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THE IMPACT OF CAPITAL MANAGEMENT ON PROFITABILITY OF COMMERCIAL BANKS IN AFGHANISTAN

Abstract

This study seeks to assess the working capital management of commercial banks in Afghanistan. Time series data from 2012 to 2017 have been extracted from the financial statement of the banks, and descriptive statistics, financial analysis techniques and ratios, correlation analysis and regression have been used to determine how working capital affect profitability. Contrary to most previous empirical works, the findings of this study show that working capital management effectively influences the profitability of commercial banks. Equity capital growth has a significantly positive relationship with banks profitability (Return on Equity) whiles working capital, and short-term debt exhibits a significantly negative relationship with the bank's profitability only in three banks (Azizi Bank, First Micro Finance Bank, and Maiwand Bank) and its insignificant in case of other banks.

Keywords: Working Capital, Profitability, Bank

Introduction

Working capital management is the crucial and key aspect of the financial management. It is the life-blood and controlling nerve center for any types of business organization because without the proper control upon it no business can run smoothly. The management of current assets and current liabilities is indispensable for daily operations of any organizations. Thus, it plays an important role in the success and failure of the organizations as it deals with the part of assets, which are transformed from one form to another form during operation. Therefore, the role of working capital management is more significant for every business organization and banks irrespective of their nature. Working Capital Management refers to the administration of all aspects of current assets, namely cash, debtors, inventories, prepaid expense, marketable securities, stock, and current liabilities, namely account receivables, outstanding expense, creditors and short-term loans. It is the functional area of finance that covers all the current accounts of the organizations. It deals with the adequacy of current assets as well as the level of risk posed by current liabilities. It is a discipline that seeks proper policies for managing current assets and liabilities for maximizing the benefits from managing working capital (Joshi 2013, pp.9-11).

Working capital management of banks is more challenging than that of manufacturing and non-manufacturing business organizations. Commercial banks are monetary institutions, which are playing an important role in the general welfare of the economy. The responsibility and scope of commercial banks are more than any other financial institutions. They must be equipped and ready to pay on demand without warning or notice, a good share of their liabilities. Banks collect funds from different types of deposits for providing loan and advance to different sector. To get a higher return, banks should attempt to increase funds from deposits as well as their investment. But commercial banks always face the problem of using more deposits as an investment of loans increase the cash balance on the bank, which require paying its large among of liabilities on its depositors demand without notice. But a large amount of idle cash balance also decreases the profitability of banks.

Literature Review

Working capital concerns with various current assets and current liabilities. The current includes: cash in hand, cash at bank, bills receivable, sundry debtor, short-term loans advance, inventories. Prepaid expenses and accrued income. The current liabilities include: bills payable, sundry creditor, outstanding expenses, short-term loans and advance. Dividend payable, bank overdrafts and provision for taxation

TYPES OF WORKING CAPITAL

On the basis of the value and the time, the working capital has been categorized into four main types;

1 . Gross Working Capital

The gross working capital is the capital invested in the total current assets of the business organization. Gross Working Capital is simply called the total current assets of the concern (Balachandran, Raghavan and Sundaram 2001, p.195). ($GWC = CA$)

2. Net Working Capital

Net Working Capital is defined as the difference between total current assets and total current liabilities (Echevarria 2012, p.19). Net operating working capital is defined as operating current assets minus operating current liabilities (Brigham and Ehrhardt 2008, p.61). Net Working Capital is the excess of current assets over the current liability of the bank during a particular period. If the current assets exceed the current liabilities it is said to be positive working capital; if it is reversed, it is said to be a negative working capital. ($NWC = CA - CL$)

3. Fixed or Permanent Working Capital

This refers to that minimum amount of investment in all current assets which is required at all times to carry out the minimum level of business activities (The Institute of Cost and Works Accountants of India 2010, p.204). It is the capital; the business organization should maintain a certain amount of capital at a minimum level at all times. The level of Permanent Capital depends on the nature and types of the business. Permanent or Fixed Working Capital will not change regardless of time or volume of sales.

4. Variable or Temporary Working Capital

The temporary or varying working capital changes with the level of business operations. It fluctuates with the scale of operations. This is the additional working capital required from time to time over and above the permanent or fixed working capital (Permanent & Temporary Working Capital n.d.). It is the amount of capital which is needed to meet the seasonal needs of the business and for some special purposes.

Sohai et al. (2016) examined the impact of working capital management and its policies (investment and financing) on the performance of the scheduled commercial banks listed in PSE (Pakistan Stock Exchange) for the time period of 2009-2013. The results revealed from the selected 30 commercial banks as sample that there is a negative relationship between CA/TA, CL/TA and CCC with ROA and ROE. There is a significant positive relationship between CA/TA and CCE, however, its relativity with CL/TA and CCC is insignificant.

Karakuman et al. (2010) investigated the impact of working capital management practices on the profitability of 140 randomly selected companies listed on the Istanbul Stock Exchange. Using data from 2005-2008, their findings indicate a statistically significant negative association between firm profitability, measured as return on assets on one hand and accounts receivable and inventory days on the other hand. The study further reveals a significantly positive relationship between accounts payable days and firm profitability. Thus, the study reiterated the importance of effective and efficient working capital management in ensuring firms' profitability

Falope & Ajilore, (2009) examined the effect of working capital management on the profitability of 50 quoted nonfinancial Nigerian firms. Using panel data methodology and date from 1996-2005, the authors observe a significantly negative relationship between net operating profit and working capital management variable, namely: average collection period, inventory days, and cash conversion cycle. However, the study notices no significant variations in the effects of working capital management between large and small firms. An important lesson therefore is that, prudent working capital management is critical for the profitability of firms of all sizes.

Mathuva, (2009) examines the influence of working capital management components on corporate profitability of 30 Kenyan listed firms. Using panel data methodology and data covering the period from 1993 - 2008, the study finds a significantly negative relationship between accounts collection days and profitability, a significantly positive association between inventory conversion period and profitability and a significantly positive relationship between average payment days and profitability. The findings of this study therefore confirm the traditional view of efficient working capital management and its effects on profitability.

Qazi et al. (2011) examined that the net working capital is positive and a strong significant relationship. The length of time increases in cash conversion cycle it will show the way to dilapidated in company's profitability measures and corporate executive be able to create a significant positive value for their shareowners through administration of sufficient cash operating cycle and maintaining all diverse components to the most favorable level. Consequently, there are significant relations between working capital management and firm performance.

Gill et al (2010) explored that there is a strong significant association among the cash operating cycle and company's profitability that is measured through gross operating margin. Companies who have selected conservative policies are competent enough to boost up the profit via managing cash conversion cycle properly and, maintaining all special constituents of Working Capital that are trade receivables, days in payables and inventory level to the most favorable level. In contrast, following an aggressive financing strategy lays negative effects on the company's profitability measures and value maximization.

Nazir & Afza (2009) found that there exists a strong significant difference between working capital necessities and company's financing strategies crosswise divergent sectors. Additionally, pooled regression analysis established a strong negative association among profitability measures and degree of aggressiveness in working capital investment strategies and financing strategies.

Gamlath, G R M & Rathirane, Y (2014) inspect the relationship between working capital management and profitability of Sri Lankan listed commercial banks. The working capital management has been presented by current ratio (CR), loans to deposit ratio (LDR) and cash ratio (CSR) and the profitability including the net profit margin (NPM), return on equity (ROA) and return on capital employed (ROCE). The results showed that the cash ratio has great impact on net profit margin and return on equity than other factors such as savings, interest rates. Working capital management has a great impact on the profitability the managers will have to increase value of the banks to control the optimal level of working capital position.

Yahaya, A, & Bala, H. (2015) stated a direct association for current ratio and quick ratio and return on assets of Money Banks in Nigeria, whereas cash ratio is inversely but significantly related to return on assets there. The study recommends that higher liquidity indicates more profitability, hence the management should enhance their liquidity and quick ratios. In order to maintain an adequate liquidity as the study has empirically proved that higher liquidity signifies more profitability, the listed Deposit Money Banks in Nigeria should try and maintain a higher quick ratio as it will have a positive impact on their profitability. Similarly, management should reduce the current asset because by investing the current assets, the banks can yield higher return.

METHODOLOGY, PRESENTATION AND ANALYSIS OF DATA

Selection of appropriate research design is necessary to meet the study objectives of any research. The research design is a plan, structure, and strategy of investigation considered to obtain an answer to research questions and to control variances.

The study aims at portraying accurately the working capital and its impact on the overall financial position of banks. It is based on recent 6 years data from 2012 to 2017. This study has been conducted to assess the existing situation of working capital management of Afghan commercial banks and describe the situation and events occurring at present. The research design followed for this study is basically a historical, empirical and descriptive with analytical. These suit the researcher's purpose and are suitable for this study.

Sample Size/Sampling Techniques

At present, there are nine commercial banks operating in Afghanistan. Among them, eight have been taken for the study. These banks are the pioneer leading bank in the context of deposit collection and loan disbursement. Financial statements for the last six fiscal years from 2012 to 2017 have been taken for evaluating working capital management. These include:

- 1) Aziz Bank
- 2) Afghanistan International Bank (AIB)
- 3) Islamic Bank of Afghanistan (IBAFG formerly Bakhter Bank)
- 4) First Micro Finance Bank (FMFB)
- 5) Afghan United Bank (AUB)
- 6) Ghazanfar Bank

- 7) Arian Bank
- 8) Maiwand Bank

The sample size is, however, all the commercial banks in Afghanistan excluding the one recently nationalized bank, viz. Afghanistan Commercial Bank (ACB).

ANALYSIS OF DATA

Net Profit & Net Working Capital

To measure the relationship between net profit with net working capital, the net profit (Y) has been assumed to be the dependent variable on net working capital (X), independent variable. Then the correlation coefficient and regression line calculated in the appendix have been summarized below.

Bank	R	r-sq	p-value	Remark	Regression equation
Azizi	-0.92	0.851	0.009	Significant	$NP=235.55-0.1617NWC$
AIB	0.03	0.001	0.956	Insignificant	$NP=435.02+0.005NWC$
IBAFG	0.53	0.281	0.279	Insignificant	$NP=-64.14+0.1207NWC$
FMFB	0.51	0.261	0.301	Insignificant	$NP=92.68+0.0210NWC$
AUB	-0.12	0.014	0.822	Insignificant	$NP=159.99-0.1568NWC$
Ghazanfar	0.34	0.114	0.513	Insignificant	$NP=43.88+0.01908NWC$
Arian	-0.54	0.291	0.269	Insignificant	$NP=32.74-0.099NWC$
Maiwand	0.24	0.060	0.640	Insignificant	$NP=-119.8+0.1019NWC$

Table 1 Correlation and Regression between Net Profit and Net Working Capital

Source: Computed by the Author

The above table shows the relationship between the net working capital and the net profit after tax. The table delineates that the net profit of AIB, IBAFG, FMFB, Ghazanfar, and Maiwand have a positive relationship with the net working capital. Azizi, AUB, and Arian have a negative relationship with the net working capital. The correlation between net profit and net working capital of Azizi is -0.92, AIB is 0.03, IBAFG is 0.53, FMFB is 0.51, AUB is -0.12, Ghazanfar is 0.34, Arian is -0.54 and Maiwand is 0.24. Also, the coefficient of determination indicates that 85.1%, 0.1%, 28.1%, 26.1%, 1.4%, 11.4%, 29.1%, and 6.0% variation in net profit of Azizi, AIB, IBAFG, FMFB, AUB, Ghazanfar, Arian, and Maiwand respectively has been explained by change in net working capital.

The p-value in the relationship between these two variables is 0.009, 0.956, 0.279, 0.301, 0.822, 0.513, 0.269 and 0.640 in Azizi, AIB, IBAFG, FMFB, AUB, Ghazanfar, Arian, and Maiwand respectively. Since the value of p-value of Azizi is less than the significance level, it can be considered that the relationship between net profit and net working capital is statistically significant in Azizi bank, and thus net profit increases with the decrease in net working capital and vice-versa.

On the other hand the p-value of remaining banks are greater than 0.05 significance level, it can be considered that the statistically relationship between net profit and net working capital is not significant in the case of AIB, IBAFG, FMFB, AUB, Ghazanfar, Arian, and Maiwand, and thus net profit does not increase with the increase in net working capital and vice-versa.

Further, the regression line of net profit on net working capital indicates that the net profit decreases by AFN 0.1617 in Azizi with per AFN decrease in net working capital, if the other variable of the respective bank remains constant.

Net Profit & Short-term Debt

Let the net profit be the dependent variable and short-term debt is the independent variable. Then the relationship between them in terms of the correlation coefficient and the regression line has been presented in the table below.

Bank	R	r-sq	p-value	Remark	Regression equation
Azizi	0.46	0.653	0.052	Insignificant	NP=1696-0.0286STD
AIB	0.38	0.143	0.818	Insignificant	NP=3.95+0.0084STD
IBAFG	-0.76	0.573	0.081	Insignificant	NP=217.7-0.0266STD
FMFB	-0.82	0.665	0.048	Significant	NP=313.3-0.0242STD
AUB	-0.06	0.004	0.909	Insignificant	NP=339.4-0.0062STD
Ghazanfar	0.71	0.498	0.117	Insignificant	NP=-403+0.07STD
Arian	0.76	0.578	0.079	Insignificant	NP=-0.84+0.0028STD
Maiwand	-0.93	0.868	0.007	Significant	NP=1330-0.075STD

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Table 2 Correlation and Regression between Net Profit and Short-Term Debt

Source: Computed by the Author

The above table measures the relationship between net profit and short-term debt. The table depicts that Azizi, AIB, Ghazanfar, and Arian have a perfect positive relationship between net profit & short-term debt and in the case of IBAFG, FMFB, AUB, and Maiwand there is a negative relationship between net profit & short-term debt. The correlation coefficient is higher, i.e. 0.76 in Arian, 0.71 in Ghazanfar and lower 0.38 in AIB and 0.46 in Azizi banks.

Further, the coefficient of determination indicates that 65.3%, 14.3%, 57.3%, 66.5%, 0.4%, 49.8%, 57.8%, and 86.8% variation in net profit of Azizi, AIB, IBAFG, FMFB, AUB, Ghazanfar, Arian, and Maiwand respectively has been caused by deviation in the short-term debt. Also, the p-value is 0.052 in Azizi, 0.818 in AIB, 0.081 in IBAFG, 0.048 in FMFB, 0.909 in AUB, 0.117 in Ghazanfar, 0.079 in Arian, and 0.007 in Maiwand. Since the p-value is smaller than the 0.05 significance level in FMFB and Maiwand, certainly there exists a statistically significant relationship between net profit and short-term debt in these two banks. And, thus net profit increases/decreases with the decrease/increase in short-term debt. Thus, the bank will earn more profit by using lesser short-term debt to finance the working capital. On the other hand, the p-value of remaining banks are greater than 0.05 significance level, it can be

considered that the statistically relationship between net profit and STD is not significant in case of Azizi, AIB, IBAFG, AUB, Ghazanfar, and Arian and thus net profit does not increase with the increase in net working capital and vice-versa.

Consequently, the regression line of net profit on short-term debt indicates that the net profit of the FMFB decreases by AFN 0.0242, and Maiwand decreases by AFN 0.0758 if the respective variable remains constant.

CONCLUSION

Working capital is viewed as the lifeblood and nerve of a business organization and is important to accommodate the smooth operations of any business organization. Under and over the allocation of working capital is dangerous to a business to achieve its primary objectives. Therefore, maintaining an optimal level of working capital is the root of the problem as it is strongly related to the trade-off between risk and return. The following major conclusions have been drawn:

- Only in Azizi bank Net working capital only has significant impact on profitability, in other banks net working capital has insignificanu impact on profitabiliy.
- Shart term debt has significant impact on profitability of FMFB and Miwand bank. The six other banks shart term debt has insignificant impact on profitability.
- It can be assumed that the relationship between net profit and net working capital is negative and significant only in Azizi, and thus net profit increases/decreases with the decrease/increase in net working capital.
- The relationship between the net profit and short-term debt is negative and significant only in FMFB and Maiwand.

The responsibility of top-level management should be more liable than lower-level management in managing the required working capital. Further, the bank should be a risk taker and should adopt the aggressive policy for the sustainability of the bank in long run, since the working capital has a crucial impact on the profitability and risk.

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