BUAD 340 Principles of Finance Fall 2018/Dr. Minor Risk and Return Handout 181107

Van Horne Chapter 6. Financial Statement Analysis

Balance Sheet Ratios

Liquidity Ratios

Current Ratio = Current Assets/Current Liabilities = $1,195/$500 = 2.39
Shows a firm's ability to cover its current liabilities with its current assets.

Year	*BW*	*Industry*
2007	2.39	2.15
2006	2.26	2.09
2005	1.91	2.01

Acid-Test (Quick) = (Current Assets – Inventory)/Current Liabilities = ($1,195 - $696)/$500 = 1.00
Shows a firm's ability to meet current liabilities with its most liquid assets.

Ratio	*BW*	*Industry*
Current	2.39	2.15
Acid-Test	1.00	1.25

Strong current ratio and weak acid-test ratio indicates a potential problem in the inventories account. Note that this industry has a relatively high level of inventories. We can perform trend analysis to diagnose problems with liquidity and/or inventories. (Slides 6.23-25)

Financial Leverage Ratios

Debt-to-Equity = Total Debt/Shareholders' Equity = $1,030/$1,139 = .90
Shows the extent to which the firm is financed by debt.

Debt-to-Total-Assets = Total Debt/Total Assets = $1,030/$2,169 = .47
Shows the percentage of the firm's assets that are supported by debt financing.

Total Capitalization (long term debt + equity) = total debt/total capitalization = $1,030/$1,669 = .62
Shows the relative importance of long-term debt to the long-term financing of the firm.

Income Statement Ratios

Coverage Ratios

Interest Coverage = EBIT/Interest Charges = $210/$59 =3.56
Indicates a firm's ability to cover interest charges.

Year	*BW*	*Industry*
2007	3.56	5.19
2006	4.35	5.02
2005	10.30	4.66

Income Statement/Balance Sheet Ratios

Activity Ratios

Receivable Turnover (assume all sales are credit sales) = Annual Net Credit Sales/Receivables = $2,211/$394 = 5.61
Indicates quality of receivables and how successful the firm is in its collections.

Average Collection Period = Days in the Year/Receivable Turnover = 365/5.61 = 65 days
Average number of days that receivables are outstanding (or RT in days).

Year	BW	Industry
2007	65.0	65.7
2006	71.1	66.3
2005	83.6	69.2

Payable Turnover (PT) = Annual Credit Purchases (assume $1,551)/Accounts Payable = $1,551/$94 = 16.5
Indicates the promptness of payment to suppliers by the firm.

PT in Days = Days in the Year/Payable Turnover = 365/16.5 = 22.1 days
Average number of days that payables are outstanding.

Inventory Turnover = Costs of Goods Sold/Inventory = $1,599/$696 = 2.30
Indicates the effectiveness of the inventory management practices of the firm.

Total Asset Turnover = Net Sales/Total Assets = $2,211/$2,169 – 1.02
Indicates the overall effectiveness of the firm in utilizing its assets to generate sales.

Profitability Ratios

Net Profit Margin = Net Profit after Taxes/Net Sales = $91/$2,211 = .041
Indicates the firm's profitability after taking account of all expenses and income taxes.

Return on Investment = Net Profit after Taxes/Total Assets = $91/$2,169 = .042
Indicates the profitability on the assets of the firm (after all expenses and taxes).

Year	BW	Industry
2007	4.2%	9.6%
2006	5.0	9.1
2005	9.1	10.8

Return on Equity = Net Profit after Taxes/Shareholders' Equity = $91/$1,139 = .08
Indicates the profitability to the shareholders of the firm (after all expenses and taxes).

Summary of the Profitability Trend Analysis

- ☐ The profitability ratios for BW have ALL been falling since 2005. Each has been below the industry averages for the past three years.
- ☐ This indicates that COGS and administrative costs may both be too high and a potential problem for BW.
- ☐ Note, this result is consistent with the low interest coverage ratio.

Summary of Ratio Analyses

- ☐ Inventories are too high.
- ☐ May be paying off creditors (accounts payable) too soon.
- ☐ COGS may be too high.
- ☐ Selling, general, and administrative costs may be too high