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The Trade-Off Between Liquidity and Profitability by analysing the Adequacy of Working Capital in Private Sector Banks

Analyzing the Impact of Working Capital Management on Bank Performance

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Abstract: The management of working capital is a crucial component of the broader company strategyaimed at optimizing shareholder value. Furthermore, organizations that possess the capability toeffectively handle their working capital are more inclined to promptly adapt to unforeseen shifts in theeconomy. The study's results indicate that both public sector and private sector banks in India exhibit agreater reliance on debt financing as opposed to equity financing. This suggests the existence of anegative trade-off between a firm's leverage and its performance. The effect was not detected in relationto the short-term debt-to-equity ratio, hence suggesting a favorable influence on the performance ofprivate banks in India when using client deposits and other forms of short-term financing. Conversely,there exists a positive correlation between Firm Size and Asset Growth with variables such as Return onAssets (ROA), Earnings per Share (EPS), and Return on Equity (ROE).

Keywords: working capital, liquidity, profitability, debt financing, equity financing, leverage, performance, short-term financing, firm size, asset growth

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INTRODUCTION

The management of working capital is a crucial component of the broader company strategy aimed at optimizing shareholder value. Furthermore, organizations that possess the capability to effectively handle their working capital are more inclined to promptly adapt to unforeseen shifts in the economy. The optimization of a firm's value via working capital management occurs when the marginal return on invested assets in working capital is equal to or above the cost of capital used to fund them. According to Raheman and Nasr (2007), the long-term survival of a corporation is contingent upon its prioritization of profit. In the meantime, the entity may encounter bankruptcy should it fail to prioritize matters pertaining to liquidity and risk. It is noteworthy to mention that liquidity within the banking sector has a higher degree of specificity. Banks primarily engage in the practice of extending loans and then earning interest on such loans. The act of maintaining a significant amount of liquid assets has the potential to diminish profitability, whilst the possession of an inadequate amount of liquid assets might result in financial hardship. Therefore, the effective administration of liquid assets is of utmost importance.

LITERATURE REVIEW

Das, Sneha & Patnaik, B. Chandra (2022) The primary aim of this research is to mitigate the working capital demands and decrease the expenditures made by private healthcare providers in their operational endeavors. A comprehensive investigation was undertaken by administering a survey to 55 non-profit private hospitals in India throughout the period spanning from 2018 to 2021. The researchers created a theoretical framework to generate hypotheses. A correlation has been shown between financial factors and the significance of working capital management. The findings suggest that private hospitals were able to maintain a balance in their working capital throughout the Covid-19 outbreak by using a delay payment plan, which allowed them to bridge the cash deficit. The hospitals' operational operations were funded by profits generated and working capital, which fluctuated based on their financial requirements. There has been a suggestion made on the need for the government to modify its healthcare strategy by allocating funds and implementing tax exemptions for hospitals. This research will give valuable insights for healthcare providers, hospital management, medical personnel, and other stakeholders involved in the healthcare industry.

AL-Zararee, Abdulnafea & Almasria, Nashat (2022) The objective of this research was to examine the influence of Working Capital Management (WCM) and Credit Management Policy (CMP) on the Financial Performance (FP) of banks in Jordan. The data for this research were collected from a sample of 16 Jordanian banks that are publicly listed on the Amman Stock Exchange (ASE) throughout the period from 2017 to 2020. The present research used panel data analysis to examine the association between two independent variables, namely working capital management (WCM) and cash management policy (CMP), and the dependent variable, financial performance (FP). A total of 64 financial reports from Jordanian banks were evaluated to assess this connection. Multiple regression was used to examine and evaluate hypotheses. The research revealed a statistically significant correlation between working capital management (WCM) and financial performance (FP), with the independent variable accounting for 34.1% of the observed variations in the dependent variable. Furthermore, the results indicate that there exists a statistically significant association between CMP (Customer Management Practices) and FP (Financial Performance). Additionally, it was elucidated by CMP that about 41.8% of the variations seen in the dependent variable could be accounted for. The results of this research provide evidence in favor of the banks' performance. It suggests that banks may consider extending customer loan terms, prolonging the cash transfer cycle, and implementing a longer payment period when evaluating working capital management.

Ala, & Abuhommous, Alaa Adden (2022) The objective of this research is to examine the potential non-linear association between working capital and credit rating. In addition, this study investigates the correlation between the three constituents of working capital, namely inventory, accounts receivable, and accounts payable, and a company's credit rating. The findings of our study, which used data from publicly traded companies in the United States from 1985 to 2017, indicate the presence of a non-linear association between working capital and its constituent elements, as well as credit rating, as shown by our ordered probit model. Ultimately, it is seen that any variation from the ideal level of working capital has a negative impact on the credit rating. The findings of this research have great significance for several stakeholders, including policy makers, managers, decision makers, and credit-rating agencies. These findings shed light on the crucial role that working capital management plays in determining a firm's credit rating.

Senan, Nabil & Al-Faryan, Mamdouh Abdulaziz Saleh (2022) The objective of this research is to analyse the influence of working capital management on the valuation of 2,326 Indian companies that are publicly traded on the Bombay Stock Exchange (BSE). This research used a combination of pooling, fixed and random, and generalised method of moments (GMM) models to analyse the effects. The measurement of firm value for Indian enterprises is determined by the Tobin-Q ratio, which serves as the dependent variable. The independent variables included in this study are networking capital, company size, financial leverage, current ratio, quick ratio, sales growth, yearly real GDP, and inflation rate. The findings of the present research suggest that the business size, financial leverage, current ratio, and quick ratio are significant determinants of firm value for Indian listed enterprises. The findings of the study indicate that business size, financial leverage, and quick ratio exhibit a negative and statistically significant impact on firm value. However, it is worth noting that net working capital has a positive and statistically significant effect on firm value. The findings of the research indicate that there is a positive relationship between sales growth, yearly real GDP, and inflation rate with the firm value of Indian listed enterprises. However, it is important to note that this relationship is not statistically significant.

Hussaini, Umaru & Aliyu, Abubakar (2022) The management of a firm's short-term resources and commitments, known as working capital management (WCM), plays a crucial role in enhancing the liquidity position of banks. A deficient liquidity situation poses a significant risk to the solvency of a bank, rendering it both unsafe and unsound. The primary aim of this research is to conduct a comprehensive evaluation of existing literature pertaining to the influence of working capital management (WCM) on the operational and financial performance of banks. The suggested conceptual framework and model aim to elucidate the correlation between working capital management (WCM) and the performance of banks, as shown by many scholarly works. The research examined indicates that there exists a favourable correlation between working capital management (WCM) and the performance of banks. This paper makes a theoretical contribution by presenting empirical data on the influence of working capital management (WCM) on the performance of banks. Moreover, this research contributes to the existing body of literature by providing additional insights into the correlation between working capital management (WCM) and banks' performance. The research will provide practical benefits to many stakeholders, including bank owners/managers, academics, management consultants, and financial institutions, by informing their policy and decision-making processes in relation to banks. This study suggests that future researchers should conduct empirical testing of the provided framework/model in order to enhance comprehension of the link.

RESEARCH METHODOLOGY

Sampling is a process of obtaining information about population/universe by examining only a part of it. Universe/population means total of the items in the field under study from which some units will be selected as sample for study. Sample means units or groups taken from population for experiments or processing or analysing or drawing inferences. The population for the study consists of private sector banks working in Haryana.

Haryana state is divided into six divisions namely Ambala, Rohtak, Gurugram, Hisar, Karnal and Faridabad divisions. We have selected five private banks namely Axis Bank, ICICI Bank, HDFC Bank, Kotak Mahinder Bank, and IndusInd Bank on random basis. These five private sector banks have 1085 branches

operating in Haryana (www.prokerala.com).

DATA ANALYSIS

Table 1 Descriptive Statistics of EPS

	Mean	Std. Deviation	N
EPS	45.6961	51.60450	218
FS	11.7850	.94743	218
AG	19.5193	6.63793	218
LTDC	1.1166	.49725	218
STDC	17.6271	3.21388	218
TDC	18.0606	3.20360	218

In the context of descriptive statistics, the calculated mean value for EPS is 45.6961, with a corresponding standard deviation of 51.6045. Similarly, the mean value for Firm Size is determined to be 11.7850, accompanied by a standard deviation of 0.9437. The mean asset growth is 19.51 with a standard deviation of 6.6349. The mean long-term debt-to-capital ratio (LTDC) is 1.11 with a standard deviation of 0.49725. The mean short-term debt-to-capital ratio (STDC) is 17.621 with a standard deviation of 3.2138. Lastly, the mean total debt-to-capital ratio (TDC) is 18.0606 with a standard deviation of 3.20.

Table 2 Model Summary for EPS

Model	R	R Square	Adjusted R Square	Change Statistics				Durbin-Watson
				F Change	df1	df2	Sig. F Change	
1	.5537	.3025	.22	7.041	5	212	.000	1.8

The table shown provides a summary of the models, indicating whether the chosen model is statistically significant or not. The coefficient of correlation, which is 0.5537 in this case, indicates a strong link between the dependent and independent elements. The coefficient of determination (R2) has a value of 0.3025, indicating that about 30.25% of the variations in EPS may be attributed to the independent variables, while the remaining 69.75% of the variations are influenced by other factors not included in the analysis. The obtained p-value for significance is 0.000, which is below the conventional threshold of 0.05. This indicates that there exists a statistically significant difference between the explained variance resulting from all independent variables and the unexplained variance. Hence, the significance of the multiple regression model is established. The Durbin-Watson statistic is calculated to be 1.8, which falls within the range of 1 to 3.

Table 3 ANOVA for EPS

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	317831.90	5	63566.38	51.82	.000[b]
Residual	260044.29	212	1226.62		
Total	577876.19	217			

The analysis of variance (ANOVA) reveals a significant p-value of 0.000, indicating statistical significance at a significance level of 0.05. In this study, the null hypothesis is rejected in favor of the alternative hypothesis, indicating a considerable influence of independent variables on dependent factors.

Table 4 Impact of Individual Independent Variables on EPS Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	166.818	55.233		3.020	.003			
FS	2.337	3.713	.043	.630	.000	.080	.043	.040
AG	.035	.514	.082	1.236	.003	.164	.085	.079
LTDC	-19.693	6.852	-.190	-2.874	.004	-.158	-.194	-.183
STDC	-4.214	1.333	-.262	-3.162	.007	-.307	-.212	-.201
TDC	-1.600	1.313	-.099	-1.218	.004	-.222	-.083	-.077

The beta value of FS is 0.043, with a t-statistic of 0.63 and a significance value of 0.00. This suggests that FS has a positive impact on EPS. Specifically, a one-unit change in FS results in a 2.337 unit change in EPS. Zero-order correlations are used to examine the association between two variables. In this case, a correlation coefficient of 0.08 suggests a moderate amount of connection with EPS. The partial correlation coefficient of -0.043 indicates that, holding all other independent variables constant, there is a negative relationship between FS and EPS.

Table 5 Descriptive Statistics for ROA

	N	Mean	Std. Deviation
STDC	500	17.5911	3.69626
LTDC	500	1.2009	.54874
AG	500	28.7359	28.04589
FS	500	13.2810	6.22601
TDC	500	19.0511	3.19272
ROE	500	12.7714	4.91885
ROA	500	1.7513	2.78317
EPS	500	21.0792	20.11059

The descriptive statistics results indicate that the mean of STDC is 17.5911 with a standard deviation of 3.69. Similarly, the mean of LTDC is 1.2009 with a standard deviation of 0.54874. The mean of AG is 28.7359 with a standard deviation of 28.0458. The mean of FS is 13.2810 with a standard deviation of 6.2260. The mean of TDC is 19.0511 with a standard deviation of 3.192. The mean of ROE is 12.7714 with a standard deviation of 4.9188. The mean of ROA is 1.7513 with a standard deviation of 2.7831. Finally, the mean of EPS is 21.0792 with a standard deviation of 20.11059.

Table 6 Model Summary for ROA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3576.3494	5	715.2699	143.054	.000[a]
Residual	1591.786	154	10.33627		
Total	5168.135	159			

The table shown provides a summary of the model, indicating whether the chosen model is statistically significant or not. The coefficient of correlation is seen to be 0.692, indicating a strong degree of connection between the dependent and independent variables. The coefficient of determination, with a value of 0.4788, indicates that about 47.82% of the variation in the dependent variable can be attributed to the independent component.

Table 7 ANOVA for ROA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3576.3494	5	715.2699	143.054	.000[a]
Residual	1591.786	154	10.33627		
Total	5168.135	159			

The objective of doing an analysis of variance (ANOVA) is to determine whether there exists a statistically significant influence of independent variables on the dependent variable. Based on the analysis of variance (ANOVA), it is evident that the observed p-value is below the threshold of 0.05, indicating statistical significance. In this analysis, the null hypothesis is rejected in favor of the alternative hypothesis, indicating a strong influence of the independent variables on the dependent component. The influence of the return on assets (ROA) is significant for all independent variables.

Table 8 Individual Impact of All Independent Variables on ROA Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	15.328	2.888		5.307	.000			
TDC	-.389	.167	-.218	-2.326	.004	-.080	-.043	-.040
STDC	-.099	.140	-.108	.405	.686	-.164	-.085	-.079
LTDC	-2.237	.827	-.215	2.705	.004	-.158	-.194	-.183
AG	.069	.015	.338	4.550	.000	.307	.212	.201
FS	.057	.072	.037	1.375	.002	.222	.083	.077

The beta value of TDC is -0.218, with a t-statistic of -2.326 and a significance value of 0.004. This suggests that TDC has a negative impact on ROA. Specifically, for every 1 unit change in TDC, there is a corresponding decrease of -0.389 units in ROA. Zero-order correlations are used to assess the association between two variables. In this case, a correlation coefficient of 0.08 suggests a moderate degree of connection with return on assets (ROA). The partial correlation coefficient of -0.043 indicates that, holding all other independent variables fixed, there is a relationship between TDC and changes in the ROA.

CONCLUSION

The findings of the model estimate suggest that there is a strong negative correlation and causal link between the ratios of total debt to capital and long-term debt to capital, and the financial performance indicators of banks, namely Return on Assets, Return on Equity, and Earnings per Share.

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