

Chapter 13

Corporations: Share Capital and the Balance Sheet

Questions

1. Corporation characteristics:
 - a separate legal entity, formed under federal or provincial law
 - continuous life and transferability of ownership
 - no mutual agency
 - limited liability of shareholders
 - separation of ownership and management
 - corporate earnings subject to a degree of double taxation
 - government regulation
 - corporations may incur costs unique to corporations.
2. The corporation itself pays income tax, and the shareholder pays personal tax on after-tax dividends received from the corporation. However, a portion of the corporate tax is allowed as a dividend tax credit to the shareholder to eliminate some of the double taxation.
3. The incorporators pay the fees and file the required documents with the incorporating jurisdiction, and approval of articles of incorporation is granted by the federal or a provincial government. The articles of incorporation include authorization for the corporation to issue a certain number of shares. The incorporators agree to a set of bylaws for governing the corporation. The corporation then issues its shares and receives assets. The shareholders elect the board of directors, which appoints the officers. At this point, the corporation begins operations.
4.

<u>Characteristic</u>	<u>Corporation</u>	<u>Partnership</u>
Legal Entity	<ul style="list-style-type: none">– a business entity formed under federal or provincial law– corporation a distinct entity; assets and liabilities belong to corporation	<ul style="list-style-type: none">– does not require federal or provincial approval to do business– partnership not distinct from partners who hold all assets and liabilities
Continuous Life and Transferability of Ownership	<ul style="list-style-type: none">– sale or transfer of shares does not affect the continuity of the corporation	<ul style="list-style-type: none">– partnerships terminate when ownership changes

<u>Characteristic</u>	<u>Corporation</u>	<u>Partnership</u>
Mutual Agency	– officers commit the corporation to contracts but not shareholders	– a partner can bind partnership by signing contract
Liability	– shareholders have no personal obligation for corporate liabilities; however, directors may	– partners are personally liable for all debts of the partnership
Ownership/Management	– corporations are owned by shareholders who elect a board of directors – the board of directors appoints officers to manage the business	– partners manage the partnership
Taxation	– corporate earnings are subject to two different types of taxation: corporate income is taxed and after-tax dividends are taxable to the shareholder	– partners are taxed on their share of partnership income
Additional costs	– corporations incur costs unique to corporations, such as the cost of directors' insurance	– partnerships do not incur these costs

5. A common shareholder has the right to: (a) vote on matters that come before the shareholders, (b) receive a proportionate part of any dividends declared on that class of shares, (c) receive a proportionate share of corporate assets if the corporation liquidates, (d) sell the shares and (e) a pre-emptive right, the right to maintain one's proportionate ownership in the corporation. Preferred shares are automatically voting, unless stated otherwise; however, they are typically nonvoting. These rights may be withheld by the corporation only by agreement with the shareholders.
6. Issuance of shares increases the assets of the corporation, which receives assets in exchange for shares issued. Authorization merely gives the corporation permission to issue shares.
7. Issuance of 1,400 shares of \$4.50 preferred shares for \$110 would increase the contributed capital by \$154,000 ($1,400 \times \110). The transaction would *not* increase retained earnings because a company does not earn a profit by selling its shares to its own shareholders. Bala Ltd.'s annual cash dividend payments would increase by \$6,300 ($1,400 \times \4.50).
8. Cash 3,475

Common shares [$(150 \times \$9) + (250 \times \$8.50)$]

3,475
9. Issuance of 1,500 common shares for land and a building worth \$200,000 increases contributed capital by \$200,000.

10. Intangible assets: Organization Cost
Current liabilities: Dividends Payable
Shareholders' equity: Preferred Shares, Common Shares, Retained Earnings.
11. Organization Cost is an intangible asset account. It is debited for its cost when acquired, and the cost is usually amortized as expense over a short period of time.
12. Three important dates for dividends are: (a) Declaration date: the board of directors announces the dividend, (b) Date of record: the corporation identifies the people who own the shares on this date so that they can receive the dividend. (c) Payment date: the corporation pays the dividend.
13. (a) Cumulative preferred: \$13,125 ($2,500 \times \1.75×3 years)
Common: \$21,875 ($\$35,000 - \$13,125$)
(b) Noncumulative preferred: \$4,375 ($2,500 \times \1.75)
Common: \$30,625 ($\$35,000 - \$4,375$)
14. A preferred shareholder would rather own *cumulative* preferred shares because any preferred dividends passed by the corporation must be paid before paying dividends to the common shareholders. The corporation would rather issue *noncumulative* preferred shares in order to avoid having to pay dividends in arrears to preferred shareholders.
15. Cumulative preferred dividends in arrears are reported in the notes to the financial statements. Dividends become a liability only after the board of directors declares the dividends.
16. The *market value* of a share is the price at which a person could buy or sell a single share. The *book value* of a share is the total amount of shareholders' equity of a certain type in the company's books divided by the number of shares issued. Market value is far more important to investors than book value.
17. In a company with both preferred and common shares outstanding, the preferred shareholders have the first claim to shareholders' equity. The book value of preferred shares is their liquidation value plus any cumulative preferred dividends in arrears if the preferred shares are cumulative. The remaining equity divided by the number of common shares gives the book value for each common share.
18. A healthy company's return on shareholders' equity should exceed its return on total assets because of the interest expense component of return on assets. Shareholders demand a higher rate of return than creditors. If return on total assets is higher than return on shareholders' equity, the company may be over leveraged.

Starters

(5 min.) **S 13-1**

1. The *chairperson* of the board of directors is usually the most powerful person in a corporation.
2. The *shareholders* hold ultimate power in a corporation.
3. The *president* or *Chief Executive Officer (CEO)* is in charge of day-to-day operations.
4. The *vice-president of accounting and finance* is in charge of accounting.

(5 min.) **S 13-2**

DIFFERENCE:

A proprietorship's balance sheet reports a single capital account, such as Joe Hopper, Capital. A corporation balance sheet reports shareholders' equity by source. There are two sources: contributed capital and retained earnings.

SIMILARITY:

A proprietorship's balance sheet and a corporation's balance sheet both report assets and liabilities in the same way.

(5 min.) **S 13-3**

Journal					
		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
	a.	Cash (1,000 × \$70)		70,000	
		Common Shares			70,000
	b.	Cash		32,000	
		Preferred Shares			32,000

(5 min.) **S 13-4**

Journal					
		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Cash		2,900	
		Common Shares			2,900
		Issued common shares.			

(5-10 min.) **S 13-5**

1. Total contributed capital increased \$6,000 (\$85,000 – \$79,000). The increase was due to the sale of common shares in 2014, shown by the increase in the number of shares from 2013 to 2014 and by the increase in the dollar balance of the common shares from 2013 to 2014.
2. KD Corporation had a profit in 2014 because the balance of retained earnings increased from 2013 to 2014 by \$4,000 (\$50,800 – \$46,800).

(5 min.) **S 13-6**

Shareholders' equity:

Common shares, 40,000 shares issued	\$29,500
Retained earnings.....	<u>8,000</u>
Total shareholders' equity	<u><u>\$37,500</u></u>

(5 min.) **S 13-7**

a. Accounts payable.....	\$ 3,000
Unearned revenue	2,600
Long-term note payable.....	<u>3,800</u>
Total liabilities	<u><u>\$ 9,400</u></u>
b. Total liabilities (from <i>Req. a</i>)	\$ 9,400
Total shareholders' equity (from Starter 13-6).....	<u>37,500</u>
Total assets.....	<u><u>\$ 46,900</u></u>

(5-10 min.) **S 13-8**

$$A = \$175,000 \div \$5 = 35,000$$

$$B = 150,000 \times \$3 = \$450,000$$

$$C = \$175,000 + \$450,000 = \$625,000$$

$$D = \$500,000 - 625,000 = -\$125,000$$

(10 min.) **S 13-9**

Journal					
DATE 2013		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Dec.	15	Retained Earnings		55,000	
		Dividends Payable — Preferred Shares			25,000
		Dividends Payable — Common Shares			30,000
		Declared a cash dividend. (5,000 × \$5.00) + (50,000 × \$0.60)			
2014					
Jan.	4	Dividends Payable — Preferred Shares		25,000	
		Dividends Payable — Common Shares		30,000	
		Cash			55,000
		Paid the cash dividend.			

(5-10 min.) **S 13-10**

1. The preferred shares are *cumulative* because they are specifically designated as cumulative.
2. Preferred gets \$1,125 ($45,000 \times \0.025).
Common gets \$13,875 ($\$15,000 - \$1,125$)
3. Preferred gets:

2012 dividend in arrears ($45,000 \times \$0.025$)	\$1,125
2013 dividend in arrears	1,125
2014 current-year dividend.....	<u>1,125</u>
Total.....	<u>\$3,375</u>
Common gets ($\$15,000 - \$3,375$)	<u>\$11,625</u>

(5 min.) **S 13-11**

Preferred equity:

Liquidation value ($45,000 \times \$0.50$)	\$ 22,500
Cumulative dividends ($45,000 \times \$0.025 \times 5$)	<u>5,625</u>
Shareholders' equity allocated to preferred	<u>\$ 28,125</u>

Book value per share = $\frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}}$

$$= \frac{\$350,000 - 28,125}{1,000,000}$$

$$= \$0.321875$$

which rounds to \$0.32.

(5 min.) **S 13-12**

$$\begin{aligned} \text{Rate of return on total assets} &= \frac{\text{Net income} + \text{Interest expense}}{\text{Average total assets}} = \frac{\$6,100 + \$400}{(\$49,000 + \$44,800) / 2} \\ &= \frac{\$6,500}{\$46,900} = 13.9\% \end{aligned}$$

$$\begin{aligned} \text{Rate of return on common shareholders' equity} &= \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shareholders' equity}} = \frac{\$6,100 - \$0}{(\$23,600 + \$22,800) / 2} \\ &= \frac{\$6,100}{\$23,200} = 26.3\% \end{aligned}$$

These rates of return are quite high.

Exercises

(5-10 min.) **E 13-1**

Note: Student responses will vary because different people have various reasons for the decisions they make.

Reasons for organizing as a corporation:

1. Ease of raising capital from other investors
2. Limited liability of shareholders for the business's debts
3. Ease of transferring ownership if a shareholder wants to sell his or her interest in the business

Reasons for not organizing as a corporation:

1. Must pay corporate tax and personal tax on dividends
2. More government regulation of corporations

(5-10 min.) **E 13-2**

MEMO TO: David Johnston and Lisa Jacobs
SUBJECT: Incorporation of Student Decor Ltd.

In order to incorporate Student Decor Ltd., you must obtain and complete the required documents from either the province in which you wish to incorporate or the federal Ministry of Industry. The completed documents must be submitted with the required fee. The documents are called articles of incorporation and include a request for authorization for the corporation to issue shares. When the appropriate jurisdiction authorizes the incorporation, Student Decor Ltd. will become a legal entity.

As soon as Student Decor Ltd. is incorporated you will draw up and agree to a set of bylaws by which Student Decor Ltd. will be governed. All those who purchase common shares in Student Decor Ltd. will be shareholders of the corporation. The shareholders will elect the board of directors of the corporation. The board of directors sets the policy for Student Decor Ltd. and appoints the officers of the corporation, including the president, who is the chief executive officer in charge of managing day-to-day operations.

Instructional Note: Student responses may vary considerably.

- a. False—Unlike proprietorships or partnerships, where the proprietor or partner can bind the company to a contract, it is one of the distinguishing characteristics of corporations that a shareholder may not bind, or obligate, a corporation to a contract.
- b. True
- c. False—Preferred shareholders typically do not have voting rights.
- d. True
- e. False—Common shares in different classes can have different voting rights or no voting rights, based on the details specified in the articles of incorporation.
- f. True
- g. True
- h. True

Req. 1(10-15 min.) **E 13-4**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATION	POST. REF.	DEBIT	CREDIT
Jan.	19	Cash		49,500	
		Common Shares (4,500 × \$11.00)			49,500
Feb.	3	Cash		14,000	
		Class A Preferred Shares (1,000 shares)			14,000
	11	Inventory		30,000	
		Equipment		17,000	
		Common Shares (5,800 shares)			47,000
	15	Cash		26,000	
		Class B Preferred Shares (2,000 × \$13)			26,000

Req. 2

Total Contributed Capital:

Preferred:	Class A	\$ 14,000
	Class B	26,000
Common:	(\$49,500 + \$47,000)	<u>96,500</u>
Total contributed capital		<u>\$136,500</u>

(5-10 min) **E 13-5**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Cash		150,000	
		Common Shares			150,000
		To issue 10,000 common shares at \$15.			

Case A—Issue shares and buy the assets in separate transactions.

(10 min.) **E 13-6**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Cash		1,460,000	
		Common Shares			1,460,000
		Issued shares.			
		Building		900,000	
		Equipment		560,000	
		Cash			1,460,000
		Purchased property, plant, and equipment.			

Case B—Issue shares to acquire the assets.

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Building		900,000	
		Equipment		560,000	
		Common Shares			1,460,000
		Issued shares to acquire building and			
		equipment.			

The balances in all accounts are the same because, in both cases, the value of the assets received for the common shares issued is \$1,460,000:

Building.....	\$900,000
Equipment	560,000

Req. 1

(15-20 min.) **E 13-7**

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Jan.	4	Cash		140,000	
		Common Shares			140,000
		Issued 5,000 common shares.			
	13	Cash		55,000	
		Preferred Shares			55,000
		Issued 500 preferred shares for cash.			
	14	Land		120,000	
		Common Shares			120,000
		Issued 4,000 common shares for land.			
Dec.	31	Income Summary		150,000	
		Retained Earnings			150,000
		Closed net income to Retained Earnings.			

Req. 2

Mid-way Consulting Inc.	
Shareholders' Equity	
December 31, 2014	
Contributed capital:	
Preferred shares, \$5.00, 500,000 shares authorized, 500 shares issued	\$ 55,000
Common shares, 1,000,000 shares authorized, 9,000 shares issued	<u>260,000</u>
Total contributed capital	315,000
Retained earnings	<u>150,000</u>
Total shareholders' equity	<u>\$465,000</u>

(10 min.) **E 13-8**

Contributed capital		
Preferred shares, \$1.50:		
Issued for cash (2,500 shares × \$20)		\$ 50,000
Common shares:		
Issued for cash (35,000 shares × \$12.50)	\$437,500	
Issued for organization cost	7,500	
Issued for patent	<u>50,000</u>	<u>495,000</u>
Total contributed capital		<u>\$545,000</u>

Req. 1

(10-15 min.) **E 13-9**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Mar.	23	Cash		120,000	
		Common Shares			120,000
		Issued 12,000 common shares at \$10.00.			
Apr.	12	Inventory		60,000	
		Equipment		10,000	
		Common Shares			70,000
		Issued 5,000 common shares to acquire inventory and equipment.			
	17	Cash		16,500	
		Preferred Shares, \$2.25			16,500
		Issued 1,500 preferred shares at \$11 each.			

Req. 2

Novak Technology Inc.	
Shareholders' Equity	
Contributed capital	
Preferred shares, \$2.25, 100,000 shares authorized, 1,500 shares issued	\$ 16,500
Common shares, 250,000 shares authorized, 17,000 shares issued	<u>190,000*</u>
Total contributed capital	206,500
Retained earnings	<u>65,000</u>
Total shareholders' equity	<u>\$271,500</u>

*Computation:

Mar. 23:	12,000 shares × \$10.00	=	\$120,000
Apr. 12:	\$60,000 + \$10,000	=	<u>70,000</u>
			<u>\$190,000</u>

(10-15 min.) **E 13-10**

Skeet Corporation	
Shareholders' Equity	
June 30, 2014	
Contributed capital	
Preferred shares, \$1.25, 100,000 shares authorized, 10,000 shares issued	\$87,500
Common shares, 500,000 shares authorized, 100,000 shares issued	<u>100,000</u>
Total contributed capital	187,500
Retained earnings	<u>97,000</u>
Total shareholders' equity	<u>\$284,500</u>

(10-15 min.) **E 13-11**

- 1,000 shares \times \$5.00 = \$5,000
- Preferred gets \$5,000
Common gets \$15,000 (\$20,000 – \$5,000)
- Preferred shares are noncumulative because they are not specifically designated as cumulative.
- Preferred gets:
2014 current-year dividend = \$5,000
Common gets \$35,000 (\$40,000 – \$5,000)

Brzynski Marketing Ltd.			
Dividend Payment Schedule			
	PREFERRED	COMMON	TOTAL
Total dividend			\$41,000
Preferred dividends in arrears for 2013:			
(60,000 × \$0.10)	6,000		
Total preferred dividends in arrears			<u>6,000</u>
Remainder			35,000
Dividends for 2014:			
Preferred			
Total preferred dividends for 2014	6,000		<u>6,000</u>
Remainder			29,000
Common		<u>\$29,000</u>	<u>29,000</u>
Remainder			<u>\$ 0</u>
Totals	<u>\$12,000</u>	<u>\$29,000</u>	<u>\$41,000</u>

(10-15 min.) **E 13-13**
Nature's Design Technology Inc.

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{\$15,000 + \$0}{300} \\
 &= \$50.00
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$302,500^*}{25,000} \\
 &= \$12.10
 \end{aligned}$$

* (\$15,000 + \$187,500 + \$115,000 – \$15,000)

(10-15 min.) **E 13-14**
Nature's Design Technology Inc.

Dividends in arrears = 300 shares × \$7,00 × 4 = \$8,400

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{\$15,000 + \$8,400}{300} \\
 &= \$78.00
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$294,100^*}{25,000} \\
 &= \$11.76
 \end{aligned}$$

* (\$15,000 + \$187,500 + \$115,000 – \$23,400)

$$\begin{aligned}
 \text{Rate of return on total assets} &= \frac{\text{Net income} + \text{Interest expense}}{\text{Average total assets}} = \frac{\$3,250 + \$5,200}{(\$105,000 + \$95,000)/2} = \frac{\$8,450}{\$100,000} \\
 &= 0.0845 \times 100 = 8.45\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Rate of return on common shareholders' equity} &= \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shareholders' equity}} = \frac{\$3,250 - (200 \times 1.15)}{(\$46,700 + \$43,000)/2} = \frac{\$3,020}{\$44,850} \\
 &= 0.067336 \times 100 = 6.73\%
 \end{aligned}$$

These profitability measures suggest some weakness because Woldenga's 6.73 percent return on shareholders' equity is fair but the return on assets exceeds it by 1.7 percent meaning that the company is paying more for its borrowed funds than it is earning.

Req. 1

(5-10 min) **E 13-16**

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Feb.	1	Cash		32,350	
		Accounts Receivable		4,900	
		Inventory		2,713	
		Supplies		100	
		Prepaid Rent		2,000	
		Equipment		1,934	
		Furniture		5,800	
		Accounts Payable			10,700
		Salary Payable			1,400
		Unearned Service Revenue			1,333
		Common Shares			36,364
		To incorporate the business and issue 20,000 common shares to the incorporator			

Req. 2

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Feb.	1	Cash		50,000	
		Preferred Shares			50,000
		Issued 1,000 preferred shares at \$50 each			

Req. 3

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Feb.	1	Organization Costs		1,500	
		Cash			1,500
		Legal fees and incorporation fees to organize the corporation			

(15-20 min.) **E 13-17**

Common shares, Dec. 31, 2013	\$ 300,000
Issuance of shares for cash (3,000 shares at \$60)	180,000
Issuance of shares to purchase another company (15,000 shares at \$70)	<u>1,050,000</u>
Common shares, Dec. 31, 2014	<u>\$ 1,530,000</u>
Retained earnings, Dec. 31, 2013	\$ 1,538,000
Net income	1,430,000
Cash dividends	<u>(650,000)</u>
Retained earnings, Dec. 31, 2014	<u>\$2,318,000</u>

Beyond the Numbers

BN 13-1

1. Contributed capital and retained earnings are reported separately as they represent different sources of capital:
 - Contributed capital represents investments in share capital by shareholders
 - Retained earnings is capital earned by profitable operations of the corporation that has not been paid out in dividends
 - Incorporating acts require corporations to report the sources of their capital.
2. Nah Inc. faces the problem of determining the market value of the land it receives. The current market value of the land will determine the recorded value of the land and of the common shares issued. This assumes the shares of Nah Inc. are not traded on a stock exchange. If they were traded on a stock exchange and a market price per share exists, then the value of the land could be determined by multiplying the number of shares given to Chan for the land by the market price per share. The value of the land should be the same in both situations – its current market value.
3. Investors buy common shares in the hope of earning higher returns on their investment than are available on an investment in preferred shares. For a healthy company, the rate of return on common shareholders' equity is usually higher than the rate of return on preferred shares. Also the market value of common shares in such a company will increase more than its preferred shares' price.
4. Yes, if book value exceeds market value. No, if market value exceeds book value. The shareholder will accept the offer that maximizes his or her wealth.
5. Convertible preferred shares may be exchanged by preferred shareholders, if they choose, for another specified class of shares in the corporation. An investor would exercise the conversion privilege if the market value of the shares received on conversion exceeded the market value of the preferred shares held after brokerage commissions and any other fees are paid.

Ethical Issue

Req. 1

Wertz's reporting a \$50,000 franchise at \$375,000 is *unethical*. The franchise cost \$50,000, not \$375,000. The three transactions are not independent. Wertz and the corporation are effectively the same entity. The third party serves no purpose other than as an accomplice to increase the value of the franchise fraudulently.

Req. 2

Potential buyers of the individual-language franchises can be harmed. Wertz's balance sheet overstates his assets. If outsiders believe his balance sheet, they may be induced to pay Wertz more than the individual-language franchises are worth.

Lenders can also be harmed by loaning money to Wertz on more favourable terms than his financial position warrants.

The public is also defrauded if Wertz amortizes the cost of the franchise for income tax purposes. Basing amortization on \$375,000 overstates tax deductions and understates the corporation's income. As a result, the tax payments are lower than they should be.

Accounting plays the role of recording assets at their cost. This sequence of events was an attempt to arbitrarily increase the value at which the franchise was recorded.

Note: One of the authors experienced this actual situation in his first job after college.

Problems

Group A

(10-20 min.) **P 13-1A**

DATE: _____
TO: Mark Mathews and Karen Willamas
FROM: Student Name
SUBJECT: Advantages and disadvantages of the corporate form of business organization

The corporate form of business organization offers some advantages over the proprietorship and the partnership forms. An important advantage of an established corporation is the limited liability of shareholders for business debts. This enables a person to invest in a corporation without having to assume any personal obligation for the corporation's liabilities. The most that an investor can lose from investing in a corporation is his or her investment in the business.

The separate legal existence of the corporation apart from its owners eases the transfer of ownership from one person to another. A shareholder buying into or selling out of a corporation has no effect on the operation of the corporation. A shareholder cannot commit the corporation to an obligation unless he or she is an officer of the business. These features enable a corporation to raise money from a large number of people. A partnership can raise owners' equity only from the partners. Most corporations have more owners and can grow larger than a partnership.

Shareholders elect a board of directors that appoints corporate officers to manage the business. It is important that corporate officers manage the business for the benefit of the shareholders. In a partnership, the partners manage the business for their benefit only.

Corporations often have to pay fees to organize as a corporation. Corporations are also taxed on their business income but for an active business this rate is less than the one an individual would pay. It is also possible to smooth out large fluctuations in income by deferring salary payments to a subsequent year, which cannot be done by an individual. However, if the corporation pays dividends, the shareholders also pay income tax on the dividend income. Therefore, shareholders are subject to a form of double taxation.

Also, corporations are regulated more heavily than partnerships. Complying with various regulations can be expensive for a corporation. Corporations also may incur additional costs compared to partnerships, such as liability insurance for a corporation's directors.

Instructional Note: Student responses will vary considerably.

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Aug.	2	Organization Costs (\$6,000 + \$16,000)		22,000	
		Cash			22,000
		Paid fees and legal fees to incorporate.			
	2	Cash		337,500	
		Common Shares (45,000 shares)			337,500
		Issued common shares to the incorporators.			
Dec.	10	Computer Equipment		80,000	
		Preferred Shares (1,000 shares)			80,000
		Issued preferred shares to acquire a			
		computer system.			
	16	Cash		120,000	
		Common Shares (15,000 shares)			120,000
		Issued common shares for cash.			

Req. 2 (shareholders' equity section of balance sheet)

(continued) **P 13-2A**

A-1 Services Inc.	
Balance Sheet (partial)	
December 31, 2014	
Shareholders' Equity	
Contributed capital:	
Preferred shares, \$2.50, 500,000 shares authorized, 1,000 shares issued	\$ 80,000
Common shares, 2,000,000 shares authorized, 60,000 shares issued*	<u>457,500**</u>
Total contributed capital	537,500
Retained earnings	<u>130,000</u>
Total shareholders' equity	<u>\$667,500</u>

* $20,000 + 25,000 + 15,000 = 60,000$

** $\$150,000 + \$187,500 + \$120,000 = \$457,500$

Req. 1

\$4.00 is the annual dividend rate on the preferred shares.

$$\text{Annual dividend on 2,500 shares} = \$10,000 (\$4.00 \times 2,500 \text{ shares})$$

Req. 2

Average issue price of common shares during 2013 =

$$\$1.50 \text{ per share } (\$225,000 \div 150,000 \text{ shares})$$

Req. 3

First-year operations were not profitable, as shown by the Deficit in Retained Earnings. Riverbend Inc. lost \$50,000 in the first year of operations.

Req. 4

a. Cash	30,000	
Preferred Shares (1,500 × \$20)		30,000
b. Cash	8,750	
Common Shares (5,000 × \$1.75)		8,750
c. Building	250,000	
Common Shares (100,000 × \$2.50)		250,000
d. Income Summary	150,000	
Retained Earnings		150,000

Riverbend Inc.	
Balance Sheet (partial)	
December 31, 2014	
Shareholders' Equity	
Contributed capital:	
Preferred shares, \$4.00, 200,000 shares authorized, 1,500 shares issued	\$ 30,000
Common shares, 1,000,000 shares authorized, 255,000 shares* issued	<u>483,750**</u>
Total contributed capital	513,750
Retained earnings	<u>100,000**</u>
	*
	-
Total shareholders' equity	<u>\$613,750</u>

Computations:

$$* \quad 150,000 + 5,000 + 100,000 = 255,000$$

$$** \quad \$225,000 + \$8,750 + \$250,000 = \$483,750$$

$$*** \quad (\$50,000) + \$150,000 = \$100,000$$

Play-time Equipment Ltd.	
Balance Sheet (partial)	
December 31, 2014	
Shareholders' Equity	
Contributed capital:	
Common shares, 200,000 shares authorized and issued	<u>\$600,000</u>
Total contributed capital	600,000
Retained earnings (deficit)	<u>(10,000)</u>
Total shareholders' equity	<u>\$590,000</u>

Computations:

Common shares: $200,000 \times \$3 = \$600,000$

Retained earnings: $-\$75,000 - \$30,000 + \$35,000 + \$60,000 = -\$10,000$

Lil-tikes Products Inc.	
Balance Sheet (partial)	
December 31, 2014	
Shareholders' Equity	
Contributed capital:	
Preferred shares, \$1.10, cumulative, 200,000 shares authorized, 2,000 shares issued	\$ 25,000
Common shares, 1,000,000 shares authorized, 100,000 shares issued	<u>300,000</u>
Total contributed capital	325,000
Retained earnings	<u>120,600</u>
Total shareholders' equity	<u>\$445,600</u>

Computations:

Preferred shares: $2,000 \times \$12.50 = \$25,000$

Common shares: Balance given as \$300,000

Retained earnings: $\$75,000 + \$50,000 - (2,000 \times \$1.10 \times 2) = \$120,600$

Req. 1

Redfern Limited has \$2.75 cumulative preferred shares and common shares outstanding.

Req. 2

The average issue price per preferred share is \$4.00 ($\$400,000 \div 100,000$ shares issued).

Req. 3

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Cash		400,000	
		Preferred Shares			400,000
		Cash		1,850,000	
		Common Shares			1,850,000

Req. 4

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
June	30	Retained Earnings		400,000	
		Dividends Payable—Preferred Shares			275,000
		Dividends Payable—Common Shares			125,000

$100,000 \text{ shares} \times \$2.75 = \$275,000$

Req. 1

(40-50 min.) **P 13-6A**

Etse Manufacturing Inc.		
Balance Sheet		
December 31, 2014		
Assets		
Current assets:		
Cash	\$ 35,000	
Accounts receivable, net	100,000	
Inventory	190,500	
Prepaid expenses	<u>15,500</u>	
Total current assets		\$ 341,000
Property, plant, and equipment, net		381,000
Patent, net		<u>37,000</u>
Total assets		<u>\$759,000</u>
Liabilities		
Current liabilities:		
Accounts payable	\$ 36,000	
Dividends payable	4,500	
Accrued liabilities	<u>23,000</u>	
Total current liabilities		63,500
Long-term note payable		<u>100,500</u>
Total liabilities		164,000
Shareholders' Equity		
Contributed capital:		
Preferred shares, \$0.15, 25,000 shares authorized, 6,000 shares issued	30,000	
Common shares, 100,000 shares authorized, 33,000 shares Issued	<u>165,000</u>	
Total contributed capital	195,000	
Retained earnings	<u>400,000*</u>	
Total shareholders' equity		<u>595,000</u>
Total liabilities and shareholders' equity		<u>\$759,000</u>

*Retained earnings = Total assets – Total liabilities – Total contributed capital
= \$759,000 – \$164,000 – \$195,000 = \$400,000

Req. 2

(continued) **P 13-6A**

$$\begin{array}{l} \text{Rate of} \\ \text{return on} \\ \text{total assets} \end{array} = \frac{\begin{array}{l} \text{Net income} \\ + \text{Interest expense} \end{array}}{\begin{array}{l} \text{Average total} \\ \text{assets} \end{array}} = \frac{\$140,750 + \$10,850}{(\$759,000 + \$567,500)/2} = \frac{\$151,600}{\$663,250}$$

$$= 0.2286 \text{ or } 22.86\%$$

$$\begin{array}{l} \text{Rate of return} \\ \text{on common} \\ \text{shareholders'} \\ \text{equity} \end{array} = \frac{\begin{array}{l} \text{Net income} \\ - \text{Preferred} \\ \text{dividends} \end{array}}{\begin{array}{l} \text{Average common} \\ \text{shareholders'} \\ \text{equity} \end{array}} = \frac{\$140,750 - (6,000 \times \$0.15)}{(\$565,000^* + \$520,000)/2} = \frac{\$139,850}{\$542,500}$$

$$= 0.2578 \text{ or } 25.78\%$$

* Total shareholders' equity	\$595,000
Less: Preferred equity	<u>30,000</u>
Common shareholders' equity	<u>\$565,000</u>

Req. 3

These rates of return suggest some strength. Return on common shareholders' equity is higher than the return on assets.

Preparing a fairly complex balance sheet will refine students' understanding of the shareholders' equity of a corporation. This will help students understand what they are buying (shareholders' equity) when they purchase a company's shares as an investment.

This problem also exposes students to two widely-used measures of profitability—return on assets and return on common shareholders' equity. Students, investors, and others can evaluate investments on the basis of their returns on assets and returns on equity. Higher return figures generally indicate better investments. Although these return measures are not the only indicators of profitability that investors use, they are helpful—along with other decision-making aids—in evaluating investments.

Req. 1a (preferred shares are noncumulative)

(20-30 min.) **P 13-7A**

Everest Corporation			
Total Dividends to Preferred and Common Shares for 2011, 2012, and 2013			
	PREFERRED	COMMON	TOTAL
2011			
	<u>0</u>	<u>0</u>	<u>\$ 0</u>
2012			
Preferred (50,000 × \$0.50)	<u>\$25,000</u>		
Remainder to common		<u>\$99,000</u>	
Total			<u>\$124,000</u>
2013			
Preferred (50,000 × \$0.50)	<u>\$25,000</u>		
Remainder to common		<u>\$235,000</u>	
Total			<u>\$260,000</u>

Req. 1b (preferred shares are cumulative)

Everest Corporation			
Total Dividends to Preferred and Common Shares for 2011, 2012, and 2013			
	PREFERRED	COMMON	TOTAL
2011			
	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
2012			
2011 in arrears to preferred			
(\$50,000 × \$0.50)	\$ 25,000		
Current to preferred (50,000 × \$0.50)	25,000		
Remainder to common		<u>\$74,000</u>	
Total	<u>\$ 50,000</u>	<u>\$74,000</u>	<u>\$124,000</u>
2013			
Current to preferred (50,000 × \$0.50)	<u>\$25,000</u>		
Remainder to common		<u>\$235,000</u>	
Total			<u>\$260,000</u>

General Journal				
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	CREDIT
2013				
Dec.	22	Retained Earnings		260,000
		Dividends Payable—Preferred Shares		25,000
		Dividends Payable—Common Shares		235,000
		To declare dividends on shares.		
2014				
Jan.	12	Dividends Payable—Preferred Shares		25,000
		Dividends Payable—Common Shares		235,000
		Cash		260,000
		To pay dividend declared December 22, 2013.		

Req. 1

The preferred shares are labelled as *cumulative*.

Req. 2

Total contributed capital is \$728,000 (\$200,000 + \$528,000)

Req. 3

Total market value of the common shares: \$1,232,000

$$44,000 \text{ shares} \times \$28.00 \text{ per share} = \$1,232,000$$

Req. 4 (book value per share of preferred and common shares)

Liquidation value (10,000 × \$24.00)	\$240,000
Cumulative dividend for two years (10,000 × \$1.20 × 2)	<u>24,000</u>
Shareholders' equity allocated to preferred	<u>\$264,000</u>

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$896,000 - \$264,000}{44,000} \\
 &= \$14.36
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{\$240,000 + \$24,000}{10,000} \\
 &= \$26.40
 \end{aligned}$$

Req. 1

(40-50 min.) **P 13-9A**

General Journal					
DATE 2012		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Dec.	1	Retained Earnings		180,000	
		Dividends Payable—Preferred Shares			112,500
		Dividends Payable—Common Shares, Class A			7,941*
		Dividends Payable—Common Shares, Class B			59,559*
		To record dividends declared on shares. (30,000 × \$1.25 × 3 years)			
	31	Income Summary		60,000	
		Retained Earnings			60,000
		To close books and record net income for year.			
2013					
Jan.	7	Cash		235,000	
		Preferred Shares			235,000
		Sale of preferred shares for cash. (10,000 × \$23.50)			
	15	Dividends Payable—Preferred Shares		112,500	
		Dividends Payable—Common Shares, Class A		7,941	
		Dividends Payable—Common Shares, Class B		59,559	
		Cash			180,000
		Payment of dividends declared December 1			
Feb.	14	Cash		165,000	
		Common Shares—Class B			165,000
		Sale of common shares for cash. (15,000 × \$11)			

* Class A common shares 20,000 (or 2/17 of total common shares)
 Class B common shares 150,000 (or 15/17 of total common shares)
 170,000

Class A = $2/17 \times (\$180,000 - \$112,500) = \$7,941$

Class B = $15/17 \times (\$180,000 - \$112,500) = \$59,559$

General Journal					
DATE 2013		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Dec.	2	Retained Earnings		120,000	
		Dividends Payable—Preferred			50,000
		Dividends Payable—Common Shares, Class A			7,568*
		Dividends Payable—Common Shares, Class B			62,432*
		To record dividends declared on shares. (40,000 × \$1.25)			
	31	Income Summary		145,000	
		Retained Earnings			145,000
		To close books and record net income for year.			
2014					
Jan.	15	Dividends Payable—Preferred		50,000	
		Dividends Payable—Common Shares, Class A		7,568	
		Dividends Payable—Common Shares, Class B		62,432	
		Cash			120,000
		Payment of dividends declared December 2.			

* Class A common shares	20,000	(or 2/18.5 of total shares)
Class B common shares (150,000 + 15,000)	<u>165,000</u>	(or 16.5/18.5 of total shares)
	<u>185,000</u>	

Class A = $2/18.5 \times (\$120,000 - \$50,000) = \$7,568$

Class B = $16.5/18.5 \times (\$120,000 - \$50,000) = \$62,432$

Req. 2

(continued) **P 13-9A**

Computer Metals Processing Ltd.		
Partial Balance Sheet		
December 31, 2013		
Liabilities		
Current:		
Dividend payable	\$ 120,000	
Total current liabilities		<u>\$ 120,000</u>
Total liabilities		120,000
Shareholders' Equity		
Contributed capital:		
Preferred shares, \$1.25 cumulative, liquidation price of \$20.00, 100,000 shares authorized, 40,000 shares issued	\$435,000	
Common shares:		
Class A, 20,000 shares authorized and issued	125,000	
Class B, unlimited number of shares authorized, 165,000 shares issued	<u>1,665,000</u>	
Total contributed capital	2,225,000	
Retained earnings*	<u>205,000</u>	
Total shareholders' equity		<u>2,430,000</u>
Total liabilities and shareholders' equity		<u>\$2,550,000</u>

*Retained earnings: \$300,000 – \$180,000 + \$60,000 – \$120,000 + \$145,000 = \$205,000

Req. 3

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$2,430,000 - (40,000 \times \$20.00)}{185,000} \\
 &= \$8.81
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{(\$20.00 \times 40,000) + \$0}{40,000} \\
 &= \$20
 \end{aligned}$$

Req. 4

$$\$125,000 / 20,000 = \$6.25 \text{ per share}$$

Problems

Group B

(10-20 min.) **P 13-1B**

DATE: _____
TO: Jack Rudd and Pam Kines
FROM: Student Name
SUBJECT: Advantages and disadvantages of the corporate form of business organization

A corporation has a separate legal existence apart from its owners. This eases the transfer of ownership from one person to another with no effect on the operation of the corporation. A shareholder cannot commit the corporation to an obligation unless he or she acts in an official capacity for the business. The owners do not have personal liability for the debts and other actions of the business. In many corporations, ownership is separate from management as the board of directors appoints professionals to manage the business on a day-to-day basis. The continuous life and transferability of ownership make it easy for a corporation to raise money from a large number of people. A partnership, on the other hand, can raise owners' equity only from the partners. The net result of these features is that most corporations have more owners and can grow larger than a partnership, the owners do not assume personal liability for debts of the corporation, and the business should be managed for the benefit of all the shareholders.

Corporations have disadvantages as compared to the partnership form of organization. Corporations often have to pay fees to organize. Corporations are also taxed on their business income but the rate for an active business is less than the one for an individual. If the corporation pays dividends, the shareholders also pay income tax on the dividend income. Therefore, shareholders may be subject to a degree of double taxation. Corporations are regulated more heavily than partnerships. Complying with various regulations can be expensive for a corporation. Corporations also may incur additional costs compared to partnerships, such as liability insurance for a corporation's directors.

Instructional Note: Student responses will vary considerably.

Req. 1 (journal entries)

(30-45 min.) **P 13-2B**

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Jan.	2	Organization Costs (\$2,500 + \$6,000)		8,500	
		Cash			8,500
		Paid costs and legal fees to incorporate.			
	6	Equipment		175,000	
		Common Shares			175,000
		Issued 20,000 common shares for equipment.			
	12	Software		19,500	
		Preferred Shares			19,500
		Issued 100 preferred shares to acquire software.			
	22	Cash		35,000	
		Common Shares			35,000
		Issued 5,000 common shares for cash. (5,000 × \$7)			

Req. 2 (shareholders' equity section of balance sheet)

Gingrich Solutions Ltd.	
Balance Sheet (partial)	
December 31, 2014	
Shareholders' Equity	
Contributed capital:	
Preferred shares, \$2.00, 100,000 shares authorized, 100 shares issued	\$ 19,500
Common shares, 250,000 shares authorized, 25,000 shares issued*	<u>210,000**</u>
Total contributed capital	229,500
Retained earnings	<u>60,000</u>
Total shareholders' equity	<u>\$289,500</u>

* 20,000 + 5,000 = 25,000

** \$175,000 + \$35,000 = \$210,000

Req. 1

The annual dividend rate on the preferred shares is \$0.20.

$$\text{Annual dividend on 4,000 shares} = \$800 (\$0.20 \times 4,000 \text{ shares})$$

Req. 2

Issue price of common shares during 2013 =

$$\$8.75 \text{ per share } (\$87,500 / 10,000 \text{ shares})$$

Req. 3

First-year operations were not profitable, as shown by the Deficit in Retained Earnings.

Req. 4

a. Cash	25,000	
Preferred Shares (10,000 × \$2.50)		25,000
b. Cash	9,000	
Common Shares (1,000 × \$9)		9,000
c. Building	235,000	
Common Shares		235,000
d. Income Summary	62,500	
Retained Earnings		62,500

Req. 5

Sloboda Corporation	
Balance Sheet (partial)	
December 31, 2014	
Contributed capital:	
Preferred shares, \$0.20, 50,000 shares authorized, 10,000 shares issued	\$ 25,000
Common shares, 100,000 shares authorized, 36,000* shares issued	<u>331,500**</u>
Total contributed capital	356,500
Retained earnings	<u>42,500***</u>
Total shareholders' equity	<u>\$399,000</u>

Computations:

$$*10,000 + 1,000 + 25,000 = 36,000$$

$$** \$87,500 + \$9,000 + \$235,000 = \$331,500$$

$$*** \$62,500 - \$20,000 = \$42,500$$

(20-30 min.) **P 13-4B**

Rexell Inc.	
Balance Sheet (partial)	
December 31, 2014	
Contributed capital:	
100,000 common shares authorized and issued	<u>\$1,000,000</u>
Total contributed capital	1,000,000
Retained earnings	<u>65,000</u>
Total shareholders' equity	<u>\$1,065,000</u>

Computations:

Common shares: $100,000 \times \$10 = \$1,000,000$

Retained earnings: $-\$30,000 + \$45,000 + \$50,000 = \$65,000$

Raonic Corp.	
Balance Sheet (partial)	
December 31, 2014	
Contributed capital:	
Preferred shares, \$1.25, cumulative, 50,000 shares authorized, 4,000 shares issued	\$ 40,000
Common shares, 500,000 shares authorized, 60,000 shares issued	<u>150,000</u>
Total contributed capital	190,000
Retained earnings	<u>77,500</u>
Total shareholders' equity	<u>\$267,500</u>

Computations:

Preferred shares: $4,000 \times \$10 = \$40,000$

Common shares: Balance given as \$150,000

Retained earnings: $\$55,000 + \$62,500 - (4,000 \text{ shares} \times \$1.25 \times 2 \text{ years}) - (60,000 \text{ shares} \times \$0.50)$
 $= \$77,500$

Req. 1

Preferred shares
Common shares

Req. 2

The preferred shares are cumulative based on their balance-sheet description.

Req. 3 (entries to record issuance of shares)

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Cash		32,500	
		Preferred Shares			32,500
		Cash		100,000	
		Common Shares			100,000

Req. 4

General Journal					
DATE 2014		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
Dec.	31	Retained Earnings		15,000	
		Dividends Payable—Preferred Shares			5,000*
		Dividends Payable—Common Shares			10,000
		To record the declaration of dividends on			
		preferred shares for the current year and			
		all arrears, and on common shares.			

* $10,000 \times \$0.25 \times 2 \text{ years} = \$5,000$

Req. 1

(40-50 min.) **P 13-6B**

Labelle Systems Ltd.		
Balance Sheet		
June 30, 2014		
Assets		
Current assets:		
Cash	\$ 15,000	
Accounts receivable, net	52,500	
Inventory	93,500	
Prepaid expenses	<u>12,000</u>	
Total current assets		\$173,000
Property, plant, and equipment, net		300,000
Trademark, net		<u>19,000</u>
Total assets		<u>\$492,000</u>
Liabilities		
Current liabilities:		
Accounts payable	\$ 36,000	
Dividends payable	10,500	
Accrued liabilities	<u>30,000</u>	
Total current liabilities		76,500
Long-term note payable		<u>48,500</u>
Total liabilities		125,000
Shareholders' Equity		
Contributed capital:		
Preferred shares, \$0.20, 10,000 shares authorized and issued	29,500	
Common shares, 500,000 shares authorized, 272,000 shares issued	<u>300,000</u>	
Total contributed capital	329,500	
Retained earnings	<u>37,500*</u>	
Total shareholders' equity		<u>367,000</u>
Total liabilities and shareholders' equity		<u>\$492,000</u>

*Retained earnings = Total assets – Total liabilities – Total contributed capital
 = \$492,000 – \$125,000 – \$329,500 = \$37,500

Req. 2**(continued) P 13-6B**

$$\begin{array}{l} \text{Rate of} \\ \text{return on} \\ \text{total assets} \end{array} = \frac{\begin{array}{l} \text{Net income} \\ + \text{Interest expense} \end{array}}{\begin{array}{l} \text{Average total} \\ \text{assets} \end{array}} = \frac{\$25,000 + \$7,200}{(\$492,000 + \$410,000/2)} = \frac{\$32,200}{\$451,000}$$

$$= 0.071 \times 100 = 7.1\%$$

$$\begin{array}{l} \text{Rate of return} \\ \text{on common} \\ \text{shareholders'} \\ \text{equity} \end{array} = \frac{\begin{array}{l} \text{Net income} \\ - \text{Preferred} \\ \text{dividends} \end{array}}{\begin{array}{l} \text{Average common} \\ \text{shareholders'} \\ \text{equity} \end{array}} = \frac{\$25,000 - (10,000 \times \$0.20)}{(\$337,500^* + \$200,000)/2} = \frac{\$23,000}{\$268,750}$$

$$= 0.086 \times 100 = \underline{8.6\%}$$

* Total shareholders' equity	\$367,000
Less: Preferred equity	<u>29,500</u>
Common shareholders' equity	<u>\$337,500</u>

Req. 3

These rates of return suggest weakness. Return on common shareholders' equity is only 1.5% higher than return on assets. An 8.6% rate of return on common shareholders' equity is good considering bank savings rates are currently below 2%; a 12% return is considered excellent in most industries.

Preparing a fairly complex balance sheet will refine students' understanding of the shareholders' equity of a corporation. This will help students understand what they are buying (shareholders' equity) when they purchase a company's shares as an investment.

This problem also exposes students to two widely-used measures of profitability—return on assets and return on common shareholders' equity. Students, investors, and others can evaluate investments on the basis of their returns on assets and returns on equity. Higher return figures generally indicate better investments. Although these return measures are not the only indicators of profitability that investors use, they are helpful—along with other decision-making aids—in evaluating investments.

Req. 1a (preferred shares are noncumulative)

(20-30 min.) **P 13-7B**

Brappit Broadcasting Inc.			
Total Dividends to Preferred and Common Shares for 2012, 2013, and 2014			
	PREFERRED	COMMON	TOTAL
2012			
Preferred (15,000 × \$2.50)	<u>\$37,500</u>		
Remainder to common		<u>\$ 7,500</u>	
Total			<u>\$ 45,000</u>
2013			
	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
2014			
Preferred (15,000 × \$2.50)	<u>\$37,500</u>		
Remainder to common		<u>\$92,500</u>	
Total			<u>\$130,000</u>

Req. 1b (preferred shares are cumulative)

Brappit Broadcasting Inc.			
Total Dividends to Preferred and Common Shares for 2012, 2013, and 2014			
	PREFERRED	COMMON	TOTAL
2012			
Preferred (15,000 × \$2.50)	<u>\$37,500</u>		
Remainder to common		<u>\$ 7,500</u>	
Total			<u>\$ 45,000</u>
2013			
	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
2014			
Arrears to preferred (15,000 × \$2.50)	<u>\$37,500</u>		
Current to preferred (15,000 × \$2.50)	<u>37,500</u>		
Remainder to common		<u>\$55,000</u>	
Total	<u>\$75,000</u>	<u>\$55,000</u>	<u>\$130,000</u>

Req. 2 (dividend entries)

(continued) **P 13-7B**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATION	POST. REF.	DEBIT	CREDIT
2014					
Dec.	28	Retained Earnings		130,000	
		Dividends Payable—Preferred Shares			75,000
		Dividends Payable—Common Shares			55,000
		To declare dividends on shares.			
2015					
Jan.	17	Dividends Payable—Preferred Shares		75,000	
		Dividends Payable—Common Shares		55,000	
		Cash			130,000
		To pay dividends declared on Dec. 28, 2014.			

Req. 1

The preferred shares are labelled as *cumulative*.

Req. 2

The common shareholders control the company because the preferred shares are nonvoting.

Req. 3

Total contributed capital is \$690,000 (\$350,000 + \$340,000)

Req. 4

Total market value of the common shares: \$270,000

$$90,000 \text{ shares} \times \$3.00 \text{ per share} = \$270,000$$

Req. 5 (book value per share of preferred and common shares)

Liquidation value	\$350,000
Cumulative dividend for three years ($16,000 \times \$1.40 \times 3$)	<u>67,200</u>
Shareholders' equity allocated to preferred	<u>\$417,200</u>

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$810,000 - \$417,200}{90,000} \\
 &= \$4.36
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{\$350,000 + \$67,200}{16,000} \\
 &= \$26.08
 \end{aligned}$$

General Journal					
DATE 2012		ACCOUNT TITLES AND EXPLANATION	POST. REF.	DEBIT	CREDIT
Dec.	1	Retained Earnings		170,000	
		Dividends Payable—Preferred Shares			120,000
		Dividends Payable—Common Shares, Class A			8,333*
		Dividends Payable—Common Shares, Class B			41,667*
		To record dividends declared on shares. (40,000 × \$0.75 × 4 years)			
	31	Income Summary		80,000	
		Retained Earnings			80,000
		To close books and record net income for year.			
2013					
Jan.	7	Cash		225,000	
		Preferred Shares			225,000
		Sale of preferred shares for cash. (10,000 shares × \$22.5)			
	14	Dividends Payable—Preferred Shares		120,000	
		Dividends Payable—Common Shares, Class A		8,333	
		Dividends Payable—Common Shares, Class B		41,667	
		Cash			170,000
		Payment of dividends declared December 1, 2012.			
Feb.	14	Cash		75,000	
		Common Shares—Class B			75,000
		Sale of common shares for cash. (15,000 shares × \$5)			

* Class A common shares 15,000 (or 1/6 of total shares)
 Class B common shares 75,000 (or 5/6 of total shares)
 90,000

Class A = $\frac{1}{6} \times (\$170,000 - \$120,000) = \$8,333$

Class B = $\frac{5}{6} \times (\$170,000 - \$120,000) = \$41,667$

General Journal

General Journal					
DATE 2013		ACCOUNT TITLES AND EXPLANATION	POST. REF.	DEBIT	CREDIT
Dec.	2	Retained Earnings		75,000	
		Dividends Payable—Preferred Shares			37,500
		Dividends Payable—Common Shares, Class A			5,357*
		Dividends Payable—Common Shares, Class B			32,143*
		To record dividends declared on shares. (50,000 × \$0.75)			
	31	Income Summary		63,000	
		Retained Earnings			63,000
		To close books and record net income for year.			
2014					
Jan.	13	Dividends Payable—Preferred Shares		37,500	
		Dividends Payable—Common Shares, Class A		5,357	
		Dividends Payable—Common Shares, Class B		32,143	
		Cash			75,000
		Payment of dividends declared December 2, 2013.			

* Class A common shares	15,000	(or 1/7 of total shares)
Class B common shares (75,000 + 15,000)	<u>90,000</u>	(or 6/7 of total shares)
	<u>105,000</u>	

Class A = $1/7 \times (\$75,000 - \$37,500) = \$5,357$

Class B = $6/7 \times (\$75,000 - \$37,500) = \$32,143$

Req. 2

(continued) **P 13-9B**

Bohemia Nursery Ltd.		
Partial Balance Sheet		
December 31, 2013		
Shareholders' Equity		
Contributed capital:		
Preferred shares, \$0.75, cumulative (no arrears),		
liquidation price of \$25, 100,000 shares		
authorized, 50,000 shares issued	\$1,025,000	
Common shares:		
Class A, 15,000 shares authorized and issued	120,000	
Class B, unlimited number of shares authorized,		
90,000 shares issued	<u>450,000</u>	
Total contributed capital		\$ 1,595,000
Retained earnings*		<u>198,000</u>
Total shareholders' equity		<u>\$1,793,000</u>

*Retained earnings: \$300,000 – \$170,000 + \$80,000 – \$75,000 + \$63,000 = \$198,000

Req. 3

$$\begin{aligned}
 \text{Book value per common share} &= \frac{\text{Shareholders' equity} - \text{Preferred equity}}{\text{Number of common shares outstanding}} \\
 &= \frac{\$1,793,000 - (50,000 \times \$25.00)}{105,000} \\
 &= \$5.17
 \end{aligned}$$

$$\begin{aligned}
 \text{Book value per preferred share} &= \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}} \\
 &= \frac{(\$50.00 \times 50,000) + \$0}{50,000} \\
 &= \$25
 \end{aligned}$$

Req. 4

$$\$120,000 / 15,000 = \$8.00 \text{ per share}$$

Challenge Problems

P 13-1C

The student should look critically at incorporation from Bryan McNair's perspective.

Separate legal entity	This characteristic is not really an advantage to Bryan based on the information given. He does not appear to be interested in taking on co-owners.
Continuous life	This may be an advantage later but does not appear to be an advantage at this time.
No mutual agency	This characteristic does not appear to be advantageous unless Bryan sells shares to other people. The question states that the plan is for Bryan to hold all the shares.
Limited liability	Limited liability would protect Bryan's business assets from creditors other than the bank. It would also protect any of Bryan's personal assets that do not form part of the bank's security.
Separation of ownership and management	Bryan will be the shareholder and the manager so this characteristic is not an issue.
Corporate taxation	The students are not likely to be aware of the fact that corporate taxes and taxes on dividends may result in Bryan being taxed at a lower rate if he incorporates. The student is likely to suggest that Bryan's taxes will be the same or higher if he incorporates.
Personal taxation	Students are likely unaware that by incorporating, if Bryan were to eventually sell his shares in the company, the first \$500,000 of capital gains would be tax free.
Government regulation	This characteristic would be a drawback as it is likely that Bryan would have to spend more time preparing and filing forms.
Corporation costs	As the sole shareholder, Bryan would also be the sole director, and as a director, he could be sued by outsiders doing business with his company. To protect himself, he would have to pay for director's liability insurance, an additional cost of incorporating.
Conclusion	The student may decide either way—the evidence suggests incorporation may not be advantageous to Bryan at this point.

1. Jan 15

Cash	400,000	
Common Shares—Class A		400,000

To issue Class A common shares at \$8.00 per share (50,000 × \$8.00).

2. Feb. 28

Cash	100,000	
Common Shares—Class B		100,000

To issue Class B common shares at \$10 per share (10,000 × \$10.00).

3. Value this transaction at either the fair market value of the land or the trading value of the shares, whichever is the better indicator of fair market value.

Aug. 8

Land	165,000	
Common Shares—Class B		165,000

To issue 15,000 common shares at \$11.00 per share in exchange for land.

4. Balances for, and details about, each class of shares must be given in the Shareholders' Equity section or in the notes to the financial statements.

Shareholders' equity

Contributed capital:

Common shares, Class A voting,	
100,000 shares authorized,	
50,000 shares issued	\$400,000
Common shares, Class B nonvoting	
200,000 shares authorized,	
25,000 shares issued	<u>265,000</u>
Total contributed capital	665,000
Retained earnings	<u>100,000</u>
Total shareholders' equity	<u>\$765,000</u>

5. The average issue price was \$10.60 per share (\$265,000 ÷ 25,000).
6. The voting privilege was withheld by specific agreement; the articles of incorporation specified the Class B common shares were nonvoting.

P 13-3C

Common	The shares pay the lowest rate of return at 6% (\$2.40/\$40.00) but have the potential for paying a higher (or lower) rate of return in the future. Any missed dividends are missed forever. In addition, the market price of the shares has the potential for increasing.
Cumulative preferred	The rate of return is 7% (\$3.50/\$50.00) and the dividend is cumulative. This is an advantage since shareholders will receive a yearly dividend; a year might be missed but must be made up before the common shareholders receive a dividend. The share price will not be likely to change much up or down.
Convertible preferred	The rate of return is 6.75% (\$5.30/\$78.50) and is fixed; the dividend is not cumulative. The shares are convertible into common at the rate of 1 preferred for 2 common. The present prices would give the shareholder a cost per common share after conversion of \$39.25 (\$78.50/2), which is below the current market price of \$40.00.
Noncumulative preferred	The rate of return is 6.2% (\$1.55/\$25.00). The present dividend at 6.2% is just slightly higher than the rate on common of 6%. The share price is not likely to move much up or down.
Decision	The student may select any one of the shares, other than the noncumulative preferred, given the cumulative preferred have a higher rate of return, and the cumulative feature has value. The common may appreciate in value; the cumulative preferred may be preferable if ERI's income fluctuates so that a dividend may be omitted in any one year; the convertible preferred may be advantageous since it pays a higher dividend than the common and the shareholder can take advantage of an increase in the price of common shares by exercising the conversion feature.

Decision Problem

Req. 1

(30-45 min.) **Decision Problem**

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Software		100,000	
		Common Shares (100,000 shares)			100,000
		To incorporate the business and issue			
		common shares to the incorporators for			
		their software.			

Req. 2

General Journal					
DATE		ACCOUNT TITLES AND EXPLANATIONS	POST. REF.	DEBIT	CREDIT
		Plan 1:			
		Cash		100,000	
		Preferred Shares (1,000 shares)			100,000
		To issue preferred shares to outside investors.			
		Cash		72,000	
		Common Shares (60,000 shares)			72,000
		To issue common shares to outside investors.			
		Plan 2:			
		Cash		150,000	
		Preferred Shares (1,200 shares)			150,000
		To issue preferred shares to outside investors.			

Req. 3**Plan 1:**

Shareholders' Equity	
Contributed capital:	
Preferred shares, \$7.50, cumulative, 10,000 shares authorized,	
1,000 shares issued	\$100,000
Common shares, 1,000,000 shares authorized, 160,000 shares issued	<u>172,000</u>
Total contributed capital	272,000
Retained earnings (\$184,000 – \$34,800)	<u>149,200</u>
Total shareholders' equity	<u>\$421,200</u>

Plan 2:

Shareholders' Equity	
Contributed capital:	
Preferred shares, \$8.50, nonvoting, noncumulative,	
10,000 shares authorized, 1,200 shares issued	\$150,000
Common shares, 1,000,000 shares authorized, 100,000 shares issued	<u>100,000</u>
Total contributed capital	250,000
Retained earnings (\$184,000 – \$34,800)	<u>149,200</u>
Total shareholders' equity	<u>\$399,200</u>

Req. 4

Plan 2 appears to fit the plan of Carlyle and Friesen better than Plan 1. Recall that their primary goal is to raise as much capital as possible without giving up control of the business. Under Plan 1, the preferred shares have voting rights if the dividends are more than two years in arrears. If they fall into arrears then the outside shareholders would have 110,000 votes (60,000 common votes and 50,000 preferred votes). If they can be sure that they will be able to make profits so that they can pay dividends of \$7,500 each year then this plan will fit their requirements. However, if they fail to pay the dividends, then Carlyle and Friesen will lose control because they will only have 100,000 votes.

Under Plan 2, the preferred shares do not have a vote even if the dividends are in arrears. Consequently Carlyle and Friesen would have complete control since they alone have voting shares.

The reason that Carlyle and Friesen are switching to a corporation is to raise capital. What they will have to decide is whether they need the additional \$22,000 so badly that they are prepared to take the risk that they cannot pay dividends. If \$150,000 is sufficient for their needs, then they would be better off to take the certainty of Plan 2.

Financial Statement Cases

(20-30 min.) Financial Statement Case 1

1. The balance sheet states that share capital has a value of \$100,436,000. No further breakdown is provided on the balance sheet, but the reader is referred to Note 10. In this note, more detail is provided.

Authorized shares:

- An unlimited number of common shares without par value

Shares issued and outstanding:

- 121,330,544 common shares
2. No shares were issued. It appears under Note 10 (c) that the number of common shares decreased during the year from 121,351,998 shares in October 2010 to 121,330,544 shares in October 2011. Another way to know this is from Note 10 (d) where it states there was a 'normal course issuer bid' that resulted in shares being repurchased and cancelled.

(15-20 min.) Financial Statement Case 2

1. Note 12 in the financial statements indicates that Rainmaker Entertainment Inc. ÷has authorized and unlimited number of common shares. There are no preferred shares. The number of shares is stated on the Consolidated Statement of Changes in Shareholders' Equity – 17,485,175.

2.

$$\begin{aligned}\text{Book value} &= \text{Total shareholders equity} \div \text{Total outstanding shares} \\ &= \$10,207,238 \div 17,485,175 \\ &= \$0.58\end{aligned}$$

The book value is based on historical cost as reported on the balance sheet. The market price varies from it because it reflects the hopes and fears of investors regarding the future value of the company and its profitability.

3. Earnings per share information is included in the Consolidated Statements of Comprehensive Income and are \$0.19 per share.

1. ASPE presentation

Plaid Robots Inc.		
Partial Balance Sheet		
April 30, 2014		
Shareholders' Equity		
Contributed capital		
Preferred shares, 10,000 issued	\$ 100,000	
Common shares, Class A, 250,000 issued	<u>1,250,000</u>	
Total contributed capital		\$1,350,000
Retained earnings		<u>110,000</u>
Total shareholders' equity		<u>\$1,460,000</u>

2. IFRS presentation (information in the statement)

Plaid Robots Inc.		
Partial Balance Sheet		
April 30, 2014		
Shareholders' Equity		
Contributed capital:		
Preferred shares, 50,000 shares authorized, 10,000 issued	\$100,000	
Common shares:		
Class A, 250,000 shares issued, 1,000,000 authorized	1,250,000	
Class B, 400,000 shares authorized	<u> </u>	
Total contributed capital		\$ 1,350,000
Retained earnings		<u>110,000</u>
Total shareholders' equity		<u>\$1,460,000</u>

Note to Instructor: Students may have chosen to present the version shown below as the answer to question 2.

3. Another IFRS Version (information in the notes)

Plaid Robots Inc.		
Partial Balance Sheet		
April 30, 2014		
Shareholders' Equity		
Contributed capital:		
Preferred shares (note 15)	\$100,000	
Common shares (note 15)	<u>1,250,000</u>	
Total contributed capital		\$ 1,350,000
Retained earnings		<u>110,000</u>
Total shareholders' equity		<u>\$1,460,000</u>

Sample notes to the financial statement:

Note 15 – The following classes of shares have been established:

Preferred – 50,000 shares authorized, 10,000 shares issued

Common Shares Class A - 1,000,000 shares authorized, 250,000 shares issued

Common Shares Class B - 400,000 shares authorized

CHAPTER 13

Corporations: Share Capital and the Balance Sheet

Chapter Overview

This chapter introduces the student to the corporation, the dominant form of business organization in our country. The characteristics of the corporation are listed, and a brief description of how a corporation is organized follows. The term *share capital* is defined. The two components of shareholders' equity—contributed capital and retained earnings—are explained, followed by a discussion of dividends and shareholders' rights.

The next section of the chapter describes the different classes of shares (common and preferred) and their characteristics, followed by a brief description of no-par-value shares and stated value of shares. Included is a discussion of issuing common shares for cash, issuing shares for assets other than cash, and issuing preferred shares and convertible preferred shares. Ethical considerations related to shareholders' equity are presented. After a discussion of organization costs, the shareholders' equity section of a corporation's balance sheet is illustrated.

The chapter continues with accounting for dividends. Dividend dates, journal entries for cash dividends, and dividends on cumulative and noncumulative preferred shares are discussed. Convertible preferred shares are explained. The different values of shares—market value and book value of preferred and common shares—are defined and illustrated. Two profitability measures are presented: rate of return on total assets and rate of return on shareholders' equity. The chapter concludes with a discussion of the impact of IFRS on share capital.

JUST CHECKING questions appear at the end of each Learning Objective for students to test their understanding of the Learning Objective just completed. The answers appear at the end of the chapter and on MyAccountingLab.

Students should be directed to www.myaccountinglab.com for extra practice. Also included on MyAccountingLab are Excel templates for Exercise 13-10, Problem 13-4A, Problem 13-7A, Problem 13-4B, and Problem 13-7B.

The **Assignment Grid** recommends “Pre-Test” problems in MyAccountingLab that can be assigned before a test or exam to ensure students understand the topics, as well as “Post-Test” problems that students can complete after a test or exam to check understanding before moving on.

Connecting Learning Objectives, Key Questions, and the Canadian Financial Accounting Learning Outcomes

	Learning Objective	Key Question	Canadian Financial Accounting Learning Outcome
1	Identify the characteristics of a corporation	What is a corporation, and why is it an important form of business?	
2	Record the issuance of shares, and prepare the shareholders' equity section of a corporation's balance sheet	How do we record and present share information?	A-14 Apply basic accounting methods to record and evaluate share transactions, cash and stock dividends, and stock splits
3	Account for cash dividends	What are cash dividends, and how do we account for them?	A-14 Apply basic accounting methods to record and evaluate share transactions, cash and stock dividends, and stock splits
4	Use different share values in decision making	What is the difference between book value and market value of shares?	A-16 Define and use the different types of financial statement analysis tools
5	Evaluate a company's return on assets (ROA) and return on shareholders' equity (ROE)	What are ROA and ROE, and how do we calculate them?	A-16 Define and use the different types of financial statement analysis tools
6	Identify the impact of international financial reporting standards (IFRS) on share capital	How does IFRS apply to share capital?	A-18 Compare and contrast IFRS and ASPE

Suggested Priority of Chapter Topics

Must cover

- Characteristics of a corporation
- Organization of a corporation
- Share capital
- Shareholders' equity basics
- Classes of shares
- Issuing shares
- Cash dividends
- Different share values
- Evaluating operations

Recommended

- Ethical considerations in accounting for the issuance of shares
- Convertible preferred shares
- Impact of IFRS

Chapter Outline

Learning Objective 1: Identify the characteristics of a corporation

(What is a corporation, and why is it an important form of business?)

- A. The corporation is the dominant form of business organization in Canada.
- B. The **characteristics** of a corporation are listed below:
 1. **Separate legal entity**—a corporation is an entity formed under federal or provincial law and exists separately from its owners (shareholders).
 2. **Continuous life and transferability of ownership**—shareholders may transfer shares as they wish. Transfers do not affect the continuity of the corporation.
 3. **No mutual agency**—shareholders are not agents of the corporation and cannot commit the corporation to a contract. Partners *are* considered agents of the partnership.
 4. **Limited liability of shareholders** —shareholders can lose no more than their investment in the business. A partner has unlimited liability in a partnership.
 5. **Separation of ownership and management**—a shareholder's only control of the operations of a corporation is the right to elect the board of directors. The corporation is managed by corporate officers elected by the board of directors.
 6. **Corporate taxation**—corporations are separate taxable entities and pay several taxes not levied on partnerships and proprietorships. Corporate earnings are subject to a degree of **double taxation** in that corporate earnings are taxed to the corporation as well as to the shareholder when earnings are distributed as dividends. However, Canadian tax laws have attempted to minimize this double taxation.
 7. **Government regulation**—corporations are subject to more regulation by governmental agencies that ensure full disclosure to investors and creditors.
 8. **Unique costs for corporations**—the cost for director's insurance is unique to corporations.

Exhibit 13-1 summarizes the advantages and disadvantages of the corporate form of organization.

- C. To **organize** a corporation, the incorporators obtain **articles of incorporation** from the federal or provincial government.
 1. The **articles of incorporation** include the number of shares the corporation is authorized to issue.
 2. **Bylaws** (adopted by the incorporators) govern the acts of the corporation.
 3. The shareholders elect the **board of directors**, which sets policy and appoints the officers. The directors elect a **chairperson** and appoint the **president**, who is responsible for day-to-day operations. (Exhibit 13-2 shows the authority structure in a corporation.)

Teaching Tip

Consider large corporations located near your school. Discuss possible corporate structures for one of these entities. If time permits, assign an exercise whereby students prepare a corporate structure, including names of top executives of an actual corporation.

- D. A company **issues** share certificates (Exhibit 13-3) to owners for their investments. This investment is referred to as **share capital**. These shares are issued from the shares authorized in the articles of incorporation.
- E. The **shareholders' equity** of a corporation shows the two different sources of capital.
1. **Contributed capital** represents all amounts paid in by owners (shareholders).
 2. **Retained earnings** is the capital provided by profits from operations and is not distributed to shareholders. Retained earnings are not a fund of cash.
 - a. A debit balance in retained earnings is called a **deficit**.
 - b. Distribution of profits to owners is called **dividends**. **Contributed capital** is the portion of shareholders' equity that cannot be used for dividends. Exhibit 13-4 focuses on the Shareholders' Equity section of a summarized balance sheet of Canadian Tire Corporation, Limited.
- F. **Shareholders' rights** are:
1. To **sell** the shares.
 2. To **vote** at shareholders' meetings.
 3. To receive a **proportionate share of dividends** (if declared).
 4. To receive a **proportionate share of assets** of the corporation if it is wound up.
 5. To maintain a **proportionate ownership** in any new shares issued; this is called a **preemptive right**. However, this right is rarely exercised and usually withheld from shareholders.

Learning Objective 2: Record the issuance of share,s and prepare the shareholders' equity section of a corporation's balance sheet

(How do we record and present share information?)

- A. Corporations may issue either preferred or common shares.
1. **Common shares** are the most basic form of contributed capital. They carry all the rights discussed above unless specifically withheld. Some corporations may issue two classes of common shares—one voting and one nonvoting.
 2. **Preferred shares** also carry shareholder rights, but are usually nonvoting. Preferred shareholders have priority over common shareholders in the payment of dividends and in the distribution of assets if the company is wound up. Different classes of preferred shares may also be issued.

3. The *Canada Business Corporations Act* and most provincial incorporating acts require common and preferred shares to be **no-par-value** shares, which means they do not have a value assigned to them by the articles of incorporation. (Par-value shares were once allowed by some provinces, and are still common in the U.S.)
- B. A corporation **issues** shares when it needs capital. The shares issued are from the shares **authorized** in the articles of incorporation. A company need not issue all the shares authorized.
1. The corporation may sell the shares to an **underwriter** who agrees to sell the shares to its clients.
 2. The issuance of shares increases assets and shareholders' equity.
 3. Shares may be issued for cash or in exchange for assets other than cash. Exhibit 13-6 is a reproduction of a share issue announcement by Tim Hortons Inc.

Teaching Tip

Go to www.canoe.ca/money. Select a company and show students how to find stock quotes online. You may wish to ask the students to bring a copy of the financial information section of a newspaper to class and have them look at a well-known company's shares.

4. When issuing common shares **for cash**, the Common Shares account is credited for the cash received.

Cash	XX	
Common Shares		XX

5. When issuing shares **for assets** other than cash, the asset should be recorded **at its current market value**. The common shares are then valued at this market value.

Asset	XX	
Common Shares		XX

6. Accounting for the issuance of **preferred shares for cash** is similar to accounting for common shares issued for cash.

Cash	XX	
Preferred Shares		XX

7. **Convertible preferred shares** are convertible at the option of shareholders for other classes of shares such as common shares. When convertible preferred shares are converted to common shares, the entry is:

Preferred Shares	XX	
Common Shares		XX

- C. The **shareholders' equity** section of the balance sheet follows this format (Exhibit 13-7):

Contributed capital:

Preferred shares, \$X, A shares authorized, B shares issued

Common shares, C shares authorized, D shares issued

Total contributed capital

Retained earnings

Total shareholders' equity

(Many companies combine several accounts.)

Teaching Tip

Point out the importance of the order and proper description of the accounts and amounts reported within the contributed capital section of the balance sheet. Refer students to Exhibit 13-7.

- D. Issuing shares for assets other than cash can pose an **ethical challenge** because the company may be tempted to **overstate** the asset value.
- E. **Organization costs**, such as legal fees for preparing documents, fees and taxes paid to the incorporation jurisdiction, and charges for selling company shares, are often incurred when a company incorporates. These costs are accumulated in an account, **Organization Costs**, and this account is treated as an intangible asset like patents or trademarks because it will benefit the organization for as long as it operates. Like other intangible assets, corporations can amortize this cost. Most corporations amortize the cost over a relatively short time period since it is often an immaterial cost. The Canada Revenue Agency allows corporations to expense a portion of organization costs against taxable income.

Learning Objective 3: Account for cash dividends

(What are cash dividends, and how do we account for them?)

- A. Corporations **declare dividends** from retained earnings and pay the dividends with cash.
- B. The relevant **dates for dividends**:
1. **Declaration date**—the date the board of directors announces its intention to pay the dividend and the dividend becomes a liability.

Retained Earnings	XX
Dividends Payable	XX
 2. **Date of record**—the date, also announced by the board of directors, that determines who receives the dividend. No journal entry needed.
 3. **Payment date**—the date the dividend is paid.

Dividends Payable	XX
Cash	XX

Exhibit 13-8 illustrates a “Notice of Dividend” for Laurentian Bank of Canada.

- C. Preferred shareholders have a **dividend preference**; that is, the preferred shareholders receive their dividend *before* the common shareholders. This dividend is usually stated as a specific dollar amount.
- D. **Cumulative preferred shares** accumulate dividends each year until the dividends are paid.
1. Dividends passed or not paid are called **dividends in arrears**. Dividends in arrears are not a liability.
 2. The corporation is not obligated to pay dividends on **noncumulative preferred shares**.

Teaching Tip

Review the journal entries associated with the date of declaration and the date of payment. Discuss the rules for allocating dividends to preferred and common shareholders for both cumulative and noncumulative preferred shares.

Exhibit 13-9 demonstrates how Guthrie Industries Inc. divided dividends between its preferred and common shareholders, and Exhibit 13-10 demonstrates how Guthrie Industries Inc. divided dividends between its *cumulative* preferred and common shareholders

Learning Objective 4: Use different shares values in decision making

(What is the difference between book value and market value of shares)

- A. The **market value (market price)** of shares is their current selling price.
- B. **Book value** is a measure of the amount of net assets or shareholders' equity per share.

If a company has no preferred shares, then it uses formula 2. below to calculate book value. If a company has both preferred and common shares, the preferred shareholders' equity must be calculated before the common shareholders' equity can be calculated. Preferred shareholders' equity (or equity allocated to preferred shareholders) is the top line in formula 1. below.

1. **Book value per preferred share** =
$$\frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}}$$
2. **Book value per common share** =
$$\frac{\text{Total shareholders' equity} - \text{Equity allocated to preferred shareholders}}{\text{Number of common shares outstanding}}$$
3. Book value may be used to negotiate the purchase of a closely held business or when buying out a shareholder.
4. Exhibit 13-11 contrasts the book values and market values of several companies.

Teaching Tip

Discuss the different values that can be associated with shares. Emphasize that book value per share is not the same as market value.

Learning Objective 5: Evaluate a company's return on assets (ROA) and return on shareholders' equity (ROE)
 (What are ROA and ROE, and how do we calculate them?)

A. Investors and creditors evaluate management's ability to earn profits. Two key ratios are provided below:

1. **Return on assets, or
Rate of return on
total assets** = $\frac{\text{Net income} + \text{Interest expense}}{\text{Average total assets}}$
 - a. This ratio measures how well a company uses its assets to earn income.
 - b. Average total assets are computed by adding beginning and ending assets and dividing by 2.

2. **Return on equity, or
Rate of return on
common shareholders'
equity** = $\frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shareholders' equity}}$
 - a. This ratio shows the relationship between net income and common shareholders' equity.
 - b. Average common shareholders' equity is computed by adding beginning and ending common shareholders' equity (shareholders' equity minus preferred equity) and dividing by 2.

B. The higher the rates of return, the more successful the company. Return on equity should exceed the return on assets.

Teaching Tip

Have students choose a company with financial statements available on the Internet. Use the above formulas to calculate each of the returns. If more than one year of data are available, have students calculate returns for each year, and discuss whether or not the results indicate an improvement or decline in the return.

Objective 6: Identify the impact on share capital of international financial reporting standards (IFRS)
 (How does IFRS apply to share capital?)

- A. The *principles* governing accounting for share capital are essentially the same under accounting standards for private enterprises (ASPE) and IFRS.
- B. The *required disclosures* under IFRS are more rigorous. Companies must make certain disclosures about *all* classes of shares authorized by the corporation, whether those classes of shares have been issued or not. ASPE only requires disclosure on shares actually issued.
- D. Organization costs are capitalized under ASPE—recorded as an intangible asset and then amortized. Under IFRS, these costs are expensed.
- C. The remaining details of accounting for and reporting share capital under IFRS are highly technical in nature and beyond the scope of this text.

Answer Key to Chapter 13 Quiz

1. B 2. D 3. C 4. C 5. A 6. D 7. B 8. A 9. A 10. B

Assignment Grid (2nd column: * = Excel Template available; W = writing required)

Assignment		Topic(s)	Learning Objective (s)	Time in Minutes	Level of Difficulty	MAL Pre-Test/ Post-Test
Starter 13-1	W	Authority structure in a corporation	1	5	Easy	
Starter 13-2	W	The balance sheets of a corporation and a proprietorship	1	5	Easy	
Starter 13-3		Issuing shares	2	5	Easy	
Starter 13-4	W	Issuing shares and interpreting shareholders' equity	2	5-10	Easy	
Starter 13-5	W	Issuing shares and analyzing retained earnings	2	5-10	Easy	
Starter 13-6		Preparing the shareholders' equity section of a balance sheet	2	5	Medium	
Starter 13-7		Using shareholders' equity data	2	5	Medium	
Starter 13-8		Calculating shareholders' equity data	2	5	Medium	
Starter 13-9		Accounting for cash dividends	3	5	Medium	
Starter 13-10		Dividing cash dividends between preferred and common shares	3	5	Medium	
Starter 13-11		Book value per common share	4	5	Medium	
Starter 13-12		Computing return on assets and return on equity	5	5	Medium	
E13-1	W	Characteristics of a corporation	1	5-10	Easy	
E13-2	W	Organizing a corporation	1	5-10	Easy	
E13-3	W	Types of shares	2	5-10	Easy	
E13-4		Issuing shares	2	10-15	Easy	
E13-5		Recording issuance of common shares	2	5-10	Medium	
E13-6		Issuing shares to finance the purchase of assets	2	10	Easy	
E13-7		Issuing shares and preparing the shareholders' equity section of the balance sheet	2	15-20	Easy	
E13 -8		Contributed capital for a corporation	2	10	Easy	
E13-9		Shareholders' equity section of a balance sheet	2	10-15	Medium	
E13-10	*	Shareholders' equity section of a balance sheet	2	10-15	Medium	
E13-11		Dividing cash dividends between preferred and common shares	3	10-15	Easy	
E13-12		Computing dividends on preferred and common shares	3	15-20	Medium	
E13-13		Book value per share of preferred and common shares	4	10-15	Easy	
E13-14		Book value per share of preferred and common shares; preferred dividends in arrears	3,4	10-15	Medium	
E13-15		Evaluating profitability	5	10-15	Easy	
E13-16		Incorporation of a going concern and corporate transactions—Serial Exercise	1,2	5-10	Medium	

<i>Assignment</i>		<i>Topic(s)</i>	<i>Learning Objective (s)</i>	<i>Time in Minutes</i>	<i>Level of Difficulty</i>	<i>MAL Pre-Test/ Post-Test</i>
E13-17		Accounting for shareholders' equity transactions—Challenge Exercise	2,3	15-20	Medium	
BN13-1	W	Characteristics of corporations' shareholders' equity	2,4	15-20	Medium	
Ethical Issue	W					
P13-1A	W	Organizing a corporation	1	10-20	Easy	
P13-2A		Journalizing corporation transactions and preparing the shareholders' equity section of the balance sheet	2	30-45	Medium	Pre-Test
P13-3A		Issuing shares and preparing the shareholders' equity section of the balance sheet	2	15-20	Medium	Pre-Test
P13-4A	*	Shareholders' equity section of the balance sheet	2,3	20-30	Medium	
P13-5A		Analyzing the shareholders' equity of a corporation	2,3	20-35	Medium	
P13-6A		Preparing a corporation balance sheet; measuring profitability	2,5	40-50	Medium	
P13-7A	*	Computing dividends on preferred and common shares	3	20-30	Medium	
P13-8A		Analyzing the shareholders' equity of a corporation	3,4	15-20	Medium	
P13-9A		Recording the issuance of shares; allocating cash dividends; calculating book value; preparing the liability and shareholders' equity sections of the balance sheet	2,3,4	40-50	Difficult	Pre-Test
P13-1B	W	Organizing a corporation	1	10-20	Easy	
P13-2B		Journalizing corporation transactions and preparing the shareholders' equity section of the balance sheet	2	30-45	Medium	Post-Test
P13-3B		Issuing shares and preparing the shareholders' equity section of the balance sheet	2	15-20	Medium	Post-Test
P13-4B	*	Shareholders' equity section of the balance sheet	2,3	20-30	Medium	
P13-5B		Analyzing the shareholders' equity of a corporation	2,3	20-35	Medium	
P13-6B		Preparing a corporation balance sheet; measuring profitability	2,5	40-50	Medium	
P13-7B	*	Computing dividends on preferred and common shares	3	20-30	Medium	
P13-8B		Analyzing the shareholders' equity of a corporation	3,4	15-20	Medium	
P13-9B		Recording the issuance of shares; allocating cash dividends; calculating book value; preparing the shareholders' equity section of the balance sheet	2,3	40-50	Medium	Post-Test
CP13-1C	W	The pros and cons of incorporation	1	15-25	Medium	
CP13-2C		Issuing shares; preparing and analyzing	2	25	Medium	

<i>Assignment</i>		<i>Topic(s)</i>	<i>Learning Objective (s)</i>	<i>Time in Minutes</i>	<i>Level of Difficulty</i>	<i>MAL Pre-Test/ Post-Test</i>
		the shareholders' equity section				
CP13-3C	W	Deciding on an investment in shares; evaluating different types of shares	4,5	20-30	Difficult	
Decision Problem		Evaluating alternative ways of raising capital	2	30-45	Medium	
Financial Statement Case 1	W	Shareholders' equity	2	20-30	Medium	
Financial Statement Case 2	W	Shareholders' equity	2	15-20	Medium	
IFRS Mini Case		Shareholders' equity section under ASPE and IFRS	2	20-30	Medium	

Name _____ Date _____ Section _____

CHAPTER 13 TEN-MINUTE QUIZ

Circle the letter of the best response.

The shareholders' equity of Allen Corporation appears below:

Table 13-1	
Contributed capital:	
Preferred shares, \$6, 5,000 shares authorized, 500 shares issued.....	\$ 55,000
Common shares, 200,000 shares authorized, 30,000 shares issued.....	<u>900,000</u>
Total contributed capital.....	955,000
Retained earnings	<u>256,000</u>
Total shareholders' equity	<u>\$1,211,000</u>

- Refer to Table 13-1. The entry to record the issuance of 1,000 common shares for \$35 per share would be:

A. Cash	1,000	
Common Shares		1,000
B. Cash	35,000	
Common Shares		35,000
C. Cash	40,000	
Common Shares		40,000
D. Cash	40,000	
Preferred Shares		40,000
- Refer to Table 13-1. Allen Corporation issued 2,000 common shares in exchange for land valued at \$80,000. Which of the following statements is *false*?
 - Assets increase \$80,000.
 - Retained Earnings is not affected.
 - Shareholders' equity increases \$80,000.
 - Total contributed capital decreases \$80,000.
- Refer to Table 13-1. The average issue price of a preferred share is:
 - \$550
 - \$500
 - \$110
 - \$100
- Which of the following statements about dividends is *false*?
 - Dividends become a liability on the declaration date.
 - The payment of dividends reduces retained earnings.
 - Chronologically, the relevant dates for dividends occur in this order: date of record, declaration date, payment date.
 - Dividends in arrears must be paid before other dividends.

5. Which of the following statements is *not* descriptive of common shares?
- Dividends are listed as an expense on the income statement.
 - Issuing shares is less risky than borrowing.
 - Shareholders are considered owners, not creditors, of a corporation.
 - The payment of dividends is not mandatory.
6. Which of the following is *not* a characteristic of a corporation?
- Transferability of ownership
 - Separate legal entity
 - No mutual agency
 - Unlimited liability of shareholders

The shareholders' equity of Borland Ltd. appears below.

Table 13-2		
	<u>2014</u>	<u>2013</u>
Contributed capital		
Preferred shares, \$6, 5,000 shares issued and outstanding	\$ 500,000	\$ 500,000
Common shares, 10,000 shares issued and outstanding	<u>500,000</u>	<u>400,000</u>
Total contributed capital	1,000,000	900,000
Retained earnings	<u>200,000</u>	<u>100,000</u>
Total shareholders' equity	<u>\$1,200,000</u>	<u>\$1,000,000</u>

Note: The preferred shares are non-cumulative and no dividend was declared during 2014.

7. Refer to Table 13-2. The book value of each common share in 2014 is:
- \$100
 - \$70
 - \$69
 - \$50
8. Refer to Table 13-2. What is the rate of return on common shareholders' equity for 2014?
- 11.67%
 - 11.86%
 - 16.67%
 - 6.36%
9. Refer to Table 13-2. Assume in 2014, Borland Ltd. declared and paid total cash dividends of \$40,000. How much dividends did common shareholders receive?
- \$10,000
 - \$30,000
 - \$40,000
 - Cannot be determined based on the information provided.
10. Holders of preferred shares do not normally have
- Preference as to dividends.
 - Full voting rights.
 - Preference as to assets on liquidation.
 - Ownership interest in the corporation.

Corporations: Share Capital and the Balance Sheet

Chapter 13

Objective 1

Identify the characteristics of a corporation

What is a corporation, and why is it an important form of business?

Corporations

Corporations are either public or private:

- Public
 - Is “listed,” which means its shares trade on a stock exchange
 - Must follow IFRS
- Private
 - Is not listed on a stock exchange
 - Shares are privately held, not traded on a stock exchange
 - Has a choice of following ASPE or IFRS

Characteristics of a Corporation

- Separate legal entity
- Continuous life and transferability of ownership
- No mutual agency
- Limited liability of shareholders
- Separation of ownership and management
- Corporate taxation
- Government regulation
- Unique costs for corporations

Corporations

Advantages

- Can raise more money than a proprietorship or partnership
- Has a continuous life
- Transferring ownership is easy
- No mutual agency
- Shareholders (owners) have limited liability

Disadvantages

- Ownership and management are separated
- Earnings are subject to a degree of double taxation
- Government regulation can be expensive
- May incur costs unique to corporations

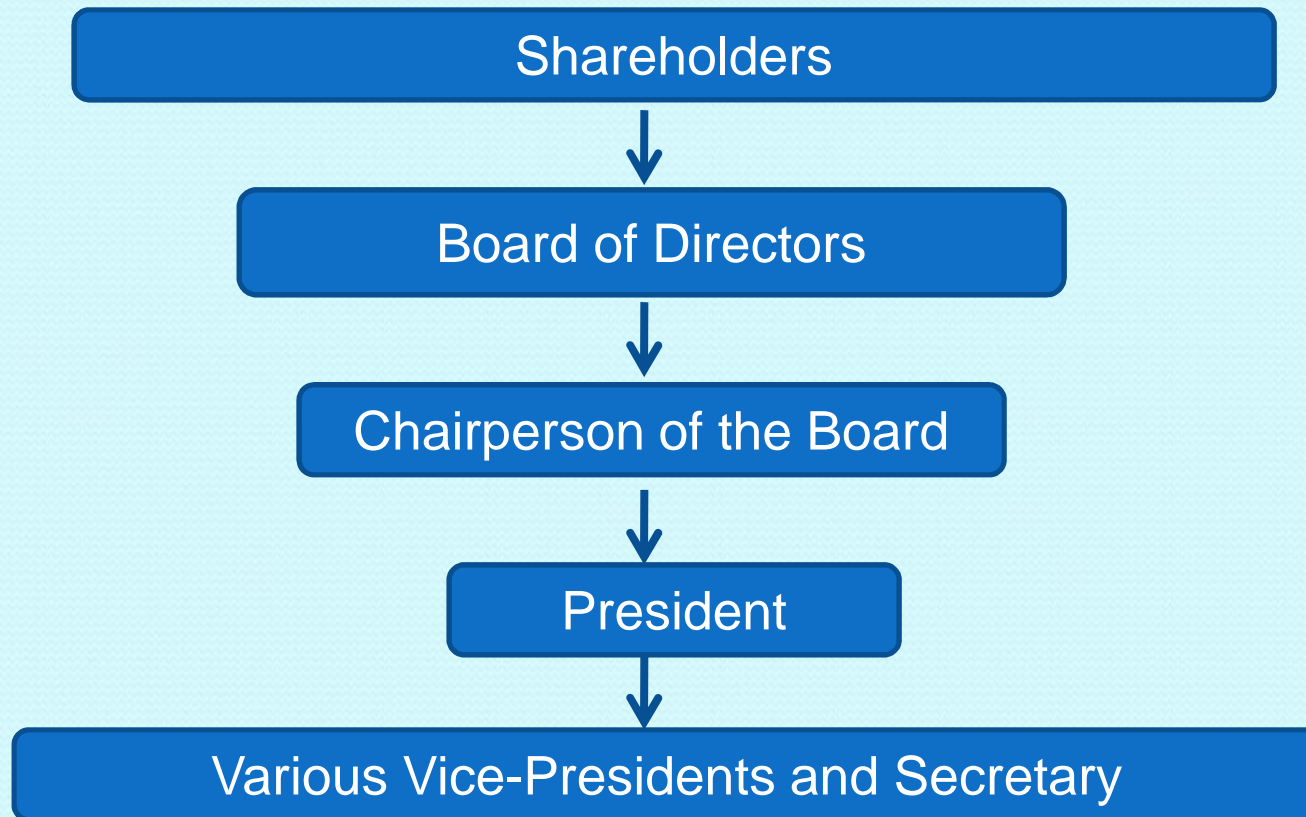
Organization of a Corporation

- The process of creating a corporation begins when organizers (incorporators) submit articles of incorporation to the provincial or federal government for approval
- The articles authorize the corporation to issue shares and set bylaws to govern the corporation
- Control of the corporation rests with the shareholders
- Shareholders elect the board of directors

Organization of a Corporation, continued

- Board of directors:
 - Sets policy
 - Elects a chairperson
 - Appoints the president, who is the chief operating officer

Authority Structure in a Corporation

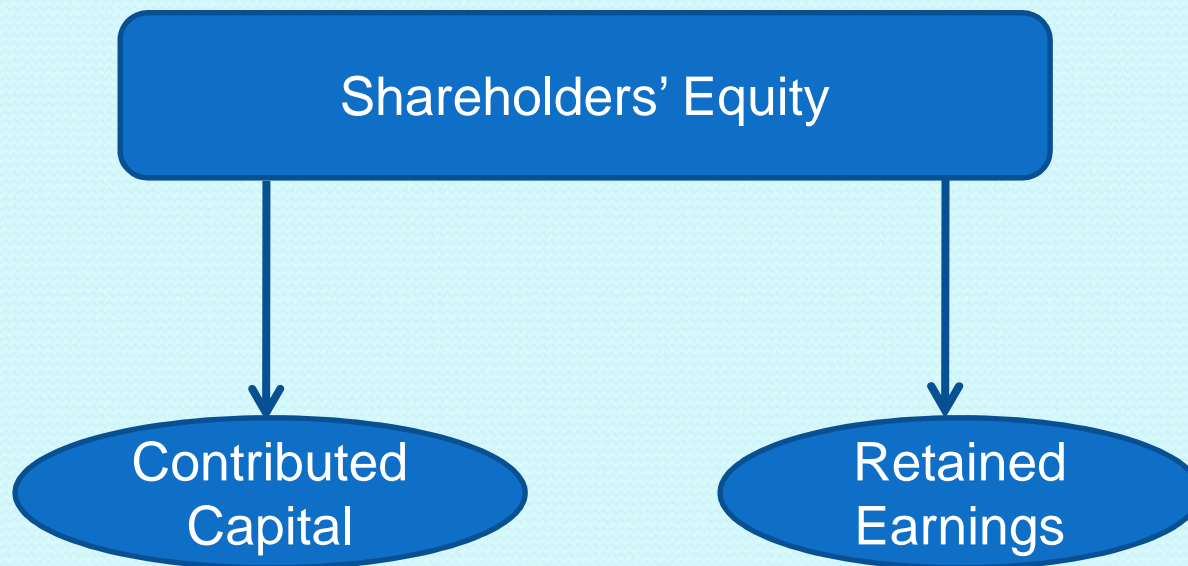


Share Capital

- Share certificates issued to investors (owners)
- Authorized shares: The maximum number of shares the corporation can issue as specified in the articles of incorporation
- Issued and outstanding shares: The shares that have been sold to, and are held by, shareholders

Shareholders' Equity

Owners' equity of a corporation is called *shareholders' equity*



Contributed Capital Comes from the Shareholders

- Common shares are one type of share capital
- Assume a corporation receives \$200,000 cash and issues common shares to its shareholders; the entry is:

Oct. 20	Cash	200,000	
	Common Shares		200,000

To record issuance of common shares.

Retained Earnings Comes from Profitable Operations

- Profitable operations produce net income
 - Net income increases Retained Earnings
 - Retained Earnings is part of Shareholders' Equity
- Assume a corporation's net income for the year is \$743.7million
- Net income is transferred to retained earnings through the closing entries as follows:

Dec. 31	Income Summary	743.7M	
	Retained Earnings		743.7M

To close net income to retained earnings.

Negative Earnings

- A net loss reduces Retained Earnings

Dec. 31	Retained Earnings	100,000	
	Income Summary		100,000

- If Retained Earnings becomes a debit balance, it is called a *deficit*.

Dividends to Shareholders

- A profitable corporation may distribute cash dividends to shareholders
- Dividends are similar to withdrawals by owners of proprietorships or partnerships
- Dividends decrease assets (cash) and retained earnings (shareholders' equity)

Shareholders' Rights

- The ownership of shares entitle the shareholder to basic rights, such as:
 - The right to sell the shares
 - The right to vote at shareholders' meetings
 - The right to receive a proportionate share of dividends
 - The right to receive a proportionate share of assets in the case of a business winding-up
 - A preemptive right: the right to maintain one's proportionate ownership in the corporation

Objective 2

Record the issuance of shares, and prepare the shareholders' equity section of a corporation's balance sheet

How do we record and present share information?

Common Shares

- Common shares are the most basic form of share capital
 - There may be more than one class of common shares
- Investors who buy shares bear the financial risk
- No-Par-Value Shares: Shares that do not have a value assigned to them by the articles of incorporation
 - Par value is an arbitrary value
 - The CBCA requires all shares issued to be no-par-value
- Stated Value of Shares: The board of directors assigns a value to the shares when they are issued initially
 - The shares may sell for a different price when they are later traded on the stock exchange

Issuing Common Shares at a Stated Value – An Example

- Assume Research in Motion (now Blackberry) issues 10,000 common shares for cash at a stated value of \$14.00 per share
- The journal entry to record the issuance is:

Jan. 8	Cash	140,000	
	Common Shares		140,000

To record the issuance of 10,000 shares at \$14 per share.

Issuing Common Shares for Assets Other Than Cash

- Assume Gillan Corporation issued 25,000 common shares for equipment worth \$25,000 plus a building worth \$125,000
- The entry is:

Nov. 12	Equipment	25,000	
	Building	125,000	
	Common Shares		150,000

To record issuance of 25,000 shares in exchange for equipment and a building.

Note: Assets are debited for their current market value when shares are not actively trading and the value per share cannot be determined.

Preferred Shares

- Preferred shares have special rights that give their owners certain advantages over common shareholders, such as:
 - Receive dividends before common shareholders
 - Receive assets before common shareholders if the corporation liquidates
 - Receive a fixed dividend
- Preferred shareholders generally have no voting rights
- Preferred shares may have several “classes”
- Preferred shares often have features attached to them
 - Example: cumulative, convertible

Preferred Shares

- Preferred shares are accounted for the same as common shares
- Example: Cendant Corp. issues 1,000 preferred shares for \$100 per share; the dividend rate is \$10 per share. The entry is:

Jul. 31	Cash	100,000	
	Preferred Shares		100,000

To record the issuance of 1,000 shares at \$100 per share.

- On the balance sheet, shareholders' equity includes:
 - *contributed capital*, including preferred and common shares
 - *retained earnings*

Convertible Preferred Shares

- Preferred shares that may be exchanged (by the shareholders) for another specified class of shares - eg. common shares
- Example: 100 preferred shares were purchased at \$100 per share = \$10,000
 - The shares are convertible into 700 common shares at the discretion of the shareholder
 - If the shareholder chooses to convert, the entry is:

Mar. 7 Preferred Shares	10,000
Common Shares	10,000

To record the conversion of 100 preferred shares to 700 common shares. The value of each common share is $\$10,000 / 700 = \7 per share.

The Shareholders' Equity Section of a Balance Sheet

CHANG CORPORATION Partial Balance Sheet December 31, 2014

Shareholders' equity

Contributed capital

Preferred shares, **\$5.00**, 10,000 shares authorized,
1,000 shares issued and outstanding

\$ 50,000

Common shares, 10,000 shares authorized,
4,000 shares issued and outstanding

80,000

Total contributed capital

130,000

Retained earnings

55,000

Total shareholders' equity

\$185,000

Ethical Considerations

- Issuing shares for assets other than cash can pose an ethical challenge
- The company issuing the shares wants to record a large amount for the noncash asset received and for the shares that it is issuing
 - Why: to positively affect ratios
- Current market value must be determined by independent appraisers and recorded in the journal entry for the issuance of shares

Organization Costs

- Costs of organizing a corporation include legal fees, fees to the incorporating jurisdiction, and promoter's charges
- Organization costs are intangible assets under ASPE
- Note: Under IFRS, all organization costs must be expensed as incurred

Organization Costs, continued

- Assume BBV Holdings Inc. pays incorporation fees of \$5,000; the investment dealer charges a fee of \$15,000 (to be paid with 2,000 common shares) for selling 30,000 common shares for \$225,000. The entry is:

Mar. 31	Organization Costs	5,000	
	Cash		5,000
	To record incorporation fees to organize the corporation.		

Apr. 3	Cash	225,000	
	Organization Costs	15,000	
	Common Shares		240,000
	To record receipt of funds from sale of common shares; issuance of 2,000 shares to investment dealer.		

Objective 3

Account for cash dividends

What are cash dividends, and how do we account for them?

Dividend Dates

- A corporation must declare a dividend before paying it
- The board of directors declares the dividend
- Once the dividend is declared, it becomes a liability
- Three dates for dividends are relevant:
 - Declaration date
 - Date of record
 - Payment date

Declaring and Paying Dividends

- Example: A cash dividend is declared on October 3 to the shareholders of record on October 31 to be paid on November 15.
- **Declaration** of a cash dividend is recorded as follows:

Oct. 3	Retained Earnings	20,000	
	Dividends Payable		20,000
	To declare a cash dividend.		

- No entry on the **record date** (October 31)
- The entry to pay the dividend on the **payment date** is:

Nov. 15	Dividends Payable	20,000	
	Cash		20,000
	To pay a cash dividend.		

Declaring and Paying Dividends: Division between Preferred and Common

- Assume Guthrie Industries Inc. has **10,000 shares of \$1.50 preferred shares** outstanding, **plus common shares**
- The division of dividends between the preferred and common shares for two situations is as follows:

Case A: Total dividend of \$15,000

Preferred dividend ($\$1.50 \times 10,000$)	\$15,000
Common dividend *	<u>0</u>
	<u>\$15,000</u>

*Total dividends declared did not exceed the preferred dividend for the year

Declaring and Paying Dividends: Division between Preferred and Common

- Assume Guthrie Industries Inc. has 10,000 shares of \$1.50 preferred shares outstanding, plus common shares
- The division of dividends between the preferred and common shares for two situations is as follows:

Case B: Total dividend of \$50,000

Preferred dividend ($\\$1.50 \times 10,000$)	\$15,000
Common dividend ($\\$50,000 - \\$15,000$)	35,000
	<u>\$50,000</u>

Cumulative Preferred Shares

- Dividends that are not paid to the preferred shareholders in any year are tracked and accumulated for every year not paid.
- Whenever dividends are declared, all unpaid dividends from past years, plus the current year dividend, must be paid to the preferred shareholders before any common dividend is paid.
- Common shares are never cumulative.

Dividends on Cumulative Preferred Shares

- Assume Guthrie Industries Inc. has 10,000 shares of \$1.50 preferred shares outstanding, plus common shares
- Assume Guthrie Industries did not distribute its 2013 preferred dividends; in 2014, the corporation declares a \$55,000 dividend.
- The allocation of the dividend is as follows:

Total dividend	<u>\$55,000</u>
Preferred shareholders get	
2013: 10,000 shares × \$1.50 per share	\$15,000
2014: 10,000 shares × \$1.50 per share	<u>15,000</u>
Total to preferred \$1.50 shareholders	30,000
Common shareholders get the remainder	<u>25,000</u>
	<u>\$ 55,000</u>

Dividends on Cumulative Preferred Shares

- The entry to record the declaration of the \$55,000 dividend is:

Sep. 6	Retained Earnings	55,000	
	Dividend Payable, Preferred		30,000
	Dividend Payable, Common		25,000
	To declare a cash dividend.		

- *Dividends in arrears are not liabilities*, but must be reported in the notes to the financial statements
- If the preferred shares are *noncumulative*, the corporation is not obligated to pay any dividends in arrears, and any past dividends are simply lost

Objective 4

Use different share values in decision making

What is the difference between book value and market value of shares?

Different Value of Shares

- The business community refers to different share values:
 - **Market value** (market price): The price for which a person can buy or sell a share on the secondary market
 - **Book value**: The amount of shareholders' equity on the company's books for each share

Market Value

- The issuing corporation's net income, financial position, future prospects, and the general economic conditions determine market value
- In almost all cases, shareholders are more concerned about the market value of a share than any other value

Book Value (B.V.)

$$\text{B.V. per share} = \frac{\text{Total shareholders' equity}}{\text{Total shares outstanding}}$$

$$\text{B.V. per common share} = \frac{\text{Total shareholders' equity} - \text{preferred equity}}{\text{Number of common shares outstanding}}$$

$$\text{B.V. per preferred share} = \frac{\text{Liquidation value} + \text{Dividends in arrears}}{\text{Number of preferred shares outstanding}}$$

Share Values

Assume Garner Corp. reports the following amounts:

Shareholders' Equity

Contributed capital

Preferred shares, \$7.00, \$90 liquidation value,

5,000 shares authorized, 1,000 shares issued \$100,000

Common shares, 20,000 shares authorized, 5,000 shares issued 150,000

Total contributed capital 250,000

Retained earnings 90,000

Total shareholders' equity \$340,000

- **The preferred shareholders' equity must be calculated before common shareholders' equity can be calculated**

Share Values, continued

Shareholders' Equity

Contributed capital

Preferred shares, \$7.00, \$90 liquidation value,
5,000 shares authorized, 1,000 shares issued \$100,000

Common shares, 20,000 shares authorized, 5,000 shares issued 150,000

Total contributed capital 250,000

Retained earnings 90,000

Total shareholders' equity \$340,000

- Assume three years of cumulative preferred dividends are in arrears
- The equity valuation for the preferred shares is:

Liquidation value: $\$90 \times 1,000 \text{ shares} = \$90,000$

Dividends owing: $\$7 \times 1,000 \text{ shares} \times 3 \text{ years arrears} = 21,000$

$\$7 \times 1,000 \text{ shares for current year} = 7,000$

Total dividends owing: 28,000

Total preferred share equity valuation \$118,000

Share Values, continued

Liquidation value:	\$90 x 1000 shares =	\$90,000
Dividends owing:	\$7 x 1,000 shares x 3 years arrears =	21,000
	\$7 x 1,000 shares for current year =	<u>7,000</u>
Total cumulative dividends owing:		<u>28,000</u>
Total preferred share equity valuation		<u><u>\$118,000</u></u>

$$\text{B.V. per preferred share} = \frac{\text{Liquidation value} + \text{Cumulative dividends}}{\text{Number of preferred shares outstanding}}$$

- The book value for the preferred shares is:

$$\frac{90,000 + 28,000}{1000} = \$118.00 \text{ per share}$$

Share Values, continued

Shareholders' Equity

Contributed capital

Preferred shares, \$7.00, \$90 liquidation value,

5,000 shares authorized, 1,000 shares issued

Common shares, 20,000 shares authorized, 5,000 shares issued

Total contributed capital

Retained earnings

Total shareholders' equity

\$100,000

150,000

250,000

90,000

\$340,000

Liquidation value

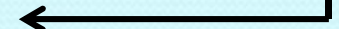
\$90,000

Total dividends owing:

28,000

Total preferred share equity valuation

\$118,000



Share Values, continued

Shareholders' Equity

Contributed capital

Preferred shares, \$7.00, \$90 liquidation value,

5,000 shares authorized, 1,000 shares issued

\$100,000

Common shares, 20,000 shares authorized, 5,000 shares issued

150,000

Total contributed capital

250,000

Retained earnings

90,000

Total shareholders' equity

\$340,000

Total preferred share equity valuation \$118,000

B.V. per common share = $\frac{\text{Total shareholders' equity} - \text{preferred equity}}{\text{Number of common shares outstanding}}$

- The book value for the common shares is:

$$\frac{\$340,000 - \$118,000}{5,000} = \$144.40 \text{ per share}$$

Using Book Value in Decision Making

- Book value may be a factor in determining the price to pay for a closely held corporation
- If the market value is below the book value, the shares may be undervalued, and thus a good investment/buy

Objective 5

Evaluate a company's
return on assets (ROA) and
return on shareholders' equity (ROE)

What are ROA and ROE, and how do we calculate them?

Rate of Return on Total Assets

- The return on assets (ROA) measures the company's success in using its assets to earn income

$$\begin{aligned} &\text{Rate of return on total assets} \\ &= \frac{\text{Net income} + \text{Interest expense}}{\text{Average total assets}} \end{aligned}$$

Rate of Return on Common Shareholders' Equity

- Return on equity (ROE) shows the relationship between net income and average common shareholders' equity

Rate of return on common shareholders' equity

$$= \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shareholders' equity}}$$

Objective 6

Identify the impact of international financial reporting standards (IFRS) on share capital

How does IFRS apply to share capital?

The Impact on Share Capital of International Financial Reporting Standards (IFRS)

- The principles governing accounting for share capital are essentially the same under ASPE and IFRS
- The main difference lies in the required disclosure:
 - Under IFRS, companies must make certain disclosures about *all* classes of shares authorized by the corporation, whether those classes of shares have been issued or not
 - Under ASPE, disclosure is made for classes of shares that have *actually been issued*