IMPACT OF WORKING CAPITAL FINANCING ON EARNING POWER: A COMPARATIVE STUDY ON PRIVATE COMMERCIAL BANKS IN BANGLADESH

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ABSTRACT

This study's main goal is to find out how working capital financing affects the earning power of private commercial banks that operate in Bangladesh. Five private commercial banks are chosen because they have sufficient data and yearly audited financial reports covering the years 2014 to 2023. Descriptive statistics, multiple linear regressions, and the Pearson correlation coefficient are used to analyze the data. The independent elements are the size of the bank (total assets), increase in operational income, leverage ratio, and working capital financing. The dependent variable is the return on equity. The findings show a strong relationship between working capital financing and the earning power of the private commercial banks in Bangladesh that were included in the sample. Furthermore, the sample features have a major influence on the profitability ratios of the sample private commercial banks. In the end, negative indicators of each of the chosen variables for NBL points to poor working capital management, which lowers profitability. To enhance their profits, the private commercial banks in the sample need to keep a tight eye on loan disbursement, working capital disbursement, loan recovery and advances, an effective method for managing expenses, and the right amount of assets.

Key Words: goal, financing, earning, Descriptive, influence, Negative, Commercial, Disbursement, etc.

INTRODUCTION

The organization's objective is to maximize profit, which it might do by scaling up operations or production. A vital element of production, trade, and service provision is working capital. Organizations must therefore provide liquidity for working capital in order to preserve organizational continuity (Morshed, 2020). Directors of business and finance typically have the power to implement relevant working capital management policies in order to meet the goals of the firm. These regulations are required for funding because they protect against the potential of commercial operations closing down as a result of errors in working capital management. After that, the series assesses the state of working capital. According to Muhammad et al. (2016), the company's value-generating strategy for shareholders depends on effective working capital management. A firm may

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experience low return on investment if it has too many current assets, while it may experience cash shortages and difficulties maintaining operations if it has too few current assets (Ayichelet, 2018; Horne &Wachowicz, 2009). Therefore, by planning and regulating current assets and current liabilities to satisfy the short-term financial demands of the corporate organization, effective working capital management avoids current asset overinvestment (Gulilat, 2020). Profitability ratios like net profit margin, return on equity, and return on assets are commonly used to assess the effectiveness and efficiency of a particular business's operations. Increasing the efficiency of working capital is one way to achieve more profitability. Regarding this, a range of ratios are available to assess the working capital efficiency of a business [(Hayajneh and Yassine (2011)]. Therefore, the study aims to explain the relationship between working capital financing by estimating the impact of prudent working capital management on profitability. Compared to other working capital financing research, this article employs a different set of approaches. We investigate the impact of working capital finance on profitability by closely examining pertinent domestic and international papers. Three theories are considered in order to strengthen the connection and importance of the chosen variables with independent variables. Targets have been carefully chosen in order to achieve the goal of this study.

OBJECTIVES OF THE STUDY

The main objective of the research is to ascertain the impact of working capital financing on the earning capacity of the selected banks. The other linked objectives are as follows:

a) To analyze the sample banks' positions on working capital financing.
b) To assess how working capital financing affects the sample banks' earning power.
c) To make recommendations for improved strategies for boosting earning power through efficient working capital financing.

SIGNIFICANCE OF THE STUDY

Management must compromise between liquidity and profitability in order to maximize shareholder wealth. Whether they are profit-oriented or not, all businesses, regardless of size or nature, require a certain amount of operating capital. Working capital is essential to maintaining a company's liquidity, survival, solvency, and profitability (Mukhopadhyay, 2004). A corporation is known to lower the ratio of its working capital to revenue in an effort to take on more risk and possibly experience higher profits and losses. Businesses that want to maintain high

profitability levels may have to sacrifice solvency in order to maintain current asset levels that are relatively modest. An organization may decide to use a bigger proportion of current liabilities than total liabilities when deciding how to finance itself, or it may adopt a cautious working capital management plan in which current assets make up a smaller portion of total assets. Since it aids in maximizing shareholder value, working capital management is crucial to the entire business plan. The ratios of current assets and short-term liabilities must be determined in order to maximize shareholder value (Nwankwo & Osho, 2010). Additionally, businesses that are skilled at managing their working capital are more likely to react fast to unanticipated changes in the market. Bangladesh's financial and economic institutions rely heavily on private commercial banks, which supply the majority of the money needed for trade and industry in the country. Through the investment of funds and collected deposits, they also present an opportunity for the expansion of particular industries, commerce, and corporate entities. By investing accumulated savings and deposits in lucrative businesses, they support capital formation. In the last 10 years, however, several commercial banks have faced difficult situations. Research is necessary to establish if this was caused by a working capital shortage or excess. More specifically for Bangladesh's private commercial banks, the study is expected to shed light on working capital financing policies and strategies and their impact on profitability. Not less important, managers within the company will benefit from the study's results in determining the best working capital management strategy to improve the performance of the organization.

HYPOTHESES OF THE STUDY

H_1: There is no significant relationship between working capital management and profitability of sample private commercial banks in Bangladesh.
H_2: Sample variables have no impact on the profitability ratios of sample private commercial banks in Bangladesh.

PROFILE OF THE SAMPLE BANKS

a) Dutch-Bangla Bank Limited (DBBL), a scheduled joint venture private commercial bank with its head office situated at Sena Kalyan Bhaban (3rd floor), 195 Motijheel Commercial Area and it's paid up capital is now BDT. 7,479.30 million.
b) Mercantile Bank Private Limited business (MBL), situated at 61, Dilkusha Commercial Area and it's paid up capital is now BDT.11, 065. 75 million.
c) United Commercial Bank Private Limited Company (UCBL), situated at 61 Dilkusha Commercial Area, and it's paid up capital is now BDT.14,765.48 million.

d) IFIC Bank Limited situated at BDBL Bhaban (8th to 10 & 16 to 19 floor); 8, Rajuk Avenue, Dhaka-1000 and it's paid up capital is now BDT.18,306.00 million.
e) National Bank Limited situated at 48 Dilkusha Commercial Area in Dhaka and it's paid up capital is now BDT.32,197.40 million.

REVIEW OF THE EARLIER STUDIES

The following researches are evaluated in order to look into how working capital finance affects earning power:

Anwar (2018) looked at how the duration of the operating cycle, inventory and receivables turnover affected the Indonesian listed companies' profitability index. The article's conclusion was that lower inventory and receivable turnover shortened the operating cycle and boosted profitability for businesses. Besides, Das et al. (2015) calculated various methods to analyze the liquidity and profitability using deposit, advance, profit, and profit growth as criteria. The study came to the conclusion that, if other things go well, good liquidity management can raise the banks' profitability. In 2018, Goncalves et al. looked at the relationship between working capital and profitability and found that while effective working capital financing increased profitability, these benefits are more pronounced during recessions. Hayajneh and Yassine (2011) also investigated the relationship between profitability and working capital efficiency for the 53 Jordanian manufacturing companies listed on the Amman Exchange Market between 2000 and 2006. Using descriptive statistics such as Pearson correlation coefficients, ordinary least squares (OLS), and two stage least squares (2SLS) regression models, the data sets in this study were analyzed. There is a negative and strong correlation observed between profitability and the average timespans for accounts receivable collection, inventory conversion, and payment, as well as the cash conversion cycle that gauges the efficiency of working capital. The impact of specific variables on the profitability of Bangladeshi banks between 2012 and 2016 was examined by Hossain and Ahamed (2015). They have used the fixed effect model to perform regression analysis on the variables. Again, Islam & Amin (2014) looked at how fifteen listed electricity and fuel companies in Bangladesh fared financially in relation to working capital management. This study evaluated the working capital efficiency using the following ratios: cash to current liability (CCL), cash to sales (CTS), turnover of net working capital (NWC), debt to equity ratio (D/E), time interest ratio (TIR), quick ratio (QR), cash conversion cycle (CCC), accounts receivables collection period (ARCP), accounts payable payment period (APPP), inventory processing period (IPP). The profitability of the company was assessed using net profit margin (NPM) and return on assets (ROA). With multiple regression and correlation matrix analysis, quantifiable correlations between the dependent and selected independent

variables are discovered. Also Morshed (2020) asserts that accounting and finance go hand in hand since the latter gives the former access to vital skills and knowledge that the former need, including working capital management, project evaluation, and financial resource management. Financing strategies and working capital investments have the strongest effects on profitability. Working capital and its impact on Kosovo's commercial banks' profitability were examined by Mazreku et al (2020).The study found that bank size and current ratio have a positive correlation with bank success in Kosovo, but debt ratio has a negative correlation. Moreover, Mengstie et al.(2024) used secondary data from the audited financial statements of five private commercial banks in Ethiopia for the years 2011–2020. An econometric model is used to study the impact of working capital management on the profitability of commercial banks. The results demonstrated that bank size and the proportion of loans and advances to total assets both significantly impacted banks' profitability. Additionally Osuma et al. (2018) found in their research that working capital management matters and has a significant role in the success of Nigeria's banking industry. Effective working capital management was found to have a substantial impact on the banks' profitability; return on assets, on the other hand, is a more reliable measure of bank profitability. Padachi (2006) also examined how the working capital management practices of 58 small manufacturing firms in Mauritius changed between 1998 and 2003. The results show a growing trend in the working capital financing short-term component as well as a relationship between high investments in inventories and receivables and low profitability. Working capital financing has an impact on the company's profitability and liquidity as a financial strategy, claims Panigrahi (2014). The data shows that the firm's profitability and liquidity have a positive correlation. It implies that there is a specific range of investments in current assets where an increase in liquidity results in a matching increase in profitability and vice versa. Working capital management's effect on the profits of ninety-four Pakistani companies listed between 1999 and 2004 on the Islamabad Stock Exchange (ISE) was studied by Rehman (2006). He came to the conclusion that, above a certain level, a company's working capital ratios strongly correlated negatively with its profitability. The association between profitability and working capital management is validated by Singh et al. (2017), who show that increased working capital financing and investment strategies result in higher profitability. Furthermore, there is a negative correlation between profitability and the cash conversion cycle. This study investigated the relationship between changes in working capital management and business profitability, with a focus on working capital management variations and profitability. The profitability of cement industry companies listed on the Dhaka Stock Exchange was examined by Tahmina (2011) in relation to efficient working capital and liquidity management. Her research showed that the working and liquid capital components of these cement companies' profitability was highly

correlated. The ROA of Nigerian listed deposit money banks was found to have a strong inverse relationship with the cash ratio by Yahaya, Adamu & Bala, H. (2015), however the current ratio and quick ratio demonstrated a high positive link.

RESEARCH GAP

Many studies are conducted to show a relationship between working capital finance and the total earning capacity of both domestic and foreign companies operating in different industries. On Bangladesh's private commercial banks, however, no similar analysis has been conducted. In order to help various parties involved in this industry and informed decisions regarding how effectively managing working capital would affect a company's profitability, it is anticipated that this study will close that gap.

METHODOLOGY OF THE STUDY

The five private commercial banks that are listed on the Dhaka Stock Exchange in Bangladesh provided their audited and published annual reports, which served as the study's primary source of secondary data, between 2014 and 2023. Both descriptive analysis and inference-based statistical techniques were used on the data. In order to assess the relationship between working capital funding and the sample banks' profitability ratios were also calculated. To describe relevant aspects of the events, descriptive analysis was carried out with SPSS version-25. Using a Pearson correlation matrix, the degree of association between the several variables under consideration was first determined. To account for the influence of additional constructs in the hypotheses, multivariate linear regression was employed as the second method.
The study encompassed the subsequent factors:

Dependent Variable: ROEi (net profit/equity)

As a measure of WCR financing, we utilize the variable WCF to examine the relationship between working capital ratio financing and company performance. The following ratio is used to compute this: a combination of short-term bank loan and WCR, where WCR is equal to current assets less accounts payable. Since WCF quantifies the proportion of WCR financed by short-term bank debt, a higher WCF indicates riskier WCR financing. We thus regress firm performance against the WCF variable and its square in order to examine the possibility of a non-monotonic connection between WCF and performance. The performance regression model incorporates additional variables to account for potential influences on the firm's performance. We specifically take firm size, revenue growth, and leverage into account. Using the following regression model, we evaluate the relationship

between WCR financing and company performance:

$$ROE_{i,t} = \beta_0 + \beta_1 WCF_{i,t} + \beta_2 WCF^2_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 GROWTH_{i,t} + \beta_5 LEV_{i,t} + \lambda_t + \eta_i + \varepsilon_{i,t} \text{---(i)}$$

Where WCFi,t is the WCR financing; WCF2i,t is its square; and ROEi,tis the return on equity, which is calculated as net profit/equity. We can examine the positive and negative effects discussed here because these two variables are included. Furthermore, we account for leverage, sales growth, and business size, as suggested by Deloof (2003) and others. The formula for GROWTHi,t is (Operating Incomei,t – Operating incomet-1)/ Operating incomet-1, and LEVi,tis the ratio of total liabilities to total assets. SIZEi,t is determined by taking the natural logarithm of all assets. The parameter is λt, a time-dependent dummy variable that remains constant for all firms across all examined time periods.

Even though these elements may have an impact on a firm's performance, this dimension is intended to represent their influence. These are external economic factors. We can adjust for the unique attributes of each firm by using the parameter t, which represents the unobservable heterogeneity or unobservable individual impacts of the firm. The random disturbance is i,t, at the end. Since our goal is to examine how WCR financing affects business performance, we limit the observations we include in our analysis to those with positive WCRs and, consequently, financing needs. WCF2 variables are subtracted from the model since WCF yields no negative results. Consequently, the updated model is:

$$ROE_{i,t} = \beta_0 + \beta_1 WCF_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 GROWTH_{i,t} + \beta_4 LEV_{i,t} + \lambda_t + \eta_i + \varepsilon_{i,t} \text{--------(ii)}$$

When WCF and return on equity have a concave relationship, β1 should be positive and β2 should be negative because the relationship's inflection point should be at a maximum. In order to reduce the possibility of biased results resulting from heterogeneity, we employ panel data methods for our model estimation (Hsiao 1985). First, this approach enables us to compensate for unobservable heterogeneity.

Table 1: Selection of Variables for Profitability

Dependent Variable	Variable's name	Computational Standard
	Return on Equity	(Profit after Tax/Shareholders 'equity)× 100
Independent Variables	Variable's name	Computational Standard
	Working Capital Financing	Short-term bank debt/(Current assets minus accounts payable)
	Bank Size	Natural logarithm of total assets
	Growth	Operating $_{Income_{i,t}}$– Operating $Income_{t-1}$/ Operating $Income_{t-1}$
	Leverage	Total liabilities to total assets.
Source: All of the above variables are related to profitability ratios (Khan, A.R., 2009).		

The selected variables are shown in table no. 1. Five factors in all have been chosen for this study. The dependent variable was one of them, and the independent or explanatory factors were the other four.

RESULT & DISCUSSION

Table 2: Working Capital Financing Ratios of Five Sample Banks (Short-term bank debt/ (Current Assets minus Accounts Payable in percentage)

Year	DBBL	MBL	UCBL	IFIC	NBL	Average
2014	79.34	40.26	40.51	44.31	50.72	51.03
2015	77.40	45.89	50.10	47.00	45.09	53.10
2016	88.91	53.30	52.80	47.52	49.11	58.33
2017	102.72	56.34	56.93	50.23	46.69	62.58
2018	103.46	54.43	61.08	55.66	57.03	66.33
2019	108.55	58.20	60.45	61.52	46.94	67.13
2020	120.45	77.90	80.33	85.82	55.22	83.94
2021	123.14	89.91	82.82	91.60	41.34	85.76
2022	112.86	85.39	84.85	96.01	57.72	87.37
2023	164.48	95.21	75.05	88.68	75.32	99.75
Mean	108.13	65.68	64.49	66.83	52.52	71.53
SD	25.32	19.60	15.34	21.09	9.63	16.55
CV	0.23	0.30	0.24	0.32	0.18	0.23
EGR	0.12	0.12	0.12	0.12	0.11	0.12
Max	164.48	95.21	84.85	96.01	75.32	99.75
Min	77.40	40.26	40.51	44.31	41.34	51.03

Source: Different published annual reports of sample banks.

The working capital financing status of the sample banks is shown in table no. 2 for the years 2014 through 2023. The highest average working capital financing was 108.13 percent in DBBL, with IFIC coming in second at 66.83%, MBL at 65.68, UCBL at 64.49, and NBL at 52.52 percent. During the study period, the coefficient of variation in IFIC was 0.32, the lowest in NBL was 0.18, and the highest in MBL, UCBL, DBBL, and 0.30. The rate of exponential growth that was highest, for all sample banks except NBL, was really 0.12. NBL's EGR for the study period was 0.11.

Table 3: Return on Equity Ratios of Five Sample Banks (Profit after Tax/(Total shareholders' equity in percentage)

Year	DBBL	MBL	UCBL	IFIC	NBL	Average
2014	15.20	8.64	16.43	19.39	9.99	13.93
2015	18.03	9.01	15.69	9.07	11.57	12.67
2016	9.98	13.21	10.20	12.32	15.49	12.24
2017	12.60	17.10	9.06	9.36	11.64	11.95
2018	18.20	16.08	8.31	6.63	9.21	11.69
2019	22.54	10.39	8.46	9.94	8.55	11.97
2020	17.05	9.78	8.91	2.02	6.70	8.89
2021	15.04	14.01	8.49	6.53	0.38	8.89
2022	13.60	8.81	9.28	10.24	-77.88	-7.19
2023	17.26	7.78	6.31	8.32	-63.70	-4.81
Mean	15.95	11.48	10.11	9.38	-6.81	8.02
SD	3.49	3.35	3.29	4.48	34.11	7.57
CV	0.22	0.29	0.33	0.48	-5.01	0.94
EGR	0.10	0.10	0.07	0.07	#NUM!	#NUM!
Max	22.54	17.10	16.43	19.39	15.49	13.93
Min	9.98	7.78	6.31	2.02	-77.88	-7.19

Source: Published annual reports of sample banks.

The sample banks' return on equity position from 2014 to 2023 is shown in table no. 3. DBBL had the best average return on equity (15.95 percent), followed by MBL (11.48%), UCBL (10.11%), and IFIC (9.38%). NBL, on the other hand, had the lowest average ROE (-6.81). During the study period, IFIC had the largest coefficient of variation (0.48), followed by UCBL (0.33), IFIC (020), DBBL (022), and NBL (-5.01). Actually, NBL has no growth at all in terms of ROE, whereas the strongest exponential growth rates were 0.10 for both DBBL and MBL and 0.07 for both UCBL and IFIC.

Table 4: Descriptive Statistics on ROE

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Return on Equity	50	-77.88	22.54	8.02	16.89
Working Capital Financing	50	40.26	164.48	71.53	26.44
Bank Size	50	5.19	5.84	5.54	0.16
Growth of operating Income	50	-417.11	68.40	-2.73	63.47
Leverage	50	0.88	0.96	0.92	0.016

Source: calculated using secondary data by SPSS version -25.

This section presents the total number of observations based on the gathered data and the results of the descriptive statistics for the variables under test

(bank size, growth of the total income leverage ratio, returns on equity, and working capital financing). The observations cover the period from 2014 to 2023. Table No. 4 above shows that all dependent and explanatory variables have a range of 50 observations. The average return on equity (ROE), which is 8.02, is extremely high. The range of the ROE's lowest and maximum values is negative 77.88 to positive 22.54, with a standard deviation of 16.89. Working capital finance has a mean value of 5.54, which suggests that WCF is critically necessary. At 26.44, the standard deviation exhibits temporal variations, ranging from 40.26 to 164.48. The size of a bank with an average of 5.54 and a standard deviation of 0.16 indicates that its asset position has remained stable over time. Once more, the average operating income is (-2.73), suggesting a revenue decline for some businesses, and the standard deviation is 63.47, suggesting inconsistent growth across the period. There is more than 100% in both figures. Additionally, the leverage ratio's mean and standard deviation, which are 0.92 and 0.016, respectively, are both acceptable.

Test of Multi-collinearity

It is evident from multiple regression analyses that there is no multi-collinearity issue when the variance inflation factor (cut off VIF) is less than 10 and the tolerance limit of all selected variables is more than 0.10. Multi-collinearity does not affect the model as a result.

Correlation Matrix of the Study

The dependent and independent variables' degree of connection, as well as their correlation, are shown by the Pearson correlation coefficients.

Table 5: Pearson correlation coefficient of the variables

-	-	roe	wcf	size	growth	leverage
roe	Pearson Correlation	1				
	Sig. (2-tailed)					
wcf	Pearson Correlation	0.11	1			
	Sig. (2-tailed)	0.43				
size	Pearson Correlation	0-.30*	0.49**	1		
	Sig. (2-tailed)	0.03	0.00			
growth	Pearson Correlation	0.77**	0.04	-0.25	1	
	Sig. (2-tailed)	0.00	0.79	0.08		
leverage	Pearson Correlation	-0.14	0.44**	0.11	- 0.27	1
	Sig. (2-tailed)	0.32	0.00	0.47	0.06	
	N	50	50	50	50	50

N.B: variables are denoted like this- roe =return on equity, wcf = working capital financing, size = bank size, growth = growth of operating income, leverage = leverage. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Source: calculated using secondary data by SPSS version -25.

The correlation coefficient between leverage, operational income growth, bank size, working capital financing, and return on equity is shown in table no. 5.

Due to p values > 0.05, the results show that ROE had a substantial negative connection (0.49) with size at the 1% level and a significant positive correlation (0.77) with growth at the 5% level. In these parameters, there were significant positive relationships at the 5% level (p value>0.05) between WCF (0.49) and leverage (0.44). Moreover, there is a very slight negative correlation between growth and leverage. The research concludes that no one independent variable exhibits a complete or almost perfect correlation. As a result, it may be assumed that multi-collinearity effects do not affect the variables. It follows that fitting a regression model with the variables linked to the main forces behind financial success makes logical. Consequently, it makes logical to create a regression model using the variables associated with the primary determinants of financial performance.

Table 6: Multiple regression analysis for return on equity (ROE) for all banks

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	154.26	134.86		1.14	0.259
Working capital financing	0.14	0.08	0.21	1.70	0.095
Size	-24.07	11.76	-0.23	-2.05	0.047
Growth	0.19	0.03	0.70	6.74	0.000
Leverage	-23.79	115.093	-0.02	-0.21	0.837
R= 0.80, R-Square= 0.63, Adjusted R-Square= 0.60, Standard error of estimate= 10.70, F-Ratio= 19.28. Dependent variable: Return on Equity; Predictor (Constant): * significant at 0.00 level and ** significant at 0.05 level. with degree of freedom (4, 45).					

Source: Source: calculated using secondary data by SPSS version -25.

According to Table No. 6, the modified R square value is 60%. As a result, it can be concluded that independent factors such working capital financing, bank size, growth in operating income, and leverage account for 60% of the variation in the dependent variable ROE of the chosen private commercial banks in Bangladesh. This suggests that the regression model's explanatory ability is moderate. F-statistics value of 19.28 suggests significance at a significance level of less than 1%. Based on the findings, a regression model was created that is statistically significant and can be used to study how particular bank-specific variables influence the way WCF affects the profitability of a sample of private commercial banks. Thus, as ROE shows, WCF, Size, Growth, and Leverage are important factors in determining the banks' success. Furthermore, as shown by ROE, the table shows that WCF has a statistically significant and positive effect on the profitability of a sample of private commercial banks, in contrast to size and leverage. WCF and Growth increased, and all other factors stayed the same, but ROE increased by 0.21 and 0.70 units, respectively. Nonetheless, throughout the 2014–2023 study periods, an increase of one unit in the sample banks' size and leverage resulted in a reduction of 0.23 units and 0.02 units, respectively, in their ROE. These findings align with the hypothesis that holds other parameters constant.

Table 7: Multiple regression analysis for return on equity (ROE) for DBBL

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	-154.59	171.99		-0.90	0.41
Working capital financing	0.06	0.11	0.43	0.52	0.63
Size	-0.39	18.63	-0.02	-0.02	0.98
Growth	0.13	0.16	0.34	0.83	0.44
Leverage	176.55	181.33	0.39	0.97	0.38
R= 0.57, R-Square= 0.33, Adjusted R-Square= (-0.21), Standard error of estimate= 3.84, F-Ratio= 0.61. Dependent variable: Return on equity; Predictors: (Constant)* significant at 0.00 level. ** Significant at 0.05 level. with degree of freedom (4, 5).					

Source: Researcher's own computation. Compiled from secondary data by SPSS version -25.

The multiple regression analysis results for DBBL are shown in Table 7. The R square shows what proportion of the variation of the dependent variable can be explained by the independent variables. This shows how lever, increase in operational revenue, bank size, working capital financing, and so on may account for 33% of DBBL's return on equity.Additionally, it demonstrates the beneficial effects of scale, working capital financing, leverage, and operational income growth on return on equity (ROE). The study's coefficients indicate that, for every unit of working capital financing increased, the return on equity will increase by 0.43 units; for every unit of size increase, equity will decrease by 0.1 units; for every unit of growth, equity will increase by 0.34 units; and for every unit of leverage increase, equity will increase by 0.39 units.

Table 8: Multiple regression analysis for return on equity (ROE) for MBL

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	-430.83	149.10		-2.89	0.03
Working capital financing	0.07	0.14	0.40	0.51	0.63
Size	-26.43	25.35	-1.08	-1.04	0.35
Growth	0.12	0.05	0.59	2.51	0.05
Leverage	626.24	266.48	1.18	2.35	0.07
R= 0.86, R-Square= 0.75, Adjusted R-Square= 0.54, Standard error of estimate= 2.27, F-Ratio= 3.65. Dependent variable: Return on Equity. Predictor (Constant): * significant at 0.00 level and ** significant at 0.05 level with degree of freedom (4, 5).					

Source: Compiled from secondary data by SPSS version -25.

Table 8 displays the measurement of the multiple regression analysis findings for MBL. It is evident from this that 54% of MBL's return on equity can be attributed to the independent variables working capital financing, bank size, growth in operating income, and leverage. It also shows that while leverage,

working capital financing, and operational income growth have positive effects on ROE, scale has a negative impact on it. Coefficients indicate that, over the course of the study, an increase of one unit in working capital financing will yield an increase in return on equity of 0.40 units; an increase of one unit in size will yield an increase in return on equity of 0.18 units; an increase of one unit in growth will yield an increase in return on equity of 0.59 units; and an increase of one unit in leverage will yield an increase in return on equity of 1.18 units.

Table 9: Multiple regression analysis for return on equity (ROE) for UCBL

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	282.22	97.96		2.88	.04
Working capital financing	-0.04	0.13	-0.17	-0.29	0.79
Size	-2.138	17.90	-0.09	-0.12	0.91
Growth	0.02	0.11	0.04	0.19	0.86
Leverage	-278.18	155.69	-0.70	-1.79	0.13
R= 0.89, R-Square= 0.80, Adjusted R-Square= 0.63, Standard error of estimate= 1.99, F-Ratio= 4.89. Dependent variable: Return on Equity. Predictor (Constant): * significant at 0.00 level and ** significant at 0.05 level with degree of freedom (4, 5).					

Source: Calculated using secondary data by SPSS version -25..

Table 9 displays the results of the multiple regression analysis measurement for UCBL. This demonstrates that 63% of UCBL's return on equity may be attributed to independent factors like as leverage, working capital financing, bank size, and growth in operating income. It also shows that, whereas operational income growth positively impacts return on equity (ROE), size, leverage, and working capital financing have a negative impact. Coefficients show that during the study period, a unit decrease in working capital financing will boost return on equity by 0.17 units; a unit decrease in size will boost return on equity by 0.09 units; a unit increase in growth will boost return on equity by 0.04 units; and a unit decrease in leverage will boost return on equity by 0.70 units.

Table 10: Multiple regression analysis for return on equity (ROE) for IFIC

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	-243.19	296.74		-0.82	0.45
Working capital financing	-0.15	0.20	-0.71	-0.75	0.49
Size	1.22	22.88	0.05	0.05	0.96
Growth	0.05	.06	0.25	0.81	0.47
Leverage	276.12	237.67	0.44	1.16	0.30
R= 0.75, R-Square= 0.57, Adjusted R-Square= 0.22, Standard error of estimate= 3.96, F-Ratio= 1.63. Dependent variable: Return on Equity. Predictor (Constant): * significant at 0.00 level and ** significant at 0.05 level with degree of freedom (4, 5).					

Source: Calculated using secondary data by SPSS version -25..

Table 10 displays the findings of the IFIC multiple regression analysis measurement. This indicates that 57% of the IFIC return on equity can be attributed to independent variables like as leverage, bank size, growth in operating revenue, and working capital financing. It further shows that working capital financing has a negative impact on return on equity (ROE), in contrast to size, expansion, and leverage. Coefficients show that during the study period, an increase of one unit in working capital financing will result in an increase of 0.71 units in return on equity, while an increase of 0.05, 0.25, and 0.44 units will result from an increase in size, growth, and leverage.

Table 11: Multiple regression analysis for return on equity (ROE) for NBL

Predictors	Unstandardized β coefficient		Standardized β coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	1284.80	881.23		1.46	0.21
Working capital financing	-0.80	1.60	-0.23	-0.50	0.64
Size	-17.27	86.16	-0.07	-0.20	0.85
Growth	-0.08	0.20	-0.32	-0.40	0.71
Leverage	-1282.45	1147.03	-0.90	-1.12	0.31
R= 0.83, R-Square= 0.70, Adjusted R-Square= 0.47, Standard error of estimate= 24.93, F-Ratio= 2.96. Dependent variable: Return on Equity. Predictor (Constant): * significant at 0.00 level and ** significant at 0.05 level with degree of freedom (4, 5).					

Source: Compiled from secondary data by SPSS version -25.

Table 11 measures and presents the results of the multiple regression analysis for NBL. It is evident from this that 47% of NBL's return on equity may be attributed to independent variables such as leverage, bank size, growth in operating revenue, and working capital financing. Additionally, it illustrates how each of the chosen variables has a negative effect on the return on equity. According to the coefficients, there increases in return on equity of 0.23, 0.07, 0.32, and 0.90 units during the study period for every unit decrease in working capital financing, bank size, operational income growth, and leverage.

FINDINGS

The sample banks' working capital financing ratios show that DBBL has an overwhelming capability for working capital financing. NBL had poor working capital funding, although IFIC, MBL, and UCBL had intermediate financing capacities. The sample banks' return on equity ratios indicate that DBBL had a sufficient return on equity, whereas MBL and UCBL had moderate ROEs and NBL had the lowest ROE type. During the study period, the sample banks' return on equity is moderate. Throughout the research period, there were irregular fluctuations in the

working capital funding, but the asset status of the bank remained constant. Once more, negative indication of operating income suggests a downward trend in operating income and an unstable growth scenario. Furthermore, the sample banks' leverage ratio is very acceptable. The Pearson's correlation test results indicate a significant positive or negative link between a numbers of variables from the sample of private commercial banks in Bangladesh. Again, the Pearson's correlation test results indicate a strong relationship between the working capital management practices of the private commercial banks in Bangladesh that were included in the sample and their profitability. Additional multiple regression analyses show that the sample factors have a positive or negative effect on the profitability ratios of the private commercial banks in Bangladesh that are included in the sample.The test also showed that, for DBBL, leverage, growth in operating income, and working capital financing all positively impacted return on equity (ROE); on the other hand, ROE was negatively impacted by size. These results imply that, in spite of certain obstacles, such the need to increase loan advances and returns, the bank is doing well in terms of financing working capital and profitability. Regarding working capital finance and profitability, the bank is doing well; yet, there are certain obstacles to overcome, like the requirement for higher loan returns and advancement. Working capital financing, operating income growth, and leverage all positively affect return on equity (ROE) for MBL, however scale negatively affects ROE. Growth in operational income for UCBL shows the bank can overcome the unusual profitability position and has a positive effect on return on equity (ROE). In contrast, ROE is negatively impacted by working capital financing, scale, and leverage. For IFIC, working capital financing has a negative effect on return on equity (ROE), but size, growth, and leverage have a favorable impact on ROE, indicating that the bank is able to control the working capital financing demand. Due to inadequate working capital management, NBL's profitability is inadequate, as evidenced by the fact that all of the variables that were chosen to provide data are negative. All things considered, DBBL is doing better than most right now. IFIC and UCBL, on the other hand, are in the worst possible situations with regard to working capital funding. NBL is unable to supply the working capital that is required. Additionally, MBL is not in a position to provide the need for working capital borrowing. While UCBL and IFIC have satisfactory asset positions, the remaining three banks have the worst positions in terms of this metric. Once more, the income increase of DBBL, UCBL, IFIC, and MBL is very low, but NBL is in the opposite situation. From the perspective of this metric, the leverage ratios of NBL and MBL are not entirely satisfactory.

REMEDIAL MEASURES

The study's findings have a big impact on projects aimed at raising the bank's earning power. Since the earning power of banks depends on the

management of working capital, factors affecting their growth should be carefully considered. These factors are identified and reported in the findings. Apart from the primary goal of decreasing the quantity of non-performing loans, DBBL also needs to ensure that loan and advancement and return on loan and advances are balanced. To meet demand, IFIC, MBL, and UCBL loans and advances must be disbursed cautiously. The banks should also make it a priority to increase deposit collection. NBL must reduce the quantity of non-performing loans, raise deposit collection, and reduce operational costs in order to enhance overall revenue. In order to improve their bottom line, banks should search for new lending markets.

CONCLUSION

The working capital financing effect on the profitability of private commercial banks in Bangladesh is the main topic of this study. For a ten-year period, from 2014 to 2023, five private commercial banks are included in the current study. The study demonstrates that the profitability of the selected private commercial banks is significantly impacted by the sample variables. To continue to be profitable, working capital financing should be prioritized by all banks. Therefore, it's essential to gather deposits and use resources properly. To improve outcomes and increase the banks' profitability, private commercial bank management should minimize operational costs and employ loans at the best possible rates. In order to optimize profits, private commercial bank management is to maintain equilibrium between bank performance and liquidity, control of superfluous expenses and excessive investment in current assets. Finally, the study will enable managers, policy makers, and other executives of financial institutions harmonize the use of working capital to maximize their earning potential.

RECOMMENDATIONS

The research offers some suggestions for striking a balance between earning potential and working capital funding. These might include the following:

(i) In order to pay for short-term payments, NBL and UCBL should raise their current assets.
(ii) Effective management of accounts receivable, inventory reduction, and smart supplier payment terms negotiation are necessary for all of the sample banks in order to extend accounts payable.
(iii) Every one of the sample banks ought to improve liquidity, lessen its dependency on outside funding, and fortify its overall financial stability.
(iv) To achieve the best outcome, sample banks should refrain from using working capital to finance fixed assets, run credit checks on prospective clients, and eliminate pointless spending

LIMITATION OF THE STUDY

The study focuses on five private commercial banks out of 43 banks. Therefore, a precise understanding of Bangladesh's banking industry as a whole cannot be obtained from this research. The analysis can't be completed with just ten years' data because it doesn't fully capture the financial market's success and doesn't take into account all working capital and profitability measurements.

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