# THE TURNAROUND EXPERIENCE: SAVING TROUBLED COMPANIES

*CHAPTER 5: FINANCIAL AND OTHER INDICATORS OF HEALTH*

CHANDLER OLAZABA

# FINANCIAL AND OTHER INDICATORS OF HEALTH

Chapter 5 takes a look at the current performance, or "pulse," of a company.

Common tools which look to do this are:

- The Balance Sheet
- Financial Ratios
  - The Current Ratio
  - The Quick Ratio
  - Account Receivable Days
  - Accounts Payable Days
  - Gross Margin
  - Inventory Turns
- Productivity Ratios

# THE BALANCE SHEET

- The Balance Sheet is "a statement of the assets, liabilities, and capital of a business or other organization at a particular point in time, detailing the balance of income and expenditure over the preceding period."
- Income statement vs Balance Sheet
- Assets = Liabilities & Stockholders' Equity

**AMAZON.COM, INC.**
**CONSOLIDATED BALANCE SHEETS**
**(in millions, except per share data)**

| | December 31, 2016 | December 31, 2017 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 19,334 | $ 20,522 |
| Marketable securities | 6,647 | 10,464 |
| Inventories | 11,461 | 16,047 |
| Accounts receivable, net and other | 8,339 | 13,164 |
| Total current assets | 45,781 | 60,197 |
| Property and equipment, net | 29,114 | 48,866 |
| Goodwill | 3,784 | 13,350 |
| Other assets | 4,723 | 8,897 |
| Total assets | $ 83,402 | $ 131,310 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Accounts payable | $ 25,309 | $ 34,616 |
| Accrued expenses and other | 13,739 | 18,170 |
| Unearned revenue | 4,768 | 5,097 |
| Total current liabilities | 43,816 | 57,883 |
| Long-term debt | 7,694 | 24,743 |
| Other long-term liabilities | 12,607 | 20,975 |
| Commitments and contingencies (Note 7) | | |
| Stockholders' equity: | | |
| Preferred stock, $0.01 par value: | | |
| Authorized shares — 500 | | |
| Issued and outstanding shares — none | — | — |
| Common stock, $0.01 par value: | | |
| Authorized shares — 5,000 | | |
| Issued shares — 500 and 507 | | |
| Outstanding shares — 477 and 484 | 5 | 5 |
| Treasury stock, at cost | (1,837) | (1,837) |
| Additional paid-in capital | 17,186 | 21,389 |
| Accumulated other comprehensive loss | (985) | (484) |
| Retained earnings | 4,916 | 8,636 |
| Total stockholders' equity | 19,285 | 27,709 |
| Total liabilities and stockholders' equity | $ 83,402 | $ 131,310 |

See accompanying notes to consolidated financial statements.

# ACCOUNTS RECEIVABLE

Accounts Receivable is "money owed to a company by its debtors."

Some portion of Accounts Receivable may not be collectible due to…

- Debtors being defunct or bankrupt
- Debtors experiencing financial difficulties
- Debtors disagreeing with the quality, price, or late shipments

Allowance for Doubtful Accounts

- An estimate prepared by the company to determine how much Accounts Receivable will actually be collected.
- Netted with Accounts Receivable

Generally Accepted Accounting Principles (GAAP) requires Accounts Receivable to be netted with Allowance for Doubtful Accounts

# ACCOUNTS RECEIVABLE EXAMPLE

Sales on account for New Mexico Windchimes (NMW) totaled $235,900 on December 31, 2019.

NMW estimates Allowance for doubtful accounts as being 12% of Sales.

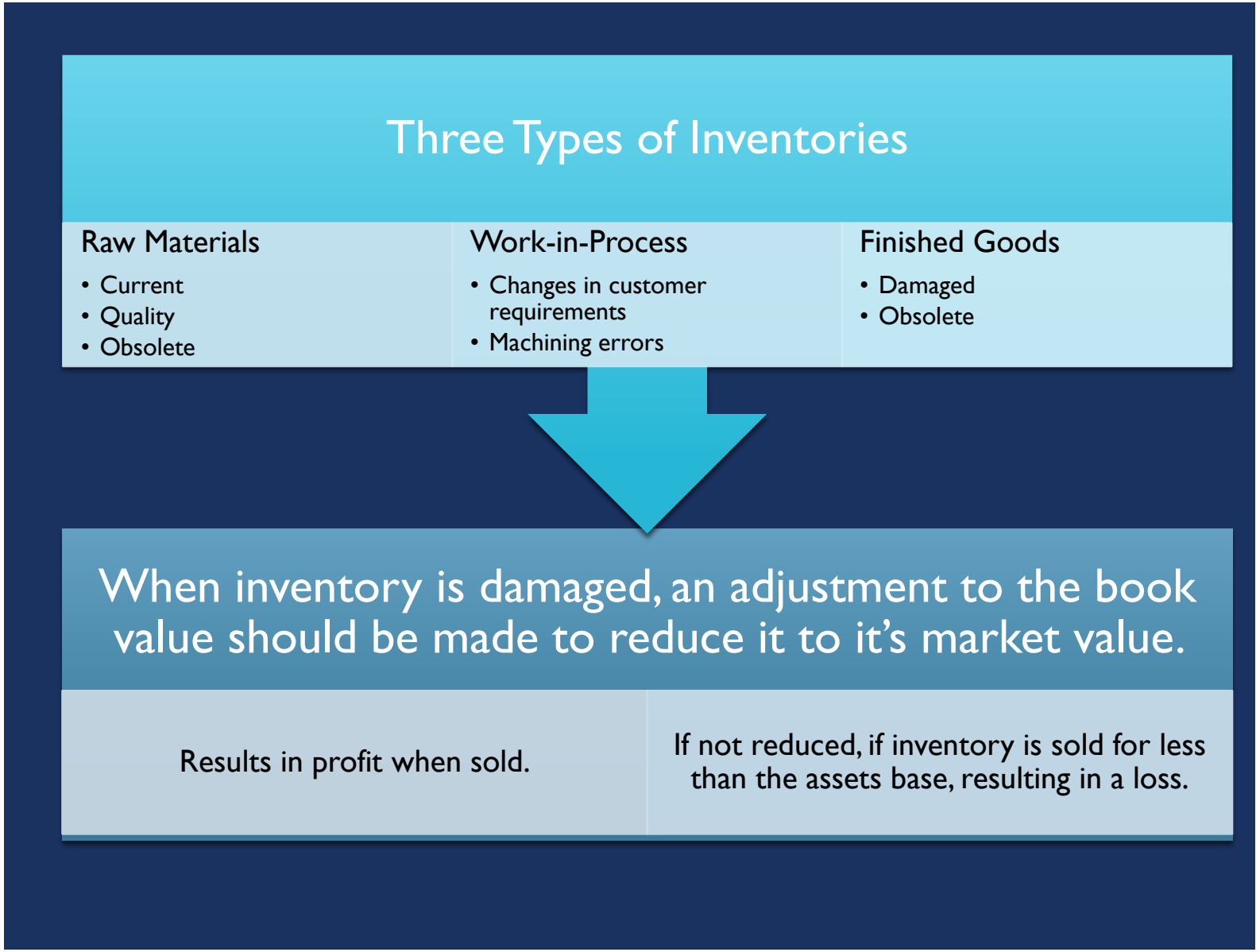
Allowance for doubtful accounts = $235,900 x 12%

Allowance for doubtful accounts = $28,308

Accounts Receivable: $235,900

Accounts Receivable, net of allowance: $207,592

# INVENTORIES



# NET FIXED ASSETS

- Fixed assets are a company's property, plant and equipment.
- Difficult to assess due to depreciation.
- Depreciation: "a reduction in the value of an asset with the passage of time, due in particular to wear and tear."
- Depreciation depends on two things:
  - The estimated life of the asset
  - The depreciation method used by the company. The most common methods are:
    - Straight-line
    - Double declining balance
    - Units of production
    - Sum of years digits

# NET FIXED ASSETS: DEPRECIATION METHODS

**Straight Line**: the simplest, method of calculating depreciation expense as depreciation expense is the same every year over the useful life of the asset.

**Depreciation Expense = (Cost – Salvage value) / Useful life**

**Double Declining**: results in a larger amount expensed in the earlier years as opposed to the later years over the asset's useful life due to assets being more productive in their early years than in their later years

**Periodic Depreciation Expense = Beginning book value x Rate of depreciation**

# NET FIXED ASSETS: DEPRECIATION METHODS EXAMPLE

- **Purchased a truck for $250,000 with an estimated useful life of 20 years. Expected truck can be salvaged in 20 years for $5,000.**
- **Straight-line**
  - Depreciation Expense: ($250,000-$5,000)/20 years = $12,250 per year
  - Ending Value: $250,000 - $12,250 = $237,750
- **Double declining**
  - Rate of Depreciation: (100%/20 years) x 2 = 10% per year
  - Depreciation Expense: $250,000 x 10% = $25,000 per year
  - Ending Value: $250,000 - $25,000 = $225,000

# ACCOUNTS PAYABLE

- Accounts payable is "money owed by a company to its creditors."
- It is important to distinguish between Current Accounts Payable and Long-term Accounts Payable.
- Current Accounts Payable are those that become due within one year.
- Long-Term Accounts Payable are those which do not become due within one year.

# CURRENT RATIO

- Represents the surplus of short term liquidity over short term debts.
- This represents the company's ability to pay it's current liabilities with it's current assets.
- A ratio of 2:1 of higher is considered ideal

**Current Assets / Current Liabilities = Current Ratio**

For Medium-sized companies with assets between $1 and $5 million.
Source: Financial Survey of Canadian Business Performance, CCH Canadian Limited, 1990.

| | |
|---|---|
| Aircraft Parts Manufacturers | 1.39 |
| Bakeries | 0.94 |
| Distilleries | 1.69 |
| Clothing Manufacturers | 1.98 |
| Commercial Printers | 1.14 |
| Industrial Electrical Equipment Manufacturers | 1.69 |
| Food Industries | 1.31 |
| Glass Products Manufacturers | 1.64 |
| Home Furniture Manufacturers | 1.55 |
| Radio & TV Manufacturers | 1.30 |
| Industrial Chemicals Manufacturers | 0.90 |
| Machine Shops | 2.28 |
| Major Appliance Manufacturers | 1.51 |
| Metal Stamping | 1.38 |
| Automotive Accessories Manufacturers | 1.60 |
| Pharmaceuticals Manufacturers | 1.63 |
| Plastic Parts Manufacturers | 1.15 |
| Rubber Manufacturers | 1.30 |
| Shoe Manufacturers | 1.07 |
| Textile Manufacturers | 1.83 |

# THE QUICK RATIO

- Similar to the current ratio, except it excludes inventory.
- Inventory is not always a guaranteed source of quick cash.
- This ratio may be a better representation of a company's ability to generate a working cash flow than the current ratio.

$$\frac{(Current\ Assets\ -\ Inventory)}{Current\ Liabilities}$$

# ACCOUNT RECEIVABLES DAYS

- This ratio represents how quickly a company is able to collect sales on account.
- A good Account Receivables Day would be 30—representing it takes the company on average 30 days to collect payment.
- An Account Receivables Day being 60 would indicate the company is having a hard time collecting on sales. The likelihood of collecting goes down.
  - This could mean Account's Receivable needs to be adjusted downward as Allowance for Doubtful accounts should increase.

Avg. Sales per Day = Estimated Annual Credit Sales / 360

Account Receivable Days = Accounts Receivable / Avg. Sales per Day

Average Sales Per Day:

$$\frac{Estimated\ Annual\ Credit\ Sales}{360\ Days}$$

Account Receivable Days:

$$\frac{Accounts\ Receivable}{Average\ Sales\ Per\ Day}$$

# ACCOUNTS PAYABLE DAYS

- Similar to Accounts Receivable Days, Accounts Payable Days measures how quickly the company is paying their debts.
- If Accounts Payable Days is lower than Accounts Receivable Days, this indicates the company is paying suppliers faster than the customers are paying them.
  - This could lead to a quick draining of the company's resources.

## Account Payable Days:

$$\frac{Accounts\ Payable}{Average\ Purchases\ Per\ Day}$$

# GROSS MARGIN

- Gross Margin is the difference between Net Sales and Cost of Goods Sold.
- The Gross Margin represents how much money is left for a company after it pays off the costs of providing the goods or services they are offering.
- The Gross Margin then covers administrative costs, selling costs, financial expenses, development costs, and hopefully leaves room for profit.
- Typically ranges from 20% to 40%

| | |
|---|---|
| Aircraft Parts Manufacturers | 26.2% |
| Bakeries | 27.7 |
| Distilleries | 20.2 |
| Clothing Manufacturers | 22.5 |
| Commercial Printers | 37.6 |
| Industrial Electrical Equipment Manufacturers | 25.8 |
| Food Industries | 20.7 |
| Glass Products Manufacturers | 24.6 |
| Home Furniture Manufacturers | 25.8 |
| Radio & TV Manufacturers | 22.7 |
| Industrial Chemicals Manufacturers | 24.5 |
| Machine Shops | 45.9 |
| Major Appliance Manufacturers | 26.4 |
| Metal Stamping | 28.0 |
| Automotive Accessories Manufacturers | 23.1 |
| Pharmaceuticals Manufacturers | 30.2 |
| Plastic Parts Manufacturers | 27.3 |
| Rubber Manufacturers | 18.9 |
| Shoe Manufacturers | 25.2 |
| Textile Manufacturers | 26.2 |

# INVENTORY TURNOVER

| | |
|---|---|
| Aircraft Parts Manufacturers | 5.0 |
| Bakeries | 15.4 |
| Distilleries | 3.7 |
| Clothing Manufacturers | 2.2 |
| Commercial Printers | 8.4 |
| Industrial Electrical Equipment Manufacturers | 3.6 |
| Food Industries | 5.6 |
| Glass Products Manufacturers | 4.6 |
| Home Furniture Manufacturers | 4.2 |
| Radio & TV Manufacturers | 3.7 |
| Industrial Chemicals Manufacturers | 8.2 |
| Machine Shops | 10.7 |
| Major Appliance Manufacturers | 3.8 |
| Metal Stamping | 7.8 |
| Automotive Accessories Manufacturers | 5.8 |
| Pharmaceuticals Manufacturers | 3.4 |
| Plastic Parts Manufacturers | 4.9 |
| Rubber Manufacturers | 4.3 |
| Shoe Manufacturers | 3.9 |
| Textile Manufacturers | 3.5 |

- Inventory should be valued at the cost of goods sold, which includes the direct materials, direct labor, and manufacturing overhead that when into the product.
- The higher the number is, the more inventory it is shipping out.

**Inventory Turnover = Annual Cost of Goods Sold / Inventory Value**

- By itself, this number means little—but when comparing one company's inventory turnover to another company's in the same industry—one can see which is selling it's inventory quicker.

# EXPENSE RATIOS

- It is important to take the major expenses in the Statement of Earnings, and represent them as a percent of Net Sales.
- This will tell you what percent of sales is going to covering these major expenses.
- Major Expenses could be
  - Raw Materials
  - Direct Labor
  - Manufacturing Over
  - Administrative Expenses
  - Selling Expenses
  - Financial Expenses
  - R & D Expenses

# DEBT TO EQUITY RATIOS

Companies should not rely on long term investments to supply the cash needed to fund operations.

However, purchases of equipment, buildings, expanding product lines or entering new markets often require a large amount of capital. Long term debt will be needed.

Two ways to decide the borrowing power of a company:

| Total Debt to Equity | Long Term Debt to Equity |
| --- | --- |

# TOTAL DEBT TO EQUITY

- Indicates the borrowing strength of the company.
- A High Total Debt to Equity is alarming for lenders as it indicates most of your operations is funded by Debt.

**Total Debt to Equity:**

**(Current Liabilities + Long Term Liabilities) / Total Stockholders' Equity**

# LONG TERM DEBT TO EQUITY

- Similar to Total Debt to Equity, except it excludes Current Liabilities.

**Long Term Debt to Equity = Long Term Liabilities / Shareholders' Equity**

- 1:1 is considered healthy, but what is considered healthy may vary greatly by industry.

| | |
|---|---|
| Aircraft Parts Manufacturers | 0.6:1 |
| Bakeries | 0.9:1 |
| Distilleries | 0.4:1 |
| Clothing Manufacturers | 0.5:1 |
| Commercial Printers | 0.6: |
| Industrial Electrical Equipment Manufacturers | 0.6:1 |
| Food Industries | 0.6:1 |
| Glass Products Manufacturers | 0.6:1 |
| Home Furniture Manufacturers | 0.9:1 |
| Radio & TV Manufacturers | 0.4:1 |
| Industrial Chemicals Manufacturers | 0.4:1 |
| Machine Shops | 1.1:1 |
| Major Appliance Manufacturers | 0.3:1 |
| Metal Stamping | 0.6:1 |
| Automotive Accessories Manufacturers | 0.6:1 |
| Pharmaceuticals Manufacturers | 1.4:1 |
| Plastic Parts Manufacturers | 0.8:1 |
| Rubber Manufacturers | 0.3:1 |
| Shoe Manufacturers | 0.2:1 |
| Textile Manufacturers | 0.6:1 |

# INTEREST COVERAGE RATIO

- EBIT, or earnings before interest and tax, is an often used measure used to value a company quickly.
- Dividing EBIT by Interest Expense, yields the interest coverage ratio which represents how many times EBIT can fully cover interest expense.
- A normal value for this would be 2 or higher.

| | EBIT as % of sales | INT as % of sales | EBIT/I |
|---|---|---|---|
| Aircraft Parts Manufacturers | 10.8 | 2.9 | 3.7 |
| Bakeries | 5.8 | 1.6 | 3.6 |
| Distilleries | 12.6 | 0.4 | 31.5 |
| Clothing Manufacturers | 6.1 | 1.8 | 3.4 |
| Commercial Printers | 6.6 | 1.0 | 6.6 |
| Industrial Electrical Equipment Mfrs. | 4.8 | 1.3 | 3.7 |
| Food Industries | 5.7 | 0.6 | 9.5 |
| Glass Products Manufacturers | 7.1 | 1.4 | 5.1 |
| Home Furniture Manufacturers | 4.5 | 1.9 | 2.4 |
| Radio & TV Manufacturers | 4.1 | 0.8 | 5.1 |
| Industrial Chemicals Manufacturers | 14.7 | 0.2 7 | 3.5 |
| Machine Shops | 8.3 | 3.2 | 2.6 |
| Major Appliance Manufacturers | 11.5 | 1.4 | 8.2 |
| Metal Stamping | 7.5 | 0.7 | 10.7 |
| Automotive Accessories Manufacturers | 7.0 | 1.2 | 5.8 |
| Pharmaceuticals Manufacturers | 7.7 | 1.9 | 4.1 |
| Plastic Parts Manufacturers | 7.4 | 1.8 | 4.1 |
| Rubber Manufacturers | 6.5 | 0.9 | 7.2 |
| Shoe Manufacturers | 3.2 | 1.8 | 1.8 |
| Textile Manufacturers | 5.5 | 1.5 | 3.7 |

# RETURN ON ASSETS & RETURN ON SALES

**Return on Assets:**

**Net Profits (after Taxes) / Total Assets**

**Return on Sales:**

**Net Profits (after Taxes) / Net Sales**

- Return on Assets allows owners to assess if they are making good investments in asset.
- Only meaningful when compared to industry averages.

**Figure 10: Average Net Income After Taxes As A Percent Of Sales by Industry**

For Medium-sized companies with assets between $1 and $5 million.
Source: Financial Survey of Canadian Business Performance, CCH Canadian Limited, 1990.

| | |
|---|---|
| Aircraft Parts Manufacturers | 5.0 |
| Bakeries | 2.0 |
| Distilleries | 9.0 |
| Clothing Manufacturers | 3.0 |
| Commercial Printers | 4.0 |
| Industrial Electrical Equipment Manufacturers | 2.0 |
| Food Industries | 3.0 |
| Glass Products Manufacturers | 3.0 |
| Home Furniture Manufacturers | 1.0 |
| Radio & TV Manufacturers | 2.0 |
| Industrial Chemicals Manufacturers | 15.0 |
| Machine Shops | 3.0 |
| Major Appliance Manufacturers | 5.0 |
| Metal Stamping | 5.0 |
| Automotive Accessories Manufacturers | 3.0 |
| Pharmaceuticals Manufacturers | 2.0 |
| Plastic Parts Manufacturers | 3.0 |
| Rubber Manufacturers | 2.0 |
| Shoe Manufacturers | 1.0 |
| Textile Manufacturers | 3.0 |

# QUESTIONS?

# THANK YOU