

## Determinants of The Capital Adequacy Ratio In Islamic Banks In The Kingdom Of Saudi Arabia

### محددات نسبة كفاية رأس المال في البنوك الإسلامية في المملكة العربية السعودية

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#### Abstract :

This study aimed to measure the most important factors that determine the degree of capital adequacy in Islamic banks in the Kingdom of Saudi Arabia for the period from 2005-2019, using the multiple linear regression model, and the Pearson correlation coefficient. The results showed :-There is a statistically significant relationship between the rate of return on assets, the rate of return on equity , the market share , and the capital adequacy ratio in Saudi Islamic banks.- There is no statistically significant relationship between investments risk, the size of the bank and capital adequacy ratio in Saudi Islamic banks.

**Keywords:** Capital Adequacy Ratio , Islamic Banks , return on equity, investments risk, liquidity risk , return on assets.

**JEL Classification codes:** G21, G32, C33.

#### الملخص :

هدفت الدراسة قياس أهم العوامل التي تحدد درجة كفاية رأس المال في البنوك الإسلامية في المملكة العربية السعودية للفترة من 2005-2019 باستخدام نموذج الانحدار الخطي المتعدد ومعامل ارتباط بيرسون، أظهرت النتائج: وجود علاقة ذات دلالة إحصائية بين معدل العائد على الأصول ، ومعدل العائد على حقوق الملكية ، والحصة السوقية، ونسبة كفاية رأس المال في البنوك الإسلامية السعودية ..، عدم وجود علاقة ذات دلالة إحصائية بين مخاطر الاستثمار وحجم البنك ونسبة كفاية رأس المال في البنوك الإسلامية السعودية. الكلمات المفتاحية: نسبة كفاية رأس المال ، المصارف الإسلامية ، العائد على حقوق الملكية ، مخاطر الاستثمار ، مخاطر السيولة ، العائد على الأصول.

تصنيف JEL: G21, G32, C33

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## **1. Introduction.**

Increased interest in the rate of capital adequacy, especially after the global financial crisis in 2008, and the financial crisis showed that there is an urgent need to develop and strengthen the financial solvency of banks through the decisions of the Basel 3 Committee, which highlighted in its decisions changes compatible with dealing with financial crises to ensure global financial stability.

The capital adequacy ratio expresses the bank's ability and efficiency in measuring, directing and controlling the risks it faces, with the aim of minimizing and controlling it, and making decisions that are consistent with its strategy and policy, and strengthening its competitiveness.

Since the Capital Adequacy Ratio (CAR) is the ratio determined by the regulatory authority in the banking sector, this ratio can be used to test the stability of the banking system.

The capital that banks maintain is considered an indicator of the soundness of banking and a technical measure of financial solvency in an environment surrounded by many risks. It is also the first line of defense against losses that the bank may be exposed to and the primary prevention element that prevents losses of depositors' money.

The efforts that established a unified rate of capital adequacy have contributed to supporting the stability of the global banking system and enhanced depositors' confidence in it.

The regulation and determination of the capital adequacy ratio continues to have a major role in contributing to financial and banking stability as it requires banks to keep minimum amounts of capital as protection against unexpected losses or adverse shocks that may lead to bank failure.

It became necessary to identify the factors that affect the capital adequacy ratio in the banking system on a larger scale. As a result, regulators around the world are rethinking the essential role of regulatory capital requirements in influencing banks' behavior and market perceptions about bank risks, especially Islamic banks that are distinct from conventional banks.

Islamic banks seek to maintain an adequate amount of cash from their capital that can meet the operational risks and lead to attracting deposits and thus lead to the bank's profitability and hence its growth.

Under Basel 3 after the global financial crisis of 2008, the minimum ratio of capital adequacy in addition to capital for hedging purposes has become 10.5% and is used for the purposes of limiting profit distribution.

Based on that, this study seeks to answer the main question: What are the factors affecting the capital adequacy ratio in Islamic banks in the Saudi Arabia?

The research aims to measure the factors affecting the capital adequacy ratio in Islamic banks in the Kingdom of Saudi Arabia through the use of mathematical and standard modeling methods. This is to highlight the role that these determinants play in strengthening the Islamic financial and banking system, and the consequent effect of maximizing the profitability of Islamic banks in the Kingdom of Saudi Arabia.

The following hypotheses will be tested: -

- There is a statistically significant relationship between the rate of return on assets (ROA), the rate of return on equity (ROE), the size of the bank (SIZE), liquidity risk (LQ), investment risk (IR), the market share (MSHARE) and the capital adequacy ratio (CAR) in Saudi Islamic banks.

## **REVIEW OF LITERATURE :**

A Study (ÜNVAN,2020): This study aims to identify the most important factors affecting the capital adequacy ratio (CAR) of commercial banks in Ghana for the period from 2008-2017. The study concluded that the capital adequacy ratio of banks is related to a significant relationship with the size of the bank, financial leverage and money supply.

A Study (Polat ,Ali, Al-khalaf , Hassan, 2014) : This study aims to determine the factors that affect the capital adequacy ratio (CAR) of commercial banks in the Kingdom of Saudi Arabia for the period from 2008 to 2012. The study concluded that there is a positive effect of the return on assets indicator on the capital adequacy ratio and a negative effect of the loan to deposit ratio indicator on the capital adequacy ratio.

A Study (Hewaidy, Alyousef,2018):The study examined the factors affecting capital adequacy in Kuwaiti banks for the period from 2009 to 2016. The results of the study indicated that the size of

the bank, asset quality, management quality, net interest margin and liquidity have a significant impact on the capital adequacy rate.

A Study (Aref,Abdelkarim,2014):This study attempted to identify the factors that affect the capital adequacy of Saudi commercial banks for the period 2007-2011. The study found a positive correlation between liquidity risk, interest risk, return on assets and capital adequacy ratio. There is also a negative correlation between credit risk, capital risk, return on equity, and capital adequacy ratio.

Study: (Mohammed T.Abusharba, et., 2013): In this study, the researchers identified the most important factors affecting the capital adequacy ratio in Indonesian Islamic banks.

The study found a statistically significant relationship between the capital adequacy ratio in Indonesian Islamic banks and the rate of return on assets, liquidity, and asset quality.

There is no statistical relationship between the capital adequacy ratio in Indonesian Islamic banks, deposit structure and operational efficiency.

## **2. Data and Research Method:**

The study population consists of four Islamic banks in the Kingdom of Saudi Arabia: (Al Rajhi Bank was established in 1988, Al Bilad Bank was established in 2005 AD, Al Jazira Bank was established in 2007, and Alinma Bank was established in 2009). The data necessary to prepare this study was obtained through accreditation On the annual financial reports issued by the study sample banks during the period from (2005 to 2019).

The study used the methodology of analyzing the collected cross-sectional data packages for the purpose of showing the factors affecting the capital adequacy ratio in Islamic banks in the Kingdom of Saudi Arabia for the period from 2005 to 2019 , by estimating the aggregate regression model and the fixed effects model. The random effects model was excluded due to the limited number ofThe banks used in the study.

In order to verify the efficiency of any of these models, the Fisher-test was used in order to obtain a more efficient model in terms of estimation, and one of the justifications for using this method is

that it is one of the most effective and efficient methods for analyzing cross-sectional data, in addition to solving the problem of unavailability of a long-term data series. For the variables that are being studied.

### **3- Description of the study variables and how to measure them :**

This study depends on a set of variables necessary to analyze the factors affecting the capital adequacy ratio in Islamic banks in the Kingdom of Saudi Arabia.

A dependent variable that expresses the capital adequacy ratio, and a set of independent variables: the size of the bank, the market share, the rate of return on assets, the liquidity ratio, the rate of return on equity, and investment risks

#### **A- Dependent variable (Capital adequacy ratio CAR):**

This standard aims to maintain the ability of banks to continue operating by maintaining strong capital that allows for facing any contingent liabilities when there are pressures before the bank or large withdrawals of deposits in a short time.

It is considered a protection factor against the risks that the bank is exposed to and increases the confidence of its customers, especially the depositors, and has the ability to absorb unexpected losses.

If the value of the bank's assets decreased as a result of non-payment, the bank uses the internal resources of the shareholders (the capital) to cover the losses in the value of the assets.

If the capital is insufficient and does not cover the losses, this means that the bank is in a state of bankruptcy and the shareholders lose all their rights. According to the regulations governing banking activity, each bank must adhere to a certain ratio of capital to assets, which is the so-called capital adequacy criterion. (Bokhari, I.H., M. Ali, and K. Sultan, 2012: 16).

And maintaining the bank with sufficient capital would protect the bank from shocks resulting from loss in the value of assets, and at the same time it carries reassurance for depositors, and the Basel 3 Committee has approved the ratio to reach 10.5%.

This variable was calculated through the equation:

$$\text{CAR} = (\text{equity}) / (\text{total risk-weighted assets})$$

The higher this ratio indicates the lower the risks, and the lower this ratio the bank will be exposed to the risks of the capital adequacy ratio .

The higher this ratio indicates the lower the risks, and the lower this ratio the bank will be exposed to the risks of the capital adequacy ratio. (Romdhane, M. ,2012: 22)

## **B- Independent variables :**

### **B-1 Liquidity risk (LQ):**

Liquidity ratios generally measure the ability of banks to meet customers' withdrawals, especially current account holders and short-term deposits.

This ratio is calculated from the following equation:  $LQ = (\text{Liquid Assets Ratio}) / (\text{Total Liabilities})$ .

Liquid assets are cash, balances with the central bank, and balances with banks and financial institutions. As for the total liabilities, they represent all long-term and short-term liabilities such as current deposits, time deposits and savings deposits, in addition to borrowing operations from banks and financial institutions.

This ratio reflects the extent to which the liquid assets are able to meet the withdrawals made by customers (depositors), meaning that the high degree of liquidity risk leads to a decrease in the degree of capital adequacy and vice versa. (Abdul Karim, M., et al., 2013)

### **B-2: Size of the bank (SIZE):**

This indicator is used to indicate the extent to which the bank has achieved savings resulting from an increase in its size and a decrease in its costs.

The increase in size gives the bank the ability to enter the financial markets easily, and leads to increased diversification in financial products and a reduction in operational risks, thus affecting the capital adequacy ratio.

The size of the bank is calculated using the natural logarithm of total assets. (Ghaleb S. Mushabeb,2016: 290)

### **- B-3 Return On Asset ROA :**

This indicator It expresses the bank's ability to achieve profits as a result of investing its assets.

The return on assets index is considered the best measure of profitability through which the efficiency of the bank can be assessed, and it facilitates the comparison process with the returns of other periods with other banks, and thus it is a measure that

measures the efficiency of the bank's operational performance. The return on assets (ROA) is calculated as follows:  $ROA = (\text{Net profit}) / (\text{Average total assets})$ .

The increase in this ratio positively affects the capital adequacy ratio (and vice versa. Javaid, Saima, Alalawi, Suha., 2018:12)

#### **- B-4 Return On Equity (ROE):**

Return on equity means the amount of return that owners (shareholders) get as a result of investing their money in the bank and their risk tolerance, and it is based on the concept of comprehensive profit, and the rate of return on shareholders' equity measures the ratio of the bank's profit to the total equity of its shareholders.

A higher ratio indicates better use of capital. It is calculated by dividing net profit after tax by total equity. Total equity is the sum of capital and reserves (Siraj and Pillai, 2012: 25).

The higher the rate of return on shareholders' equity indicates the strength of the bank's performance, and the continued rise in this rate for a long period indicates the good management of the bank.

#### **B-5 Market share (MSHARE):**

It expresses the market share of deposits for each bank.

The most efficient banks increase their size and market share and allow them the ability to compete, and this positively affects their ability to achieve high returns that are positively reflected on the capital adequacy ratio.

It is calculated by the following equation:  $MSHARE = \text{Market share} = \text{total deposits of Bank (A)} / \text{total deposits of banks in the study sample}$ . (Ghaleb S. Mushabeb, 2016: 292)

#### **B-6 - Investments risks (IR):**

This indicator shows the peculiarity of Islamic banks in terms of money investments, as there are no financing formulas for traditional banks that express loans.

This indicator measures the risks specific to Islamic financial investments, as this ratio has a positive impact on the profitability of banks, which is positively reflected on the capital adequacy ratio.

This indicator is calculated through the following equation:  $IR = (\text{Net Investments} - \text{Provisions for Financing Losses}) / \text{Total Assets}$ .

( Al Rajhi Bank annual reports, 2019).

The higher the investments risk as a result of the higher provisions for financing losses, the higher the capital adequacy ratio should be.

### 3- Model Specification:

this study conceptualizes the model between CAR and six bank specific variables (ROA, ROE, SIZE, LQ, IR, and MSHARE) through the following hypothesized mode:

$$CAR = f(\text{ROA, ROE, SIZE, LQ, IR, and MSHARE})$$

based on the above formula the study seeks to see whether the capital adequacy ratio could be explained by bank specific variables. Therefore, the panel data regression is formulated as follows:

$$CAR_{it} = \alpha + \beta_1 * ROA_{it} + \beta_2 * ROE_{it} + \beta_3 * SIZE_{it} + \beta_4 * IR_{it} + \beta_5 * LQ_{it} + \beta_6 * MSHARE_{it} + \varepsilon_{it} \quad i = 1, \dots, 4 \quad t = 2005, \dots, 2019$$

$\varepsilon_{it}$ : Indicates random error and expresses the probability of an error occurring in the model.

$i$ : Refers to the number of banks of the study sample ( $i = 1, 2, 3, 4$ )

$t$  : Indicates the number of years of study ( $t = 2005, \dots, 2019$ )

$\alpha$  : constant .

$\beta$  : A coefficient for each of the independent variables of the study and expresses the marginal slope, meaning if the independent variable changes by one percent, the capital adequacy ratio (the dependent variable) will change by  $\beta\%$ .

### 4- Empirical results

For the purpose of building the capital adequacy ratio equation for Saudi Islamic banks, we first determined the most appropriate method for analyzing the study data by using the panel data analysis model as follows:

First method : Pooled model

$$CAR_{it} = \alpha + \beta X_{it} + \varepsilon_{it}$$

The second method: Fixed Effects model



$$CAR_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it}$$

$X_{it}$ : Refers to a population that includes all of the independent variables mentioned above.

It should be noted that in this paper we did not use the specificity stochastic cross-sectional effects model method due to the limited number of banks used.

As for analyzing the strength of the correlation between the study variables, Table No. (1) shows the results of the Person correlation coefficients to measure the strength and direction of the correlation between the study variables.

**Table N0 (1): the Pairwise Correlation Matrix for Explanatory Variables**

	CAR	ROA	ROE	SIZE	IR	LQ	MSHARE
CAR	1.000000	0.014030	-0.150648	-0.457634	0.065525	0.249613	-0.170223
ROA	0.014030	1.000000	0.827752	0.242564	0.088546	-0.246861	0.739106
ROE	-0.150648	0.827752	1.000000	0.270919	0.005525	-0.151990	0.670251
SIZE	-0.457634	0.242564	0.270919	1.000000	0.351710	-0.580720	0.425940
IR	0.065525	0.088546	0.005525	0.351710	1.000000	-0.011755	0.074837
LQ	0.249613	-0.246861	-0.151990	-0.580720	-0.011755	1.000000	-0.321519
Mshare	-0.170223	0.739106	0.670251	0.425940	0.074837	-0.321519	1.000000

Table No. (1) We note through the results of the Pearson correlation coefficient matrix between the independent variables and the dependent variable, which shows that the correlation coefficient between the independent variables is low and less than 0.5, and that the highest correlation of the independent variable with the dependent variable is the size of the bank with a correlation coefficient of (-0.457634) , and the least correlation of the independent variable with the dependent variable is MSHARE, with a correlation coefficient of ( -0.170223) .

In order to conduct a comparison test between the first method and the second method, the (Fisher-test) test was used, which enables comparison between:

The null hypothesis :  $H_0: \alpha_1 = \alpha_2 = \dots = \alpha_{12}$  means that the value of (alpha) is constant across banks, which means that there are no other bank-specific variables that are fixed in time that can affect the capital adequacy ratio in Saudi Islamic banks.

The alternative hypothesis:  $H_1: \alpha_i \neq \alpha_j \quad i, j = 1, 2, \dots, 12$  means the value of (alpha) is not fixed across Islamic banks, and this means that there is a constant value in time and it changes from one bank to another from the banks of the study sample and This indicates the existence of banking variables that could affect the capital adequacy ratio.

If the null hypothesis is accepted, this indicates that the first method (Pooled model) is better than the second method (Fixed Effects model) and the third method.

Table No. (2) gives the result of this test:

**Table NO(2) The result of the comparison test between the first method and the second method**

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects		
Effects TestStatistic	d.f.	Prob.
Cross-section F1.343501	(3,44)	0.2725
Cross-section Chi-square4.732921	3	0.1924

And based on the results of Table No.(2),we note that the p-value=0.2725 in the Fisher test, which is greater than 5%, and therefore the test result is the acceptance of the null hypothesis of the test, which confirms that there are no fixed factors over time and specific to each bank that can affectCapital adequacy ratio, so the model will be estimated using the first method (pooled model).

When we estimating the model, we noticed that the (Durbin-Watson) test statistic for errors of autocorrelation is 0.613 and it is considered small and therefore indicates the existence of autocorrelation problems in the errors. Therefore, we re-estimated the model taking

into account the correction of this problem by using the autocorrelation model for errors in the estimation process.

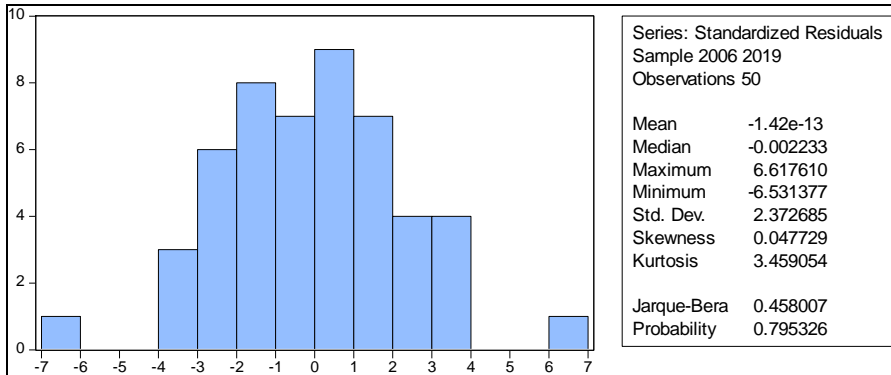
**Multiple Regression Results (Dependant variable: CAR)Table NO (3):**

Dependent Variable: CAR				
Method: Panel Least Squares				
Date: 04/22/21 Time: 14:30				
Sample (adjusted): 2006 2019				
Periods included: 14				
Cross-sections included: 4				
Total panel (unbalanced) observations: 50				
Convergence achieved after 6 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.364867	13.51144	0.175027	0.8620
ROA	1.871367	0.790170	2.368308	0.0229
ROE	-0.296353	0.112646	-2.630828	0.0121
SIZE	1.067595	1.196243	0.892457	0.3776
RC	0.020066	0.192182	0.104412	0.9174
LQ	0.000345	0.029538	0.011692	0.9907
MSHARE	0.399846	0.223001	1.793024	0.0807
AR(1)	0.377668	0.019264	19.60520	0.0000
R-squared	0.949529	Mean dependent var		22.21340
Adjusted R-squared	0.936588	S.D. dependent var		10.56135
S.E. of regression	2.659536	Akaike info criterion		4.985719
Sum squared resid	275.8521	Schwarz criterion		5.406364
Log likelihood	-113.6430	Hannan-Quinn criter.		5.145903
F-statistic	73.37213	Durbin-Watson stat		1.508681
Prob(F-statistic)	0.000000			
Inverted AR Roots	.38			

In order to verify the validity of the regression result of the standard models and their explanatory ability of the relationship that combines their variables, and to verify the availability of the property of a normal distribution of data for the study variables, Table No. (4) (Jarque-Bear) test shows that the series of residuals after the estimate is distributed normal, and that the value The probability is greater than 0.05 and it is prob = 0.795 for this test, which explains the acceptance of the null hypothesis and that all the

variables follow the data of the normal distribution, and therefore we accept the null hypothesis for the normal distribution of the residuals.

**Table No. 4: Jarque-Bear test result for normal distribution of study variables data**



And based on the results of the estimates in Table (3), and to clarify the results of hypothesis testing, we provide the following:

A- It is clear to us from the model that the rate of return on assets (ROA) has a positive and significant effect on the capital adequacy ratio (CAR) in Saudi Islamic banks, whenever the rate of return on assets (ROA) increases by 1%, the capital adequacy ratio (CAR) increases by 1.871 percent.

This means that the rate of return on assets (ROA) has a significant effect on the capital adequacy ratio, and this is explained by the fact that the returns of Islamic banks in the Kingdom of Saudi Arabia have the ability to increase their capital ratio, which is consistent with the theoretical logic of the importance of the rate of return on assets on increasing the adequacy ratio Capital, and thus this relationship shows the high operational efficiency of the assets of Islamic banks in the Kingdom of Saudi Arabia.

The results of the descriptive analysis of the data show that there is a discrepancy between the Islamic banks under study in the rate of return on assets, where the results of Al-Rajhi Bank are superior to other Islamic banks, Al-Inma Bank, then Al-Jazira Bank and Al-Bilad Bank, during the period of time under study, which means that these banks were characterized by the exploitation of the portfolio

Investment to enable them to achieve higher financing efficiency for these banks.

B- The results indicate that the rate of return on equity (ROE) has a significant and negative impact on the ratio Capital adequacy (CAR), as the rate of return on equity (ROE) increases by 1%, the capital adequacy ratio (CAR) decreases by 0.296%.

This means that the percentage of increase in the total net profits achieved is less than the percentage increase in the capital due to the conservative policies of Islamic banks in the Kingdom of Saudi Arabia, which tended to increase provisions to reduce risks and strengthen their financial positions, especially after the 2008 financial crisis.

C- It is clear from the model that there is a significant and direct relationship between market share (MSHARE) and capital adequacy ratio (CAR). In Saudi Islamic banks, whenever the market share (MSHARE) increases by 1%, the capital adequacy ratio (CAR) increases by 0.399%.

Which means the importance of the market share (MSHARE) in increasing the capital adequacy ratio (CAR) and the ability of these banks to deposit investment, which leads to achieving high returns and increasing their competitiveness that allows them to have opportunities in the banking market to achieve the largest returns.

At the detailed level, Al Rajhi Bank outperforms other Islamic banks in acquiring the market share of deposits (65%) approximately throughout the study period, and the rest of the Islamic banks have approximately equal percentages of the market share. The market share of deposits contributes to increasing and raising the ability of Islamic banks to achieve high returns. Positively reflected on the capital adequacy ratio.

D- it appears from the results of Table No. 3 that there is no significant relationship between the size of the bank, the liquidity risk (LQ) and the IR investment risk on the one hand, and the capital adequacy of the Saudi Islamic banks on the other hand.

D-1: It is explained as follows:- - It was found from the results of Table No. (3) that there is no significant relationship between the

size of the bank and the capital adequacy ratio in Saudi Islamic banks, which means that increasing the size of the bank does not help in controlling the banking market and does not contribute to increasing the capital adequacy ratio.

Small-sized banks have a capital adequacy ratio greater than large-sized banks, because a large-sized bank has no difficulty in finding financing resources, while a small-sized bank has great difficulty in finding financing resources, and therefore the increase in the size of the bank does not affect the capital adequacy ratio. In the Islamic banks under study, we find that the relative capital adequacy ratio of Al Rajhi Bank (large size) is lower than the capital adequacy ratio of other small-sized banks (Al-Inma Bank, Al-Bilad Bank, Al-Jazira Bank).

Hence, an increase in its size leads to a decrease in the capital adequacy ratio in its minimum limits. But the small-sized bank does not have the ability to obtain financing in the event of losses, so it increases its reserves in the capital adequacy ratio in order to face any potential risks.

D-2: The results of Table No. (3) show that there is no significant relationship between liquidity risk and capital adequacy ratio in Saudi Islamic banks, as liquidity risks do not contribute to increasing the capital adequacy ratio.

This means that Islamic banks turn to highly liquid and low-risk assets to meet capital adequacy requirements.

Therefore, Saudi Islamic banks do not have risks from the side of obligations, as they are able to obtain financing resources to meet any risks related to investments, and therefore these weak risks prove that the liquid assets of these banks can face any obligations, and therefore the capital adequacy ratio remains within its minimum limits.

Also, these liquid assets can play the role of reserves that the bank uses in case it is exposed to investment risks because of the possibility of quickly liquidating these assets.

It must be pointed out that Islamic banks in the Kingdom of Saudi Arabia suffer from excess liquidity and this is evident in the high

capital adequacy ratio in all these banks above its required regulatory limits (the Basel III committee set the capital adequacy ratio at 10.5%), where this ratio exceeds 23 % in these banks, which negatively affects their profitability.

D-3: It was found from the results of Table No. (3) that there is no significant relationship between the investment risk (IR) on the one hand and the capital adequacy ratio in Saudi Islamic banks. Investment risks have no effect on the capital adequacy ratio, and this means that a large proportion of investment through Financing formulas are less risky, and therefore the provision for financing losses is weak, which causes weak investment risks.

Despite the importance of this variable (IR) and its impact in the event of its decline in increasing the returns resulting from investments through Islamic financing formulas, these banks resort to financing using low-risk debt formulas (Murabahat - Ijarah – SALAM...), which usually depend on real mortgages in The asset is the subject of sale or lease, and therefore requires a low percentage of capital adequacy, and its withdrawal from financing by means of participation and speculation, which are characterized by high risks, led to that result.

Table 5 shows a summary of the study results.

**Table 5 Capital adequacy ratio (CAR) Hypothesis testing results**

<i>Hypothesis</i>	<i>Directional relation</i>	<i>Rejected null hypothesis</i>
ROA	+	YES
ROE	-	YES
MSHARE	+	YES
SIZE	-	NO
LQ		NO
IR		NO

## **5- Conclusion and Recommendation :**

The study attempted to identify the most important factors that affect the degree of capital adequacy in Islamic banks in the Kingdom of Saudi Arabia for the period from 2005-2019 using a standard model. The results of the study showed the following:

-There is a statistically significant relationship between the rate of return on assets (ROA), the rate of return on equity (ROE) and the capital adequacy ratio (CAR) in Saudi Islamic banks.

-There is no statistically significant relationship between the size of the bank (SIZE), liquidity risk (LQ), investment risk (IR) and the capital adequacy ratio (CAR) in Saudi Islamic banks.

- There is a significant and direct relationship between market share (MSHARE) and capital adequacy ratio (CAR) in Saudi Islamic banks .

-Islamic banks in the Kingdom of Saudi Arabia have a high liquidity surplus, and therefore they have met the requirements of liquidity ratios adopted by the Basel III Convention, because they do not depend on debt to support their capital, as their capital has the ability to face financial losses.

-Due to the high investment risks, Islamic banks in the Kingdom of Saudi Arabia have been interested in short-term investments and not investing in long-term projects This led to an increase in the liquidity surplus, and that this method does not serve economic development.

- Islamic banks should be interested in diversifying the Islamic financing formulas and not focusing on the debit formulas (Murabaha, EJara, SALAM..) and moving towards financing formulas such as partnerships, which is the philosophical basis on which Islamic banks are based.

-Islamic banks in the Kingdom of Saudi Arabia should be interested in financing in long-term projects, as it leads to absorbing the excess liquidity that these banks suffer from.

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