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Working Capital Management and Profitability in Islamic Banks: An Empirical Study

Bader Mustafa AlSharif

Faculty of Business, Department of Business Economics, University of Tafila Technical, Jordan

[*] *Corresponding author:* bader.alsharif99@gmail.com

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Abstract: This study applied multiple correlation to comprehensively analyze the correlation between variables by using annual panel data for (International Islamic Arab Bank, and Jordanian Islamic Bank) for period 2005-2020. The results of the study showed that Islamic Banks' profitability responded positively to return on deposits, equity multiplier, liquidity ratio, leverage ratio, and Share Multiplier within the econometrics' models. The rationale for the positive relationship within the results of the study models is that increasing the extent of independent factors (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and Share Multiplier) would be followed by an increase within the extent of capital management, Increasing the return on investment deposits and increasing revenues generally in Islamic banks and this is often reflected during an increase within the return on equity and at an equivalent time increase.

Keywords: Working Capital Management, Profitability, Islamic Banks.

1. Introduction

The Islamic banks appeared within the seventies of the last century, where Islamic banks are considered intermediary financial institutions that collect deposits then grant various funds consistent with Islamic legal controls, and one among the foremost important components of Islamic banks is its capital. Common concepts of capital are current assets (assets which may be converted into cash within a year and include cash, receivables, inventory, and temporary investments that are completed within a year). There's another accurate concept of capital, which is that the difference between current assets and current liabilities at a selected moment, and when the difference is positive, the capital condition of the bank is good, but within the case of the difference being negative, the capital position of the bank is bad (Elgly, 2004, 3).

Capital theory means the study of policies and decisions associated with the management of current assets and liabilities, and assets and liabilities generally within the company (Hobson, 1986, 52).

Before the appliance of this theory is significant to spot sort of the ratios of which determine the extent of investment in current assets compared with the fixed assets, and to figure out the proportion of short-term investments to term capital investment of long, determine the term the extent of funding from sources of funding short compared with the sources of long-term funding (Al-Maidani, 2006, 202).

Capital management features a significant role in avoiding the liquidity risks facing the bank through balancing and aligning the optimal volume of liquidity that increases depositors' confidence and thus the number of funds granted by it from current liabilities, which successively increases profits and thus encourages and increases investors who wish to need a foothold within the bank's shares. Thus, you'll say that the concept of capital management means managing both current assets and current liabilities optimally to realize the foremost important possible amount of profits by overcoming the risks of losing liquidity by balancing current assets represented by liquidity and current liabilities represented by the number of granted short-term funds (within a year) by the bank.

The worldwide Islamic banking industry remains developing, and there are still many obstacles facing this technique, the foremost important of which is that the matter of lack of liquidity in Islamic banks. The Islamic bank cannot solve the matter of its lack of liquidity by resorting to the financial institution or commercial banks that invite interest in exchange for covering the shortage, and this is often forbidden. Shariah, it is not permissible for Islamic banks to affect usurious interests. To unravel such a haul, Islamic banks resort to maintaining a high percentage of liquidity that's greater than the optimal volume of liquidity in commercial banks. Its total investments, especially short-term, but on the opposite hand, and within the event of exploiting liquidity in long-term investments to know higher profit, it makes the bank in danger of facing difficulties and problems and can lead the bank to failures in managing its operational operations, in terms of its financial growth and expansion. And increasing its exposure to liquidity risk (Horne &Wachowicz, 2000, 24).

It's clear to the researcher, after handling most of the previous studies, that they didn't study the connection between capital management and profitability in Islamic banks, especially that the Islamic banking system is characterized by high risks, because the study used indicators to gauge capital management and measure its impact on profitability in Islamic banks. It's noted from the foregoing that the importance of managing capital and its components and thus the extent of their impact on profitability leads us to pose the matter that we'll analyze during this study with following question: "What is that the character and strength of the impact of profitability on the components of capital management? To unravel this problem, the null hypothesis of the study was tested that there's no significant effect on the extent ($\alpha \leq 0.05$) of the capital indicators (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and Share Multiplier) on profitability (return on equity, return for share) during a sample of Jordanian Islamic banks Listed on the Amman stock market (Jordan Islamic Bank and International Islamic Arab Bank) and thus the newly opened Safwa Bank were excluded, its data doesn't cover the study period (2005-2020). To achieve the objectives of the study, the study addressed the theoretical framework, previous studies, methodology, the sensible side, then the results.

2. Literature Review

Studies explored the relationship between profitability and working capital management in industrial firms, and rarely in banks. The reason for the study's interest in industrial companies may be because they're seen as the main driver of economies. The literature that dealt with working capital management based on the improvement of the extent of working capital management with the increase in the surplus of liquid assets and thus decreases the inventory and debtors and reduces the risks and this at the expense of the decrease in profit, studies: (Abdul Rahman & Nasr, 2007), (Radi, 2009) (Chatterjee, 2010), (Ray, 2012), (Awunyo-Vitor & Badu, 2012)& (Samiloglu & Akgun, 2016).

Some studies depend on the economic situation of the country and the level of high risks of refinancing. Therefore, banks have tightened the conditions for granting credit and then directing capital management towards the priority of maintaining liquidity in the long term rather than achieving a higher level of profitability as a primary goal for the bank, especially within the global financial crisis of 2008, Studies: (Aslam, et al., 2016), (Hamid, et al., 2017), (Arnaldi, et al., 2021).

As for the studies that give priority to achieving the largest possible profit, exploiting liquidity by shortening the cash transfer cycle as a primary goal for working capital management, they are (Abbadi & Abu-Rub, 2012), (Khalid, et al., 2018), (Osuji & Agbada, 2020). Among the literature that urges a balance between profitability and liquidity in managing working capital, regardless of economic conditions, is (Ebrati, et al., 2013) (Abor, 2005), (Yeboah & Yeboah, 2014).

As for the studies that addressed the nature of the relationship between working capital management and profitability or performance in general, many of them indicated the existence of a positive relationship between working capital management and profitability, which are: (Saeed, et al., 2013), (Ng, et al., 2017), (Nastiti et al., 2019), (Alsulayhim, 2019), (Mazreku, et al., 2020), (Senan et al., 2021), she explained her view of this positive relationship through the very fact that the improvement of working capital is through the exploitation of liquidity to increase investments and revenues. Here, the problem of the high risk that the bank may be exposed to in the event of a liquidity shortage appears.

Some studies indicated a negative relationship between working capital management and profitability, including (Zeitun & Tian, 2007) (Falope & Ajilore, 2009), (Al-Farisi & Hendrawan, 2012), (Luper & Isaac, 2012), (Umar, et al., 2012), (Gill, et al., 2010), (Alavinasab & Davoudi, 2013), (Hailu &Venkateswarlu, 2016), (Anton Nucu, 2021), she explained her view of this negative relationship through the fact that the improvement of working capital depends on the increase in the liquidity ratio in the bank, and the costs of the working capital increase, and thus investments decrease, and then profitability decreases, which makes it less susceptible to risks of liquidity or bankruptcy, and it is safer.

Some studies indicated that there is no relationship between working capital management and profitability, including (Ebaid, 2009), (Nguyen, et al., 2016), she explained her point of view that there's no relationship between working capital management and profitability through that profitability doesn't depend on current assets and current liabilities, but there are other variables on which profitability depends, which were not in

the field of research and study. Based on the literature review and previous studies, these studies that were dealt with in the study will be briefly presented, arranged according to date of publication as follows:

Senan et al. (2021) The purpose of this study is to examine how to improve the performance of Indian commercial banks through the determinants of working capital management. This study uses both fixed models, generalized moments method (GMM), pooled, fixed, and random effects. The study is based on balanced panel data of 98 Indian banks from 2008 to 2018. The performance is determined by two indicators, namely, return on assets (ROA) and return on equity (ROE). While working capital cycle, profit after tax, asset size, leverage, quick ratio, current ratio, return on capital employed, return on total assets, net profit margin, and monetary policy rate are used as independent variables. The results showed that the current ratio, asset size, net income margin ratio, and return on capital employees have significant positive effects on (ROE).

Arnaldi, et al. (2021) This paper analyzes the impact of working capital management policies on manufacturing SMEs' profitability in the Czech Republic. The data necessary for the research was collected through a questionnaire. The sample was chosen probabilistically. The analysis considered 105 manufacturing companies from 2014 to 2018. The individual determinants of working capital were used as independent variables, while leverage represented the control variable. EBITDA represented the variable and was used to measure profitability. It used a quantitative methodology based on dynamic panel data. The robustness analysis confirmed the validity of the results obtained. The results of the variables showed a negative relationship with the profitability of the companies.

Mazreku, et al. (2020) This paper aims to analyze working capital and its impact on the profitability of economic banks. Some indicators such as return on assets, current ratio, debt ratio, and banks' size will be calculated. This research covered a period of 5 years and to analyze the impact of capital on the profitability of commercial banks in Kosovo, it concludes that bank size and other independent variables have positively affected the performance of economic banks in Kosovo, except the debt ratio, has had a negative effect. This means that high investment in the elements of working capital can lead to increased bank profitability, whereas its profitability decreases when investment in capital is low.

Osuji & Agbada (2020) This study explored working capital Management (WCM) and Profitability in the banking industry in Nigeria. Independent variables namely: Short-term Investments; Credits to customers and Account Receivables and Payables were used. The survey design was adopted and data were collected using questionnaires and analyzed with Pearson correlation coefficient by 'r'. The values of 'r' exhibited positive signs affirming a positive relationship between independent and dependent variables. This was affirmed by the values of (r2), especially that of the variable 'Credits to customers' which stood low at 0.2229, meaning that the variable explained only 22.29% variation in Profitability.

Alsulayhim(2019) Efficient management of working capital can help a corporation to manage its finances and increases its profitability. This study investigates the relationship between working capital management and profitability in non-financial companies listed on the Saudi stock exchange. A sample of 67 companies is employed for a period (2007-2016). A quantitative method using multiple linear regression is employed for analysis. The results indicate a positive relationship between working capital management and profitability.

Nastiti et al. (2019) This study aims to test the effect of working capital management on firms' profitability. The study uses data panel regression with a hard and fast effect estimation model to analyze 136 manufacturing firms listed within the Indonesian stock exchange from 2010 to 2017 data. The results indicate that there is a positive effect between working capital and profitability. In addition, this study will likely contribute to managers in efforts to increase sustainable growth for his or her enterprises through working capital management.

Khalid, et al. (2018) This study aims to find out the impact of working capital management on profitability. Return on assets is used as a proxy of profitability. Other variables that are used in this study are the current ratio, debt to equity ratio, operating profit to debt ratio, and inventory turnover ratios of the firms. Secondary data of electrical equipment firms listed on the Karachi stock exchange was taken for a period of six years i.e. 2007-2012. Regression analysis was applied to the data. Normality and linearity test were also applied. Results showed significant positive results. It's concluded that working capital management features a positive significant impact on the profitability of the firms.

Ng, et al. (2017) This study investigates the relationship between working capital management and Malaysian manufacturing firms' profitability. Data is obtained from the annual reports of 122 firms listed in the industrial products sector of Bursa Malaysia Mainboard for peMainboard2007 to 2012 to determine the relationships between the variables of working capital management and therefore the firm's gross operating income (GOI). The study finds cash conversion cycle is positively related to GOI. It shows that an increase in inventory converse ion period is positively related to firms' profitability. Likewise, firms can increase profitability by reducing the period of collecting account receivables.

Hamid, et al. (2017) This study examined the relationship between working capital management (cash transfer cycle, average repayment period, financial leverage, average collection period, and company size) and profitability for a sample of 92 industrial companies listed on the Pakistan stock exchange for the period (2006-2014). Regression analysis and correlation coefficient in data analysis, and the study concluded that there's a direct relationship between the size of profitability, and a significant negative impact of working capital management on the profitability of companies.

Aslam, et al. (2016) This study examines the impact of working capital and financial structure on Pakistan's banking sector profitability. The study was wont to generalize the least square (GLS) estimation analysis on 5 Islamic banks over the period 2006 to 2014 and 15 conventional banks from 2008 to 2014. Return on assets (ROA) return on equity (ROE) and net income (NI) are used as dependent variables. Working capital and the proportion of funds provided by bank creditors are used as independent variables. Bank size, deposit ratio, gross domestic product (GDP), and inflation (CPI) are used as control variables to control heterogeneity and co-linearity among variables. The study found an increase in working capital results decrease in the profitability of Islamic and conventional banks. However, financial leverage has a statistically significant positive impact on the profitability of Islamic banks and vice versa for conventional banks.

Samiloglu & Akgun (2016)The relationship between working capital management (the average period for collecting accounts receivable, the average period for repaying accounts payable, and the cash transfer cycle) and the profitability of 1 hundred and twenty industrial companies listed on the Istanbul stock exchange for the period (2003-2012) was studied, and a multiple linear regression model was wont to find out the

character of the relationship The results indicated that there is a significant negative relationship between working capital management with all its components and profitability.

Nguyen, et al. (2016) The study examined the relationship between capital management the average period of repayment of receivables, the average period of stock holding, the period of collection of receivables, and the cash transfer cycle on the profitability of one hundred and twenty-seven industrial companies listed on the Vietnam stock exchange for the period (2006-2014), and the study found that there is no relationship between working capital management with its various components and corporate profitability. Thus, resolving short-term crises and improving efficiency through the improved supply chain and credit policies improve capital management but do not affect corporate profitability.

Hailu &Venkateswarlu(2016) the relationship between working capital and profitability was studied for a sample of 30 industrial companies listed on the Ethiopian stock exchange for the period (2010-2014), and the application of the E View program was used. By reducing the collection and storage period, which leads to improved profitability for the company.

Yeboah & Yeboah (2014), This paper examines the working capital management of Ghanaian banks on profitability during the period 2005– 2010 using panel regression models. It investigates whether the capital management of selected Ghana banks is associated with more profitability. Empirical findings suggest that the cash conversion cycle is inversely related to a bank's profitability. In particular, we find that leverage of the banks exhibits statistically significantly a positive impact on banks' profitability.

Ebrati, et al. (2013) This study tested the impact of the capital structure measured by (liabilities to assets and liabilities to equity) on the financial performance of (85) companies listed within the Tehran market using multiple regression and for the period 2006-2011, and the study concluded that the capital structure has a positive and significant effect. Statistical significance on the financial performance as measured by the return on equity, while it has a negative, statistically significant effect on the return on assets and share of net profits.

Saeed, et al. (2013) This paper examined the impact of capital structure on the performance of Pakistani banks. For the amount 2007-2011 using data of banks listed on the Karachi stock exchange. Multiple regression models were applied to estimate the relationship between capital structure and banking performance. Performance was measured by return on assets, return on equity and return on equity. The determinants of the capital structure include long-term debt to capital, short-term debt to capital, and the total debt to capital ratio. The study found a positive relationship between the determinants of the capital structure and the performance of the banking industry.

Alavinasab & Davoudi (2013) the relationship between working capital management and profitability was addressed to 147 companies on the Tehran stock exchange for the period (2005-2009), and the working capital management variables were the cash transfer cycle, debt-to-assets ratio, current liabilities to total assets, and current assets to total assets. Using multiple regression and Pearson's correlations to test hypotheses. The results showed that there is a negative relationship with statistical significance between the variables of working capital management and profitability.

Awunyo-Vitor& Badu (2012) This study tested the relationship between capital structure or financial leverage and therefore the performance of listed banks in Ghana for the period (2000-2010) and cross-sectional time-series data was used to analyze the data. The study concluded that the capital structure measured by total debt to equity and short-term debt has a negative and statistically significant impact on the financial performance of banks as measured by return on assets and return on equity.

Umar, et al. (2012) The study dealt with the impact of the capital structure on the financial performance of (100) companies in Pakistan and listed on the Karachi stock market for the period (2006-2009). The Exponential generalized least square regression method was used to test the relationship between the capital structure and the financial performance of companies. The results showed All three variables from the capital structure, current liabilities to total assets, long-term liabilities to total assets, and total liabilities to total assets, negatively affect EBIT, return on assets, earnings per share, and net profit margin.

Abbadi& Abu-Rub (2012) The study dealt with the impact of the capital structure on the financial performance of Palestinian financial institutions using multiple linear regression. The study concluded that total deposits to assets and return on assets have a positive and statistically significant effect on the return on equity and the market value of the bank. (Luper and Isaac, 2012) This study examined the impact of capital structure on the performance of industrial companies in Nigeria and used the annual financial statements of 15 companies listed on the Nigerian stock market for the amount 2005-2009. Multiple regression analysis was applied to performance indicators such as return on assets (ROA) and profit margin (PM). Short-term debt to total assets (STD), long-term debt to total assets (LTDTA), and total debt to equity as capital structure variables. The results showed that there is a negative and statistically significant relationship between short-term debt to total assets (STDTA), return on assets, and profit margin.

Ray(2012) This study aimed to find out the relationship between the components of working capital management and profitability for a sample of 311 Indian industrial companies for the period (1996-2010). The result indicates a negative relationship between the components of working capital and profitability in Indian companies and a weak relationship between company size and profitability.

Al-Farisi & Hendrawan (2012) This paper aimed to study the impact of the capital structure on the performance of conventional and Islamic banks in Indonesia during the period (2002-2008) and the sample included (105) banks, including (102) conventional banks and (3) Islamic banks and used cross-sectional time-series data analysis (Panel Data Analysis) and the study concluded that working capital as an independent factor and the ratio of equity to assets as a dependent factor has a negative and statistically significant effect on both Islamic commercial banks, but this effect was greater on Islamic banks than conventional banks (0.47%, 0.33%). Straight.

Chatterjee (2010) The relationship between working capital management and the profitability of companies listed on the London stock exchange. Using a sample of 30 companies within the United Kingdom and using the Pearson correlation data analysis technique, the study confirmed the existence of a big indirect correlation between profitability and working capital management variables. Except for the connection between profitability and the size of the company was positive, and that the profitability of companies increases when they improve in the management of working capital. Holding highly liquid assets enhances

the profitability of companies. This is often because assets can be sold easily and quickly and reinvested in short-term assets whose earnings are relatively higher.

Gill, et al. (2010) It dealt with the relationship between capital management and profitability, and a sample of 88 American companies listed on the New York stock exchange was selected, and the study concluded that there is a negative, statistically significant relationship between the cash transfer cycle and profitability, and managers should increase profitability through the correct handling of the cash transfer cycle Maintaining accounts receivable at an optimal level.

Ebaid(2009) the study dealt with the impact of the capital structure on the performance of the institution in Egypt as one of the economies of the transforming countries, and this study used multiple regression to test the relationship between financial leverage measured by short-term debt, long-term debt, total debt to total assets, and the financial performance of the institution as measured Return on assets, return on equity, and gross profit margin for non-financial companies listed on the Egyptian financial market for the period 1997-2005. The study found that the capital structure has an impact between the weak and the lack of impact on the performance of the institution.

A study Radi(2009) dealt with the relationship between working capital management and profitability in Iraqi companies this is applied to a sample of Iraqi industrial companies operating in the private and mixed sectors during the amount (1993-2002). The study used the financial leverage ratio to total assets and company size as control variables. This study concluded that there is a significant negative correlation between the working capital management variables and the company's profitability, and there is a positive significant correlation between the company's size and profitability.

Falope & Ajilore(2009) examined the effects of working capital management on the profitability of 50 registered Nigerian non-financial companies. Using the panel data methodology and data from 1996-2005, a negative relationship was observed between net operating profit and dealing capital management variables, and the study didn't notice any difference in the effects of working capital management between large and small companies.

Abdul Rahman & Nasr (2007) studied the impact of different working capital management variables on the net operating profit of 94 listed Pakistani companies. Using regression analysis and data covering the period from 1999-2004, a significant negative correlation was found between the variables working capital management and corporate profitability. As well as a negative relationship between corporate debt and profitability, but there is a positive relationship between volume and profitability. These results imply that prudent management of working capital further enhances the profitability of the company.

Zeitun & Tian (2007) This study examined the impact of the capital structure measured by total debt to assets, total debt to equity, long-term debt to assets, and short-term debt to assets, on the financial performance of (167) Jordanian companies for the period. (1989-2003) using panel data analysis, and the study concluded that the capital structure harms the financial performance of Jordanian companies.

Abor(2005) the study examined the impact of the capital structure (short-term debt/total and long-term assets / total assets and total debt / total assets) on the profitability of companies (return on equity) listed in the financial market in Ghana, using statistical analysis, and it reached This study indicates that there is a

positive and statistically significant relationship between the ratio of short-term debt to assets and return on equity, and between the ratio of total debt to total assets and return on equity, and that there is an inverse relationship between the ratio of long-term debt to assets and return on equity.

It is noted from the previous studies that the number of studies that dealt with the impact of working capital management on the financial performance of commercial banks is still small. On the one hand, and the other hand, there are no studies that dealt with the impact of working capital on profitability in Islamic banks, especially that Islamic banks Islamic countries are considered a basic building block in their economies, so this study came to test the impact of working capital management on the profitability of Jordanian Islamic banks listed on the Amman stock exchange during the period (2005-2020). This study was distinguished from previous studies in that it dealt with the determinants of capital management. Factor modern financial metrics rather than periods, and add bank size as a control variable.

3. Method

The study used the descriptive approach in the theoretical aspect, the statistical and normative approach in the quantitative and applied aspect, and the estimation of multiple linear regression equations based on E-views and Excel in analyzing the data of the study variables.

3.1.Data and Variables

The study population consists of three Jordanian Islamic banks listed on the Amman stock exchange (the International Islamic Arab Bank, the Jordan Islamic Bank, and Al Safwa Bank). Safwa Islamic Bank was excluded from the sample because it is a newly opened bank and its data does not cover the study period (2005-2020).

Data on working capital management variables, stock multiplier, net income, and shareholders' equity were retrieved from the Securities Depository Centre (SDC) website in Jordan (www.sdc.com.jo). Total deposits, total assets, current assets, current liabilities, total loans, and deferred sales were retrieved from the Amman stock exchange website (www.ase.com.jo/ar) that were used in the estimation model for the study, as follows:

The dependent variables were:

Return to Equity (Y_1): net profit to Shareholders Equity it is considered a measure of the profitability of both investment and finance management decisions and is calculated as follows (can be expressed in the following mathematical formula (Ray, et al., 2006, 796):

Profitability (Y_1) = (net income after tax for banks / Shareholders Equity for banks).

Return for share (Y_2): it is considered one of the financial performance indicators, and it measures in the following mathematical formula (Al-Sharif, 2020, 19):

Return for share (Y_2) = (net income after tax for banks /number of shares for banks).

The independent variables were:

Return on deposits (X_1): It measures the efficiency of the bank's management in obtaining profits from operating deposits (Zamil, 2000, 308): This indicator is calculated as follows:

Return on Deposits (X_1) = net profit / Total Deposits.

Equity Multiplier (X_2): it is one of the measures of capital management that measures the bank's ability to efficiently fund its assets from equity. Achieving a high turnover rate of assets may require greater debt while maintaining a constant level of equity. This indicator is calculated as follows (Abu Wadi &Saqfalhait., 2016, 2502):

Equity Multiplier (X_2) = Total Assets / Shareholders Equity.

Liquidity Ratio Indicator (X_3): The liquidity ratio is an important measure of working capital management used to determine a debtor's ability to pay current debt obligations without increasing external capital. It's also called the current ratio. This indicator is calculated as follows (Senan, et al., 2021, 750):

Liquidity Ratio(X_3) = Current Assets / Current Liabilities.

Leverage Ratio Indicator (X_4): The financial leverage ratio is one of the capital management measures that show the amount of debt held by banks in financing their investment process without affecting the bank's ability to meet its financial obligations when they become due. This indicator is calculated as follows (Senan et al, 2021, 750):

Leverage Ratio (X_4) = Debt Loans and Deferred Sales / Capital Share.

Multiplier Indicator (X_5): The share multiplier is a measure of working capital management and is used to judge the current stock prices compared to their historical prices or to compare the relative cost with similar banks for these stocks. This indicator is calculated as follows (Mazreku, et al., 2020, 129):

Share Multiplier Indicator (X_5) = market value per share/earnings per share.

The size of the bank (X_6): it is a controlling variable, and the size of the bank is measured as total assets or total equity, and others measured it by the growth rate in deposits, the number of employees, or the number of branches of the bank. For this study, the size of the bank will be measured by total assets as follows (Abu Al-Haijaa, 2004, 22):

The size of the bank (X_6) = total assets in the annual balance sheet.

3.2. Research Method

Test the models that were adopted in the study, a multiple linear regression test was performed, which shows the explanatory power of each model. The multiple linear regression method is one of how the relationship between the variables is formed. Accordingly, the equation of each study model can be written as follows:

$Y_1 = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + U$

$Y_2 = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + U$

4. Findings and Discussions

The data relating to the working capital management indicators and the profitability were entered into the (SPSS) program to conduct tests and analyze the info as follows:

4.1. Descriptive Statistics

It is noticed from the first table that the arithmetic mean value of the dependent variable profitability (return /equity equals 0.136172313), (return for share equals 0.09974382), while the arithmetic means of the independent variables that represent the indicators of working capital management, which are (net profit/total deposits, equity multiplier, liquidity ratio, Leverage Ratio, and share multiplier) equals 0.021240591, 11.656571253, 0.289062500, 7.603613520, 10.114937500, 2249665690.97, respectively, and therefore the arithmetic mean of the control variable (size of the bank) equals 2249665690.97. When checking the standard deviation values of the data of the independent and dependent variables, we find that the data whose standard deviation value is equal to one or less features a normal distribution.Please Write the method used in the article with details. Place Tables and Figures in the article.

Table 1: Descriptive Statistics of Variables

Variables	*Mean*	*SD*	*Min*	*Max*
Y_1	0.136172313	0.0377859807	0.0220788	0.2182793
Y_2	0.246593750	0.0997438200	0.0260000	0.4330000
X_1	0.021240591	0.0059091552	0.0051143	0.0368933
X_2	11.656571253	2.0716130580	7.1332814	19.0205955
X_3	0.289062500	0.1292249695	0.0800000	0.5100000
X_4	7.603613520	1.4008029869	5.4568700	10.8225108
X_5	10.114937500	6.4751820497	2.9080000	38.5140000
X_6	2249665690.96875	1251826572.4	391116270.0	4844498859.0

Source: Author's findings

4.2. Correlations Matrix

Table 2 shows the Pearson the correlation coefficient between the independent variables and the dependent variable, and the largest absolute value of the correlation coefficient is 0.731, which is less than the permissible 0.8, which means that there is no linear correlation between the independent variables of the study models.

Table 2: Correlation Matrix for Model 1, 2 with Variable Control

Variables	Y_1	Y_2	X_1	X_2	X_3	X_4	X_5	X_6
Y_1	1.000							
X_1	0.628		1.000					
X_2	0.495		-0.279	1.000				
X_3	0.604		0.129	0.492	1.000			
X_4	-0.332		-0.209	-0.089	-0.731	1.000		
X_5	-0.442		-0.655	0.052	-0.113	-0.121	1.000	
X_6	0.295		-0.053	0.145	0.316	-0.157	-0.042	1.000
Y_2		1.000						
X_1		0.560	1.000					
X_2		0.311	-0.279	1.000				
X_3		0.686	0.129	0.492	1.000			
X_4		-0.540	-0.209	-0.089	-0.731	1.000		
X_5		-0.309	-0.655	0.052	-0.113	-0.121	1.000	
X_6		0.546	-0.053	0.145	0.316	-0.157	-0.042	1.000

Source: Author's findings

Table 2 shows the value of the Pearson correlation coefficient between the independent and dependent variables of the study. It was found that there is a medium positive relationship between the independent variables (profit/total deposits, equity multiplier, liquidity ratio, bank size) and the dependent variable (profitability), and there is a medium negative relationship between the independent variables (leverage ratio, profitability multiplier) and the variable (profitability). While the relationship between the independent variables is not strong, whether positive or negative.

The results of the multiple linear regression test indicate that there is no multiple linear correlation problem between the study variables because the value of VIP for the independent variables in Tables 3, 4, 5, 6 and these values are greater than (1) and less than (10), which confirms that there is no multicollinearity problem in the study (Al Sharif, 2020).

Tables 3 and 4 show that the calculated DW value equal to (1.261) located in a region that does not know the existence of an autocorrelation, which confirms that there is no autocorrelation between the errors of the regression model, That the calculated t and F values are greater than the tabulated value of the independent variables (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and equity multiplier) with dependent variable profitability (return on equity) either under the control variable (bank size) in Table 4 or without the control variable in Table 3, which means that there is a significant positive relationship at a significant level of 50 between the independent variables and the dependent variable and that the model is suitable.

Tables 3 and 4 indicate that return on deposits has the largest positive effect on profitability and bank size has a weak positive effect on profitability. And the coefficient of determination (R^2) is 0.929 and 0.967, for model 1,2 respectively, which means that 92.9% of the change in ROE is caused by the change that occurs in the independent variables (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and Share

Multiplier) and that 96.7% of the changes that occur in profitability (return on equity) are caused by changes that occur in the independent variables under the controlling variable. While 7.1% and 3.3% of changes in profitability are thanks to other factors that enter into random error due to their inability to measure. The model is suitable based on the F value (68.016 and 120.941), which is greater than the tabulated value (F). Thus, the form is suitable in the form acceptance field, these become the forms:

$Y_1 = -0.196 + 5.810X_1 + 0.010X_2 + 0.112X_3 + 0.006X_4 + 0.001X_5$ ~~~~~~~~~~~~~~~~~~~~~~~~~~1

$Y_1 = -0.205 + 6.031X_1 + 0.011X_2 + 0.080X_3 + 0.005X_4 + 0.001X_5 + 6.384E\text{-}012X_6$ ~~~~2

Table 3: The Results of Examining the Effect of Working Capital Management on The Profitability (Y_1)

Variables	*Coefficient*	*t-Statistic*	*R^2*	*Sig*	*F*	*VIP*
Constant	-0.196	-5.474	0.929	0.000	68.016	
X_1	5.810	11.052		0.000		2.474
X_2	0.010	7.840		0.000		1.927
X_3	0.112	3.510		0.002		4.395
X_4	0.006	2.097		0.046		3.761
X_5	0.001	2.327		0.028		2.525

The effect is statistically significant at ($\alpha \leq 0.05$)

Table 4: The Results of Testing the Impact of Working Capital Management on Profitability (Y_1), Under Control Variable (the size of the bank)

Variables	*Coefficient*	*t-Statistic*	*R^2*	*Sig*	*F*	*D.W*	*VIP*
Constant	-0.205	-8.187	0.967	0.000	120.941	1.261	
X_1	6.031	16.323		0.000			2.506
X_2	0.011	11.735		0.000			1.949
X_3	0.080	3.475		0.002			4.711
X_4	0.005	2.485		0.020			3.795
X_5	0.001	3.555		0.002			2.529
X_6	6.384E-012	5.321		0.000			1.149

The effect is statistically significant at ($\alpha \leq 0.05$)

Tables 5 and 6 show that the calculated DW value is (1.015) located in a region that does not know the existence of an autocorrelation, confirming that there is no autocorrelation between errors of the regression model. That the calculated t and F values are greater than the tabulated value of the independent variables (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and equity multiplier) with the dependent variable (return for share) either without the control variable (bank size) or under the control variable, this means that there is a statistically significant positive relationship at a significant level of 0.05 between the independent variables and the dependent variable and that the model is suitable, Contrary to the effect of the negative leverage ratio on return per share, but its effect is not significant because SIG (0.844, 0.706) of the model 3, 4 is greater than 5%.

Tables 5 and 6 indicate that return on deposits has the largest positive effect on profitability and bank size has a weak positive effect on profitability. The coefficient of determination (R^2) is 0.746 and 0.926, respectively, which means that 74.6% of the change in return for share is due to the change that occurs in the independent variables (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and equity multiplier) and that 92.6% of the changes that occur in profitability (return for share) are due to changes that occur in the independent variables under the control variable. While 25.4% and 7.4% of changes in profitability are due to other factors that enter into random error due to their inability to measure. The model is suitable based on the values F (15.268 and 52.483), which is greater than the tabulated value (F). Thus, the form is suitable in the field of acceptance of the form, which are:

$Y_2 = -0.196 + 5.810X_1 + 0.010X_2 + 0.112X_3 + 0.006X_4 + 0.001X_5$ ~~~~~~~~~~~~~~~~~~~~~~~~~~3

$Y_2 = -0.205 + 6.031X_1 + 0.011X_2 + 0.080X_3 + 0.005X_4 + 0.001X_5 + 6.384E\text{-}012X_6$~~~~4

When checking the above equations (1, 2, 3, 4), the control variable (bank size) has influence on the independent variables (return on deposits, equity multiplier, liquidity ratio, leverage ratio, and share multiplier) on the dependent variable (return on equity) a significant at level 5%, and the control variable had a great role to change the effect of the independent variables (equity multiplier, share multiplier) on the dependent variable(return for share) From an insignificant to a significant effect, while the effect of the variable leverage ratio remained insignificant at the 500 level on return for share. Therefore, the second and fourth equations are the equations adopted in this study for (Y_1, Y_2).

Table 5: The Results of Examining the Effect of Working Capital Management on the Profitability (Y_2)

Variables	*Coefficient*	*t-Statistic*	*R^2*	*Sig*	*F*	*D.W*	*VIP*
Constant	-0.307	-1.722	0.746	0.097	15.268		
X_1	11.774	4.486		0.000			2.474
X_2	0.011	1.740		0.094			1.927
X_3	0.409	2.555		0.017			4.395
X4	0.003	0.199		0.844			3.761
X5	0.003	1.273		0.214			2.525

The effect is statistically significant at ($\alpha \leq 0.05$)

Table 6: The Results of Testing the Impact of Working Capital Management on Profitability (Y_2), Under Control Variable (the size of the bank)

Variables	*Coefficient*	*t-Statistic*	*R^2*	*Sig*	*F*	*D.W*	*VIP*
Constant	-0.361	-3.673	0.926	0.001	52.483	1.015	
X_1	13.048	9.003		0.000			2.506
X_2	0.015	3.996		0.001			1.949
X_3	0.224	2.467		0.021			4.711
X4	-0.003	-0.382		0.706			3.795
X5	0.004	2.650		0.014			2.529
X6	3.639E-011	7.833		0.000			1.149

The effect is statistically significant at ($\alpha \leq 0.05$)

5. Conclusion

The correlation matrix and the multiple linear regression model shown in Tables 2, 3, 4,5, 6 accept the alternative hypothesis (rejecting the null hypothesis) that there is a statistically significant positive effect at level ($\alpha \leq 0.05$) of return on deposits, equity multiplier, liquidity ratio, leverage ratio, and Share Multiplier on profitability in Jordanian Islamic banks under control variable (size of the bank) in the two models. This result is in agreement with the study by PHAM, et al., (2020) and SENAN, et al., (2021) but differs from that of Mohamed, et al., (2016) and NGUYEN, et al., (2020), who concluded that there was a negative relationship. Between capital management and profitability.

The researcher attributed the reason for the difference in the results of the studies to the difference in the environment, the nature of society, the study sample, and the small size of Islamic banks in Jordan compared to the major industrial companies. The studies also differed in determining working capital variables on a financial basis, and their impact on profitability was positive, such as this study and the studies mentioned in the previous paragraph. Or on a period time basis as inventory turnover in days, credit account turnover in days and receivable collection period These studies were spread in the industrial companies sector and the impact of working capital management indicators on profitability was negative, such as (Zeitun & Tian, 2007), (Falope & Ajilore, 2009), (Al-Farisi & Hendrawan, 2012), (Luper & Isaac, 2012), (Umar, et al., 2012), (Gill, et al., 2010), (Alavinasab & Davoudi, 2013), (Hailu &Venkateswarlu, 2016), (Anton &Nucu, 2021).

The positive relationship that appeared between working capital management as measured by return on deposits, equity multiplier, liquidity ratio, leverage ratio, equity multiplier, and bank size, on the one hand, and profitability in Islamic banks, on the other hand, is because an increase in the rate of return on deposits has the greatest impact on improving working capital management by dealing with investment deposits efficiently, would increase the revenues generated from deposits, and thus lead to an increase in profits that leads to an increase in the return on equity on the one hand. An increase in return for share on the one hand. On the other hand, the increase in equity multiplier, liquidity ratio, leverage ratio, share multiplier, and bank size leads to an improvement in working capital management, but weakly, because the increase in assets, whether short, medium, or long-term compared to liabilities is the increase Weak because of the risks of lack of liquidity that Islamic banks are trying to avoid for fear of falling into usury to cover the shortage. Then, asset generation is weaker than that of commercial banks, which leads to a weak increase in both returns on equity and return for a share in Islamic banks. This paper presents new evidence on the profitability of Islamic banks and the working capital literature. Determinants of working capital management that affect the profitability of Islamic banks for decision-makers, managers, and major shareholders of Islamic banks, and also provides a new guide for those who deal with banks, including investors and academics.

Based on the previous results, the researcher suggests the management of Islamic banks to improve the level of working capital management, which increases profitability by controlling the quality of assets compared to the size of liabilities and optimal utilization of them, avoiding usury.

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