L16 APSC221 - Assessing Financial Strength

Financial management is the raising of money and managing company finances to achieve the highest rate of return

Financial Objectives

1. Profitability - ability to make a profit
2. Liquidity - ability to meet short-term financial obligations
3. Efficiency - ability to utilize assets and equity productively to generate revenues and profits
4. Stability - Company's overall financial health and posture

Financial Management Process

Each step has different documents
This process is cyclical, not linear

1. Preparation of Historic Financial Statements - income statement, balance sheet, statement of Cash Flows

Income Statement

- reflects the result of business operations for a given period of time
- records all revenues and expenses
- shows the net result in profit or less

Balance Sheet

- outlines a company's assets, liabilities, and equity at a **specific point in time**
- limited use due to its time constraint

Statement of Cash Flows

- summarizes the change in a company's cash position for a given period of time and **why it changed**

2. Preparation of Forecasts - income, expenses, capital expenditures

3. Preparation of Pro Forma Financial Statements - pro forma means into the future

Historical Statements

- reflect past performance
- typically, reported on a quarterly and fiscal year basis
- publicly traded companies are required by securities laws to prepare these statements for shareholders and to make them public

Pro Forma Statements

- projections of future periods
- typically, prepared for an annual period for 2-3 years into the future
- strictly planning tools and have no legislated requirements, nor are binding

4. Ongoing Analysis of Financial Results - ratio analysis, measuring results versus plans and/or industry norms

Income Statement

Income Statement

	December 31, 2014	December 31, 2013	December 31, 2012
Net sales	$586,600	$463,100	$368,900
Cost of sales	268,900	225,500	201,500
Gross profit	317,700	237,600	167,400
Operating expenses			
Selling, general, and administrative expenses	117,800	104,700	90,200
Depreciation	13,500	5,900	5,100
Operating income	186,400	127,000	72,100
Other income			
Interest income	1,900	800	1,100
Interest expense	(15,000)	(6,900)	(6,400)
Other income (expense), net	10,900	(1,300)	1,200
Income before income taxes	184,200	119,600	68,000
Income tax expense	53,200	36,600	18,000
Net income	131,000	83,000	50,000
Earnings per share	1.31	0.83	0.50

Net sales or revenues is the amount of money brought in from sales
Cost of sales is the cost of goods sold
Gross profit Revenue - cost
Operating expenses (selling, general, admin) are the overhead costs of the company
Depreciation shows the amount of depreciation reduces from revenues

Operating income is the income in the operation (running) of the company
Other income (expense), net is interests, investments, financing expenses etc.
Income before income taxes how much you have to pay before taxes
Income tax expense taxes paid
Net income bottom line, how much the company can keep
Earnings per share if company is public

Balance Sheet

Assets = Liabilities + Equity

Assets

Balance Sheet - Assets

Assets = Liabilities + Equity

Assets	December 31, 2014	December 31, 2013	December 31, 2012
Current assets			
Cash and cash equivalents	$63,800	$54,600	$56,500
Accounts receivable, less allowance for doubtful accounts	39,600	48,900	50,200
Inventories	19,200	20,400	21,400
Total current assets	122,600	123,900	128,100
Property, plant, and equipment			
Land	260,000	160,000	160,000
Buildings and equipment	412,000	261,500	149,000
Total property, plant, and equipment	672,000	421,500	309,000
Less: accumulated depreciation	65,000	51,500	45,600
Net property, plant, and equipment	607,000	370,000	263,400
Total assets	729,600	493,900	391,500

Current Assets

Quick to become cash. Use to make payments on debts, liabilities, etc.

Cash and cash equivalents are immediately cash (GIC)
Accounts receivable, less allowance for doubtful accounts money expected to receive from invoices.
Inventories is what we have prepared and ready to sell

Long Term Assets

Land, buildings, equipment

Liabilities + Equity

Assets = Liabilities + Equity

Liabilities and shareholders' equity			
Current liabilities			
Accounts payable	30,200	46,900	50,400
Accrued expenses	9,900	8,000	4,100
Total current liabilities	40,100	54,900	54,500
Long-term liabilities			
Long-term debt	249,500	130,000	111,000
Long-term liabilities	249,500	130,000	111,000
Total liabilities	289,600	184,900	165,500
Shareholders' equity			
Common stock (100,000 shares)	10,000	10,000	10,000
Retained earnings	430,000	299,000	216,000
Total shareholders' equity	440,000	309,000	226,000
Total liabilities and shareholders' equity	729,600	493,900	391,500

Current Liabilities

Debts or bills to pay in the short-term (1-2 months)

Accounts payable to be invoiced out
Accrued expenses are things like insurance or utilities (paid after its use)

Long Term Liabilities

Long-term debt and liabilities long term loans (mortgages, business loans)

Shareholders' equity

Owner equity is related to those who have ownership in the company (stocks)
Retained earnings is all the past profits not paid out to investors

Statement of Cash Flows

	December 31, 2014	December 31, 2013
Cash flows from operating activities		
Net income	$131,000	$83,000
Additions (sources of cash)		
Depreciation	13,500	5,900
Decreases in accounts receivable	9,300	1,300
Increase in accrued expenses	1,900	3,900
Decrease in inventory	1,200	1,000
Subtractions (uses of cash)		
Decrease in accounts payable	(16,700)	(3,500)
Total adjustments	9,200	8,600
Net cash provided by operating activities	140,200	91,600
Cash flows from investing activities		
Purchase of building and equipment	(250,500)	(112,500)
Net cash flows provided by investing activities	(250,500)	(112,500)
Cash flows from financing activities		
Proceeds from increase in long-term debt	119,500	19,000
Net cash flows provided by financing activities		19,000
Increase in cash	9,200	(1,900)
Cash and cash equivalents at the beginning of each year	54,600	56,500
Cash and cash equivalents at the end of each year	63,800	54,600

Shows what the change in cash is depending on the activity

Cash flows from operating activities from running the business or operating itself

Cash flows from investing activities from the company doing investing

Cash flows from financing activities taking out loans or receiving capital from investors

The final result will indicate an increase or decrease in cash. And, it shows the cash and cash equivalents at the beginning vs. the end of each year

Ratio Analysis

Find a practical way to interpret a company's financial statements

You can:

- compare company performance between years on a relativistic basis
- compare company performance to other company's or the industry norms

Liquidity

$$\text{Working Capital Ratio} = CurrentAssets - CurrentLiabilities$$

$$\text{Current Ratio} = \frac{CurrentAssets}{CurrentLiabilities}$$

$$\text{Acid-Test Ratio} = \frac{QuickAssets}{CurrentLiabilities}$$

$$\text{Inventory Turnover Ratio} = \frac{Sales}{Inventory}$$

1. Goal: bigger than 1
2. Relativistic equivalent of WCR. Greater than 1
3. This uses quick assets, things we can turn to cash immediately
4. Telling us if we have too much inventory sitting around vs. sales

Profitability

$$\text{Profit Margin} = \frac{NetIncome}{Sales} = \frac{BottomLine}{TopLine}$$

$$\text{Return on Assets Ratio} = \frac{NetIncome}{TotalAssets}$$

$$\text{Return on Equity Ratio} = \frac{NetIncome}{TotalEquity}$$

1. Bottom line / top line. How much a company is keeping relative to its sales
2. Determines how efficient total assets are in creating income.
3. Tell us how efficient company is in making money depending on equity

Stability

$$\text{Debt Ratio} = \frac{TotalDebt}{TotalAssets}$$

$$\text{Debt to Equity Ratio} = \frac{TotalDebt}{Owner'sEquity}$$

$$\text{Equity Ratio} = \frac{TotalEquity}{TotalAssets}$$

1. Tells us if we are heavily using debt to run company. Small = good. Large = we have assets due to debt
2. Tells investors how much debt "they are in". Large = stockholder's will not receive money in bankruptcy

3. How much our assets are financed in equity

Ratio Analysis Comparison

Intuition-based comparison through ratio analysis

Good Examples:

- rising profit margin per year
- stable current and quick ratios
- decreasing debt ratios

Bad Examples:

- low pro forma ratios
- low return on assets

Rules of Thumb

Targets:

- current ratio = 2
- acid test ratio = 1

In general, specific ratio values are themselves netiher good nor bad - it is what they **imply** that is important