Construction Industry Ratios

One of the value-added services Lanter, Leonardo & Levy provides to its audit and review clients is our client specific ratio analysis report. Our clients have come to recognize and value the benefits to be gained by being aware of and being able to interpret financial data and use it to run their businesses more effectively. This type of analysis separates CPAs specializing in the construction industry from the CPA firms with a less focused practice.

The construction industry is faster-paced than any other industry. A project can go from performing well to performing poorly in a matter of days, a swing that doesn’t occur in any other industry. Because of this volatility, most companies already have systems in place to collect timely pertinent data for effective cost control measures. Our report synthesizes this complex data into an easy to understand, actionable report which is both objective and effective in assessing the strengths and weaknesses of a construction contractor.

Two types of comparisons can be made when using ratio analysis:
1. A company can track improvements over time by comparing its current performance with prior years’ performance.
2. A company can compare itself to the industry as a way of measuring whether or not it is performing as efficiently and effectively as its peers.

To reap the benefit of financial ratio analysis, the contractor must determine the cause of changes in the ratios. Self-comparison is more beneficial than comparing results to published industry averages. However, industry averages are useful as a beginning comparison and as an indicator the contractor performance versus the competition.

These ratios are the comparisons banks and bonding companies utilize when weighing the risk of granting credit to construction contractors. Our report allows our clients to focus more clearly on maintaining the key ratios scrutinized by the financial community. The 20 important ratios we examine are broken down into four basic categories, liquidity, profitability, leverage and efficiency ratios:

The Liquidity Ratios
Banks and sureties rely on working capital calculations (the availability of current assets to satisfy current liabilities) to determine credit. These ratios demonstrate the ability to finance new contracts and meet current obligations. Sureties rely heavily on these calculations to determine the amount of construction activity a contractor can handle.
1. **Current Ratio**
\[
\frac{\text{Current Assets}}{\text{Current Liabilities}}
\]
Indicates the extent to which current assets are available to satisfy current liabilities. Usually stated in terms of absolute values (e.g., 2.1 to 1.0 or simply 2.1). Generally, a minimum current ratio is 1.0, which indicates that current assets at least equal current liabilities.

2. **Quick Ratio**
\[
\frac{\text{Cash and Cash Equivalents} + \text{Short-Term Investments} + \text{Receivables, Net}}{\text{Current Liabilities}}
\]
Indicates the extent to which the more liquid assets are available to satisfy current liabilities. Usually states in terms of absolute values, a quick ratio of 1.0 is generally considered a liquid position.

3. **Days of Cash**
\[
\frac{\text{(Cash and Cash Equivalents)} \times 360}{\text{Revenue}}
\]
Indicates the number of days revenue in cash. Generally, a ratio of seven days or more is considered adequate.

4. **Working Capital Turnover**
\[
\frac{\text{Revenue}}{\text{Current Assets} - \text{Current Liabilities (Working Capital)}}
\]
Indicates the amount of revenue being supported by each $1 of net working capital employed. A ratio exceeding 30 may indicate a need for increased working capital to support future revenue growth.

**Profitability Ratios**
The construction industry is a capital-intensive industry. It relies heavily on equipment and assets to build projects. Profitability ratios are a measure of management’s effectiveness in utilizing both the assets and the equity of the company. These ratios are a valuable tool in determining the most opportune allocation of an owner’s capital based on his risk assessment.

1. **Return on Assets**
\[
\frac{\text{Net Earnings}}{\text{Total Assets}}
\]
Indicates the profit generated by the total assets employed. A higher ratio reflects a more effective employment of company assets. This ratio is generally stated in terms of percentages (i.e., 10% return on assets).

2. **Return on Equity**
\[
\frac{\text{Net Earnings}}{\text{Total Net Worth}}
\]
Indicates the profit generated by the net assets employed. This ratio reflects the stockholders’ return on investment and is generally stated as a percentage. A very high ratio may indicate an undercapitalized situation or, conversely, a very profitable company.

3. **Times Interest Earned**
\[
\frac{\text{Net Earnings} + \text{Income Taxes} + \text{Interest Expense}}{\text{Interest Expense}}
\]
Indicates the company’s ability to meet interest expense from operations. A low ratio may indicate an overleveraged situation and a need for more permanent equity.
**Leverage Ratios**
Debt is often the silent killer of construction companies. These ratios indicate total debt, including debt to purchased equipment, accounts payable and accrued expenses. They reveal the relationship between the stockholders and creditors and whether or not there is a proper investment in fixed assets.

1. **Debt-To-Equity**
\[ \frac{\text{Total Liabilities}}{\text{Total Net Worth}} \]
Indicates the relationship between creditors and owners. In general, a ratio of 3 or lower is considered acceptable.

2. **Revenue To Equity**
\[ \frac{\text{Revenue}}{\text{Total Net Worth}} \]
Indicates the level of revenue being supported by each $1 of equity. In general, a ratio of 15 or less is considered acceptable.

3. **Asset Turnover**
\[ \frac{\text{Revenue}}{\text{Total Assets}} \]
Indicates a level of revenue being supported by each $1 of assets. By reviewing the trend of this ratio, the effectiveness of asset expansion can be determined.

4. **Fixed Asset Ratio**
\[ \frac{\text{Net Fixed Assets}}{\text{Total Net Worth}} \]
Indicates the level of stockholders equity invested in net fixed assets. A higher ratio may indicate a lack of funds for current operations. Usually, a lower ratio indicates a more favorable liquidity position; however, off-balance-sheet financing of equipment may offset this apparent positive indication.

5. **Equity to General and Administrative Expenses**
\[ \frac{\text{Total Net Worth}}{\text{General and Administrative Expenses}} \]
Indicates the level of overhead in relation to net worth. In general, a ratio of 1.0 or more is considered acceptable.

6. **Under Billings To Equity**
\[ \frac{\text{Unbilled Work} + \text{Cost In Excess}}{\text{Total Net Worth}} \]
Indicates a level of contract volume being financed by the stockholders. Usually stated as a percentage, a ratio of 30% or less is considered acceptable.

7. **Backlog to Equity**
\[ \frac{\text{Backlog}}{\text{Total Net Worth}} \]
Indicates the relationship of signed or committed work to total stockholders’ equity. In general, a ratio of 20 or less is considered acceptable. A higher ratio may indicate the need for additional permanent equity.
Efficiency Ratios
Efficiency ratios are a measure of certain selected metrics that indicate management’s effectiveness in operating the company. Stockholders can glean important details about the company from these measurements.

1. Backlog to Working Capital
   \[
   \text{Backlog} : \text{Current Assets} - \text{Current Liabilities}
   \]
   Indicates the relationship between signed or committed work and working capital. In general, a ratio of 30 or less is considered acceptable. A higher ratio may indicate a need for an increase in permanent working capital.

2. Months in Backlog
   \[
   \text{Backlog} : \frac{\text{Revenue}}{12}
   \]
   Indicates the number of months it will take to complete all side or committed work. A ratio of less than 12 indicates a need to secure new contracts in the next year to maintain a constant level of annual revenue.

3. Days in Accounts Receivable
   \[
   \left(\text{Contract Accounts Receivable} + \text{Other Accounts Receivable} - \text{Allowance For Doubtful Accounts}\right) \times 360 : \text{Revenue}
   \]
   Indicates the number of days to collect accounts receivable. A lower ratio indicates a faster collection of accounts receivables, therefore more liquidity. In general, a ratio of 60 days or less is desirable. Consideration should be given to the days in accounts payable ratio because a day in accounts receivable ratio may indicate a drain on cash flow. Retainage has been excluded.

4. Days in Inventory
   \[
   \text{Inventory} \times 360 : \text{Cost of Sales}
   \]
   Indicates the number of days required to sell inventory. A high ratio may indicate an overstocking of inventory.

5. Days in Accounts Payable
   \[
   \left(\text{Trade Accounts Payable} + \text{Other Accounts Payable}\right) \times 360 : \text{Total Cost}
   \]
   Indicates the number of days it takes to liquidate trade payables. The ratio should be compared credit terms of vendors. In general, a ratio of 45 days or less is considered adequate; however, if this ratio is lower than the days in accounts receivable ratio, cash flow may be negatively affected. Retainage has been excluded.

6. Operating Cycle
   \[
   \text{Days in Cash} + \text{Days in Accounts Receivable} + \text{Days in Inventory} : \text{Days in Accounts Payable}
   \]
   Indicates the length of time it takes for the company to complete a typical operating cycle. A lower ratio may indicate a need for more permanent working capital.

Each ratio analysis should include two years to five years of the past performance as well as the industry averages. We recommend that our clients inquire of their lenders and sureties if improvements in certain areas would enable them to increase their borrowing and bonding capacity. These types of inquiries provide the financial institutions with a better sense that the contractor has done its homework and is looking to improve its financial situation.
These ratios are a powerful tool for effective management. They are also essential for understanding the requirements of securing additional banking credit and increasing bonding capacity. Lanter, Leonardo & Levy strives to provide our clients with the most up-to-date information that will enable them to manage their businesses more effectively.

The best strategies for business and personal growth and success are specific to your business and personal situation. Your plan must be tailored to fit your unique circumstances. Contact Lanter, Leonardo & Levy for a no obligation consultation on building and preserving the company and wealth you have worked so hard to achieve.

Call Alex Leonardo or Rick Captain today at 561-998-7770