

## FINANCIAL ANALYSIS OF CONSTRUCTION COMPANY IN KOCHI

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**Abstract:** *Construction industry plays a crucial role in shaping the economy of a nation. Construction industry in India has undergone sea changes in the last few decades. This research facilitates to examine the financial position and different financial factors of the company and helps to predict the expected future outcome using past and present performance. The main objectives of the study was to find the relation between the Expenses and Profit on Short term and Long term debt of a construction company and to identify whether the organization is under financial distress and give necessary recommendation for easing the same. It was found from the study that there exists negative correlation between short term debt and net profit, short term debt and financial cost, long term debt and net profit. There exists positive correlation between long term debt and financial cost of the company.*

*Keywords: Construction Company, short term debt, long term debt, financial distress*

### Introduction

Construction industry in India has undergone sea changes in the last few decades. Construction Company is a key contributing sector in development of the economy of the country. The construction industry in India creates investment opportunities in the sector and also in other related sectors. Financial performance analysis is a powerful tool to interpret the position and soundness of the company. Financial analysis is a complex study of relationship of various financial statements of a business to examine and predict the performance of the company. It largely involves the process of evaluating the relationship among the various financial factors to get in depth knowledge about firms financial position. This research facilitates to examine the financial position and different financial factors of the company and helps to predict the expected future outcome using past and present performance.

### Statement of Problem

The relation between factors that influence short term and long term debts is crucial for the performance of the company; hence the study deals with the relationship between the same.

Analyzing whether the company chosen has a chance of being distressed financially and finding the relation between the factors and performance of the company is essential for understanding the company performance.

### **Objective**

- To study the relation between the Expenses and Profit on Short term and Long term debt.
- To identify whether the organization is under financial distress and give necessary recommendation for easing the same.

### **Research Methodology**

Research is done to interpret or confirm facts, restate the results of previous work and find solutions for new or existing problems. The data used in the study is analyzed using Correlation analysis. It is a method of statistical evaluation used to study the strength of a relationship between two, numerically measured, continuous variables. This analysis type is used when a researcher wants to find out if there are possible connections between variables.

### **Literature Review**

R.Rajasekhar(2017), in his study entitled "Financial Performance Evaluation of Construction Industries " has analysed financial performance evaluation of Construction companies in India. It was found that Indian economy has been hit by various economic crises from last few years and the economic stagnation still continues. Financial, economical, and industrial data were collected from 100 Indian construction companies for five consecutive years (2011-2015). Seven independent factors, i.e. liquidity, Activity, profitability, long term solvency, Asset management, Inventory and Efficiency were identified to be sensitive to the economic changes in the country. The final outcome of this research is a performance grade, which provides the performance of a construction company and ranking the companies based of calculated performance grade and finally assessing the risk of bankruptcy by using Z-score model.

In the study entitled "Industry specific financial distress modeling", NazSayari and Can Simga Mugan (2017), has investigated uncertainty levels of various industries and attempted to determine financial ratios having the greatest information content in determining the set of industry characteristics. Various ratios were used to develop industry specific financial distress models. The study used factor analysis to determine the set of ratios which were most informative in specified industries. To measure the level of uncertainty the study used the

method based on the concept of entropy. To judge the predictive ability of selected financial ratios for each industry logistic regression analysis was conducted and derived the industry specific financial distress model. The outcome of the study showed that the information content of specific ratio varies among different industries.

Roozbmeh Kandari, Foad Farid and Hesham M. Elgharib, members ASCE, in their study, "Financial performance analysis for construction industry", has stated that for forecasting the financial status of the construction company, the business failure in the industry is an important research issue. The study used quantitative model based on financial ratio to assess the financial performance and grade the construction company and its probable chance of business survival. the various financial ratios used for developing the model included return on net worth, total liabilities to net worth, revenues to net working capital, current ratio, total assets to revenues and return on total assets.

Aditi Boraste and Prof. R.V. Devalkar(2016), in their study on "Financial Performance Evaluation Of Construction Companies", has focused on analyzing the financial performance of the construction companies by finding various financial ratios using tool analysis. The study also showed how ratio analysis can be used to find out the long range planning, asset management and budgeting to strengthen the financial performance and to evade financial difficulties. The study also suggests remedial measures along with the picture of financial position of the firm.

According to Ocal et al (2007) in their study on "Industry financial ratios - application of factor analysis in Turkish construction industry", has noted that the construction company is very important for every country as it recover from economic crisis and power up the financial status of the country, in this regard financial ratio analysis is an important tool which helps in analysis of the position and also planning towards sustainable development strategy. The main aim of the study was to create factors which give an alternative view on the ratios.

### **Analysis and Interpretation**

**Relation between Net Profit and Short Term Debts**  
**Table 3.1**

Year	NET PROFIT	SHORT TERM DEBT
2014	13.7478985	38.5426647
2015	3.2166441	67.4498061
2016	7.2293489	62.5820434
2017	1.6175822	79.8541153
2018	2.9026117	46.3598097

R= -0.70

### Interpretation

From the first table, the relation between short term debts and profit was studied through Correlational analysis. A -0.70 was found as the correlational coefficient, which means with the increase of one factor the other will decrease. Here with the increase in the short term debts, the net profit decrease as higher interest charges are paid.

**Relation between Financial cost and Short Term Debts**  
**Table 3.2**

YEAR	FINANCIAL COST	SHORT TERM DEBT
<b>2014</b>	283.95125	38.5426647
<b>2015</b>	304.27579	67.4498061
<b>2016</b>	278.05344	62.5820434
<b>2017</b>	204.38948	79.8541153
<b>2018</b>	204.33158	46.3598097

R= -0.16

### Interpretation

The relation between short term debt and financial cost is a -0.16. This is a weak negative relation. With the times of increase in the short term debts employed by the company, higher financial costs are being born. As in a state for being liquid, these short term debts are taken and they are expensive.

Relation between Net Profit and Long Term Debts

Table 3.3

YEAR	NET PROFIT	LONG TERM DEBT
2014	13.7478985	1.2519352
2015	3.2166441	5.382035
2016	7.2293489	4.9846961
2017	1.6175822	1.6969579
2018	2.9026117	2.9894904

R=- 0.31

**Interpretation:**

The above table shows that -0.31 is the correlational coefficient between long term debt and net profit. As an inverse relation should exist, but is often not followed as many other factors in the Economy are also affecting this correlation.

Relation between Financial cost and Long Term Debts

Table 3.4

YEAR	FINANCIAL COST	LONG TERM DEBT
2014	283.95125	1.2519352
2015	304.27579	5.382035
2016	278.05344	4.9846961
2017	204.38948	1.6969579
2018	204.33158	2.9894904

R= +0.50

**Interpretation:**

From the table, +0.50 is found to be the correlation coefficient existing between the long term debt and financial cost .With the increase in one factor the other will increase .As the long term debts employed reduces due to various reasons like dip in the demand of new construction projects .With this the interest payments associated with the debt is removed.

**Relation between Revenue and Operating Cash Flow**

Table 3.5

YEAR	REVENUE	OPERATING CASH FLOW
2014	3.03819	1.35727
2015	3.060474	1.56571
2016	2.85113	1.55347
2017	2.044661	1.18434
2018	2.072541	1.64239

r=0.21

**Interpretation:**

A positive correlation coefficient of 0.21 is between revenue and operating cash flow is a good indication of the financial position of the Company with the increase in the operating cash flow ratio, more revenue is being generated due to the influx of cash.

**Relation between Revenue and Current Ratio**

Table 3.6

YEAR	REVENUE	CURRENT RATIO
2014	3.03819	1.55111
2015	3.060474	1.68288
2016	2.85113	1.73942
2017	2.044661	1.80005
2018	2.072541	2.0556

r = -0.81

**Interpretation:**

Current ratio is one of the criteria used to study the liquidity position of the Company .From the correlational study of revenue and current ratio it was observed a negative coefficient of 0.81.Here as the current ratio increases beyond the required ratio the revenue is badly affected .As most of the liquid cash is being unutilized to keep up the liquidity position.This liquid cash being kept is mostly from short term debts.

### **3.7. Relation between Revenue and Quick Ratio**

Table 3.7

YEAR	REVENUE	QUICK RATIO
2014	3.03819	0.0234531
2015	3.060474	0.0233444
2016	2.85113	0.0133311
2017	2.044661	0.0114557
2018	2.072541	0.0079526

$$r = 0.87$$

#### **Interpretation:**

Quick ratio also known as the acid test ratio is also one of the parameters for assessing the Company's financial health. A +0.87 is observed as correlational coefficient between revenue and the quick ratio. With the decrease in the revenue, a decrease is also observed in the quick ratio.

### **Relation between Revenue and Debt Equity Ratio**

Table 3.8

YEAR	REVENUE	DEBT EQUITY RATIO
2014	3.03819	0.00849
2015	3.060474	0.03571
2016	2.85113	0.03156
2017	2.044661	0.01064
2018	2.072541	0.0184

$$r = +0.44$$

#### **Interpretation:**

Debt equity ratio helps in identifying the financial stability and the ability to avail more capital for growth. The correlation coefficient of +0.44 is observed between revenue and debt equity ratio. The change in the factors is affected by various other internal and external factors. The influence of these factors makes change in patterns of their relationship.

## Findings

The research is divided into 2 parts. The first part understands the relationship between the net profit and financial cost on short term and long term debts taken by the Company.

### I. Short term debt and net profit

- From the study it was observed there is a negative correlation of 0.70.
- With the increase in the short term debts, the net profit decreases as higher interest rates are to be paid.

### II. Short term debt and financial cost

- A negative correlation of 0.16 exists.
- As the money lend for shorter duration the expenses accrued is also high.

### III. Long term debt and net profit

- It was noted a negative correlation of 0.31 exists.
- Even though the money borrowed is lesser, as they are not taken for immediate purposes the interest rates are higher. This in turn reduces the net profit.

### IV. Long term debt and financial cost

- Positive 0.50 correlations exist between financial cost and long term debt.
- With the decrease in the long term debt, the financial cost associated with it can be reduced.

The second part understands the relationship between operating cash flow, current ratio, quick ratio and debt equity ratio on revenue of the Company.

- Operating Cash flow and revenue
- From the study a positive correlation of 0.21 is observed.
- With the increase in the operating cash flow, the revenue of the company increases.
- Current ratio and revenue.
- Between the 2 factors a negative correlation of 0.81.
- With high current ratio, the revenue decreases as most of the money is kept in easily liquidable form and not being utilized properly.
- Quick ratio and revenue
- Positive correlation coefficient of 0.87.
- With the quick ratio decreasing at the pace of the revenue of the Company, it can turn very quickly insolvent.



#### V. Debt equity ratio and revenue

- Positive correlation of 0.44 is observed between the above 2 variables used.
- Revenue of the Company increases as the Debt equity ratio increases. If the Debt increases beyond the Equity of the Company, chances of being bankrupt increases.

When there is no proper utilization of debt.

#### Suggestions

- The debt employed must be in a proper proportion of short term and long term debts. As this helps in reducing the impact of each on the net profit and financial cost associated with the debts.
- If the current ratio is higher than 2, more liquid assets are being underutilized. Most of these liquid resources would be from short term debts for meeting day to day needs. If there is improper management. More interest payments must be done, which is an unwanted expense.
- Required quick ratio must be maintained as per the revenue of the Company. So as to remain solvent.
- The debt employed by the Company must not be greater than the Equity. Else the Company could be bankrupting on unable to pay the Debt taken by the Company.

#### Conclusion

The aim of the study was to study the relationship of short term and long term debts on net profit and revenue of the Company in Construction industry. Relation between some factors that affect the financial position was also studied. The study of these were done using Correlational Analysis. The Company's financial documents from 2014-2018 was taken for studies. The scope of the project was limited to the nature of relationship between these factors. Secondary data was only used for the study.

From the study on revenue with some factors, it was found that the Company has chances of slipping into a financial distress on considering the changes in the external environment like demand for new housing projects. Proper management of short term debts must be enforced to save income, setting up of more efficient internal control systems for the allocation of liquid resources by these the Company can avoid going to a distressed condition.

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