

LECTURE 6

Chapter 14

Financial Analysis – example (Celerity Technology)

– **PRINT SPREADSHEET ON FINANCIAL ANALYSIS FOR CELERITY TECHNOLOGY**

Perfect World – all cash – Lemonade stand



I/S and CF – Differences (Taxes – Depreciation, Amortization of Fees (Capitalized))

- Capex (Non deductible)
- Working Capital (Timing Differences) – Changes in Balance Sheet
- Financing Activities (New/repayment of debt)

Income Statement

- Unlike the Balance Sheet that is a snap-shot at a particular time, the Income Statements show the flow over time (one year / one quarter/ one month)
- Measures profitability for that period
- EBITDA

Cash Flow Statement

- Working Capital
- Capex (Maintenance / Growth Capex)
- Acquisitions
- Selling Assets/property – Disposition of Assets
- Principal Payments
- Raising New Financing/IPO Equity
- Beginning/Ending Cash

Financial Ratios

Definition

Trend Analysis Ratios

Revenue Growth
Stock one-year Return

Liquidity Ratios

Current Ratio CA/CL
Quick ratio (Cash + A/R) / CL
Accounts Receivable Turnover (ART) Revenue/Avg AR
Accounts Receivable Days 365 / ART

Solvency Ratios

Debt/Equity Ratio LTD / Equity
LTD / Total Capitalization LTD / (LTD + Equity)
EBITDA / Interest (Coverage Ratio) EBITDA / Interest
EBIT / Interest
Fixed Charge Coverage Ratio (EBITDA-Capex)/(Int+ST+ LT
Pmts)
Cash Avail.for Debt Service / Debt (CABFA + int.) / (Int. + ST+LT
Service Pmts)
LTD / EBITDA (Leverage Ratio) LTD / EBITDA

Activity Ratios / Operating Ratios

Inventory Ratio (IR) Cost of Revenues/Avg Inventory
Inventory Ratio - Days 365 / IR
Fixed Asset Turnover Ratio Rev / Avg of FA
Asset Turnover Ratio Rev / Avg of Total Assets

Profitability Ratios

Gross Margin Gross Margin / Revenues
EBITDA Margin EBITDA / Revenue
EBIT Margin EBIT / Revenue
Return on Assets (ROA) NI / Avg Assets
Gross Return on Assets EBIT / Avg Assets
Return on Equity (ROE) NI / Avg Equity

Market Ratios

Stock Price
Total Shares Outstanding
Market Value of Equity
Market-to-Book
Earnings Per Share (EPS) NI / Avg Shares Outstanding
Price Earnings Ratio (PE) Market Price / EPS
EV / EBITDA (MVE + LTD + STD - Cash) / EBITDA

Professor Chris Droussiotis

Other Ratios

Altma's Z-score

Z Formula

$$Z = 1.2x (WC/TA) + 1.4x(RE/TA)+3.3x(EBIT/TA)+0.6x(MVE/Liabilities) + 0.99x(Sales/TA)$$

WC = Working Capital

TA=Total Assets

RE=Retained Earnings

MVE=Market Value of Equity

<u>Z-Score</u>	<u>Bankruptcy</u>
1.8x or less	Likely
Between 1.8 - 3.0	Uncertain
3.0 or above	Not likely

Three questions:

1. How does it compare versus last year
2. How does it compare versus their peers / Competition
3. How does it compare versus expectations