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Extent of Impacts of Working Capital Management on profitability of Local Banks in Iraq

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ABSTRACT

This study investigated the relationship between working capital management and profitability of local banks in Iraq. The working capital management was determined using Cash Ratio (CR) while profitability of the banks was determined using Return on Equity (ROE) and Return on Assets (ROA). The sample for the study was five local banks listed in Iraqi Stock Exchange (ISX) and the secondary data used for the study was derived from five years (2015-2019) financial statements of the five sampled banks. Data study was analysed using descriptive analysis of mean and standard deviation. Also, correlation matrix was used to determine the relationship between working capital management and profitability of local banks in Iraq. Regression analysis was carried out to determine the contribution of working capital management on profitability of local banks in Iraq. The analyses were carried out using SPSS 2.0. The finding of the study revealed that working capital management has a positive relationship with profitability. The study concluded that working capital management significantly predicted the profitability of local banks in Iraq. The study recommended, among other things, that local banks in Iraq should hire or employ qualified, competent and professional workers that can help them to reasonable decisions that can lead to maximization of profits. Local banks in Iraq should identify the factors that facilitate effective management of working capital and use the factors to determine the achievement of profitability of the banks.

Keywords: Working capital, Management, Local bank, profitability.

Introduction

Working capital is the current assets of companies which make up the cash and cash equivalents, receivables, and inventories owned by the companies. According to Mutlu and Gizem (2017), working capital explains the finance and management of the short-term investment of a company which greatly affect the profitability and liquidity of the company. The earlier submission of Alipour (2011) corroborated this by stating that working capital focuses on the management of current assets and current liabilities that directly affect the profitability and liquidity of companies. The management of working capital is believed to be one of the important financial decisions taken by banks as financial companies. Working capital management is the process of planning and controlling the current assets and current liabilities of companies with the aim of eliminating the risk of inability to meet up with short-term obligations (Eljelly, 2004).

Being a sensitive aspect of financial management, working capital management focuses on the composition and amount of current asserts and how to finance these assets in order to meet up with the objectives of banks as financial firms (David, 2010). Working capital management is a business as well as financial strategy designed to ensure that banks operate efficiently by monitoring and using its current assets and liabilities in fullest. The main objective of working capital management is to allow banks to maintain sufficient cash flow to meet its short-term operating costs and short-term debt obligations (Hofmann & Kotzab, 2010).

The principal benefit of working capital management is to improve a company's earnings and profitability through efficient use of its resources. In this sense, management of banks as business entities ensure a smooth operating cycle which should continue without being stopped for the lack of liquidity. For the smooth achievement operating cycle, it is essential for banks to keep the requirement of working capital at the lowest. This objective may be achieved through favourable credit terms with accounts payable and receivables, effective inventory management as well as faster production cycle (Padachi, 2006).

In both developed and developing countries, banking sector is the mainstay of the economy. It is the oil that lubricates the wheel of nation's economy. Huda, Saja and Mohammed (2020) corroborated this by stating that banking sector is the backbone of the economy and financial system of a nation. It is submitted that banks, as financial intermediaries, play an exceptional role in reallocating funds for the small, medium and non-formal sectors. Bank, throughout the world, stands for the largest size or volume of the total assets in the economic sector due to the fact that banking sector occupies about 60% of the total financial assets in both developed and developing countries (Seelanatha, 2019). This shows that a nation cannot thrive economically without firm support of banking industry. Mishkin (2010) mentioned that banks are able to harness profits for all other sectors of economy from the data banks received or produced. This is done through provision of loans to firms and companies as subsectors of the nation economy.

There are forty-six operating banks including seven state banks in Iraq. This indicates that Iraq has thirty-nine private and local banks which operate with the aim of improving the economy of the country. Banking system in Iraq has weak governance structure which prevents it from meeting the international standards. This submission indicates that most of the local banks in Iraq have no good financial strength and inability to be productive. For these banks, to meet the international best practices and standards, working capital must be well-managed. Huda, et al. (2020) opined that effective banking supervision which includes working capital management is essential in maintaining the financial reliability of the banking system in Iraq.

Sardar (2018) stated that one of the critical components of bank financial management is the management of working capital. This is due to the fact that the component usually has significant effect on firms including banks' profitability, values and risks. This is corroborated by submission of Qazi et al. (2011) that working capital management is one of the principal factors that determine the financial management of corporate organisations like banks. Working capital management plays a significant role in determining the performance, risk and values of business and financial organisations such as banks (Rizwan & Shah, 2015).

Research Question: based on the introduction mentioned above, the research has formulated the following question:

Is there any relationship between working capital management and local banks' profitability in Iraq?

Research Hypothesis: to achieve the objectives of the current study, the researchers propose the following hypothesis:

H1: There is a positive relationship between working capital management and profitability.

H2: There is a significant relationship between working capital management and profitability.

Literature Review

Working capital management has received a lot of attention in research. This indicates that many researchers have worked on the impact of working capital on companies including local banks in Iraq and other countries of the world. Abdulla, Atheer and Delan (2017) examined the relationship between liquidity management and profitability in Islamic banks in Kurdistan

Region of Iraq, Cihan Bank for Islamic. The study focused on the impact of the components of working capital management which are liquidity and profitability on the performance of Islamic banks as one of the local banks in Iraq. The study found that better management of liquidity was associated with better profitability. The finding concluded that there was a negative relationship between working capital management (liquidity ratio and profits) in banks in Cihan between 2009 and 2015.

Ganesan (2007) analysed the efficiency of working capital management on telecommunication industry. The objective of the study was to examine the relationship between working capital management efficiency and profitability. It used correlation and regression analyses for the analysis of data collected. The findings of the study revealed that evidence that there was negative relationship between profitability and efficiency of telecommunication industry in Iraq. Relatedly, Shivan and Shivan (2019) examined the role of liquidity management in the profitability of commercial banks listed on the Iraq Stock Exchange during the period 2006-2016. The data used for the study was collected from the annual financial statements of the sampled banks. The finding of the study showed that all of the variables under study are stationary at first differenced by utilizing Panel Unit Root Tests. Also, the study found that the of panel co-integration test revealed that there was no long-term relationship among variables.

Raheman and Nasr (2007) investigated the relationship between working capital management and profitability of firms in Pakistan. The sample for the study was for a sample of 94 firms registered on Karachi Stock Exchange in Pakistan for a period of 6 years which was between 1999 and 2004. The finding of the study revealed that there was a strong negative relationship between working capital management and profitability of the firms in Pakistani. In a study carried out by Awan et al. (2014) on the impact of working capital management on profitability cement companies in Pakistani for the period of five years. The study found that there was negative relationship between return on equity and cash conversion cycle, current ratio and inventory turnover as the components of working capital management.

Furthermore, Rizwan and Shah (2015) investigated the impact of working capital management on the performance of firms in Karachi. The data for the study was the financial statement of 253 non-financial firms registered in Stock Exchange in Karachi. The finding of the study revealed that current asset to total sales had a negative relationship with profitability. It also found that working capital management had positive relationship with the performance of firms in Karachi. In the same vein, Nor and Noriza (2010) in their study which focused on the effect of working capital management on the performance of companies in Malaysia. The sample for the study was 172 companies selected using simple random sampling technique and the secondary data collected was analysed using multiple regression. The study found that Nor and Noriza (2010) managing working capital ensure an improvement in market values as well as the profitability of the companies. It also found that working capital management promoted the strategic, effective and efficient operations of the companies.

Kieschnick, LaPlante and Moussawi (2008) carried out a study to investigate the impact of working capital management on the value of firms including banks in United States of America. The data for the study was obtained from panel of U.S for the period of 1990 to 2004. The finding of the study revealed that working capital management had significant impact on the performance and value of firms. This indicates that firms including banks that employed working capital management recorded optimum performance. Similarly, Irene & Lee, (2007) investigated the fundamental working capital management practices put in place by some standard and well-performed firms in Malaysia. The main objective of the study was to examine the relationship between profitability and the level of working capital of the firms. The finding of the study showed that there was linear positive relationship between profitability and working capital to some extent.

Younis (2015) investigated the relationship between the regular capital and the risks on the capital adequacy in the banks. The relationship was examined for the period of five years of 2008 to 2013. The finding of the study revealed that there was statistically significant positive relationship between regular capital and capital adequacy ratio in the majority of banks. It also found that there was a significant negative relationship between credit risks and capital adequacy ratio in the banks. The study equally found that there was a significant negative relationship between market risk and capital adequacy ratio of the banks.

Chantapong (2005) carried out a study to examine the performance of the local and foreign banks in Thailand between 1995 and 2000. The study found that all banks witnessed reduction in their credit facilities during the period of the crisis with the hope to improve on them when things get better. Relatedly, Ben and Goaied (2010) investigated the effect of attributes of banks on their financial structures, the net interest, the economic conditions and profitability in the Tunisia. The data for the period was that of 1980 to 2000. The finding of the study revealed that size of the bank led to their negative relationship with bank profitability. It also found that the capital market had positive significant impact on the profitability of the banks.

Ikram, Mohammad and Zaheer (2011) investigated the relationship between working capital management and profitability in cement industry in Pakistan. The study found that there was a moderate relationship between working capital management and profitability in the specific context of cement industry in Pakistan. Raheman (2010) investigated the impact of working capital management on performance of listed 204 firms in Pakistan for ten years which is, between 1998 and 2007. The study found that cash conversion cycle, inventory turnover and net trade cycle are the principal determinants of firm performance. Similarly, Quayyum (2011) examined the relationship between working capital management and profitability of four corporations in Bangladesh with the use of data of the corporations for the period of five years of 2005 to2009. The finding of the study revealed that there was significant relationship between working capital management and profitability of the examined corporations for within the five years. This finding is supported by the finding of a study carried out by Afeef (2011) which stated that there is an observable effect of working capital on profitability of small and medium enterprises in Karachi Stock in Pakistani.

Ahmed (2013) investigated the impact of working capital management on performance of 253 non-financial firms listed in Karachi Stock Exchange. The study found that current assets of the firms had a negative relationship with profitability. It also found that working capital management had significant positive relationship with the performance of the firms. This finding is affirmed by the finding of Alipour (2011) that there was significant relationship between working capital management and profitability of companies in Iran.

The reviewed studies mentioned above give empirical evidences to support the impact of working capital management on local banks as subsector of companies in Iraq. The studies laid emphasis on the components of working capital management and how each of them impact on the performance of local banks. Furthermore, reviewed literatures give us basic knowledge of the methodology being used in the previous studies to examine the impact of working capital management on other sectors of economy such as banks. The reviewed studies revealed that working capital management has mix impact on performance of corporate organisation like bank. Some of the studies found positive relationship while some found negative relationship and this suggests the research vacuum which this present study is seeking to fill.

Research Methodology

Descriptive research design of survey type was adopted for the study. The population for the study was all thirty-nine private and local banks operating in Iraq. The sample for the study was five local banks listed in Iraq Stock Exchange (ISX). The banks are Bank of Baghdad, Commercial Bank of Iraq, Ashur International Bank, Al-Mansour Bank for Investment and Babylon Bank. Secondary data was used for the study. The data was from the financial statements of the five local banks for period of five years (2015 to 2019) which was obtained from the site of Iraqi Stock Exchange. The data was analysed using descriptive statistics, correlation and regression analysis using SPSS 20.0 version.

The independent variable in the study is working capital management which was determined through Cash Ratio (CR) while banks' profitability which is the dependent variable was determined using Return on Equity (ROE) and Return on Asset (ROA).

$$CR = \frac{Current\ Asset}{Current\ Liabilities}$$

$$ROE = \frac{Net\ Income\ after\ Taxes}{Total\ Equity}$$

$$ROA = \frac{Net\ Profit}{Total\ Assets}$$

Therefore, the model for the study is as follows:

Profitability (ROE and ROA) = $\alpha + \beta 11$ CR + Ui

Where:

ROE = Return on Equity

ROA= Return on Asset

CR = Current Ratio

α: the constant , β: the regression coefficient

Results

Descriptive Analysis

Descriptive statistics was used to determine the aspects of the variables in the study which are CR, ROE and ROA as presented in Table 1.

Table 1: Descriptive Analysis of CR, ROE and ROA

Variables	Mean	Std. Deviation
ROE	4.7603	.49642
ROA	3.0614	.06531
CR	4.4864	.82156

The results in Table 1 revealed the descriptive statistics of the Return on Equity and Return on Asset which are the determinants of local banks' profitability and Cash Ratio as determinant of working capital management for five sampled local banks for the period of five years. The results indicated that mean score of ROE, ROA and CR are 4.7603, 3.0614 and 4.4864 respectively. These results indicate that there are clear perceptions of bank employees for all the variables of the study, as all the values of their arithmetic mean exceeded the value of the hypothetical arithmetic mean of (3).

Correlation Analysis

The correlation analysis was carried out to determine the association between the working capital management (CR) and profitability (ROE and ROA). This was done using Pearson Product Moment Correlation (PPMC) to determine the correlation coefficients of the variables. The results in Table 2 showed the relationship between working capital management and profitability of local banks in Iraq for the period of five years (2015 to 2019).

Table 2: Correlation Matrix of Relationship between Working Capital management and Profitability

Variables	ROE	ROA	CR
ROE	1		
ROA	0.476	1	
CR	0.785	0.557	1

The results indicated that working capital management (CR) positively correlated to profitability of local banks in Iraq. It indicated that CR has a positive relationship with ROE and ROA which are the indicators of banks' profitability. Also, the correlation coefficients of profitability (ROE and ROA) were positive which indicates that the local banks made profit due to working capital management.

Regression Analysis

Linear regression analysis was carried out to examine working capital management as the predictor of local bank profitability in Iraq. Data of ROE and ROA were added to obtain the bank profitability and it was regretted against the CR which was used to measure the working capital management of the banks.

The Regression Model used for the study is as follows:

Profitability (ROE and ROA) = $\alpha + \beta 11$ CR + Ui

Table 3: Regression Analysis of Working Capital Management and Profitability of Local Banks in Iraq

Dependent Variable = Banks' Profitability (ROE and ROA)

Total observations = 25 (5 years data of 5 banks)

R = 0.89 R Square = 0.72 Adjusted R Square = 0.68 Standard Error = 0.84	Fcal. = 1.37 p > 0.05		
Model	Beta	t	Sig
Working Capital Management	.301	2.055	.040

Table 3 showed that F_{cal} (1.37) is greater than level of significance of 0.05 and this implied that working capital management contributed positively to local banks' profitability in Iraq. Equally, the results revealed that there was a significant positive composite correlation between the predictor variable (working capital management) and local banks' profitability. This is revealed through the value of R (0.89) which is greater than significant level (0.05), that is, (R= 0.89 > 0.05). This indicates that the predictor variable (working capital management) positively contributed and predicted profitability of local banks in Iraq.

The coefficient of determination (R^2 = 0.68) which implies that working capital management accounted for 68% (R^2 x 100) of the total variance in local banks' profitability. The remaining 32% unexplained variation is due largely to other variables that can account for the profitability of the local banks in Iraq.

The result of Regression analysis presented in Table 3 shows that Working Capital Management has a significant and positive (β= .301, t = 2.055, p< 0.05) influence on the profitability and therefore H1 and H2 are supported. Therefore, working capital significantly predicted local banks profitability in Iraq.

Discussion

The findings of the study revealed that working capital management significantly related to local banks' profitability in Iraq. It showed that there was a significant correlation between working capital management and profitability of the banks which was determined through the ROE and ROA. The finding agreed with the finding of Nor and Noriza (2010) that managing working capital ensure an improvement in market values as well as the profitability of the companies. It also found that working capital management promoted the strategic, effective and efficient operations of the companies. The finding also concurred with the finding of Kieschnick, LaPlante and Moussawi (2008) that firms including banks that employed working capital management recorded optimum performance. The finding of the study was also in agreement with the finding of Irene & Lee, (2007) that there was linear positive relationship between profitability and working capital.

The finding of the study revealed that working capital management significantly predicted the profitability of local banks as viable firms in Iraq. The finding is in line with the finding of Quayyum (2011) that there was significant relationship between working capital management and profitability of the examined corporations for within the five years. The finding agreed with the study of Alipour (2011) that there was significant relationship between working capital management and profitability of companies in Iran.

However, the study disagreed with the finding of Awan et al. (2014) that there was negative relationship between return on equity and cash conversion cycle, current ratio and inventory turnover as the components of working capital management. There was also disagreement between the finding of the current study and that of Raheman and Nasr (2007) that there was a strong negative relationship between working capital management and profitability of the firms in Pakistani.

Conclusion

The study concluded that working capital management had positive and significant relationship with the profitability of local banks in Iraq. It concluded that the adoption of working capital management which was represented by Cash Ratio (CR) significantly predicted the profitability of local banks in Iraq which was measured using Return on Equity (ROE) and Return on Asset (ROA).

Recommendations

Based on the findings and conclusion of the study, the following recommendations were made:

1. Local banks in Iraq should try to identify the factors that facilitate effective management of working capital and use the factors to determine the achievement of profitability of the banks.
2. Local banks should seek the cooperation of their international counterparts in managing working capital for the achievement of better performance and profitability.
3. Local banks in Iraq should design comprehensive plans that can lead to better performance and profitability in the banks.
4. Local banks in Iraq should hire or employ qualified, competent and professional workers that can help them to reasonable decisions that can lead to maximization of profits.

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