A Comparative Study on Liquidity and Profitability of Shivam Cement Industry

Bashu Neupane
Lecturer
Faculty of Management
Nepal Commerce Campus, Kathmandu, TU, Nepal
bashuneupane55@gmail.com

Abstract

The paper focuses the sales, liquidity and profitability analysis in corporate finance. Any firm aims to maximize its earnings per share. However, most of the firms try to attain maximum profit. In this way, this study is initiated to find out the cause and effect relationship between sales, liquidity and profitability. The study is concentrated on the cement industry in Nepal for four year's data. The quantitative research design has been used to draw a valid conclusion. The descriptive statistics, correlation analysis and regression analysis were used in the analysis of the sample and there is any relationship among sales, liquidity and profitability in the cement industry in Nepal. The study found a significant positive relationship between sales and profitability, similarly insignificant positive relation between net working capital and profitability.

Keywords: sales, net working capital, profitability, liquidity, solvency.

Introduction

1.1 Background

Net working capital is the aggregate amount of all current assets and current liabilities. It is used to measure the short term liquidity of a business and can also be used to obtain a general impression of the ability of a firm. If the networking capital is substantially positive, it indicates that the short term funds available from current assets are more than adequate to pay for current liabilities as they come due for payment. If the networking capital is negative, the firm may not have sufficient funds available to pay for its current liabilities and may be in danger of bankruptcy. The networking capital is more informative when tracked on a trend line. Since this may show a gradual improvement or decline in the net amount of working capital over time.

Net Working Capital (NWC) = Current Assets – Current Liabilities

Profitability and liquidity are the most important issues that the management of each firm should take studying and thinking about them into account as their most important duties. Liquidity refers to the ability of a firm to meet its short term obligations. Liquidity plays a crucial role in the successful functioning of a business firm. Sound liquidity is vital to both

internal and external analysis because of its close relationship with day to day operations of a business. A poor liquidity position poses a threat to the solvency as well as the profitability of a firm and makes it unsafe and unsound.

Profitability is a measure the firm's revenues exceed its operating expenses. Potential investors are interested in dividends and appreciation in the market price of a stock, so shareholders pay more attention to the profitability. On the other hand, managers are interested in measuring the operating performance in terms of profitability. Hence, a low profit denotes ineffective management and such a firm cannot attract probable investors.

The liquidity and profitability are contradictory to each other in most decisions which the finance manager takes. Firms with high liquidity may have low risk but low profit. Conversely, a firm that has low liquidity may face high-risk results in a higher return. Consequently, a firm is required to maintain a balance between liquidity and profitability in its day-to-day operations.

1.2 Research Problems

Maintaining proper liquidity indicates that funds are confined to liquid assets thereby making unavailable for operational use and investment purposes for higher returns. Thus, there is an opportunity cost associated with the maintenance of those liquid assets and this might affect the overall profitability of the firm. In other words, increasing profitability would tend to reduce the firm's liquidity and too much attention on liquidity would tend to affect profitability (Smith, 1980). Therefore, firms should always strike to maintain a balance between conflicting objectives of liquidity and profitability. The firm's liquidity should not be too high or too low. Excessive dependence on liquidity indicates the accumulation of idle funds that don't fetch any profits for the firm (Smith, 1980). On the other hand, insufficient liquidity might damage the firm's goodwill, deteriorate firm's credit standings and that might lead to forced liquidation of the firm's assets. Hence, the present study is initiated to identify the trade-off between liquidity and profitability of listed manufacturing firms in Nepal:

- What is relationship therelationshipbetweenliquidity, salesandprofitability?
- What is the impact of sales and networking capital on profitability?

1.3 Research Objectives

Following are the Objectives of the research paper:

- Toidentifytherelationshipbetweenliquidity, salesandprofitability.
- To analyze the impact of sales and networking capital on profitability.

1.4 Research Hypothesis

The two hypotheseswere set to test the study empirically:
Hypothesis one

H_1: There is a significant association between sales and profitability.

Hypothesis two

H_2: Thereis asignificant relationship betweenliquidityandprofitability.

1.5 Literature Review

Liquidity and profitability have been extensively discussed and analyzed in the literature. While the immediate survival of a business depends on its liquidity, its long term survival and growth depend on profitability. Thus, liquidity ensures short term survival and profitability ensures long term survival. Both are important for any firm to survive. This study has reviewed research papers from the existing literature to understand the research work conducted in this field.

Velnampy T. (2006) analyzed the financially sound or bankruptcy of the firms is examined by using Altman's original bankruptcy forecasting model with the samples of 25 quoted public firms in Sri Lanka. The major findings of the study are that only 4 firms, out of 25 firms, are in the position of financially sound. The financial institutions and commercials banks are interested to know whether a particular company will be in a position to repay their debts.

A. Thomas and M. Oke (2010) studied the impact that the running assets management on the profitability of the sample of 74 types of cement industry of Turkey. This study outlines the main factors that determine the working capital in the financials of the cement sector. To manage the firm's liquid assets which are working capital management and to reach the desired equilibrium level among profitability and risk, figures were collected from Annual Reports and sample consist of 10 cement industry during 2003-2008. The association between working capital management and profitability is examined with correlation; regression analysis the result proved that there is inverse and positive association between working capital management and profitability in the cement industry.

M.U. Rehman and N. Anjum (2012) examined the financial performance is a return on assets, sales equity and other financial variables. This study analyzed the performance os selected firms in Jordan on the parameters such as profitability, utilization of assets, growth of performance, financial strength and capital structure. This study concluded that there is a positive relationship between working capital and profitability.

H. Altay Guvenir and M. Cakir (2013) conducted a study for a sample of 120 manufacturing firms in Turkey for the period 2005-2012. The estimation results from dynamic panel data model taking into account the variables indicate that lagged profitability, firm size, financial risk, research and development costs, net working capital and economic growth are the most important variables affecting firm profitability. The profitability is positively and significantly affected by past profitability, firm size in terms of total sales, net working capital

and economic growth. On the other hand, research and development costs and financial risk have a dampening effect on profitability.

Dr. Mehtap Oner (2015) study aimed to provide empirical evidence for the relationship between working capital and profitability of a sample of 110 manufacturing firms during the period of 2005-2014. The impact of working capital management of the firm's profitability is tested by using panel data methodology. The finding of the study was there is a significant and negative impact on firms' profitability suggesting that a firm may increase its profitability through minimizing its working capital and significant positive relationship between profitability and sales.

M. Malik, W. Ullah Jan, and K. Ullah (2016) identify and measure the relationship of firm size, profitability, net working capital and leverage and their effect on corporate cash holdings. A sample of 30 textile firms of Pakistan was selected for the study. Secondary data for the period 2006-2013 was selected for the study. Multiple regressions model show consistency. This study concluded that Profitability and firm size show a positive and significant relation with cash holding. A however negative and significant relationship was found between net working capital land leverage with cash holding.

Ozcan I. and U. F. Tasgin (2018) analyzes the factors that determine the profitability of 120 manufacturing firms in Europe during the period 2005-2012. The conclusion from dynamic panel data model taking into account the variables indicate that profitability, firm size, financial risk, R & D cost, net working capital, and economic growth are the most important variables affecting firm profitability; More specifically, profitability is positively and significantly affected by past profitability, firm size in terms of total sales, networking capital, and economic growth. On the other hand, R & D costs and financial risk have a dampening effect on profitability.

Methods and Materials

This study has been used as secondary data for the analysis. The data utilized in this study is extracted from the income statements and balance sheets of the sample cement industry. Sampling design is a definite plan for obtaining a sample from a given population. The sample of this study is confined to the one sample has been selected from the population. The quantitative research approach is employed to arrive at the findings of the research study. Under which, descriptive statistics and inferential statistics were used. Descriptive statistics depict the average for the selection of financial variables. It is a snapshot of the samples and their measures and shows the exact position of the data used in the study. Inferential statistics are used to conclude the reliability of the findings. The correlation analysis and regression analysis were carried out to identify the trade-off among sales, liquidity and profitability. Here, liquidity and sales are the independent variables and profitability is the dependent variable.

Results and Discussion

I. Descriptive Statistics

The descriptive statistics analyzed the financial variables of four years from 2072 to 2075. Descriptive analysis shows the average of the different variables of the study. The mean value of profitability is 786.95 and profit margin of 11.54% on sales.

Table 1
Descriptive statistics of study variables

Particulars	Average (millions)
Current assets	3045.55
Current liabilities	2374.95
Sales revenue	6817.73
Net profit	786.95
Net Profit margin	11.54%
Current ratio	1.28 times

Note. These data are extracted from annual reports of Shivam Cement Industry**.**

II. Correlation Coefficient

The correlation coefficient states the relationship between dependent and independent variables.

Table 2
Correlation coefficient between different variables

Particulars	Net profit	Sales	Net working capital
Net profit	1	0.971*	0.634
Sales		1	0.468
Net working capital			1

Note. *Correlation is significant at the 0.05 level (2-tailed).

Correlation analysis is also used to analyze the relationship between net profit, sales and networking capital. The net profit and sales have a high degree of positive and significant association. Similarly, the net profit and net working capital have a positive and insignificant association. The correlation results showed that there is a strong relationship between net profit and sales. Similarly, there is a positive relationship between profitability and net working capital in Nepalese cements industry.

III. Regression Analysis

Table 3

Regression analysis of aelected variables

R	= 0.992	$R^2 = 0.985$	
F	=31.875	$P = 0.026 < 0.05$	Significant model
Constant	=40.175		
$\beta 1$	= 0.095	T = 6.140	Significant t-value
$\beta 2$	= 0.148	T = 1.164	insignificant t- value

Therefore the model would be:

$$Y = 40.175 + 0.095X1 + 0.148X2 + \varepsilon i$$

The regression model describes the model summary, ANOVA table and coefficients. The coefficient of determinant 0.095 is the variation of dependent variables (Net Working Capital and Sales) is explained by 98.5% independent variables (Profitability). The P-value of F-value is significance at 5% level. This showed that the proposed model is significant. The coefficient value of sales is 0.095 million; its t- statistic is significant. The coefficient of sales has a positive and significant impact on the profitability of Shivam Cement and similar to the previous results. This means that if Re. 1 increased in sales the profit also increased by Rs 0.095. The coefficient value of Net Working Capital is 0.148 million, but its t-statistic is insignificant. The coefficient of Net Working Capital has a positive impact on profit but insignificant. This study revealed that there is a positive impact on sales and Net Working Capital on Profitability.

Discussion

The Test statistics measure the relationship between the sample data and its hypothesis. Since the profit is volatile and changes accordingly. The test statistics analyzed the sample data and test the hypothesis. The higher the t-value of sales coefficient is significant at 5% level but the t-value of NWC is insignificant. This indicates that there is a strong impact on sales on profit, but not NWC. The impact of profitability and sales has a similar result to other studies. But the impact of NWC on profitability has the opposite result with the previous study.

Hypothesis one. There is a significant relationship between sales as a predictor of profitability. This states that the priory hypothesis is accepted.

Hypothesis two. There is no significant relationship between liquidity and profitability. This states that the prior hypothesis is rejected.

Conclusions

This study was conducted for testing the sales and liquidity as a predictor of profitability for the cement industry of Nepal. In this study used Sales and Liquidity as independent variables and the dependent variable is profitability. The descriptive statistics, correlation analysis and multiple regression models are used to prove empirically. These models are used as a strong tool to establish and find if the relationship or correlation exists between the variables. These study results give a clear indication that the sales have a strong predictor of profitability. But the networking capital does not predict the profitability.

Based on the study the results can be further strengthened if the firms manage their working capital in more efficient ways. Management of working capital means management of current assets and current liabilities and financing these current assets. If the firm properly manages cash, account receivables and inventories in a proper way, this will ultimately increase the profitability of the firm.

References

Ahmed. R. (2016). A study of relationship between liquidity and profitability of standard chartered bank Pakistan: Analysis of financial statement approach. *Global Journal of Management and Business Research Corporate Finance, 16*.

Ayodele, T. and Oke, M. (2010). An empirical investigation of the liquidity profitability relationship in Nigerian Commercial Banks. *Journal of Economics and Sustainable Development 4(6).*

H. A. Guvenir and M. Cakir. (2013).Voting features based classifier with feature construction and its application to predicting financial distress. *Expert Systems with Applications. 37(2*).

Malik, M., Ullah Jan, W. & Ullah, K. (2017). Working capital management and profitability: an analysis of firms of textile industry of Pakistan. *Journal of Managerial Science, 6(2).*

Onee, M. (2015). An impact of aggressive working capital management policy of firms's profitability. *Siyaset, Ekonomi Ve Yonetion: Arastirmalari Dergisi 4(3).*

Ozcan, I. and Tasgin, U. F. (2018). Profitability and its determinants in Turkish Manufacturing Industry: Evidence from a dynamic panel model. *International Journal of Economics and Finance 9(8).*

Rehman, M. U. and Anjum, N. (2012). Determination of the impact of working capital management on profitability: An empirical study from the cement sector in Pakistan. *Asian Economical and Financial Review, 3.*

Smith, K. (1980). Profitability versus liquidity trade-offs in working capital management, readings of the management of working capital. *West Publishing Company, St. Paul, New York.*

Velnampy, T. (2006). An empirical study on application of altman original bankruptcy forecasting model in Srilankan companies. *Management Studies and Commerce (Accounting) 6(2).*