WORKING CAPITAL POLICIES AND FINANCIAL HEALTH OF SEA FOOD MANUFACTURING COMPANIES IN KERALA

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ABSTRACT

The present study examines the relationship between working capital policies and financial health of seafood manufacturing companies in Kerala. The study intends to investigate how various working capital policies affect the financial health of these companies. This study uses a quantitative method that draws on the financial data of five seafood manufacturers in Kerala. This analysis was carried out with the help of financial ratios, Z score model, descriptive statistics,correlation and regression model to determine the working capital policies, financial health and relationship between the dependent variable and two independent variables that are "CATA" and "CLTA" respectively.The result concluded that the companies follow conservative investment policy and aggressive financing policy during the study period. The average Z score was 1.039, which means that the companies are in a severe condition with high bankruptcy risk.The regression statistics shows a positive correlation between the working capital policies and financial health, with a multiple correlation coefficient (R) of 0.6794. The model reveal approximately 46.10% of the variation due to dependent variable, as shown in coefficient of determination (R-square) = 0. Both "CATA" and "CLTA explains the importance of these two variables in understanding how variations on R1 are produced. The study concluded that there is significant impact of working capital policies on financial health of seafood firms. These findings can be used to improve the analysis of factors affecting financial health and decisions based on model's coefficient as well as its statistical inference.
Key words: Financial health, working capital policies, Z-Score

INTRODUCTION

Proper management of working capital is crucial for companies that are active in dynamic business settings. The working capital is the amount of cash which goes into operations and which keeps liquidity to support business activity. Working capital policies that work are simply a matter of strategic decision-making on current assets andcurrent liabilities management so as to arrive at equilibrium with adequate liquidity levels in addition to the highest possible returns. The significance of working capital policies lies in their direct influence on a company's financial

health. Financial health is aoverall indicator of a firm's ability to meet its short-term obligations, generate profits, and sustain operations over the long term. It encompasses various financial indicators such as solvency, liquidity, profitability, and efficiency. Efficient policy settlements of working capital allow companies to improve financial health, retain sustainability and increase competitiveness.

An important element of working capital policies is the management of current assets such as accounts receivable, inventory and cash. The effective management of these assets is contingent on the thoughtful consideration of factors such as credit policies inventory turnover and cash flows. For example, keeping a sound cash balance empowers businesses to fulfill their short-term commitments in time, exploit lucrative opportunities and survive periods of recessions. Likewise, good inventory management ensures that sufficient quantities of goods are available when they need to be used and avoids stock outs or high carrying costs. Regarding the other side of the equation, working capital policies also include monitoring current liabilities that consist in short-term loans and accounts payable. Companies should balance in making timely payments on obligations with taking advantage of credit terms. However, delayed payment beyond the credit duration can lead to poor relations with suppliers while making early payments may damage liquidity. Therefore such careful handling of the current liabilities is essential for financial health.

There are various facets of the relationship between strategies for working capital and financial health. Efficient management of working capital may lead to improvement in profitability since there is reduced cost due inventory depletion, efficient cash flowand minimizing bad debts. In addition, good working capital policies can increase liquidity that companies use to meet their short-term obligations and take advantage of growth opportunities. Companies can also improve their solvency by maintaining an optimum level of working capital and this ensures the stakeholders' ability to cover long-term financial obligations. But mismanaged working capital can affect financial health negatively. Poor liquidity can result in late payments, failure to meet deadlines of suppliers and disruptions in emerging supply chain. However, too much working capital may block the use of those funds in more profitable investments or lead to higher carrying costs. These concerns may slow down expansion, weaken profitability, and undermine the entire financial picture of an organization.

REVIEW OF LITERATURE
Filbeck and Krueger (2005) discussed how working capital management practices differ among industries. The research compared working capital policies of Aerospace/defense and chemical companies. The authors concluded that aerospace/defense companies have shorter cash conversion cycles and lower levels of inventory and accounts payable that represent superior working capital management efficiency. On the other hand, chemical companies show lengthened CCC which may be associated with their industry specific character. **Afza and Nazir (2016)** put the spotlight on how working capital impacts profitability in Pakistan's textile industry. The paper focused on working capital components including accounts receivable, inventory turnover, and accounts

payable regarding their interrelations and profitability indicators. The findings showed that a less cash conversion cycle and optimal working capital have positive effects on the profitability of companies in Pakistani textile industry.

Smith (2018) studied the working capital management and financial condition of companies in the United Kingdom. The analysis of different working capital policies and their effects on liquidity, solvency, as well profitability is performed within the study. The results indicated that firms with efficient working capital management processes have better financial health, underscoring the importance of well-designed working capital policies for achieving financial stability. **Bonde (2017)** assessed the working capital management and corporate profitability among Indian manufacturing firms. This research analyzed several working capital policies like cash conversion cycle, accounts receivable and inventory as well as its effect on the profitability of a firm. The results showed that working capital efficiency has a positive impact on corporate profitability. Hence, it is necessary to support the relationship between such policies and financial health.

Mohapatra's (2016) attention was given to the fiscal well-being of state enterprises in India. The study performed an empirical investigation to analyze the indicators of financial health for these enterprises which include liquidity, profitability, solvency, and efficiency. The findings indicated that factors including liquidity and profitability have a pronounced effect on both the financial well-being of public sector corporations as well as their overall performance. **Al-Shubiri (2011)** analyzed aggressive/conservative working capital policies because they determine the profitability and risk for a sample of Jordanian companies whose shares were listed on ASE during 2004–2008. In the article, the researcher examined how firms' decisions regarding their working capital management strategies determined their financial performance and risk levels. The results of the research indicated that an aggressive investment policy was negatively correlated with market price, while an aggressive financing policy had a positive correlation with it.

Akoto et al. (2013) focused on the significance of working capital management practices for listed manufacturing companies in Ghana. It highlighted the importance of optimizing cash conversion cycle and reducing amounts receivable days and in order to improve profitability. The study found out a significant negative association between accounts receivable days and profitability, while cash conversion cycle turned out to have significantly positive effect on profitability. **Vahid et al. (2012)** was geared towards highlighting the impact of working capital management policies on firms' profitability and value. This study showed that a conservative investment policy negatively affected the profitability and value of firms. However, companies which employed aggressive investment strategy that entails higher risks and greater levels of investments have shown to be more profitable with an increase in value. The study determined that pursuing an aggressive financing strategy had a negative impact on the profitability and value of firms.

STATEMENT OF THE PROBLEM

The seafood sector is an essential player in the economic development of Kerala because one of its main sources of employment and income from exports. Competent management of working capital is, therefore, building the basis for financial health and sustainability among seafood companies that operate in Kerala. But there is very little research on the particular working capital policy that was enacted by these companies and how this affected their financial health indicators which may include profitability, liquidity, solvency and efficiency. Working capital management is relevant to the success of seafood firms; however, there are a few empirical studies that document the relationship between working capital measures and financial health indicators in this particular sector.

The study aims to address the following research questions:

1. 1.What are the prevalent working capital policies adopted by seafood companies in Kerala?
2. How do these working capital policies impact the financial health indicators of seafood companies, including profitability, liquidity, solvency, and efficiency?
3. What is the financial health of sea food companies in Kerala?

SIGNIFICANCE OF THE STUDY

The understanding the working capital policies and their relationship with indicators for financial health such as profitability, liquidity, solvency, and efficiency will allow companies to minimize the gaps between realized benefits from current assets used in operations. As a result, this can increase their financial return, better manage the flow of cash and promote continued development. Therefore, the study can make a meaningful contribution to sustainable growth in seafood businesses via improved financial health and operations due through optimized working capital policies. This in turn can result to more job opportunities, foreign revenues and improvement of the region's economy.The research under consideration on the working capital policies and financial standing of seafood organizations in Kerala has significant importance for many stakeholders. In addressing the factors that influence effective working capital management and their implications for financial health metrics, this study can support seafood businesses in growth and sustainability whereby lending organizations will have a better understanding of what to look out for before extending credit while policymakers devise industry-specific policies all seeing how much contribution it makes towards academic knowledge development at large having influence on economic progress.

OBJECTIVES OF THE STUDY

1. To analyze the prevailing working capital policies of sea food companies in Kerala.
2. To identify the financial health of sea food companies in Kerala.
3. To examine the impact of working capital policies on financial health of sea food companies in Kerala.

HYPOTHESIS

H_0: Thereis no significant impact of working capital policies on financial health of firms.

H_1: There is significant impact of working capital policies on financial health of firms.

SCOPE OF THE STUDY

The study tries to analyze the working capital policies and financial health of sea food companies in Kerala. The study considers top five sea food manufacturing companies located in Cochin. The companies having the plant capacity above fifty MT are selected for the purpose of study. The study covers the prevailing working capital policies, financial health, and the impact of working capital policies on financial health of Nas Fisheries Private Limited, Profand Vayalat Marine Exports Pvt. Ltd., Moon Fishery (India) Pvt. Ltd., Poyilakada Fisheries Private Limited, and Mangala Marine Exim India Pvt. Ltd. in Cochin.

RESEARCH METHODOLOGY

The data required for the present study are acquired from the annual reports of the selected companies. Further, journals, articles, and text books are also used for data collection. The study covers a period of five years starting from 2016-17 and ending on 2020-21. The top five companies on the basis of their plant capacity are selected as sample through deliberate sampling technique. The panel data regression model is used under this study. The tools like financial ratios, Z-Score model, mean, median, standard deviation, correlation and regression analysis are applied for data analysis. The variables used for the study are working capital financing policy, working capital investment policy, and financial health. The working capital financing policy is assessed by Current Liability/ Total Assets (CLTA), working capital investment policy is assessed by Current Assets/Total Assets (CATA), and financial health is assessed by Altman's Z score analysis. The data collected are analyzed with the help of Ms-Excel.

Z-Score is calculated by:

$$Z = (0.717 \times T_1) + (0.847 \times T_2) + (3.107 \times T_3) + (0.420 \times T_4) + (0.998 \times T_5)$$

> - Working Capital to Total Assets -T_1
> - Retained Earnings to Total Assets -T_2
> - Operating Earnings to Total Assets - T_3
> - Book value of Equity to Total Liabilities - T_4
> - Sales to Total Assets - T_5

Z-Score Result

Z > 3 Safe Zone

Z = 1.23 - 2.99 Grey /Alert Zone

Z < 1.23 Distress Zone and Likely to be bankrupt

REGRESSION MODEL

The multiple regression is used in this study to check the impact of working capital policies on the financial health of sea food companies. The variables used for the regression model were CLTA, CATA and Z.

The regression equation is:

$$Z_{it} = \beta_0 + \beta_1 CATA_{it} + \beta_2 CLTA_{it} + \varepsilon_{it}$$

Z represents, Z score value of financial health, CATA represents current assets to total assets, CLTA represents current liabilities to total assets, i represent sampled processing units, t represents the time dimension, β_0 represents Constant or Intercept and ε represents the error term.

RESULT AND DISCUSSIONS

Table 1

Descriptive Statistics

	CATA	CLTA	Z
Mean	0.716	1.248	1.039
Standard Deviation	1.294	1.180	1.681
Minimum	0.112	0.071	1.290
Maximum	6.828	6.003	5.601
Count	25	25	25

Source: Statistically analyzed data from annual reports

Interpretation

Table 1 is the descriptive statistics of variables used in this study. Current assets by total assets (CATA) was used to measure the investment policy, current liabilities by total asset ratio were applied for financing policy and Altman's Z score analysis aided in measuring financial health. The average Z score was 1.039, which means that the companies are in a severe condition with high bankruptcy risk. Only one company is in the safe zone. This means that the authorities should make sure to take necessary steps for improving companies' financial standing. If investment policy value is greater than 0.5, the company adopts a conservative approach to investments. In this case, the average investment policy is 0.716; it means that companies follow a conservative approach in investments. However, in the case of financing policy if it is above 0.5 then firm follows aggressive financing policy. The mean value of financing policy 1.248, which means that firms adopt an aggressive funding strategy.

Table 2

Correlations

Variables	CATA	CLTA	Z
CATA	1		
CLTA	0.794	1	
Z	0.170	0.265	1

Source: Statistically analyzed data from annual reports

Interpretation

There is a correlation of 0.794 between CLTA and CATA. This implies a high positive correlation between CLTA and CATA, meaning that if one variable increases the other variable also tends to increase. The correlation between Z and CATA is 17%. This correlation is a moderate positive relation between Z and CATA. But the correlation is not significant statistically. Z and CLTA have also a moderate correlation of 0.265. The correlation is weak between Z and CLTA. Briefly, the correlation analysis shows a high positive relationship between CLTA and CATA because these variables are positively related to each other. Yet, there is moderate positive relationship between Z and either CATA or CLTA, which shows that they lack a high level of correlation.

Table 3

Regression Statistics	
Multiple R	0.679
R Square	0.462
Adjusted R Square	0.413
Standard Error	1.288
Observations	25

Source: Statistically analyzed data from annual reports

Interpretation

The multiple R value, or the Multiple Correlation Coefficient is 0.679. This shows a medium positive relationship between the independent variables and the dependent variable in regression model. The coefficient of determination or R-square value is 0.462. This implies that about 46.2% of the variance in dependent variable can be accounted for by independent variables included in model. The value of the adjusted R-square, which accounts for the number of predictors and sample size, is 0.413. It is slightly less than the R-square value. The adjusted R-square penalizes the addition of irrelevant predictors to the model and results in a more conservative estimate for goodness of fit. The standard error is 1.288. It measures the average unexplained variation or error in the dependent variable. A lower standard error means that the model fits better to data.

Table 4

ANOVA

	df	SS	MS		F	Significance F
Regression	2	31.312		15.656	9.433	0.001
Residual	22	36.515		1.660		
Total	24	67.826				

Source: Statistically analyzed data from annual reports

Interpretation

The degrees of freedom for the three components are regression, residual and total. In this case, the regression component has 2 df; residual is equal to 22 degrees of freedom and total – to 24 degrees of freedom. SS signifies the sum of squares and is a measure of total variation in the dependent variable. For the regression part, the total sum of squares is 31.312 which represent how much variation has been accounted for by using a regression model. For the residual term, 36.515 is the sum of squares that reflects unexplained or residual variation. 67.826 is the total sum of squares, which includes both regression and residual SSRs. Mean square, MS is the ratio of sums of squares to corresponding degrees of freedom. The mean square is 15.656 for the regression component, and it is 1. The F-value is simply the mean squares for regression divided by those of residuals. In this instance, the F-value is 9.433. It evaluates the entire contribution of regression model in terms of variation to be explained by comparing regression mean square against residual mean square.

The F-statistic, or p-value for significance (F), is the probability of observing the F value.This extreme given that no relationship exists between the independent and dependent variables. In this instance, the statistical significance F is indicated as 0.001 which falls below a standard threshold of 5%. Thus, the regression model is statistically significant which implies that independent variables explain a large part of variation in dependent variable.

Table 5
Regression Co-efficients

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.007	0.399	5.031	0.000	1.180	2.834	1.180	2.834
CATA	1.337	0.334	3.999	0.001	0.644	2.030	0.644	2.030
CLTA	-1.543	0.367	-4.206	0.000	-2.303	-0.782	-2.303	-0.782

Source: Statistically analyzed data from annual reports

Interpretation

The intercept term of the regression model is 2.007. It is the predicted value of the dependent variable when all independent variables are zero. In this situation, the intercept is statistically significant with a t-statistic of 5.031 and P-value = 0. The CATA coefficient is 1.337 for the independent variable. It is the estimated effect of a one-unit change in the "CATA" variable, with all other variables controlled for. The coefficient is statistically significant in that the t-statistic has a value of 3.99 and P= .001. The coefficient for the independent variable CLTA is -1.543. It is the estimated change in the dependent variable for a one-unit increase of CLTA while controlling other variables. The coefficient is significant with a t-statistic of -4.206 and p-value 0.0. The standard errors are a measure of the variability in estimated coefficients. Lower standard errors imply more accurate estimates. Here, the standard errors of intercept and CATA are 0.399 and 0.367 while for CLTA they are equal to 0.482 respectively. The lower and upper 95% confidence intervals define a range of values within which the true population coefficients are likely to lie. With respect to the intercept, we have a lower 95% confidence interval of 1.180 and an upper one at 2.834. In the same manner, for CATA variable; lower 95% confidence interval is at 0.644 and upper 95% Confidence Interval is 2.30. In terms of CLTA, the lower 95% confidence interval is -2.303 and the upper one – 0.782

CONCLUSION

In sum, the ANOVA table shows that this regression model is significant in predicting variation of dependent variable. The F-test shows that the explanatory power of this model is statistically significant which implies that independent variables have a strong effect on dependent variable. In addition, the regression model implies that both "CATA" and 'CLTA' have a significant impact on the dependent variable Z. A unit increase in "CATA" is related to an estimated 1.337 units increment of the dependent variable, while a one-unit increase in "CLTA" leads to an expected decrease by 1.54 units for that same variable measure. The independent variable is also significantly influenced by the intercept term. The findings of this study are meaningful for seafood manufacturing firms operating in Kerala as they provide the much needed guidance on how to improve their financial health by practicing effective working capital management practices. Through the proper management of their working capital policies, these companies will achieve operational efficiency and reduce financial risk to improve its position in terms of finance.

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