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# Applying the PATROL Model According to the Indicators of Capital Adequacy and Liquidity and Determining its Relationship to Banking Security - An Applied Study in a Sample of Iraqi Islamic Banks

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Abstract: The research aims to measure the relationship between each of the components of the PATROL model represented by (capital adequacy, liquidity) and the degree of banking safety for a sample of Iraqi Islamic banks. Included the border Temporal For research (6) years for the duration from 2016 And up to 2021 And done to choose (12) A local Islamic bank listed in the Iraq Stock Exchange. And done Approval Equity to total deposits and equity to total assets to represent The degree of banking security, which is variants affiliate While the independent variables were expressed in two components (two indicators) of the PATROL model, which are: B (capital adequacy, liquidit) The research found that there is a positive and significant correlation between the variable The first independent (capital adequacy) and variable approved (degree of bank security), and the existence of a positive and significant correlation between the second independent variable (liquidity) in the variable approved (the degree of bank security in Islamic banks. during finding balance thoughtful Between the degree of banking security and the two indicators of the PATROL model.

**Keywords:** PATROL model, Capital adequacy, Liquidity, Banking security, Iraqi Islamic banks.

#### Introduction

Islamic banks have an important role in the economic and social life of any country, through which the fiscal surplus units are combined with the fiscal deficit units, i.e. collecting savings and employing them in various investment channels in accordance with Islamic Sharia, in addition to the many services that these banks provide to the public of customers, and after what the banks have completed The Islamic Bank has established its activities and works, and has successfully provided its services, which has witnessed a great spread and expansion, and its spread was not only in the Arab world but also globally, and its role was clear, especially during financial crises. The research is a path that deals with two extremely important variables in financial and banking thought, namely the PATROL model and banking security, and testing the relationship and the impact between them by applying it to a sample of Islamic banks listed in the Iraq Stock Exchange for the period from 2016 to 2021, with a diagnosis and identification of the most prominent indicators and measures of the PATROL model, which are (sufficiency), capital, liquidity, profitability, credit risk, regulation), as well as dealing with indicators of security Banking represented by

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the degree of banking security, and this degree was expressed in two indicators (equity to total deposits, equity to total assets).

### The first topic: research methodology and previous studies

This topic will present the research methodology, which is an important part of the research, in addition to dealing with previous studies represented by Arab studies and foreign studies related to the subject of the research. The presentation will be within two requirements as follows:

## The first requirement: research methodology

This requirement will provide a presentation of the research methodology represented by the research problem, importance, objectives, hypotheses, research community and sample, as well as the time limits of the research as follows:

#### First: the research problem

PATROL model is one of the evaluation models that have a clear impact on the degree of banking security , but its effect may be different according to its components . Iraqi research sample through the following questions:

- ✓ Is there a correlation between capital adequacy and the degree of banking safety?
- ✓ Is there a correlation between liquidity and the degree of banking safety?

#### Second: the importance of research

The importance of research stems from The pivotal role that Islamic banks play in the economy of any country in the world, which requires raising the degree of banking security for Islamic banks operating in the Iraqi banking sector, by urging them to implement the PATROL model with its components (indicators) by providing an appropriate amount Adequate capital and liquidity.

#### Third: Research objectives

After defining the research problem, identifying its questions, highlighting its importance, and based on the main objective of the research, which is to identify the relationship of the capital adequacy and liquidity indicators of the PATROL model on banking security, this research seeks to achieve a set of goals, most notably the following:

- 1- Identifying Islamic banks and addressing the most important aspects related to them, as well as identifying the PATROL model and its classifications, in addition to dealing with banking security from various aspects.
- 2 -Identifying the nature of the relationship between two components of the PATROL model represented by (capital adequacy and liquidity) and the degree of banking security of Iraqi Islamic banks, the research sample for the period (2016-2021).

#### Fourth: research hypotheses

After defining the research problem, its importance and objectives, the following hypotheses were formulated:

**The first hypothesis:** There is a statistically significant correlation between capital adequacy and the degree of banking security.

**The second hypothesis:** There is a statistically significant correlation between liquidity and the degree of banking safety.

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# Fifth: the research community and sample

The research community consists of (28) local Islamic banks listed in the Iraq Stock Exchange, while the research sample was limited to (12) banks, which are ( Elaf Islamic Bank , Cihan Islamic Investment and Finance Bank , Islamic World Bank , Al Janoob Islamic Bank , Islamic National Bank , International Islamic Bank , Arab Islamic Bank , Islamic Trust Bank , Noor Iraq Islamic Bank , Al Ataa Islamic Bank for Investment and Finance , Islamic Holding Bank , Kurdistan International Bank for Investment and Islamic Development ).

# Sixth: the temporal limits of the research

Temporal limits of this extended The research is for the period from 2016 to 2021, which was chosen because it represents the first work of the Iraqi local Islamic banks, in addition to the researcher's inability to go beyond this period due to the incompleteness of the annual reports of the Iraqi local Islamic banks under study.

# The second requirement: previous studies

In this requirement, a number of Arab studies and foreign studies related to the subject of the research will be presented, as follows:

### First: Arabic Studies

The following table presents a number of Arabic studies that are relevant to the subject of the research

# Schedule (1): Related Arabic studies

First study: a study (Khioka and Abdel-Rahman, 2014).	
Evaluation and analysis of risk indicators of banking financial statements and their impact on banking security using time series models with cross-sections Panel Data (an analytical study in a sample of selected Islamic banks)	Study Title
Providing a quantitative and control tool at the same time for Islamic banks by building a measurement model to describe the degree of banking security based on a set of financial risks resulting from the nature and activities of those banks	Purpose of the study
(3) Islamic banks (Jordanian Islamic Bank, Faisal Sudanese Bank, Islamic International Arab Bank)	Study sample
2011 - 2002	study duration
Achieving a margin of safety in Islamic banks is directly related to liquidity and inversely proportional to the goal of profitability. Banking security	The most important results
The second study: a study (Al-Nuaimi, 2017)	
Evaluating the performance of banks using the PATROL model, an analytical study of a sample of Iraqi private banks	Study Title
Shed light on the PATROL model and how it can evaluate the performance of _ The banks according to this model and the order of the study sample banks in terms of performance , starting with banks with good performance and ending with with the lowest performing banks	Purpose of the study
(8) Banks from the listed Iraqi private banks In the Iraqi market for securities	Study sample
2012	study

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	duration
Banks evaluating their performance with accreditation _ P. P. P. P. Her own potential It enables it to identify errors and deviations and find out their causes . So find _ sufficient methods to address them, in addition to being able to draw up an appropriate strategy to raise and improve the level of their performance Present  The third study: a study (Hamza and Mal Allah, 2018)	The most important results
Measuring the impact of risks (liquidity, credit, and capital adequacy) on the degree of banking security, a study on a sample of private commercial banks listed on the Iraq Stock Exchange for the period (2005-2015)	Study Title
Measuring the impact of liquidity, credit and capital adequacy risks Through indicators specific to each of them in the degree of banking security for commercial banks, the study sample	Purpose of the study
(10) Private commercial banks listed on the Iraq Stock Exchange	Study sample
2015 - 2005	study duration
There is a significant impact of the first independent variables (liquidity risk), the second (credit risk) and the third (capital adequacy risk) on the dependent variable (the degree of banking security), and that the explanatory power of the designed model amounted to (88%). which is indicative On his efficiency in expressing the impact of the banking risks studied on the degree of banking security	The most important results

Source: The table was prepared by the researchers based on the sources mentioned in the table.

# Second: foreign studies

The following table presents a number of foreign studies that are relevant to the subject of the research:

Schedule (2): Related foreign studies

The first study: a studyAl Ajlouni & Al rgaibat , 2014	
The impact of risks on the degree of banking security in traditional Jordanian	Study Title
banks (2000-2011(	-
Impact of Risk on the Degree of Banking Safety in Traditional Jordanian Banks	
(2000-2011)	
Measuring the impact of banking risks, which are represented in (liquidity risk,	Purpose of the
risk credit, interest rate risk) on the degree of bank safety	study
Traditional Jordanian banks	Study sample
2011 - 2000	study duration
There is a statistically significant effect relationship Between banking risks and the	The most
degree of banking security in Jordanian banks _ traditional study sample	important
	results
The second study: a study ( Al-Afeef & Al- Ta'ani , 2017 )	
The Impact of Risks on Banking Security: An Empirical Study on Jordanian	Study Title
Conventional Banks (2005-2016(	
he Effect of Risks on Banking Safety: Applied Study on Jordanian Traditional	
Banks (2005-2016)	
Examine the impact of the risks to which the banking business is exposed	Purpose of the
(liquidity risk, bank credit risk, interest rate risk) on safety in the banking sector.	study

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	Jordanian conventional banks	Study sample
	2016 - 2005	study duration
Ī	There is a statistically significant effect of both liquidity risk and interest rate risk	The most
	on safety in the banking sector, and there is no statistically significant effect of	important
	credit risk on safety in the banking sector during the period of this study.	results

Source: The table was prepared by the researchers based on the sources mentioned in the table.

# The second topic: the concept of Islamic banks and their objectives

This topic presents a number of concepts related to Islamic banks, in addition to addressing the objectives of Islamic banks as follows:

## First: the concept of Islamic banks

of Islamic banks have been mentioned Given the comprehensiveness of the subject of Islamic banks, as well as the desire of every author and researcher to highlight some aspects at the expense of others, despite the existence of some similarities between these concepts (Abdul Halim and Oraibi, 2020, 46), Islamic banks are defined as a financial institution. With objectives and principles that are compatible with the provisions of Islamic Sharia, i.e. the abolition of fixed interest rates to achieve justice and rebuild the Islamic society (1 Saleh & Zeitun, 2006, 1), and Islamic banks are defined as a banking financial institution working to collect Funds and their employment in accordance with Islamic law in a way that is compatible with society to build it and achieve justice, and put money in an Islamic path (Abdul Allah and Saifan, 2008, 31) (Al-Ajlouni, 2010, 110) (Khalaf and Rashid, 2017, 335).

### Second: The objectives of Islamic banks

legal, social and economic goals, as well as other goals, and the following is an overview of these goals:

- 1- **Legitimate goals:** These goals are represented in applying God's approach in the field of money and economy, as well as correcting the function of capital in society, highlighting human labor and human effort as an important element of production, achieving comprehensive growth and adhering to the teachings of all of this. Islam and its directives, by following its commands, avoiding its prohibitions, adhering to all the spiritual and moral values called for by the heavenly laws, following the rule of what is permissible and forbidden in that, and presenting an Islamic alternative to traditional banking transactions to relieve Muslims of embarrassment (Ahmed, 2013, 41-42) (Havan, 2001, 4).
- 2 **objectives:** Since Islamic banks are primarily Islamic banking institutions that perform financial intermediation on the principle of participation, they have many financial objectives that reflect the extent of their success in performing this role in light of the provisions of Sharia. Islamic, and these goals are represented by (C.B. Deposits and their development, investing money, achieving profits) (Ismail and Muhammad, 2018, 132) (Al-Shammari, 2012, 25).
- 3 **Objectives related to customer satisfaction:** Customer satisfaction is among the objectives of Islamic banks, through (Mousawi, 2017, 33).
- a- banks seek to provide and improve the level of services in accordance with the provisions of Islamic Sharia in order to attract the largest number of customers.
- b- **Providing safety for depositors:** Islamic banks pay great attention to achieving the element of safety, because the risks to which their dealers are exposed are greater compared to what depositors in conventional usurious banks are exposed to.

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- 4- **Social goals :** In addition to the legal and financial goals and the goals related to customer satisfaction achieved by Islamic banks , they aim to achieve Social goals as well, and these social goals are represented in the following (Khalaf, 2006, 98).
- a- Collecting zakat and alms and distributing them fairly to those who deserve them.
- b- Taking care of the conditions of Muslims in Islamic and non-Muslim countries and standing by them in good times and bad.
- c- Create an atmosphere of social solidarity and solidarity among the members of society.
- d- Linking the relationship between the Islamic peoples.
- e- Contribute to social projects and charitable works aimed at developing society.
- f- Providing good loans to meet social needs.
- 5- Economic goals: Unlike the traditional bank, which is a financial intermediary that deals in debts through usurious interest, the Islamic bank is an economic project, as in addition to playing the role of a financial intermediary without usurious interest, it exercises all financial, banking, commercial, industrial, agricultural and real estate activities and seeks to It aims to achieve economic goals, represented by (contributing to achieving economic development, achieving the highest possible return for shareholders and investors, making optimal use of the bank's resources and employing them in legal ways, encouraging individuals to save to accumulate resources for investment financing, contributing to the establishment of investment projects, providing The necessary financing with its various deadlines, the provision of production requirements for the productive sectors, the carrying out of all banking operations and services) (Ben Masouda, 2008, 21).

# The third topic: Genesis of the PATROL model concept and its components

This topic deals with the aspects related to the PATROL model, which is the origin and concept, as well as dealing with the indicators of capital adequacy and liquidity, which are among the important components of the PATROL model, as follows:

## First: The origins of the PATROL model and its concept

In 1993, the Italian Central Bank introduced a new classification system (model) called the PATROL system (model) for evaluating banking performance in an attempt to identify weaknesses and imbalances in order to address them before they aggravate so that banks do not fall into the net of financial failure. This system (model) is a tool An external supervisory system that provides a clear picture of the financial health of banks and also provides support in determining priorities for the use of supervisory resources to determine the time of site selections ( Hameed&et al, 2022, 322 ) ( Савельєва , 2012, 2 ), and the quality and efficiency of Italian banks are classified according to this model according to data provided monthly. Semi-annual and annually, which measure the basic components of the model, which are (capital adequacy, liquidity, profitability, credit risk, and regulation) (Ali and Barris, 2022, 305), and the PATROL model contains a set of indicators that include a number of financial ratios specialized in analyzing capital adequacy And liquidity, profitability, credit and regulatory risks (Al-Nasser, 2016, 1).

The PATROL model is defined as one of the early warning models for banks against the risks that may cause financial crises for the bank. Al Nuaimi, 2017, 325.)

As he is known A powerful tool To assess the performance of banks and their financial position and to identify their existing problems based on quantitative indicators and expert assessment . for qualitative variables (Jana & Vagizova, 2014, 158).

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# Second: the components (indicators) of the PATROL model

PATROL model consists of five main components (indicators) through which the performance of banks is evaluated, represented by ( capital adequacy, liquidity, profitability, credit risk, organization), ( Sahajwala & Denbergh, 2000, 10) ( Cannata & Quagliariello, 2004)., 13), and the following is an illustration of the two indicators used in the research:

# 1- Capital adequacy\_

Capital means the amount of funds available to support the bank's activities and act as a protective barrier that prevents losses to which the bank is exposed from leaking to depositors' funds, i.e. it serves as a source that provides protection through the bank's stability as well as its efficiency (Ongore & Kusa, 2013, 240). It is considered capital It acts as an absorber of financial shocks or losses to protect banking institutions from unexpected losses or negative external factors that they may be exposed to (Powell & Allen, 2011, 543) (Kurniawan, 2020, 60), so it is necessary to maintain an adequate level of capital for the bank (Babar & Zeb, 2011, 25), as for capital adequacy, it refers to the methods used by the bank 's owners and management to achieve a kind of balance between The risks expected by the bank on the one hand and the size of the capital on the other hand And it can Identifying the solvency of the bank and its ability to bear potential losses, as is meant by this term (capital adequacy) to clarify the relationship between sources of capital The bank and the risks that assets or any operations may be exposed to by the bank, and it also expresses the bank's ability to fulfill its obligations or face any losses that banks may be exposed to (Daoud, 2017, 50) (Chioma & et al, 2021, 36), and it also represents the adequacy of Capital The process of determining the level of capital that the bank allows to protect it from losses that occur, which are formed as a result of the risks that may occur and compliance with a required level of capital. To compare with the capital rules of the bank and to adjust the capital to a level that is consistent with the risk assessment, and this means that the level of risk probability must remain very low in order to be acceptable (Al-Mutairi, 2022, 36) (Bessis, 2015, 20), and the capital adequacy ratio is calculated According to the following equation (Al-Mahmoud, 2014, 65) (184 Georgios & Elvis, 2019, )(Cannata & Quagliariello, 2004, 15) (Al-Rubaie and Al-Radi, 2011, 110-111).

### Capital Adequacy = Regulatory Capital / Risk Weighted Assets

regulatory capital is divided into two types, the first type is basic capital, which consists of (shares, reserves, profits retained by the bank), and the second type is supportive capital, which consists of (undeclared reserves, reserves for revaluation of assets, provision for bad debts). As for the risk-weighted assets, it was approved by the first Basel Committee to classify the bank's assets inside and outside the budget (Hanafi and Abu Qahf, 2004, 273-277) (Basel Committee on Banking Supervision, 2001, 27).

### 2- liquidity

Liquidity represents the relationship between cash and quick assets The obligations required to be fulfilled on the maturity date ( Drehmann & Nicolaou , 2009, 10 ), and liquidity represented the element of protection and safety for banks and maintained the ability of the banking system to meet credit requests in At any time, liquidity allows for the fulfillment of expected and non- foreseen commitments expected ( Alsolami , 2015, 3 ), and liquidity is the ability of the bank to convert assets into cash quickly without realizing any losses ( Daher and Al- Khunisa , 2015 , 340). Liquid cash in addition to financial assets dominated by liquidity to meet immediate cash needs ( Marozva, 2015, 454-455 ), and liquidity is the ability of banks to lend to other financial institutions to support the issuance of new shares at reasonable prices ( Koch & McDonald , 2015, 552 ) That is, it is the financial ability of the bank to meet the needs of bank credit, which is represented by the available cash balance, and it is also one of the elements of wealth owned by individuals and institutions, which can be expressed in a certain monetary value such as land,

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real estate, equipment, machinery, etc., and it is an economic expression that is intended to remain cash without investment to meet urgent requirements That is, it is possible to convert it into liquid cash without financial losses (Al-Shammari and Al-Zubaidi, 2022, 169), that is, it is the ability of the bank to obtain the necessary funds when needed (MacDonald & Koch, 2006, 78), so liquidity is the ability of the financial institution to pay Its obligations when due (Susmitha & Mouneswari, 2017, 685) (Casu & et al, 2006, 486), and this requires the availability of liquid cash with the bank or the possibility of obtaining it by liquidating some of its assets, i.e. converting them into liquid cash over a period of time. Short and easy (Fabozzi & Markowitz, 2002, 237), and from this logic it can be said that liquidity is the ability of the bank to fulfill financial obligations, which is the ability to face withdrawals, and thus liquidity is considered the backbone of the banking system to avoid losses, so the first duty of banks is to provide A specific amount of liquidity (Millard & et al, 2008, 179), and among the most important liquidity ratios are the following (Kazem and Hassan, 2021, 132) (Al-Karwi, 2021, 6) (Al- Dahbawi and Al-Musawi, 2018, 7) (Rose, 1999, 141):

# Statutory Liquidity Ratio = Liquid Assets Ratio / Demand Deposits x 100

An increase in this ratio indicates the bank's ability to fulfill its obligations to creditors, but in return, this increase may affect the investment of funds in investments that generate returns for the bank (Al-Karwi, 2021, 7) (Abu Hamad Qaduri, 2005, 239), and this ratio must remain balanced because if it rises, it indicates the presence of large untapped liquidity in the bank, and this usually negatively affects the financial returns of the bank. To the risk of liquidity and problems in the payment of financial obligations.

# **Topic:** banking security

This topic reviews aspects related to banking security, represented by the concept of banking security, as well as the principles of banking security, as follows:

## First: the concept of banking security

Banking security is one of the most important basic features that banks must take into account when carrying out any activity, so that they can maintain their continuity and ability to face banking risks. In the language also, security and security are two sources in the sense of reassurance and lack of fear, and security and safety indicate one meaning, which is (security) in terms of understanding, peace, and security against fear. So security is the opposite of danger, and it means tranquility of the soul and the removal of its fear, while security is defined idiomatically. It is a set of sensations and feelings formed by the individual that his life and interests, as well as the interests of his country, his group, and his family are preserved and protected. It also represents tranquility, tranquility, and the ability to face events and emergencies without disturbance. And security does not depart from being self-assured (Mujbil and Daoud, 2020, 308) (Al-Hakim, 2017, 351). As for safety on the part of banks, it is known as banking safety, and it is represented in the extent of the bank's ability to absorb losses resulting from systemic and irregular risks, i.e. The ability of the bank 's capital to cover potential losses in the total assets and to meet the unexpected through liquidity (Muhammad and Abdul Qadir, 2020, 36)

#### **Second: Principles of Banking Security**

Banking security has four basic principles, and the following presents these four principles (Lakhja, 2015, 4) (Ben Bouziane et al., 2014, 123):

- 1- The first principle is that achieving banking security is first and foremost the responsibility of its owners, while achieving the safety of the banking system is one of the concerns of the public authorities.
- 2- principle is that banking safety is critically linked to sound macroeconomic policies.

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- 3- principle is that for banking security to be achieved it must include the framework Structures to support internal governance, in addition to setting rules to manage banking risks and withstand banking crises.
- 4- principle is the effective control of banking operations.

Topic: Estimating the indicators of capital adequacy and liquidity for the PATROL model and their impact on banking security for a sample of Iraqi Islamic banks for the period (2016-2021).

After the theoretical side of the research variables represented by the capital adequacy and liquidity indicators, which are components of the PATROL model and banking security in the previous investigations, have been dealt with, this topic will deal with the estimation of the capital adequacy and liquidity indicators for the PATROL model and their impact on banking security for a sample of Iraqi Islamic banks for the period (2016). - 2021), according to the following paragraphs:

# First: Testing the stillness of cross-sectional data for the studied variables through the panel unit root test

We notice through the unit root tests (Levin, Lin and Chu-LLC) and the test (I'm, Pesaram and Shin-IPS) that some of the variables settled at the level and some settled at the 1st difference as follows:

Panel unit too test variants Levin, Lin & Chut I'm, Pesaram & Shin **Individual Intercept Individual Intercept** t-statistic Prob. t-statistic Prob. Level x1-2. 65432 0.0 233 - 2.23020 0.2314 1st difference -2. 98765 0.0 765 - 0.13066 0.0043 Level  $\mathbf{x2}$ - 4.76543 0.0000 - 4.72612 0.0034 1st difference - 2.87654 - 4.01760 0.0 432 0.0000 **Y1** Level -5.46151 0.0000 - 1.98765 0.0020 1st difference - 4.98765 0.0000 - 2.54321 0.0000 **Y2** Level -2.17968 0.0146 -1.34026 0.0901 1st difference 0.65432-0.0000 - 2.46633 0.0003

Schedule (3): Panel unit root test

Source: table from Preparation Researchers based on the outputs of the program (12 Reviews)

Second: measurement relationship engagement Between the capital adequacy and liquidity indicators of the PATROL model and their reflection on the banking safety indicators for a sample of Islamic banks listed on the Iraq Stock Exchange for the period (2016-2021).

will be measured relationship engagement Between the indicators of capital adequacy and liquidity of the PATROL model and their reflection on the indicators of banking safety as follows:

# 1- Correlation between the capital adequacy and liquidity indicators of the PATROL model and its reflection on the equity index to total deposits

The following table sets the correlation between the indicators of capital adequacy and liquidity for a model PATROL and its reflection on Equity index to total deposits:

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**Schedule (4):** Relationship engagement between The indicators of capital adequacy and liquidity for a model PATROL and its reflection on Indicator rights Property to total deposits.

Covariance Analysis: Ordinary Date: 02/14/23 Time: 16:52 Sample: 2016-2021 Included notes: 72		
Covariance		
Probability	<b>x1</b>	x2
Y1	550,751.0	37163211
	0.0006	0.0000

Source: table from Preparation Researchers based on the outputs of the program (12) Eviews

Above table shows the results of the correlation between the search variables ( X1 , X2 ) and ( Y1 ) as follows:

- ➤ The existence of a positive and significant correlation between capital adequacy of the independent variable (X1) and the dependent variable equity to total deposits (Y1) in terms of the value of the correlation coefficient, which appeared equal to (550751.0), and with a significant level (0.0006) that is less than (0.05)
- Existence relationship Engagement positive And morale between the liquidity index The independent variable (X2) and the covariate approved rights Property to total deposits (Y1) and so on indicatively value Factor engagement that appeared equal (37163211), And with a level Significant (0.0000), namely less than (0.05).

# 2- Relationship engagement between The indicators of capital adequacy and liquidity for a model PATROL and its reflection on Indicator rights Property to total the findings

The following table sets the correlation between the indicators of capital adequacy and liquidity for a model PATROL and its reflection on Indicator rights Property to total The assets are as follows:

**Table (5):** Correlation between the capital adequacy and liquidity indicators of the PATROL model and its reflection on the equity index to the total the findings

Covariance Analysis: Ordinary Date: 02/14/23 Time: 16:53 Sample: 2016-2021 Included notes: 72		
Covariance		
Probability	x1	<b>x2</b>
Y2	3,078,193	55,353.60
	0.0 243	0.0 471

Source: table from Preparation Researchers based on the outputs of the program (12 Eviews).

### X1, X2) and (Y2) as follows:

➤ There is a positive and significant correlation between the independent variable capital adequacy (X1) And the dependent variable is property rights to total assets (Y2), in terms of the value of the correlation coefficient, which appeared equal to (3078.193), and at a significant level (0.0243), which is less than (0.05).

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The existence of a positive and significant correlation between the independent variable liquidity index (X2) and the dependent variable equity to total assets (Y2) This is in terms of the value of the correlation coefficient, which appeared equal to (55353.60)., and at a significant level (0.0471), which is less than (0.05).

We conclude from the foregoing that there is a significant correlation between the indicators of capital adequacy and liquidity for the model PATROL and banking security represented by the indicators of the degree of banking security, which are (index rights Property to total Deposit and index rights Property to total assets) of Islamic banks, the research sample listed on the Iraq Stock Exchange for the period (2016-2021), and the correlation between the components (capital adequacy, liquidity) and the degree of banking security was a positive and significant correlation, and this proves the verification of the two research hypotheses:

The first hypothesis: There is a statistically significant correlation between capital adequacy and the degree of banking security.

**The second hypothesis:** There is a statistically significant correlation between liquidity and the degree of banking security.

# The sixth topic: conclusions and recommendations

The research came out with a set of conclusions and recommendations, and the following presents these conclusions and recommendations:

#### **First: conclusions**

- 1. The degree of banking security is one of the most important objectives of Islamic banks that it seeks to achieve, and it is also one of the important ways to measure banking security, and the high degree of this makes banks operate in a relatively safe environment.
- 2. The existence of a statistically significant correlation between the first independent variable (capital adequacy) and the dependent variable (degree of banking security) in the local Islamic banks, the research sample, which is consistent with the first sub hypothesis.
- 3. There is a statistically significant correlation between The second independent variable (liquidity) and the dependent variable (Degree of banking security) in the local Islamic banks, the research sample, which is consistent with the second hypothesis.

#### **Second: Recommendations**

- 1. The need for Islamic banks, the research sample, to pay attention to indicators of the degree of banking safety, because these indicators will give an impression to both lenders and borrowers about the strength and stability of the financial position, the ability to pay debts and loans, and stand up to financial crises in the event of their occurrence.
- 2. Encouraging banks in general and Islamic banks in particular to apply the PATROL model because it is one of the models that are used to achieve two important purposes, the first in order to evaluate the performance of banks and the second to predict financial soundness, through the ability of this model to detect imbalances and weaknesses in a timely manner before they worsen, as well as It also identifies strengths.
- 3. The need to activate the basic indicators that characterize the PATROL model in Islamic banks.
- 4. The need to find a method or mechanism that helps the Islamic banks, the research sample, to maintain an acceptable percentage of capital adequacy within international standards without exaggerating

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- greatly because all banks have exceeded the percentages specified within the Basel standard, and this is not necessary and negatively affects the profitability of the bank.
- 5. Seeking to strengthen the degree of banking security in Islamic banks, the research sample, from during finding balance thoughtful Between the degree of banking security and the indicators of capital adequacy and liquidity for a model PATROL.

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