

Graduate Student Research Abstract – Construction Practice (Non-Pedagogical Content)

Exploring the Financial Health of the United States Construction Firms Using Financial Ratio Analyses

Lindsey E. Bridge
Roger Williams University
Bristol, RI

Strong financial management is a fundamental key towards business success, including the construction industry. Data from the Census Bureau's Business Dynamics Statistics shows that, of new construction firms founded in 2005, only 36.4% of them remained active through 2010. The Surety Information Office identifies six warning signs that a construction firm is in trouble; four of the six signs directly relate to financial management. Several construction firms are highly dependent on smaller specialized subcontractors to complete projects. One of the factors impacting success of subcontractor firms is their financial health, which can be requested by prime contractors using prequalification forms. Currently, prime contractors focus on viewing potential subcontractors' financial statements to determine health, but do not perform financial ratio analyses. Although financial statements contain valuable information, performing various financial ratio analyses can further reveal a firm's financial status. In this study, quantitative data is collected from the December 2012 financial statements of 24, different sized, United States' construction firms. The included firms are all traded on the New York Stock Exchange, American Exchange, or NASDAQ. The analysis of statements consisted of the following financial ratios; current ratio, average age of accounts payable (AAAP), assets to revenue ratio, working capital turns (WTC), accounts payable to revenue ratio, gross profit margin (GPM), return on assets, and return on equity. Results are determined by viewing the sample as potential subcontractors for a prime contractor. Results show 87% of the firms AAAP is over 45 days; the industry average. This suggests that there are few firms in this sample that pay their bills on time and do not receive hefty financial charges. If a subcontractor does not pay its bills; a lien could prevent the prime contractor from closing a project. If a firm takes longer than 90 days to pay its bills it is a sign they are not financially healthy and should not be used as a subcontractor. Results of this study show that of the firms who have an attractive GPM, 78% of them have poor WCT. This suggests that even if a firm shows an attractive GPM, it may not be efficiently utilizing its working capital. This result helps prove the importance for analyzing more than one financial ratio when selecting a subcontractor. A subcontractor with a poor WCT may have trouble funding projects even if they show promising profits. Because this study uses data from construction firms varying in size and location, future research should focus on a larger database of homogenous construction firms, allowing for a stronger generalization of these results. Future research can also be conducted to determine the current use of financial ratio analysis for subcontractor selection. In conclusion, this study recommends construction firms utilize more than one financial ratio for subcontractor selection. This would increase the overall success rates within the construction industry. This research proves the significance of financial ratio analyses in the construction industry by demonstrating the ability to determine the financial health of any construction firm.

Key Words: Construction finance, financial analysis, financial ratios, subcontractor prequalification