

ACC250: Intro to Financial Accounting
Ch11. Shareholders' Equity

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Corporations

a business structure that separates ownership from management and provides limited liability to its owners.

- A common form of business organization.
- Separate legal entity
 - ▶ A corporation is distinguished from its owners (shareholders).
 - ▶ Shares can be bought and sold, allowing for easy transfer of ownership.
 - ▶ A corporation can enter into contracts, sue and be sued, and own property in its own name.
- Limited liability
 - ▶ Owners' liabilities are limited to their investment in the corporation.
 - ▶ This limited liability protects shareholders' personal assets from being used to satisfy the corporation's debts.

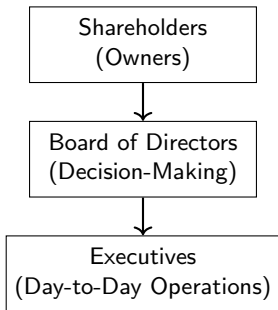
EX. You invested \$10,000 in a corporation. The corporation incurs \$1,000,000 in debts. In case of bankruptcy, how much can you lose?

- \$10,000 investment.
- Your personal assets are protected from the corporation's debts.
- This is the essence of limited liability .

EX. Suppose a corporation incurs debts of \$1,000,000 (including Wages Payable (employees), Accounts payable (suppliers), Notes payable (banks), etc.) but only has assets worth \$600,000 because of continuing losses. In case of liquidation:

- How much would the corporation pay to its creditors (employees, etc.)?
\$600,000; , not \$1,000,000 .
- How much can shareholders take from the corporation?
\$0. No leftover.
- But still, the shareholders are not personally responsible for the remaining
\$400,000 .
- Wait! how much SHE for the firm without liquidation?¹
-\$400,000.

¹Yes, it can be negative (e.g., American Airlines due to continuing losses in the past)!



- Shareholders elect the board of directors (BOD) and vote on major corporate matters.
- The BOD appoints executives (e.g., CEO) to manage the corporation; monitor executives' performance.
- The executives are responsible for the day-to-day operations of the corporation.

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- **Shares (a.k.a. stocks)** represent ownership in a corporation.
- Each share represents a claim on the corporation's assets and earnings.
- If you own 1% of the shares, you own 1% of the corporation.
- Shares can be bought and sold on the stock market, allowing investors to trade ownership in the corporation.
- Thanks to this transferability, corporations can raise (a large amount of) capital by selling shares to the public.

²There are more than one type of shares/stocks. We focus on Common Stock in this course. Other types include Preferred Stock.

Common stockholders have the following rights:

- **Voting rights**: Shareholders can vote on important matters, such as electing the board of directors and approving major corporate transactions.
- **Right to receive dividends**.
- **Residual claims**: Right to participate in the distribution of assets upon liquidation.

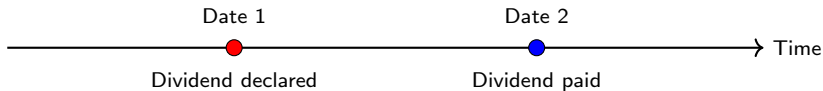
EX. A corporation has 1,000 shares of common stock outstanding and you own 100 shares. The corporation has \$1,000,000 in assets and \$800,000 in liabilities. In case of liquidation,

- \$800,000 would be used to pay off the liabilities.
- The remaining \$200,000 (residual claims) would be distributed to the shareholders.
- You would be entitled to:

$$10\% \times (\$1,000,000 - \$800,000) = 10\% \times \$200,000 = \$20,000$$

Dividends

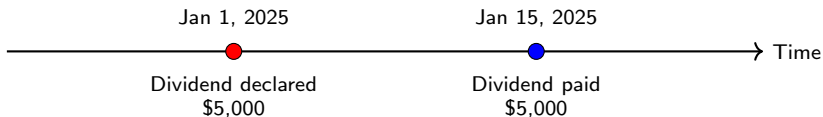
- A distribution of a portion of a corporation's earnings to its shareholders.
- Dividends are declared by the board of directors.
- Dividends reduce RE and are not considered an expense on the I/S.³



³Recall: Expenses are those that are incurred in the process of generating revenue. Does Dividends fit this definition?

Dividends - Journal Entries

- On January 1, 2025, a corporation declares a cash dividend of \$5,000 to its shareholders.



January 1, 2025:	<u>Div (+D)</u>	5,000
	<u>Div. Payable (+L)</u>	5,000

January 15, 2025:	<u>Div. Payable (-L)</u>	5,000
	<u>Cash (-A)</u>	5,000

Dividends - Journal Entries incl. Closing

EX. On May 20, the board of directors for Auction.com declared a cash dividend of 50 cents per share payable to stockholders of record on June 14. The dividends are paid on July 14. The company has 500,000 shares of stock outstanding. Closing entries are recorded on July 31.

- May 20: The board of directors declares a cash dividend of \$0.50 per share.
- July 14: The payment date for the dividend.
- July 31: Closing entries are recorded.

May 20:	Div (+D)	250,000
	Div. Payable (+L)	250,000

July 14:	Div. Payable (-L)	250,000
	Cash (-A)	250,000

July 31:	<u>Retained Earnings (-SHE)</u>	250,000
	<u>Div (-D)</u>	250,000

Temporary accounts and closing process:

- Dividends are temporary accounts like Revenue and Expenses.
- All temporary accounts are closed to RE at the end of the period.

Retained Earnings Equation

$$\text{End. RE} = \text{Beg. RE} + \text{Net Income} - \text{Dividends}$$

Through the closing process:

- Dividends are initialized to 0 at the beginning of the period.
- RE are decreased by dividends.
- Now all accounts are ready for the next period.

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Shareholders' Equity

The residual interest in the assets of the corporation after deducting liabilities. It represents the ownership interest of shareholders in the corporation.

- Contributed capital (C.C)
- Treasury stock (T.S) (a.k.a. stock repurchase; stock buyback)
- Retained earnings (R.E)
- Accumulated other comprehensive income⁴

$$\underline{SHE = C.C - T.S + R.E}$$

⁴covered in ACC301 and ACC302.

Contributed Capital

The amount of capital that shareholders have contributed to the corporation.

- Main components
 - ▶ Common stock
 - ▶ Additional paid-in capital (APIC)
 - ▶ Preferred stock⁵

⁵covered in ACC301 and ACC302.

Common Stock, Par Value (Equity)

The nominal value assigned to each share of stock.

- It used to be a legal requirement
- But now, it is often set at a very low amount (e.g., \$0.01).
- This is not the **market value** of the stock.

Additional Paid-in Capital (APIC, Equity)

The amount received from shareholders in excess of the par value of the stock.

EX. A corporation issues 1,000 shares of common stock with a par value of \$1 per share at a price of \$10 per share.

Cash (+A)	10,000
Common Stock (+SH)	1,000
APIC (+SH)	9,000

EX. A corporation issues 2,000 shares of common stock with a par value of \$2 per share at a price of \$15 per share.

Cash (+A)	30,000
Common Stock (+SH)	4,000
APIC (+SH)	26,000

The distinction between Par Value and APIC is important [just for accounting purposes.](#)

Why would firms repurchase their own stock? Examples:

- 1 Firms have incentives to provide signals to the market
— “Our stock is undervalued.”
- 2 Firms can resell the stocks to the market later at a higher price.
- 3 Firms use their own stocks for employee compensation.

Treasury Stock (Stock Repurchase/Buyback)

Treasury Stock (Contra Equity)

The cost value of shares repurchased by the corporation.

Journal entries when repurchasing stocks:⁶

	<u>Treasury Stock (+xSH, -SH)</u>	XXX
	Cash (-A)	XXX

- Contra-equity account, Not asset.
- Retained by the corporation, but does not have voting rights or receive dividends.
- Cash outflow for the corporation.

⁶Journal Entries for Treasury Stock are covered in ACC301 and ACC302.

Treasury Stocks lead to:

- Lower Outstanding Shares.⁷
- Lower Shareholder's Equity.
- Lower Cash.

Treasury Stocks lead to (when holding Net Income constant):

- Higher Return on Equity (ROE) - Net Income / Shareholders' Equity
- Higher Earnings-Per-Share (EPS) - Earnings / Shares Outstanding

⁷Outstanding shares = Issued shares - Treasury shares. Outstanding shares are the number of shares that are currently held by shareholders, i.e., available in the market.

Retained Earnings (Earned Capital, Equity)

The cumulative amount of net income retained in the business after dividends are paid.

- Retained earnings (RE) equation:

$$\text{Ending RE} = \text{Beginning RE} + \text{NI} - \text{Div}$$

- Net income (NI): Increases retained earnings.
- Dividends (Div): Decrease retained earnings.

EX. A corporation has beginning retained earnings of \$50,000, net income of \$20,000, and dividends of \$5,000.

<u>Item</u>	<u>Amount (\$)</u>
Beginning Retained Earnings	<u>50,000</u>
Add: Net Income	<u>20,000</u>
Less: Dividends	<u>(5,000)</u>
<u>Ending Retained Earnings</u>	<u>65,000</u>

Table: Statement of Retained Earnings

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Return on Equity (ROE)

Return on Equity (ROE)

Return (net income) on \$1 of equity investment.

Calculated as: $\frac{\text{Net Income}}{\text{Average Shareholders' Equity}}$ if Preferred Dividends = 0.

- Measures how much, for \$1 of equity investment, the firm generates in net income.
- Higher ROE values generally indicate better performance.

EX. A corporation has net income of \$100,000 and average shareholders' equity of \$500,000.

- $\text{ROE} = \$100,000 / \$500,000 = 0.20$ or 20%
- This means the corporation generated a return of 20% on its equity investment.

Earnings Per Shares (EPS)

Earnings Per Share (EPS)

A measure of a company's profitability on a per-share basis.

Calculated as: $\frac{\text{Net Income}}{\text{Average Shares Outstanding}}$ if Preferred Dividends = 0.

- Measures how much, for each share of common stock, the corporation generates in net income.
- Higher EPS values generally indicate better performance.

EX. A corporation has net income of \$100,000 and average shares outstanding of 50,000.

- $\text{EPS} = \$100,000 / 50,000 = \2.00
- This means the corporation generated \$2.00 in earnings for each share of common stock outstanding.

Earnings Per Shares (EPS) and Treasury Stock

- Treasury stock reduces the number of shares outstanding.
- This can increase the EPS.

EX. A firm has net income of \$100,000 and average shares outstanding of 50,000.

- How much is the EPS without stock repurchases
 - ▶ $\text{EPS} = \$100,000 / 50,000 = \2.00
- How much is the EPS if the corporation repurchases 10,000 shares as treasury stock?
 - ▶ $\text{EPS} = \$100,000 / (50,000 - 10,000) = \2.50

Price-to-Earnings (P/E) Ratio

A valuation ratio that compares a company's current share price to its EPS.

Calculated as: $\frac{\text{Stock Price per Share}}{\text{Earnings Per Share (EPS)}}$

- Measures how much investors are willing to pay for each dollar of earnings.
- Higher P/E ratios indicate currently higher prices relative to earnings, i.e., Premium!
- Why?
 - 1 the stock is overvalued.
 - 2 investors expect that future earnings will be higher.

EX. Consider two similar firms in the same sector.

<u>Firm</u>	<u>Price (\$)</u>	<u>EPS (\$)</u>	<u>P/E Ratio</u>
A	20.00	2.00	10
B	40.00	2.00	20

• For the same EPS, Firm B is more expensive than Firm A. Why?

▶ Scenario 1: Firm B is overvalued.

- ★ Firm B's stock price would decrease to \$20.
- ★ Firm B's P/E ratio would decrease to 10, the same as Firm A!

<u>Firm</u>	<u>Price (\$)</u>	<u>EPS (\$)</u>	<u>P/E Ratio</u>
A	20.00	2.00	10
B	20.00	2.00	10

▶ Scenario 2: Firm B is expected to have higher future earnings than Firm A.

- ★ Firm B's earnings would increase to \$4.
- ★ Firm B's P/E ratio would decrease to 10, the same as Firm A!

<u>Firm</u>	<u>Price (\$)</u>	<u>EPS (\$)</u>	<u>P/E Ratio</u>
A	20.00	2.00	10
B	40.00	4.00	10

Comparison of United Airlines and Delta Airlines (End of April 2025)

<u>Metric</u>	<u>UAL</u>	<u>DAL</u>
Stock Price	\$66.97	\$40.34
2025 EPS forecast from CNBC	\$10.23	\$5.35
P/E	6.54	7.54

- Assume they have similar growth prospects. Which one is undervalued?
United Airlines (with lower P/E).

Comparison of United Airlines and Delta Airlines (End of Nov 2025)

<u>Metric</u>	<u>UAL</u>	<u>DAL</u>
Stock Price	\$92.20	\$58.57
2025 EPS forecast from CNBC	\$10.82	\$6.02
P/E	8.52	9.73

- Assume they have similar growth prospects. Which one is undervalued?
United Airlines (with lower P/E).

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B/S example 1: Growing Retained earnings

- Year 1: Raised \$1,000,000 in capital
- Year 1: Borrowed \$2,000,000 from a bank
- Year 1: Earned \$200,000 in net income.
- Year 2: Earned \$300,000 in net income.
- Year 3: Earned \$400,000 in net income.
- **Calculate Retained Earnings (RE) at the end of each year.**⁸

Balance Sheet	Year 1	Year 2	Year 3
Assets			
...
Total Assets	<u>3,200,000</u>	<u>3,500,000</u>	<u>3,900,000</u>
Liabilities and Shareholders' Equity			
Liabilities			
...
Total Liabilities	<u>2,000,000</u>	<u>2,000,000</u>	<u>2,000,000</u>
Shareholders' Equity			
Contributed Capital (C.C)	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>
Retained Earnings (R.E)	<u>200,000</u>	<u>500,000</u>	<u>900,000</u>
Total Shareholders' Equity	<u>1,200,000</u>	<u>1,500,000</u>	<u>1,900,000</u>
Total Liabilities and Shareholders' Equity	<u>3,200,000</u>	<u>3,500,000</u>	<u>3,900,000</u>

⁸The below B/S can be made from the information above.

B/S example 2: Growing Retained Earnings even with dividends

- Year 1: Raised \$1,000,000 in capital
- Year 1: Borrowed \$2,000,000 from a bank
- Year 1: Earned \$200,000 in net income.
- Year 2: Earned \$300,000 in net income.
- Year 3: Earned \$400,000 in net income.
- Year 3: **Paid \$250,000 dividends.**
- **Calculate Retained Earnings (RE) at the end of each year.**⁹

Balance Sheet	Year 1	Year 2	Year 3
Assets			
...
Total Assets	3,200,000	3,500,000	<u>3,650,000</u>
Liabilities and Shareholders' Equity			
Liabilities			
...
Total Liabilities	2,000,000	2,000,000	<u>2,000,000</u>
Shareholders' Equity			
Contributed Capital (C.C)	1,000,000	1,000,000	<u>1,000,000</u>
Retained Earnings (R.E)	200,000	500,000	<u>650,000</u>
Total Shareholders' Equity	1,200,000	1,500,000	<u>1,650,000</u>
Total Liabilities and Shareholders' Equity	3,200,000	3,500,000	<u>3,650,000</u>

⁹The below B/S can be made from the information above.

B/S example 3: Growing Retained Earnings even with dividends

- Year 1: Raised \$1,000,000 in capital.
- Year 1: Borrowed \$2,000,000 from a bank.
- Year 1: Reported **\$600,000 losses**.
- Year 2: Reported **\$800,000 losses**.
- Calculate Retained Earnings (RE) at the end of each year.¹⁰

Balance Sheet	Year 1	Year 2
Assets		
...
Total Assets	2,400,000	<u>1,600,000</u>
Liabilities and Shareholders' Equity		
Liabilities		
...
Total Liabilities	2,000,000	<u>2,000,000</u>
Shareholders' Equity		
Contributed Capital (C.C)	1,000,000	<u>1,000,000</u>
Retained Earnings (R.E)	(600,000)	<u>(1,400,000)</u>
Total Shareholders' Equity	400,000	<u>(400,000)</u>
Total Liabilities and Shareholders' Equity	2,400,000	<u>1,600,000</u>

- If Retained Earnings is negative, it is called **accumulated deficit**.
- The company has an **accumulated deficit** of **(400,000)**.

¹⁰The below B/S can be made from the information above.