

Lecture 2

Financial Statement Analysis

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Firms' Disclosure of Financial Information

- Financial Statements
 - Firm-issued accounting reports with past performance information
 - Filed with the SEC
 - 10Q (Quarterly)
 - 10K (Annual)

Must also send an annual report with financial statements to shareholders

- Contains financial statements as well as management's analysis of the of the firm's past operations and future prospects.

You may find financial statements on SEC website

<https://www.sec.gov/edgar/searchedgar/companysearch.html>

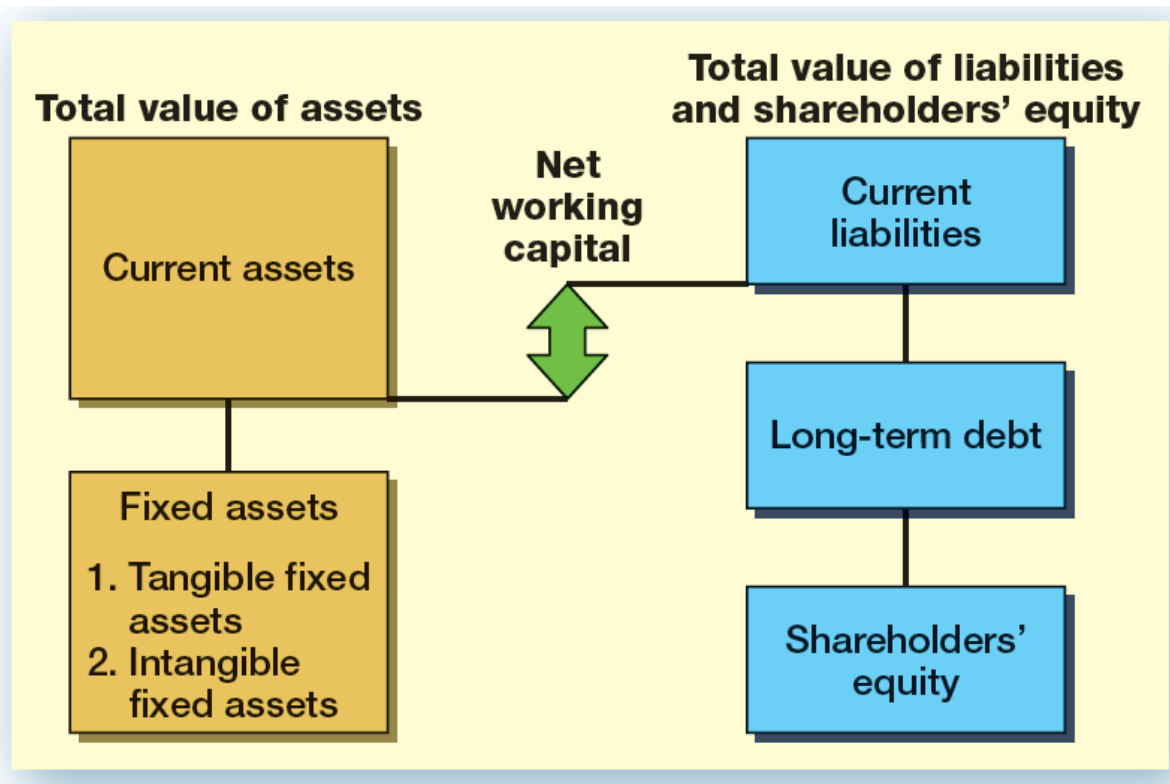
Financial Statements

- Balance Sheet: provides a *snapshot* of a firm's assets and liabilities at *a given point in time*
- Income Statement: summarizes a firm's revenues and expenses *during the stated period*
- Statement of Cash Flows: reports the impact of a firm's activities on cash flows during the stated period
- Statement of Retained Earnings: reports on the changes in equity of the company during the stated period

Balance Sheet

- The balance sheet is a snapshot of the firm's assets and liabilities at a given point in time
- Balance Sheet Identity
 - $\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$

The Balance Sheet



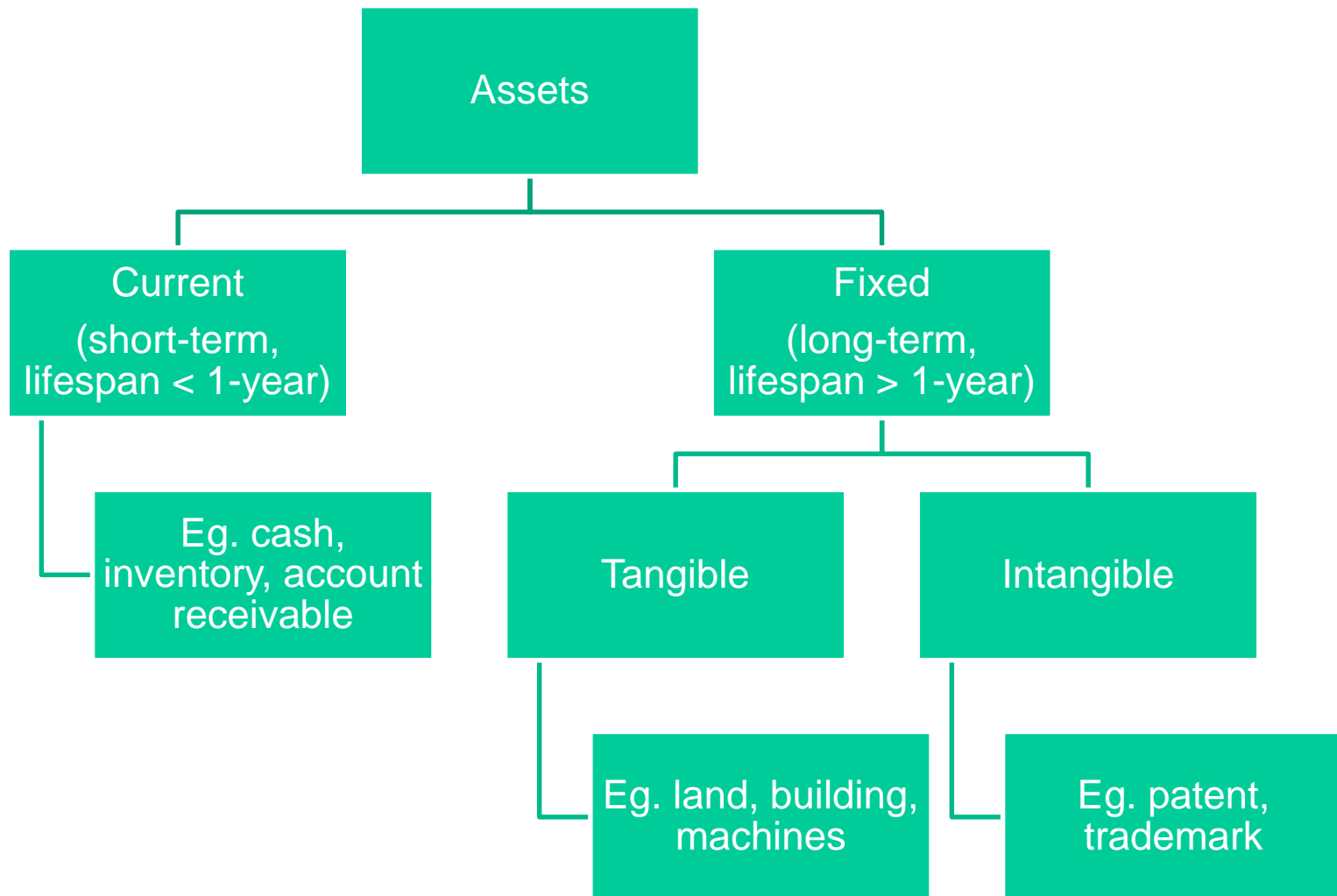
Assets

$$= \text{Liabilities} + \text{Stockholders' Equity}$$

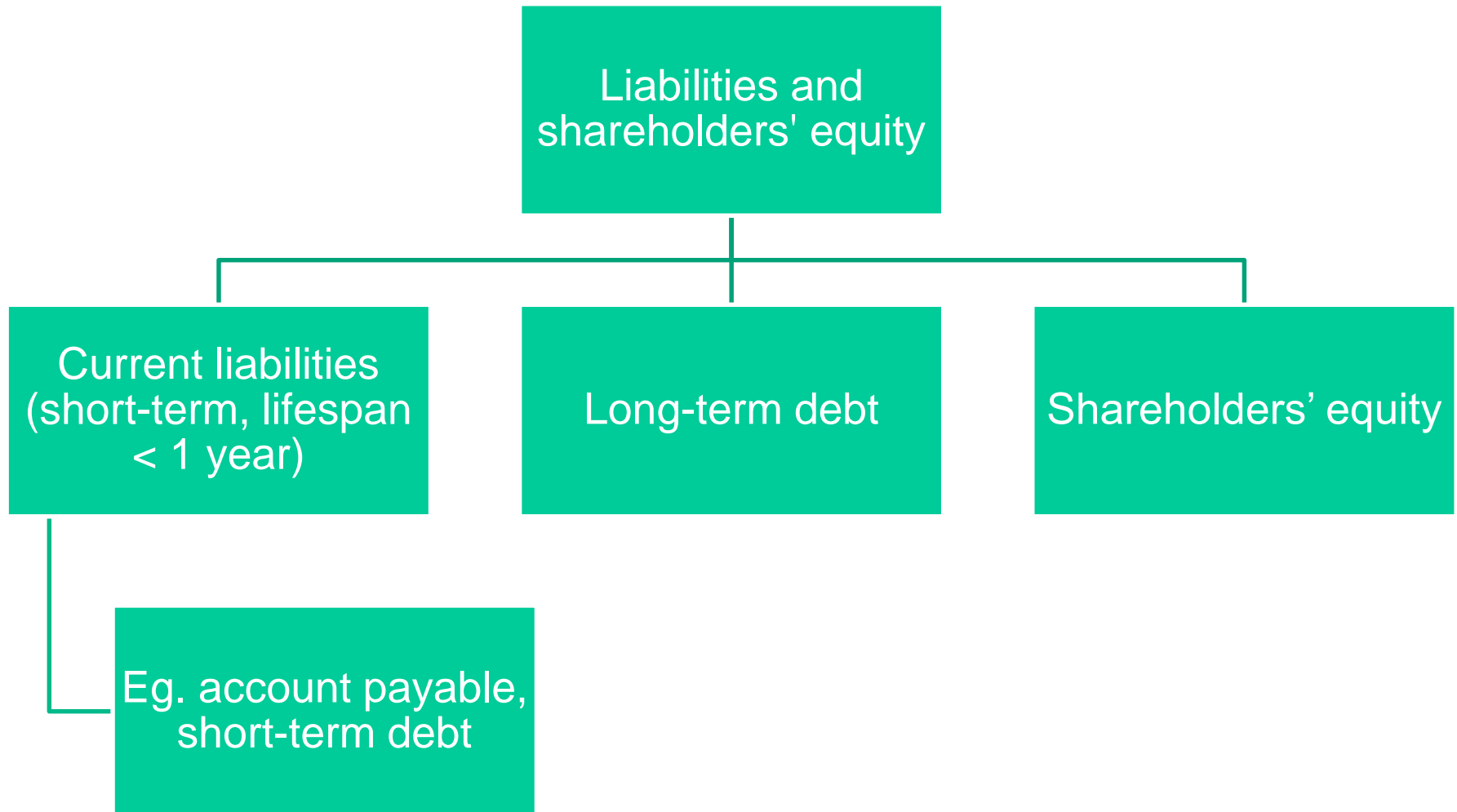
Net Working Capital

$$= \text{Current Assets} - \text{Current Liabilities}$$

Left side of the Balance Sheet



Right Side of the Balance Sheet



Sample Balance Sheet

ASIA-PACIFIC CORPORATION 2014 and 2015 Balance Sheets (\$ in millions)					
Assets			Liabilities and Owners' Equity		
	2014	2015		2014	2015
Current assets			Current liabilities		
Cash	\$ 104	\$ 160	Accounts payable	\$ 232	\$ 266
Accounts receivable	455	688	Notes payable	196	123
Inventory	553	555	Total	\$ 428	\$ 389
Total	<u>\$1,112</u>	<u>\$1,403</u>			
Fixed assets					
Net plant and equipment	<u>\$1,644</u>	<u>\$1,709</u>	Long-term debt	\$ 408	\$ 454
			Owners' equity		
			Common stock and paid-in surplus	600	640
			Retained earnings	<u>1,320</u>	<u>1,629</u>
			Total	<u>\$1,920</u>	<u>\$2,269</u>
Total assets	<u>\$2,756</u>	<u>\$3,112</u>	Total liabilities and owners' equity	<u>\$2,756</u>	<u>\$3,112</u>

Debt vs. Equity

- Creditors: first claim to the firm's cash flow.
- Equity holders: the residual value.
 - Shareholders' equity = Assets – Liabilities
- The use of debt in a firm's capital structure is called *financial leverage*.
 - The more debt a firm has (as a percentage of assets), the greater is its degree of financial leverage.
- Financial leverage increases the potential reward to shareholders, as well as the potential financial distress and business failure (lecture 9).

Market Value vs. Book Value

- The balance sheet provides the *book value* of the assets, liabilities, and equity
- *Market value* is the price at which the assets, liabilities, or equity can actually be bought or sold
 - Market value = stock price x shares outstanding
- Market value and book value are often very different.
 - The balance sheet shows the *historical* costs
 - *Book value can be greater than market value*
 - market has lost confidence in the ability of the company's assets to generate future profits and cash flows
 - *Book value can be smaller than the market value*
 - market has faith in the earnings power of the company's assets.
- *Market value is more important to the decision-making process.*

Income Statement

- The income statement measures performance over a specified period of time.
 - like a video of the firm's operation

Sample Income Statement

ASIA-PACIFIC CORPORATION 2015 Income Statement (\$ in millions)		
Net sales		\$1,509
Cost of goods sold		750
Depreciation		<u>65</u>
Earnings before interest and taxes		\$ 694
Interest paid		<u>70</u>
Taxable income		\$ 624
Taxes (34%)		<u>212</u>
Net income		<u><u>\$ 412</u></u>
Dividends	\$103	
Addition to retained earnings	309	

- Income Statement Equation: Revenues – Expenses = Income
- generally report revenues first and then deduct any expenses for the period

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- Any interest payments are deducted from Earnings Before Interests and Taxes (EBIT) *before* the calculation of Taxes. The reduction in the amount of tax paid is referred to as the *Interest Tax Shield*.
- Dividend payments are not tax deductible and do not reduce the amount of taxes

Example: EPS and ROE

Suppose Asia-Pacific had 200 million shares outstanding at the end of 2015. Based on the its balance sheet and income statement, what was its *earnings per share* (EPS) and *return on equity* (ROE)?

Solutions:

Form the balanced sheet and the income statement, we see that Asia-Pacific had a owner's equity of \$2,269 and a net income of \$412 million for the year. Because 200 million shares were outstanding, we can calculate earnings per share (EPS) and return on equity (ROE) as follows:

Earnings per share = Net income/Total shares outstanding
= \$412/200=\$2.06 per share

Return on equity = Net income/Total equity
=\$412/\$2,269=18.2%