

# FINANCIAL RATIO ANALYSIS

#### THE COMPLETE FINANCIAL STATMEENT ANALYSIS

MODULE 3: THE BALANCE SHEET RATIOS

LEARNING MATERIAL — TAKEAWAY NOTE

#### DISCLAIMER

LEGALLY REQUIRED DISCLAIMER — THIS COURSE CONTAINS THE PERSONAL IDEAS AND OPINIONS OF THE COURSE PROVIDERS. THE INFORMATION CONTAINED IN THIS COURSE IS FOR EDUCATIONAL PURPOSES ONLY. THERE IS RECOMMENDATION OR ADVICE ON MAKING ANY INVESTMENT DECISIONS, BUYING OR SELLING ANY TYPES OF STOCKS, SECURITIES OR INVESTMENTS DISCUSSED IN THIS COURSE. THE COURSE PROVIDERS ARE NEITHER STOCK BROKERS NOR REGISTERED INVESTMENT ADVISORS. WE DO NOT RECOMMEND MAKING ANY INVESTMENT DECISIONS PROPOSED IN THIS COURSE. INDIVIDUALS SHOULD FIND REGISTERED INVESTMENT ADVISORS TO HELP THEM MAKE INVESTMENT DECISIONS. ALTHOUGH THE COURSE PROVIDERS HAVE STRIVED FOR PROVIDING THE MOST ACCURATE INFORMATION, THERE IS NO GUARANTEE OR WARRANTY CONCERNING THE RELIABILITY, ACCURACY AND COMPLETENESS OF THE INFORMATION. INDIVIDUALS SHOULD BE CAUTIOUS ABOUT MAKING THEIR OWN INVESTMENT DECISIONS. INDIVIDUALS ARE SOLELY RESPONSIBLE FOR INVESTMENT DECISIONS. THE COURSE PROVIDERS ARE NOT RESPONSIBLE FOR ANY LIABILITIES AND LOSSES, WHICH MAY ARISE FROM THE USE AND APPLICATION OF THE INFORMATION AND STRATEGIES PROPOSED IN THIS COURSE.

### THANK YOU!

Hello friends,

Congratulations! You've completed the Module 3 – The Balance Sheet Ratios. This is a learning note that we've prepared for you. It includes all key information in the lectures. You can take it away and revise the course from anywhere, on any device and at anytime you want.

If you have any concern about the lectures, feel free to send us a message, we are always here to help you!

Best regards,

Wealthy Education Team.

### HOW A BALANCE SHEET WORKS



BALANCE SHEET EXAMPLE (AAPL) – As of the 1st Quarter, 2016			
ASSETS		LIABILITIES	
Current Assets		Current Liabilities	
Cash or Cash Equivalents	55,283	Short-term Debts	10,498
Accounts Receivable	12,229	Accounts Payable	25,098
Inventories	2,281	Other Current Liabilities	32,669
Other Current Assets	17,799	Non-current Liabilities	
Total Current Assets	\$ 87,592	Long-term Debts	69,374
		Other Liabilities	37,181
Non-current Assets		Total Liabilities	\$ 174,820
Property, Plant & Equipment (PPE)	23,203		
Long-term Investments	177,645	SHAREHOLDERS' EQUITY	\$
Intangible Assets	3,843	Equity / Common Stock	29,484
Other Long-term Assets	7,745	Retained Earnings	100,973
Total Long-term Assets	\$ 217,685	Total Owner's Equity	\$ 130,457
Total Access	¢ 205 277	Total Link illains a Total Comments Socials	ć 20F 277
Total Assets	\$ 305,277	Total Liabilities + Total Owner's Equity	<u>\$ 305,277</u>

### CASH & CASH EQUIVALENTS

- Cash is the most liquid asset
- Some examples of cash and cash equivalents include:
  - Company bank accounts
  - Money market funds
  - ☐ Treasury bills
  - Marketable securities

### CASE #1 – A LOW CASH BALANCE

- Having adequate cash and cash equivalents on hand is what allows a business to:
  - ☐ Settle its debts
  - Purchase new inventory
  - Buy into lucrative investments
- → Potential problem if your company can't meet its debt obligations

### CASE #2 – A HIGH CASH BALANCE

- A high cash balance can be an indication that:
  - Your company is waiving potential investment opportunities that would generate higher interest income
  - Your company is waiving potential opportunities to expand its business operations
- → Potential problem with the management

# HOW TO EVALUATE CASH & CASH EQUIVALENTS

Cash to Current Assets = 
$$\frac{\text{Cash \& Cash Equivalents}}{\text{Current Asset}} \times 100\%$$

- This ratio shows what percentage of a firm's total current assets is represented by cash
- Criterion: Cash & Cash Equivalents ratio
- < 40%

### **INVENTORIES**

- Inventories include:
  - Raw materials for the manufacture of goods
  - Goods that are in the process of being manufactured
  - Completed goods that are ready to be sold
- Inventory control is one of the key areas where you can expect to see a firm's management team shine, or fall flat

### FACTS ABOUT INVENTORIES

- The higher a company's inventory levels are:
  - The more quickly it can fulfill customer orders
  - ☐ The better its customer service will be in terms of always having stock on hand
  - ☐ The more attractive its displays, for those companies operating in the retail sector

### FACTS ABOUT INVENTORIES

- Excess inventory levels can lead to:
  - Higher costs of storage space, insurance, and personnel
  - □ A loss of inventory related to goods that are perishable, or that become obsolete in the marketplace
  - ☐ The tying up of company resources in products that are only in demand intermittently

### HOW TO EVALUATE INVENTORIES

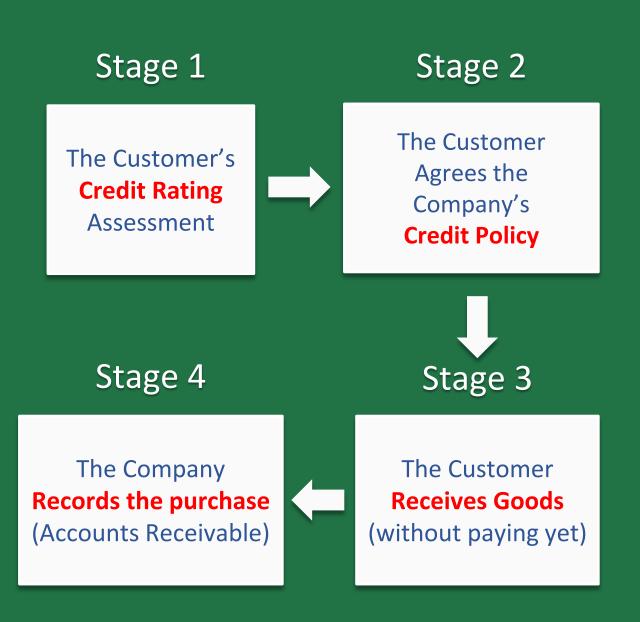
Inventory to Current Assets = 
$$\frac{Inventories}{Current Asset}$$
 x 100%

- This ratio shows what percentage of a firm's total current assets is represented by its inventory holdings
- → Criterion: Inventory to Current Assets ratio < 40%

#### **ACCOUNTS RECEIVABLE**

- Accounts Receivable is the term used to signify the monies owed to a company from its various customers.
- These payment terms represent a company's credit policy
- → Cannot collect money owed by customers = bad debts
- → A company's Accounts Receivable is considered to be one of the most important parts of its current assets

### **ACCOUNTS RECEIVABLE**



### CREDIT POLICY

- Changes in credit policy will significantly affect sales and profits:
  - When a company's credit policy is loose, and encourages customers to pay on credit, it can cause sales to increase
  - When a company's credit policy is strict, and makes it difficult or unappealing for customers to pay on credit, it can cause sales to drop off

# CASE #1 A LOOSE CREDIT POLICY

Abuse the customer credit policy to drive up sales

### Potential problems:

- An inability to collect outstanding payments from customers
- □ The conversion of accountsreceivables into bad debts that mustbe written off
- → A loss or decrease in profits over the long term

### CASE #1 A STRICT <u>CREDIT POLICY</u>

Enforce a more stringent credit policy to reduce potential bad debts

#### Potential problems:

- Reduced sales, as fewer customers
   qualify for credit and qualified
   customers seek more
   accommodating payment terms with
   other companies
- → Reduced profits, resulting from fewer sales

# HOW TO EVALUATE ACCOUNTS RECEIVABLE

Receivable to Current Assets =  $\frac{\text{Accounts Receivable}}{\text{Current Asset}} \times 100\%$ 

- This ratio shows what percentage of a firm's total current assets is represented by its accounts receivable
- → Criterion: Accounts Receivable to

**Current Assets ratio < 40%** 

### **ACCOUNTS PAYABLE**

- A firm's accounts payable is made up of all the money it owes to:
  - Suppliers
  - ☐ Vendors
  - ☐ Other short-term creditors, such as banks
- These debts are the result of purchasing supplies on credit
- On credit = Get the product first and promise to pay later

### **ACCOUNTS PAYABLE**

Accounts payable can directly impact a company's profitability:



Relationships With Suppliers



Business Cash Flows

### RISKS OF A HIGH ACCOUNTS PAYABLE BALANCE

- The bigger a company gets, the more challenging it can become for it to keep its accounts payable under control.
- When a business can't meet its shortterm bill payments for whatever reason, it may have to:
  - ☐ Sell off assets to settle its debts
  - Declare bankruptcy, if all else fails

# HOW TO EVALUATE ACCOUNTS PAYABLE

Payable to Current Assets = 
$$\frac{\text{Accounts Payable}}{\text{Current Asset}} \times 100\%$$

- This ratio shows what percentage of a firm's total current assets is represented by its accounts payable
- → Criterion: Accounts Payable to Current

Assets ratio < 40%

# RETURN ON EQUITY (ROE)

Return on Equity (ROE) = 
$$\frac{\text{Net Income}}{\text{Shareholders'Equity}} \times 100\%$$

- The higher your company's return on equity is:
  - ☐ The higher a profit it's generating from the money invested by common shareholders
  - ☐ The more effectively it's using its equity to fund its regular business operations

### RETURN ON EQUITY (ROE)

- When a company's ROE is equal to 1, it means that it's earning 1 dollar of net income from each dollar invested by shareholders, or a 100% return on equity.
  - Net Income = \$50,000
  - Total Assets = \$1,000,000
  - Total Liabilities = \$500,000

Return on Equity = 
$$\frac{\$50,000}{\$1,000,000 - \$500,000} \times 100\% = 10\%$$

# RETURN ON EQUITY (ROE)



- **❖** Average ROE (3-5 years) > 12%
  - Previous Year's ROE > 15%

### CAPITAL STRUCTURE





### **USEFUL DEBT RATIOS**





Interest Coverage Ratio (long-term)



Working Capital to Debt Ratio (total debt)

### **CURRENT RATIO**

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

- Current ratio reflects your company's ability to pay its short-term debts, by measuring all of its current assets against all of its current liabilities.
- → The higher the ratio is, the better

### **CURRENT RATIO**

- When a company doesn't have sufficient resources to meet its debts, it simply means:
  - ☐ It's not generating enough profits to support itself
  - ☐ It's not efficient at collecting monies owed from customers
- → Investment criterion: Current Ratio > 1.50
- Avoid businesses with the ratio of less than0.50

### INTEREST COVERAGE RATIO

**Earnings Before Interest & Taxes** 

Interest Coverage Ratio = 
$$\frac{EBIT}{Interest Expenses}$$

- Known as the Time interest earned ratio
- This ratio allows to you examine the interest payments associated with your company's debt obligations

### INTEREST COVERAGE RATIO

- The higher the company's ratio is , the healthier its financial position is in terms of:
  - Its debt-servicing ability
  - Its debt repayment capability
  - Its credit rating for any new borrowing
- → Investment criterion: Interest Coverage

**Ratio > 15** 

# WORKING CAPITAL TO DEBT RATIO

**Current Assets – Current Liabilities** 

Working Capital to Debt Ratio =  $\frac{\text{Working Capital}}{\text{Short term Debt} + \text{Long term Debt}}$ 

- Working Capital to Debt ratio allows us to evaluate a company's ability to reduce or even eliminate its debt load
- The higher the ratio, the better

# WORKING CAPITAL TO DEBT RATIO

- Looking for companies that would be capable of:
  - Paying off all of their debt should it become necessary
  - Retaining a reasonable level of working capital were this situation ever to occur
- → Investment criterion: WC to Debt > 0.20
- Avoid businesses with a negative working capital ratio



# THANK YOU!

FOR MORE INFORMATION:

VISIT: WWW.WEALTHYEDUCATION.COM