Professor Chris Droussiotis' Notes

LECTURE 9

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

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Financial Ratios

Definition

Trend Analysis Ratios

Revenue Growth Stock one-year Return

Liquidity Ratios

Current Ratio
Quick ratio

Accounts Receivable Turnover (ART)

Accounts Receivable Days

CA/CL

(Cash + A/R) / CL Revenue/Avg AR

365 / ART

Solvency Ratios

EBIT / Interest

Debt/Equity Ratio LTD / Total Capitalization

EBITDA / Interest (Coverage Ratio)

LTD / Equity

LTD / (LTD + Equity)

EBITDA / Interest

EBIT / Interest

(EBITDA-Capex)/(Int+ST+ LT

Pmts)

(CABFA + int.) / (Int. + ST+LT

Pmts) LTD / EBITDA

LTD / EBITDA (Leverage Ratio)

Cash Avail.for Debt Service / Debt

Fixed Charge Coverage Ratio

LID / EBITDA (Leverage Natio)

Activity Ratios / Operating Ratios

Service

Inventory Ratio (IR)
Inventory Ratio - Days
Fixed Asset Turnover Ratio

Asset Turnover Ratio

Cost of Revenues/Avg Inventory

365 / IR

Rev / Avg of FA

Rev / Avg of Total Assets

Profitability Ratios

Gross Margin EBITDA Margin EBIT Margin

Return on Assets (ROA) Gross Return on Assets Return on Equity (ROE) Gross Margin / Revenues

EBITDA / Revenue
EBIT / Revenue
NI / Avg Assets
EBIT / Avg Assets
NI / Avg Equity

Market Ratios

Stock Price

Total Shares Outstanding Market Value of Equity

Market-to-Book

Earnings Per Share (EPS)

Price Earnings Ratio (PE)

EV / EBITDA

NI / Avg Shares Outstanding

Market Price / EPS

(MVE + LTD + STD - Cash) / EBITDA

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Other Ratios

Altma's Z-score

Z Formula

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

WC = Working Capital
TA=Total Assets
RE=Retained Earnings
MVE=Market Value of Equity

Z-Score	Bankruptcy
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