mets to pay him $5.9 million. When the Mets released Bonilla, he agreed to take the following payments in lieu of the $5.9 million the Mets would have paid him in the year 2000: He will receive 25 equal payments of $1,193,248.20 each July 1 from 2011 to 2035. If you were Bobby Bonilla, which would you rather have had, the lump-sum $5.9 million or the 25 payments beginning in 2011? Explain the basis for your decision.

7A.11 Suppose that eLake, an online auction site, is paying a dividend of $2 per share. You expect this dividend to grow 2 percent per year, and the interest rate is 10 percent. What is the most you would be willing to pay for a share of stock in eLake? If the interest rate is 5 percent, what is the most you would be willing to pay? When interest rates in the economy decline, would you expect stock prices in general to rise or fall? Explain.

7A.12 Suppose you buy the bond of a large corporation at a time when the inflation rate is very low. If the inflation rate increases during the time you hold the bond, what is likely to happen to the price of the bond?

7A.13 Use the information in the following table for calendar year 2008 to prepare the McDonald's Corporation's income statement. Be sure to include entries for operating income and net income.

Revenue from company restaurants	$16,561 million
Revenue from franchised restaurants	6,961 million
Cost of operating company-owned restaurants	13,653 million
Income taxes	1,845 million
Interest expense	523 million
General and administrative cost	2,344 million
Cost of restaurant leases	1,230 million

Source: McDonalds Corporation, *Annual Report, 2008.*

7A.14 Use the information in the following table on the financial situation of Starbucks Corporation as of September 28, 2008, to prepare the firm's balance sheet. Be sure to include an entry for stockholders' equity.

Current assets	$1,748 million
Current liabilities	2,188 million
Property and equipment	2,956 million
Long-term liabilities	992 million
Goodwill	267 million
Other assets	261 million

Source: Starbucks Corporation, *Fiscal 2008 Annual Report.*

7A.15 The *current ratio* is equal to a firm's current assets divided by its current liabilities. Use the information in Figure 7A-2 on page 233 to calculate Google's current ratio on December 31, 2008. Investors generally prefer that a firm's current ratio be greater than 1.5. What problems might a firm encounter if the value of its current assets is low relative to the value of its current liabilities?

>> End Appendix Learning Objective