

Week 3

Agenda

- Where Are We? / Review
- Income Statement
- Quiz
- Balance Sheet
- Statement of Owners' Equity
- Break
- Articulation
- Annual Report Review

Where Are We?

- Week 1: Business Introduction
- Week 2: Accrual Accounting/Environment
- **Week 3: Income Statement/Balance Sheet**
- Week 4: Statement of Cash Flows
- Week 5: Time Value of Money/Review
- Week 6: Midterm / Time Value of Money
- Week 7: Financing Activities
- Week 8: Investing Activities
- Week 9: Operating Activities

Review

Review Items

- Basic Principles of Accrual Accounting
- Financial Statements
- Financing v. Investing v. Operating
- Depreciation

Basic Principles

- Don't recognize revenues until seller has received goods/services and the amount of cash received is measurable
- Assign expenses to the same time period that the associated revenues are earned
“matching principle”

Financial Statements

- Balance Sheet (snapshot in time)
- Income Statement (period of time)
- Statement of Cash Flows (period of time)
- *Statement of Retained Earnings or Statement of Stockholders' Equity*(period of time) - not required statements

Financial Statements

Beginning
of Period

End
of Period



Income Statement

Statement of Cash Flows

Statement of Retained Earnings

Balance Sheet



Fundamental Accounting Equation

$$\begin{array}{c} \text{ASSETS} = \text{LIABILITIES} + \text{OWNER'S EQUITY} \\ \begin{array}{c} \text{---|---|} \\ \text{cash} \quad \text{other} \end{array} \qquad \begin{array}{c} \text{---|---|} \\ \text{contributed} \quad \text{retained} \\ \text{capital} \qquad \text{earnings} \end{array} \end{array}$$

Balance Sheet

- Lists Assets and Liabilities/Owners' Equity
- These MUST balance because of the Fundamental Accounting Equation
- Owners' Equity is split into Contributed Capital and Retained Earnings

Income Statement

- Net Income is profit/loss for the fiscal period
- Shows information regarding **operating activities only**
- **Does not reflect investment activity or change in debt principal**

Statement of Cash Flows

- Shows the changes in underlying accounts that caused cash to change from beginning of year level to end of year

Types of Business Activities

Operating Financing Investing

Financing Activities - Two Methods

- **Equity Financing:** contribution by owners and retained profits
- **Debt Financing:** have principal repayments and interest
 - ✓ Initial stock sales / company repurchases
 - ✓ Dividend payments
 - ✓ Principal repayments (interest is operating activity)

Investing Activities

- Acquisition of **long-term assets**
- Acquisition of other investment assets, such as acquisitions, joint ventures or securities
- ✓ Land (Property)
- ✓ Physical Plant/Buildings
- ✓ Equipment (lasting more than one year)

Operating Activities

Activities needed to acquire and sell goods/ services in the “ordinary course of business”

- ✓ Making goods; obtaining consumable resources
- ✓ Selling, general and administrative costs (SG&A)
- ✓ Wages, utilities, insurance, etc.
- ✓ Depreciation and Amortization

Operating Activities - Interest Expense

Q: Is interest expense on debt an ordinary operating expense?

A: GAAP generally requires interest to be shown outside of operating activities on Income Stmt, but it is in Operating Activities for Cash Flow Stmt.

Purpose of Financial Statements

- Balance Sheet: important for **creditors**
- Earnings Statement: important for **investors**
- Statement of Stockholders' Equity: important for **investors**
- Statement of Cash Flows: important for **creditors, investors** to assess ability to meet cash requirements

Lightning Round

**Do you look to the cash
account to find Net
Income?**

What is Return on Assets?

How is it calculated?

What is it a measure of?

**Can retained earnings
be used to pay
dividends?**

**What is an example of
Accrued Revenue?**

**What is an example of a
Deferred Revenue?**

**What are some
different names for the
Income Statement?**

**If a company sells more
shares on the open
market, how is it valued
on the company's
books?**

**What is an example of
Accrued Expense?**

**What is an example of a
Deferred Expense?**

What is agency risk?

What is moral hazard?

**When should gift cards
be recognized as
revenue?**

**What is the difference
between accrual
accounting and cash
accounting?**

**What are the three
main types of business
activities?**

**What are the two types
of financing?**

**What are some typical
investing activities of a
business?**

**What do operating
activities measure?**

Income Statement

Income Statement

Gross Revenues	\$ 300,000	
Cost of Goods Sold (CoGS)	<u>\$ 210,000</u>	
Gross Margin/Profit	\$ 90,000	
Operating Expenses		
Selling, General & Admin.	\$ 30,000	
Depreciation & Amortization	\$ 6,000	
Research & Development	<u>\$ 4,000</u>	
Total Operating Expenses	\$ 40,000	
Operating Income (EBIT)	\$ 50,000	
Interest Expense	<u>\$ 10,000</u>	
Earnings before Taxes	\$ 40,000	
Income Taxes	<u>\$ 12,000</u>	
Net Income	\$ 28,000	

Analysis “Toolbox”

- **Gross Margin:**
 $(\text{Revenues} - \text{CoGS}) / \text{Revenues}$
- **Operating Margin:**
 $\text{Operating Revenue} / \text{Revenues}$
- **Net Margin:**
 $\text{Net Income} / \text{Revenues}$

These are all measures of profitability

Income Statement

Gross Revenues	\$ 300,000	
Cost of Goods Sold (CoGS)	\$ 210,000	
Gross Margin/Profit	\$ 90,000	30% gross margin
Operating Expenses		
Selling, General & Admin.	\$ 30,000	
Depreciation & Amortization	\$ 6,000	
Research & Development	\$ 4,000	
Total Operating Expenses	\$ 40,000	
Operating Income (EBIT)	\$ 50,000	16.7% oper. margin
Non-operating Income	5,000	
Interest Expense	\$ 15,000	
Earnings before Taxes	\$ 40,000	
Income Taxes	\$ 12,000	
Net Income	\$ 28,000	9.3% net margin

Depreciation / Amortization / Impairment

- Depreciation: The attribution of long-term assets over to the associated revenue period
- Amortization: The attribution of long-term INTANGIBLE assets, such as trademarks or copyrights
- Impairment: The reduction of Goodwill (excess of purchase price over book value)

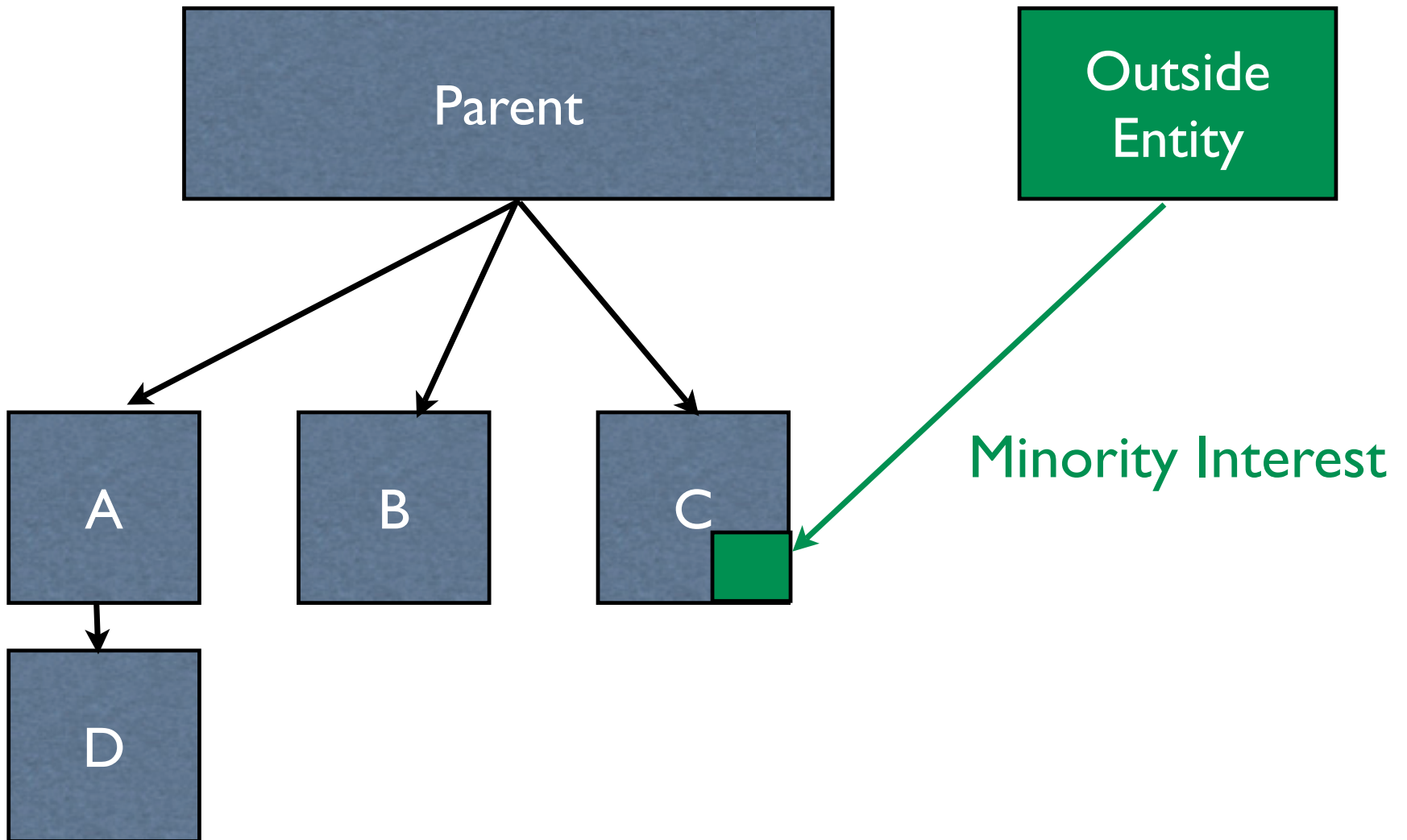
Income Statement (cont.)

Net Income	\$ 28,000	
Earnings per Share (EPS)		
Basic	\$ 0.28	
Diluted	\$ 0.19	
Shares used to calculate EPS		
Basic	100,000	
Diluted	150,000	
Dividends	\$8,000	
Basic (per share)	\$ 0.08	

EPS v. ROA

- Return on Assets = Net Income / Total Assets
is a measure of **firm profitability**
- EPS is a measure of **investor profitability**

Parent/Subsidiaries



Week 3 Quiz

Balance Sheet

Balance Sheet - Assets

Current Assets		
Cash & Cash Equivalents	\$ 30,000	
Accounts Receivable	\$ 10,000	
Inventory	\$ 35,000	
Prepaid Expenses	<u>\$ 15,000</u>	
Total Current Assets	\$ 90,000	
Property, Plant & Equipment	\$ 220,000	net of accumulated depreciation
Goodwill	\$ 10,000	
Other Intangible Assets	<u>\$ 20,000</u>	
Total Assets	\$ 340,000	

Balance Sheet - Liabilities

Current Liabilities		
Accounts Payable	\$ 30,000	
Accrued Expenses	\$ 10,000	
Notes Payable	\$ 20,000	
Interest Due in Current Year	<u>\$ 5,000</u>	
Total Current Liabilities	\$ 65,000	
Long-term debt	\$ 50,000	
Deferred Income Taxes	<u>\$ 5,000</u>	
Total Liabilities	\$ 120,000	

Current Ratio

- Current Assets / Current Liabilities
- Measure of organizational solvency

Our example: $\$90,000 / \$65,000 = 1.38$

- Standards will vary by industry

Working Capital

- Current Assets *minus* Current Liabilities
- Measure of an organization's solvency
- Measure of an organization's ability to grow

**Can a company grow
too quickly?**

Balance Sheet - Shareholders' Equity

Common Stock (par)	\$ 1,000	
Additional Paid-in Capital	\$ 199,000	
Retained Earnings	\$ 20,000	
Accumulated Other Comprehensive Income	<u>\$ 0</u>	
Total Shareholders' Equity	\$ 220,000	
Total Liabilities + Owners' Equity	\$ 340,000	

Stock Shares

- **Authorized** - total number of shares that the company has SEC approval to sell
- **Issued** - number of shares sold
- **Outstanding** - number of shares still on market

- **Par Value** - “face” value of stock
- **Additional Paid-in Capital** - amount initially received by the firm above the par value

Common v. Preferred

- Preferred shares typically have a stated dividend return
- Preferred dividends have priority over common share dividends
- Preferred stock holders have liability preference over common stock holders in case of bankruptcy
- More similar to debt than equity

Is basic or diluted the “better”
measure?

What would the earnings per
share or dividend per share be
compared to?

**Where does the market value
stock price appear in the
financial statements?**

Statement of Owners' Equity

Dividends

- Date Declared - announced by Board, creates an accounting entry in Dividends Payable (a Retained Earning account)
- Ex-dividend Date - stock holders on this date will receive the dividend
- Date Paid - date funds actually distributed

Other Comprehensive Income

- Financial Derivatives
- Pension Benefits
- Currency Fluctuations

- Annual amount that is usually shown on Earnings Statement or a separate statement
- Accumulated Other Comprehensive Income typically shown on Stmt of Retained Earnings or Stockholders' Equity

Reconciliation of Owners' Equity

	Par Value	Addl Paid-in	Retained Earn.	AOCI
Beginning of Year	\$0	\$ 0	\$ 0	\$ 0
Stock Issued	\$ 1,500	\$ 298,000		
Stock Repurchased	(\$ 500)	\$ 99,000		
Net Income			\$ 28,000	
Dividend Declared			\$ 8,000	
Other Comp. Inc.				\$ 220,000
Total Assets	\$ 1,000	\$ 199,000	\$ 20,000	\$ 220,000

**Are Dividends shown
on the Income
Statement?**

**How do the Financial
Statements Inter-relate?**

“Articulation”

Balance Sheet

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$



$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (end of period)}$$

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (beg. of period)} + \text{Net Income (for period)} - \text{Dividend (for period)}$$

Income Statement



$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

Cash | Other

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (end of period)}$$

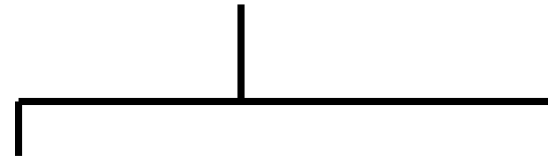
Cash Flow Statement

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (beg. of period)} + \text{Net Income (for period)} - \text{Dividend (for period)}$$

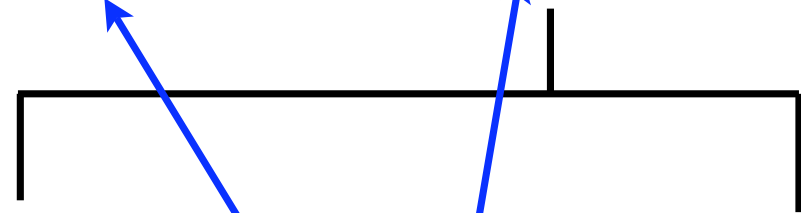
Cash | Other



$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

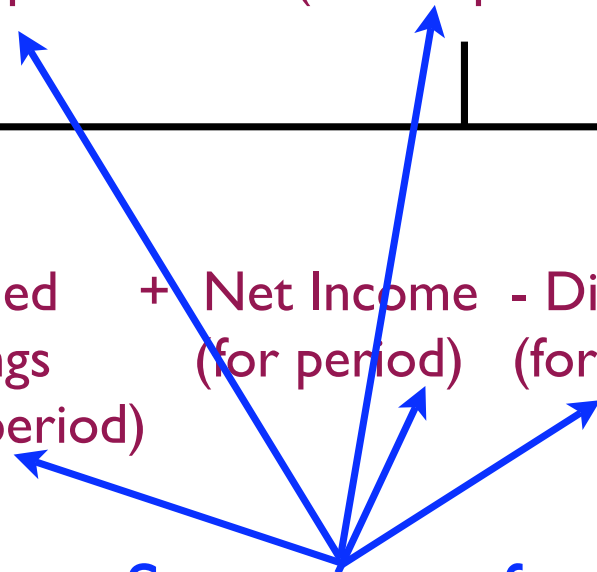


$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (end of period)}$$



$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earnings (beg. of period)} + \text{Net Income (for period)} - \text{Dividend (for period)}$$

Statement of
Owners' Equity



Limitations of Financial Statements

- Use of estimates and allocations
- Use of historical cost
- Omission of transactions
- Omission of resources and costs
- Delay in providing information

Exercise 4.3

1. The statement provides information about resources consumed during an accounting period.
2. The portion of profits that were distributed to owners of the firm is disclosed.
3. The current market value of the firm's resources is reported.
4. The statement is dated as of a specific point in time.
5. The amounts that are owed to other organizations or individuals are reported.
6. The total amount of capital that has been contributed to the organization is reported.

7. Amt. of capital contributed during the accounting period just ended.
8. Information reported regarding the rewards earned from serving customers during accounting period just ended.
9. The statement is not as of a specific date, but covers a period of time.
10. Reports information that has been developed on an accrual basis.
11. Statement contains information about the financial sacrifices made to acquire resources.

12. Statement contains information concerning contributed capital.
13. Statement contains information concerning the results of operating activities.
14. The amount of stock sold during the accounting period just ended is disclosed.
15. The information links two other statements.

Target Annual Report

- What is the most recent fiscal period for Target?
- What is the gross margin? operating margin? net margin? for each of the three years?
- Is the SG&A increase reasonable?
- Would you consider the gain on discontinued operations as part of your analysis? Why or why not?
- Why did cash increase during 2004 fiscal year?
- Is the change in working capital reasonable?
- Is Target in better or worse financial condition at the end of the 2004 fiscal year?

Week 3