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Measuring the profitability of Saudi Islamic banks: empirical study

*** Mostafa Mahmoud Abdel Salam[1]**

[1] Department of Banking and Financial Markets - College of Economic Sciences and Islamic Finance - Umm Al-Qura University

E-mail: mabdelsalam@uqu.edu.sa

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Abstract

The abstract includes : the objectives of the article and its problematic, the contents of the article, and the substantive results.

This paper aims to measure profitability in Islamic banks in the Kingdom of Saudi Arabia during 2004-2019 , Panel ARDL method was used to analyses the data collected from four Islamic banks (Al-Rajhi, Al-Bilad, Al-Enma, Al-Jazeera), to Measure of Islamic banks profitability in the Saudi Arabia, The result shows that in the long-run total liquid assets and rate of return on investment is positively associated with profitability in Islamic banks but in the short-run estimation shows significant positive effect for Capital adequacy ratio and total liquid assets variables on Return on equity index.

Key words: Islamic banks; capital adequacy ratio , rate of return on investment, profitability of Islamic banks, Liquid Assets Ratio.

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* **Corresponding author.**

introduction:

Achieving profits for Islamic banks is one of the main objectives of Islamic banks because it is in the interest of Shareholders on the one hand and owners of investment deposits on the other hand, as the owners of these deposits share their money on the basis of sharing the return between depositors and Shareholders, which distinguishes Islamic banks from conventional banks, the goal of increasing profitability is in the interest of both parties. There is also a financial importance that is achieved through increasing profitability, which is to increase the market value of the shares of these banks, especially since they are ultimately Shareholding Company.

Profitability is one of the important indicators for evaluating competitiveness and the financial sustainability of Islamic banks , and then achieve maximizing profits is the most important goal that Islamic banks pursue, as it enables them to maintain their continuity and survival, strengthen their financial position, increase their ownership rights and enhance their financial solvency and liquidity, which requires Islamic banks employing depositors' money in a manner that achieve maximizing returns to increasing their ability facing obligations and probability risks .

Islamic banks have been selected in the Kingdom of Saudi Arabia because the Kingdom of Saudi Arabia is the largest market for Islamic finance globally, where Islamic banks in the Kingdom represent one of the most important networks of Islamic finance in light of a dual banking system that combines conventional and Islamic banking, and Islamic banks in Saudi Arabia account for 38% of the total Islamic finance globally, so the article focused on studying the situation of Financial to present a method for measuring the profitability of Saudi Islamic Banks in order to increase the global competitiveness of Islamic banks in the Kingdom.

The study attempts to explore the performance and efficiency of the banking sector in Saudi Arabia and the role of Islamic banking in the profitability, during the period 2005-2019 by employing different measures to study various bank specific variables.

Problem of study :

Determining and measuring the factors affecting the profitability of Islamic banks represents a great challenge because the determinants of profitability in Islamic banks launched their indicators affected by the traditional financial theories that depend on calculating profitability factors indicators commensurate with the traditional banks by calculating the lending ratios, and the mathematically determined credit risks in total loans And the ratios of investments, loans and advances to total deposits, and from this point of view, the research problem lies in the following main question:

What are the profitability measurement indicators compatible with Islamic financial theories in Islamic banks in Saudi Arabia?

The following sub-questions are derived from it:

1- What is the impact of cash liquidity ratios on the profitability of Saudi Islamic banks?

2- What is the impact of the capital adequacy ratio on the profitability of Saudi Islamic banks?

3- What is the impact of the rate of return on investment on the profitability of Islamic banks in Saudi Arabia? the importance of studying:

The importance of this study stems from the importance of the Measuring factors to achieve profitability in Islamic banks. In addition to that, Measuring the profitability factors of Islamic banks and focusing on the most important of these factors can be placed before the administrative

decision-maker in those banks to work on guidance by focusing on the Measuring of profitability of these banks.

Review of Literature :

By following up on the previous literature to study the profitability of Islamic banks, we find that most of the articles focused on comparing the effect of some variables in the GCC countries on the profitability of both Islamic and conventional banks banks (Ashraf and Dia Or-Rehman, 2011; Jaffar and Manarvi, 2011 Hanif et al., 2012; Siraj and Pillai, 2012; Usman and Khan, 2012) and these studies relied on the use of cross-sectional time-series method ((data panel) ,The results show thaT bank's equity is important i increasing conventional banks profitability only , while there is an inverse relationship between the cost-to-return variable in both conventional and Islamic banks, in addition to a positive statistically significant correlation between the size of the bank and the profitability ratio, according to the rate of return on assets index, while this relationship is not available in conventional banks, which leads to It indicates an increase in the ability of the Islamic bank to achieve economies of scale in the banking services it provides compared to conventional banks, while GDP is positively correlated, and inflation has shown a negative correlation with profitability of both Islamic and conventional banks. While the study of (Almazari, A.A. and M.A. Almumani, 2017) aimed to measure the impact of the determinants of profitability (return on assets (ROA), the size of operating income, the size of the bank's assets, and asset management on the operational efficiency of five Saudi banks during the period (2006-2010) based on Following quantitative approaches to measure the extent of the impact of financial efficiency on the profitability of the banks under study, and the results of the regression analysis indicated a significant effect between operational efficiency and asset management, total size of banking assets, and return on assets, which was reflected on the increase in profitability in the study sample, depending on the Analysis of the results of the correlation between the study variables, and despite that, the results of the multiple regression analysis indicated that the independent variables do not affect the profitability efficiency of the Saudi banks under study, and the study did not provide a logical justification for this result. However, a study by Masoud et al., 2017) aimed to measure the determinants of profitability in Saudi conventional banks during the period 1999-2007, using the enhanced Dickey-Fuller test, the Johansson co-integration test, and the causal Granger test to verify co-integration and causation. The relationship between return on assets (ROA) and return on equity (ROE). The study proved the existence of a co-integration between the variables.

The study of (Haroun, 2017) came to the inventory of the internal and external factors that affect the profitability of Islamic banks and found a significant correlation between the internal factors (liquidity, total expenses, funds invested in Islamic securities, the percentage of profit sharing ratio between the bank and borrower funds) and the level of total income received by Islamic banks. He found almost the same effects with respect to external factors such as bank size, interest rates and market share. Also (Salam et al. 2019,) tried to study the main determinants that affect the profitability of Islamic banks in Pakistan during the period 2007 to 2014, using internal indicators, indicators specific to the banking sector and indicators related to the macroeconomics, the internal indicators represented in the return on equity and return on assets to measure the profitability of banks Islamic banks, the size of the bank, deposits and finance/investment), while the market share represented the indicators of the role of Islamic banks at the level of the banking sector in the industry, while inflation and GDP were used as external economic factors, and the research relied on the use of linear regression analysis to verify the relationship between variables with Return on

equity and return on assets as profitability, the survey results showed that size, financing and market share positively affected return on equity and return on assets, but deposits, GDP and inflation are negatively affected. Return on equity and assets are affected. The study of (Javed and Al Alawi, 2020) relied on examining the internal and external determinants affecting the profitability of Saudi Islamic banks during the period 2000 to 2013, through the application of unbalanced panel data and a strong model for the fixed effect of regressions, and the use of banks' financial statements as internal data, industry-specific variables, and Macroeconomics for the period of the study concluded that all of the characteristics of the bank, the characteristics of the industry, and macroeconomic variables play an important role in determining the profitability of Islamic banks. Their results showed that while capital adequacy and debt ratios had a positive impact, operating expenses had a negative impact on profitability in the Saudi Islamic banks under study.

A Study (Merhej, Hammouda, and Mazek, 2014) The research identified the factors affecting the profitability of commercial banks in Syria, and arranging them according to their relative importance, which is a group of internal and external factors that affect the profitability of these banks. These factors came in the following order: economic and political conditions, employment of resources, legal legislation and banking controls, profits or Stock losses, loan profits or losses, monetary policy, deposit structure, liquidity, interest rates, social culture and banking awareness, bank size, bank management, number of bank branches, competition, age of the bank, number of bank employees.

A Study (Alzoubi,Tareq, 2018) This research uses a fixed effect panel data analysis on a large sample of 68 banks (42 Islamic and 26 conventional banks) from 13 MENA countries, covering the period of 2006 until 2016. Using several variables, including bank size, equities to assets, loans to assets, deposits to assets, cash to assets and securities to assets, the results show that bank size, equities to assets and deposits to assets have a significant positive effect on Islamic banks' profitability, while they have a significant negative effect on conventional banks' profitability; loans to as-sets and cash to assets have no effect on bank profitability for either Islamic or conventional banks; and securities to assets has a significant negative effect on Islamic banks' profitability, while it has a significant positive effect on conventional banks' profitability. The results also show that bank size, equities to assets, deposits to assets and cash to assets contribute more to Islamic banks' profitability compared to conventional banks, while loans to assets and securities to assets contribute more to conventional banks' profitability compared to Islamic banks.

A study (Al-Jarah & et al ,2010) The impact of a set of internal and external determinants on profitability in Jordanian banks during the period 2000-2006 was studied, then profitability was measured by the rate of return on assets and the rate of return on property rights. The study concluded that the most important internal determinants of profitability during that period are the ratio of loans to total assets, the ratio of operating expenses, the capital structure, the ratio of deposits, the ratio of non-operating expenses, and the study showed that money supply and inflation are the most important external determinants of profitability during the study period.

A study (Sabry, Muqeem, 2014): The study showed that the most important indicators for measuring profitability in commercial banks according to two models: the rate of return on assets (ROA), and the rate of return on equity (ROE). With conducting an applied study in the Algerian BADR Bank through a model of regression analysis and simple linear correlation to determine the

effect of determinants as independent variables on the profitability of commercial banks as a dependent variable.

Study (Al-Hamd, Abd Al-Salam, 2013) The aim of the research is to study the internal determinants of Islamic banks by applying to Jordanian Islamic banks through the use of a multiple regression model using unbalanced aggregate data for Islamic banks. The results showed that the return on the assets of Islamic banks is affected positively and statistically by both capital adequacy, credit risk and management efficiency. The study concluded that the risks, credit other than interest, and the efficiency of operating expenses management affect positively and statistically the profit margin of the Jordanian Islamic banks.

A study (Deger and Adem, 2011) : The study aimed to investigate the impact of some banking determinants and some quantitative economic policy determinants on the profitability of banks. The profitability of Turkish banks during the period 2002 to 2010 was measured. The results of the study with regard to the determinants of banking showed a positive and statistically significant relationship between the size of the bank and income without interest with profitability, while the relationship was negative and statistically significant between the size of the credit portfolio and profitability.

A study (Asma & et al, 2011): The study clarified the determinants of profitability for Islamic banks in Malaysia, and a set of determinants were tested, including capital adequacy, credit risk, bank liquidity, bank size, and operating expenses management. The study concluded that the size of the bank is the only variable influencing a statistical indication of the profitability of Islamic banks in Malaysia.

The differences between previous studies and the current study:

Based on previous studies, and in the field of adding to the previous efforts, and the desire to narrow the gap between what has been achieved and what must be achieved in this field, it is possible to present the main differences between the current study and previous studies, which clarifies the most important areas of potential contribution of the current study to the following: -

The current study deals with the internal determinants and factors that affect the profitability of Islamic banks in the Kingdom of Saudi Arabia.

The current study focuses on Islamic banks in the Kingdom during the periods of emergence (separately) until the year 2019, and by focusing that study on the Islamic banking sector in time and place, it thus moves away from generality as much as possible, and the study also uses descriptive analysis method, and quantitative economic measurement supported by many indicators Statistics, including the requirements of the nature of the analysis in determining those determinants.

Previous studies that studied the determinants of profitability of Islamic banks, their indicators were influenced by the traditional financial thought, so indicators were calculated and profitability factors commensurate with traditional banks were calculated by calculating lending ratios, mathematically determined credit risks of total loans, and the ratios of investments, loans and advances to total deposits (see The previous study of Al-Hamd, Abd Al-Salam, 2013), and therefore this study was not influenced by traditional financial thought and proves the philosophical specificity on which Islamic banks are based.

The current study can contribute to the focus of Islamic banks in the Kingdom of Saudi Arabia on the factors that can increase profitability and thus put those determinants before the

administrative decision-makers in those banks to increase the size of those factors and activate their effects on profitability.

Study hypothesis:

The following hypotheses will be tested: -

- There is a statistically significant effect between the cash liquidity ratios and the profitability of Islamic banks in the Kingdom of Saudi Arabi.
- There is a statistically significant effect between the capital adequacy ratio and the profitability of Islamic banks in the Kingdom of Saudi Arabia.
- There is a statistically significant impact between the rate of return on investment and the profitability of Islamic banks in the Kingdom of Saudi Arabia.

Spatial and temporal research limits: Determining the internal factors affecting the profitability of Islamic banks will be addressed by application to Islamic banks in the Kingdom of Saudi Arabia (Al-Rajhi, Al-Bilad, Al-Enma, Al-Jazeera), according to the available data from the inception of those Islamic banks until the end of 2019.

Research Methodology :

The research relied on the descriptive approach in identifying the determinants of profitability in Islamic banks and methods of measuring them.

Despite the multiplicity of methods for measuring the profitability of Islamic banks, the research relied on the method ARDL of the data, which is one of the Statistical parameter methods, which depends on the data published in the financial statements of Saudi Islamic banks in addition to the small size of the study sample prevents use other methods of evaluation which require unpublished internal data that are difficult to obtain from the Islamic banks under study banks It.

Description of the study variables and how to measure them:

Dependent variable (profitability of banks):

Return On Asset (ROA) :

This indicator shows the relationship between the profit of operations and the assets that contributed to achieving this profit, and it expresses the bank's ability to achieve profits as a result of investing its assets, and it is the ratio of the profit of operations carried out by the bank to the assets of this bank (Hammad, & et al, 1999).

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= NP/ATA

Where:

(ROA) : Return on assets , (NP) : Net profit ,(ATA) : Average total assets.

This equation is very comprehensive because it includes the assets components in addition to the income statement elements that are directly related to the operating operations and are based on the concept of net profit resulting from operating profits.

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.

It is calculated through the following equation:

ROE= NI/ASE

Where:

(ROE): Return on Equity , (NI): Net Incom , (ASE): Average shareholders' equity.

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. (Qureshi, 2005).

Independent variables (internal determinants of the profitability of Islamic banks):

Liquidity ratios:

Liquidity ratios generally measure the ability of banks to meet customer withdrawals, especially those with current accounts and short-term deposits, and there are several indicators that Islamic banks can rely on to identify the level of liquidity:

-- Cash Ratio / Total Deposits (current + investment) : This ratio measures the ability of an Islamic bank to return deposits through the cash available to it that it can directly control.

-- Liquid Assets Ratio / Total Deposits: This ratio measures the extent to which the bank can return deposits that are quick to demand by clients, through the liquid assets available to it, represented by cash in the treasury and balances with the Central Bank and other Islamic banks, in addition to the assets that are easily converted into liquidity without Or the least losses.

-- Liquid assets / total assets ratio: This ratio is used to determine the relative importance of liquid assets to the bank's total assets group, thus contributing to identifying the liquidity position in relation to the rest of the bank's various uses.

Liquid Assets Ratio / Total Assets = Liquid Assets (Cash + Quasi-Monetary) / Total assets (liquidity + financing and investment.

-- The ratio of liquid assets / financing and investment balances: This ratio shows the relative importance of liquid assets compared to the financing and investment balances of the Islamic bank, which enables the bank to determine the appropriate areas of use that it practices.

Liquid Assets Ratio / Financing and Investment Balances = Total Liquid Assets (Cash + Quasi-Monetary) / Total Financing and Investment Balances.

--Liquid assets ratio / total liabilities: This ratio measures the bank's ability to pay its various obligations, whether these liabilities are deposits or other obligations, through what is available to it from liquid assets represented in cash in the treasury and balances with the Central Bank and other Islamic banks, in addition to To what he owns of assets that are easily converted into liquidity without or with minimal losses.

Liquid Assets Ratio / Total Liabilities = Liquid Assets (Cash + Quasi-Monetary) / Total liabilities (deposits + other liabilities). (ElMassah, & et al ,2019)

Capital adequacy ratio:(CAR)

It is the ratio of the bank's capital to its risk. It illustrates the relationship between the bank's capital sources and the risks surrounding the bank's assets and any other operations.

It is defined as the ability of the bank's capital to pay obligations and maintain the rights of the depositors, in addition to preserving the relationship between the bank and its customers, and in this way it provides protection against any risks to the bank, and it has the ability to generate added value for the bank. (El-Ansary, Hafez, 2015)

The capital adequacy ratio is a tool for measuring the solvency of the bank and its ability to pay its obligations and face any losses that may occur in the future, which protects banks from

falling into financial crises. At the same time, it brings reassurance to depositors, and according to the regulations regulating banking activity, each bank must abide by a certain ratio of total capital to assets, which is the so-called capital adequacy criterion. The Basel III Committee has approved the required ratio of capital adequacy at 10.5% of the total Capital to assets in the bank.

The capital adequacy criterion is one of the most important criteria used in evaluating banks. The higher the capital adequacy ratio, the higher the bank's rating. If the value of the bank's assets decreases as a result of non-payment, the bank uses the internal resources of shareholders (capital) to cover losses in the value of the findings.

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.Rate of return on investment in Islamic financing formulas: (ROI)

Refers to the financial returns obtained by the Islamic bank, and it expresses the relationship between employing the funds obtained from depositors and investing them in Islamic financing formulas and the value of the return on investment in those formulas, provided that they are used on an ongoing basis to verify the feasibility of investments. Carried out by the bank on the financial level ((Nwude, 2016)

It is calculated as follows:

ROI= RI/TI

Where:

(ROI) : Rate of return on investment, (RI) : returns on investment in Islamic financing formulas, (TI) : Total investments for those formulas %.

The higher the percentage of return on investment, the better the investment.

The goal of calculating the return on investment is to determine the feasibility of investing in these formulas. Thus, this will help to know the concept of return on investment and its importance in addition to the factors that must be taken into account while calculating the return on investment

2-The model for measuring the profitability of Saudi Islamic Banks:

This study aimed to measure the profitability of Islamic banks during the period (2004-2019) For Saudi Islamic banks, which consist of four banks (Al-Rajhi, Al-Bilad, Al-Jazira, and Al-Iman Bank) ,the ARDL-Panel and PMG models has been used ,to estimate the study regression model variables, The data sources relied on The data used in this study have been assembled using a diversity of sources, such as SAMA and Argaam. This was to allow the construction of an integrated database of Islamic banks in the Kingdom of Saudi. Thus, there is a panel on four of Islamic banks from 2004 to 2019. These four Islamic banks included are: Al-Bilad, Al-Inma, AlJazira Bank, and Al-Rajhi.

The data contain information on return on assets (ROA), Rate of return on investment (ROI), Capital adequacy ratio (CAR), and total liquid Assets (TLA) . Return on equity (ROE) 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.

3- **Estimating the regression equation to measure the profitability of Saudi Islamic banks (panel ARDL approach)** :

This section discusses the methodological framework necessary for estimating the determinants of profitability in Islamic banks in Kingdom of Saudi. The relation between return on assets (ROA) and Rate of return on investment (ROI), Capital adequacy ratio (CAR) and total liquid Assets (TLA) will be tested with dynamic panel ARDL. This method is superior regardless of whether the underlying regressors exhibit I(0), I(1) or a mixture both (Pesaran and Shin 1998) with a time span of over 20 years, the macro panel data method can be implemented ,to obtain the relationship between Return on Asset (ROA) and Rate of return on investment (ROI), Capital adequacy ratio (CAR) and total liquid Assets (TLA):

$$y_{it} = \alpha_i + \sum_{l=1}^{p} \beta_0 y_{i,t-l} + \sum_{l=0}^{q} \beta_1 d_{i,t-l} + \sum_{l=0}^{q} \beta_2 x_{i,t-l} + u_{it} \qquad (1)$$

By reparameterising eq. (1):

$$\Delta y_{it} = \alpha_i + \Phi_i (y_{i,t-l} - \theta_1 d_{i,t-l} - \theta_2 x_{i,t-l}) + \sum_{l=1}^{p-1} \lambda_{il} \Delta y_{i,t-l} + \sum_{l=0}^{q-1} \lambda'_{il} \Delta d_{i,t-l} + \sum_{l=0}^{q-1} \lambda''_{il} \Delta x_{i,t-l} + u_{it} \qquad (2)$$

with i and t representing sector and time respectively, y is return on assets (ROA), d is Rate of return on investment (ROI) and Capital adequacy ratio (CAR), x is a total liquid Assets (TLA). Notation λ, λ' , λ'' are the short-run coefficients of the lagged dependents variables. The long-run coefficients are θ_1 and θ_2. Lastly, Φ_i shows the speed of adjustment. The PMG restricts long-run equilibrium to be homogenous across banks, while allowing heterogeneity for the short-run relationship. The short-run relationship focuses on the bank specific heterogeneity, which might be caused by different

responses of stabilization policies, external shocks or financial crises for each. The MG estimator allows for heterogeneity in the short-run and long-run relationship. To be consistent, this estimator is appropriate for a large number of countries. For a small number of N, this method is sensitive to permutations of non-large model and outliers (Favara, 2003). Indeed, pooled Mean Group (PMG) estimator will be used (Pesaran and Smith 1995; Pesaran et al. 1999).

The summary statistics are reported in Table 1.

Table 1.

Summary statistics of four Islamic banks in the Kingdom of Saudi data

Variable	N	Mean	Std Dev	Minimum	Maximum
A. Dependent variable:					
ROE	44	3.892798	4.855162	.0209	17.36
B. Independent variables:					
Rate of return on investment (ROI)	44	3.089377	6.790075	.0496	44.4
Capital adequacy ratio (CAR)	44	16.02881	29.9656	.1382	183
Total liquid assets (TLA)	43	9.448685	16.32447	.0612	57.08

4. Empirical results

Our empirical analysis is start by checking whether the variables are non-stationary. To this end, we conduct a panel unit root tests for all our variables. Several tests are conducted: Im and al. (2003) test (IPS), Levin and al. (2002) test (LLC), which assumes cross-sectional independence. According to IPS and LLC unit root tests summarized in Table 2 Capital adequacy ratio variable showed that the data is non-stationary in level and is integrated of order one. However, Return on Equity (ROE), Rate of return on investment (ROI), and total liquid assets (TLA) variables are stationary.

Table 2. Unit Root Test

Variables	Levels		First Difference	
	IPS	LLC	IPS	LLC
ROE	-1.3253	-16.4634***	-2.4213***	NA
ROI	-1.7979**	--	NA	--
CAR	-1.2994	2.1150	-2.7456***	-1.9066**
TLA	-2.3789***	--	NA	--

***denotes rejection of a unit root at the 1% level of significance and **denotes rejection of a unit root at the 5% level of significance.

As previously stated, the panel ARDL method can be utilized to account for long-run and short-run relationships, even for the case of non-stationary variables but without cointegration. The PMG method is used in this study.

Table 3. ARDL estimation

D.ROE	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
ROI	1.394442	.4303454	3.24	0.001	.5509802 2.237903
CAR	-.2728111	.4049889	-0.67	0.501	-1.066575 .5209525
TLA	.1063872	.0469286	2.27	0.023	.0144088 .1983656
ECM	**-.3797002**	**.0836406**	**-4.54**	**0.000**	**-.5436328 -.2157676**
D1. ROI	-.4516864	.4881444	-0.93	0.355	-1.408432 .505059
D1.CAR	1.035861	.4086766	2.53	0.011	.2348695 1.836852
D1.TLA	.521176	.3016641	1.73	0.084	-.0700747 1.112427
Cons	.0117257	.3132604	0.04	0.970	-.6022534 .6257048

Source: Calculated by the researcher based on the financial statements of the Islamic banks under study.

Table 3, show that The ECM has a significant negative sign for the error correction term which implies that this model converges to a long-run relationship. Long-run results show that the Rate of

return on investment and total liquid assets variables has a significant positive effect on , Return on Equity index. Although, Capital adequacy ratio has non-significant effect and negative sign. The short-run estimation shows that Capital adequacy ratio and total liquid assets variables have a significant positive effect on , Return on Equity . Therefore, short-run Islamic banks profitability responds positively to the increase in Capital adequacy ratio and total liquid assets. The results revealed that a higher ratio of Capital adequacy ratio and total liquid assets lead to higher profit margins. These results are intuitive and consistent with previous studies. They indicate that adequate Capital adequacy ratio and total liquid assets play an empirical role in explaining the Islamic banks profitability. Banking regulators can use this as evidence for swift prudential action.

1. Summary and Conclusions

Previous studies have identified the reasons and Measuring of profitability in Islamic banks influenced by the traditional financial thought, which considers that the interests of loans represent profits for the traditional bank, which is in line with the philosophy of traditional banks. While this study considers that the rate of return on investment (ROI) is one of the determinants of the profitability of the Islamic bank, and therefore it is considered an independent variable, and a determinant of the determinants of profitability, which distinguishes this study.

After applying the ARDL method based on PMG analysis to measure the impact of the dependent variable (represented by the profitability of Saudi Islamic banks, which was measured according to the ROE index) on the independent variables in the model, which are represented in liquidity ratios, capital adequacy ratio, rate of return on investment in Islamic financing formulas .

According to the statistical significance and correlation tables, the multiple linear regression function representing the model variables was estimated, and the study concluded:

- The results showed that the rate of return on investment and the variables of total liquid assets have a significant positive impact on the return on assets index and then on the profitability of Islamic banks in the Kingdom of Saudi Arabia in the long term. This is due to the long-term nature of the returns resulting from the use of Islamic financing formulas (Musharaka, Mudaraba, Murabaha...),

and therefore it is difficult to observe the correlation between the rate of return on investment and profitability in the short term.

On the other hand, the study showed that there was no significant correlation between the capital adequacy ratio and the profitability rates of Saudi Islamic banks. This contradicts the principles of bank finance, which indicate that there is a direct relationship between the capital adequacy ratio and profitability rates due to the negative effect of leverage; Raising capital adequacy requires increasing equity by increasing the bank's capital, in addition to keeping more profits in the form of unused reserves. The bank's data during the study period showed a growth in retained earnings by about (1.6%). Which leads to canceling the positive impact of increasing the capital adequacy ratio on profitability in Saudi Islamic banks, and with reference to other explanatory variables, the coefficient of return on assets and return on equity is positive and significant, as both reflect the sound financial position of Saudi banks. A bank with a sound capital position is able to pursue business opportunities more effectively and has more time and flexibility to deal with problems arising from unexpected losses, thus achieving increased profitability.

The results of the study indicated a significant correlation between the profitability of Saudi Islamic banks and the bank's total liquid assets in both the short and long term, due to the Saudi Islamic banks' reliance on the use of treasury bills to reconcile the liquidity and profitability objectives of the Islamic bank , and The long-term nature of the returns generated by the use of Islamic financing formulas (Participation, speculation, and Murabaha) .

The results of the study showed a positive relationship between the rate of return on investment and the profitability of Saudi Islamic banks. This is due to the Saudi Islamic banks' reliance on debit formulas such as the Ijarah and Murabaha formula because of the lower risks associated with their use compared to the potential risks in the participation formulas.

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