

Firm Evaluation & Financial Statement Analysis

Evaluate
Community ED
Benefits: Triple
Bottom Line

Assess
Business Plan
and Prospects

Diagnose financial
condition,
performance, debt
capacity of firm

Analyze financial
projections re:
needs & capacity to
support financing

Economic Development and Community Benefits



- Reflect local goals and strategy
- Size & type of community benefits
 - number & quality of jobs
 - employee benefits and wealth creation opportunities
 - commitment and resources to hire targeted groups
 - positive environment impacts
 - ownership
 - location
 - other benefits
- Several “scorecard” tools exist
 - TBL Tool, CDVC Measuring Impact Toolkit

Common Capital Lending Criteria



1. Create jobs with a living wage and/or opportunities for career and income growth
 2. Multiplier effect on the dollars created in the region
 3. Provide services to other businesses
 4. Purchase services from other local businesses
 5. Positive impact on the environment
 6. Locally owned
 7. Contribute to blight elimination
 8. Provide goods and services beneficial to community
- Annual survey to evaluate goal fulfillment

Business Plan Analysis



- Key to assess business potential & capacity to succeed
- Is the market well defined & quantified?
 - What market share is implicit in projected sales?
- Who are major competitors (current & future)?
- What is the basis for competition and strategy for competitive success?
- Does management have the appropriate skills & expertise
- Are investment and financing plans consistent with the business plan and feasible?

Sources for Business Plan Evaluation



- Firm's written business plan
- Prior experience and references of entrepreneurs and key managers
- Speak with current customers, suppliers, and lenders
- Review industry studies and trade press
- Interview industry & community experts on emerging trends and developments

Financial Statement Analysis: Ratio Analysis



- Assess business financial performance & condition
- Trends over time for the business
- Compare to ratios for similar firms & industry average
- Four categories of ratios:
 - Short term liquidity and cash needs
 - Profits and operating results
 - Capital structure & debt service capacity
 - Common size financial statements
- Pine Tree Lumber analysis

Short-term Liquidity and Cash Needs



- Key issue for small enterprises: less equity & long-term debt; rely more on short-term financing with need to carefully manage short-term cash flow
- Current Ratio: $\text{Current Assets} / \text{Current Liabilities}$
- Quick Ratio: $(\text{Current assets} - \text{inventory}) / \text{Current Liabilities}$
- Days Receivables (average collection period to convert receivables into cash)
 - Calculate average daily sales = $\text{total sales in period} / \text{days in period}$ (365 for a year)
 - Days receivable = $\text{accounts receivable} / \text{sales per day}$
- Inventory Turnover = $\text{COGS} / \text{Average inventory}$
 - Shows how fast inventory investment is being used

2012 Pine Tree: Short-Term Liquidity



• Net working capital amount	288,000
• Current ratio	2.57
• Quick ratio	1.39
• Days receivable	18
• Inventory turnover	12

What do these ratios indicate about the firm?

Ratio Analysis: Profits & Operating Results

- **Gross Margin %:** **$(\text{Revenue}-\text{COGS})/\text{Revenue}$**
- Net Profit on Sales: Net income (profit)/revenue
- Investment turnover: Sales/Total Assets
- Return on assets: Net income/Assets
- Return on investment: Net income/Shareholder equity
- Ratios measure profitability in several ways:
 - profit margin on direct costs—is it large enough to cover overhead & other costs and leave a profit
 - overall profit margin on sales
 - return on assets and equity-do investors earn a good return
- What are trends in profitability and margins?
- What is the outlook for sustaining profitability given the environment?

Pine Tree: Profits & Operating Results



• Net profit amount	17,000
• Gross margin percent	5.6%
• Net profit on sales percent	0.6%
• Return on assets	1.7%
• Return on equity	2.2%

What do these ratios indicate about the firm?

Cash Flow Statement

Pine Tree Lumber 2012

Income Before Interest & Taxes	23,224
Subtract taxes	-6,224
Add back non-cash expenses (depreciation)	33,000
Less Change in Account Receivables	-12,000
Less change in inventories	-7,000
Less Change in other current assets	-2,000
Plus Change in accounts payable	-16,000
Plus Change in Accrued Taxes Payable	3,000
Plus Change in Deferred Income Taxes	2,000
Net Cash Flow from Operations	18,000
Less increase in land, buildings, equipment, gross	-7,000
Net Cash Flow After Investing	11,000

Cash Flow and Debt Capacity



- **Sizing debt to cash flow**
 - Net cash flow/DSCR = cash available for debt service
 - $PV(NCF/DSCR, n, i) = \text{supportable debt}$
- **Pine Tree Lumber:**
 - $\$11,000/1.30 = \$8,462$
 - $PV(8,462/12, 5*12, .06/12) = \$36,473$
- **Equipment cost = 100,000; gap of \$63,527**
- **Loan at 7%, 10 year amortization:**
 - $PV(8,462/12, 10*12, .07/12) = \$60,730$
- **Gap reduced to \$39,270**

Pine Tree Collateral and Recommendation



- **Collateral at time of loan:**
 - Sale value of existing fixed assets : \$49,830
 - Sale value of new equipment: \$75,000
 - Total collateral: \$124,830
 - Loan to Value with \$60,730 loan .49
- **Collateral at year five:**
 - Sale value of existing fixed assets : \$30,200
 - Sale value of new equipment: \$25,000
 - Total collateral: \$55,200
 - Loan principal ($pV(.07/12,5 * 12, 705)$) \$35,610
 - Loan to Value with \$60,730 loan .65
- **Recommend a loan? For what amount & terms?**

Ratio Analysis: Capital Structure and Debt Capacity



- Debt/total assets: $(\text{total current \& LT debt}) / \text{total assets}$
- Debt to equity ratio: $(\text{total current \& LT debt}) / \text{total equity}$
- Times interest earned: $\text{EBIT} / \text{Interest expense}$
- Debt service coverage: $\text{annual cash flow} / (\text{annual principal payments \& interest expense})$
 - Use cash flow after operations & investment activities
- Maturity structure of firm's debt
- Debt covenants and their implications for new investment and borrowing
- Current assets pledged and available collateral

Ratio Analysis

Common Size Financial Statements

- Present financial statement figures as percentages of total revenue or total assets
 - Useful way to track trends over time
 - Compare company to industry wide ratios
 - Use to prepare financial projections
 - ✦ Use a firm's historic ratios to create projections (last part of crystal clear financial analysis)
 - ✦ Apply industry averages for a start-up firm
- Sources of ratio data: D&B, RMA, Troy's Almanac

Preparing Financial Projections



- Forecast cash flow
 - Will it support the financing plan?
 - How does it stand up to down side risks?
- Begin with sales forecast
- Calculate operating expenses (common size ratios)
- Convert forecast into **cash flow** forecast
 - Project cash collections from sales
 - Project cash expenditures from operations
 - Include other cash inflows and outflows
- New investments & debt service under plan
- Consider tax impacts: increased taxes & tax savings
- Sensitivity analysis under different scenarios

Projecting Cash Receipts



Cash Receipts = Collection of Beginning Period Accounts Receivable + Sales Revenue – End of Period Accounts Receivable

Projected 2004 Cash Receipts (in \$ millions):

Collection of 2003 Year End Accounts Receivable:	\$ 75
Plus 2004 Projected Sales	\$2,400
Less 2004 Year End Accts Receivable (@ 20 days) (((\$2.4 million/365)*20)	<u>(\$ 132)</u>
Projected Cash Receipts	\$2,343

**Firm with sales growth: AR at year end > AR at start of yr
thus cash receipts < sales; need to finance this AR growth**

Projecting Cash Expenditure



Cash Expenditures = Payment of Beginning Period Accounts Payable + Costs of Sales + Other Expenses – End of Period Accounts Payable

Projected 2004 Cash Expenditures (in \$ millions):

Payment of 2003 Year End Accounts Payable:	\$ 100
Plus 2004 Projected Expenses	\$2,150
Less 2004 Year End Accounts Payable (@ 30 days) (((\$2.15 million/365)*30)	<u>(\$ 177)</u>
Projected Cash Expenditures	\$2,073

Growing accounts payable => cash outflow < expenses; a way to finance growth but often can be expensive

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