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# The Impact of liquidity risk management on financial performance of the Islamic banks in Egypt

#### **Abstract**

Liquidity risk Management is vital to sound banking practice. Undoubtedly today all banking organizations face uncountable risks such as liquidity risk which can cause failure of a banking system. So, a good risk management practice is necessary for the existence and the development of banks. Therefore, the aim of this study is to examine the efficacy of risk management practice that is liquidity risk their impact on financial performance of Islamic banks. Liquidity risk is measured by loan to deposit ratio, cash to total asset ratio. Financial performance measure representations were Return on assets (ROA) and Return on Equity (ROE). Data are piece from 2013–2017 which is taken from the financial reports of Islamic banks. Regression analysis has been used to extract the results. The result of this study determined that how this liquidity risk will affect the bank financial performance in Egyptian Islamic banks.

**Key words:** Return on assets (ROA); Return on Equity (ROE); Liquidity; Cash to Total Asset Ratio; Loan to Deposit Ratio; Islamic Banking.

### ملخص البحث

إدارة مخاطر السيولة أمر حيوي للممارسة المصرفية السليمة. فمما لا شك فيه اليوم أن جميع المؤسسات المصرفية تواجه مخاطر لا تحصى مثل مخاطر السيولة التي يمكن أن تسبب فشل النظام المصرفي لذلك ، فإن الممارسة الجيدة لإدارة مخاطر السيولة تكون ضرورية لوجود البنوك وتطويرها. تهدف هذه الدراسة إلى دراسة مدى فاعلية ممارسة إدارة مخاطر السيولة من ناجية تأثيرها على الأداء المالي للبنوك الإسلامية. تقاس مخاطر السيولة باستخدام نسبة القروض إلى الودائع ، ونسبة النقد إلى إجمالي الأصول (ROA)

البيانات مأخوذة من ٢٠١٣-٢٠١٧ من التقارير المالية للمصارف الإسلامية. تم استخدام تحليل الانحدار لاستخراج النتائج. حددت نتيجة هذه الدراسة كيف تؤثر مخاطر السيولة على الأداء المالي للبنوك الإسلامية المصرية.

الكلمات المفتاحية: العائد على الأصول، العائد على حقوق الملكية، السيولة، نسبة النقدية إلى أجمالي نسبة الأصول، نسبة القروض إلى نسبة الودائع، المصرف الإسلامي.

#### 1. Introduction

One of the most important functions of banks is the transfer of benefits, that is, the ability to obtain financing from short-term deposits so as to finance long-term loans. As a result of this behavior, banks are exposed to liquidity risk. Liquidity risk occurs when the Bank is unable to meet its financial obligations without incurring costs. Therefore, liquidity risk management can be defined as a systematic process to ensure that anticipated and unforeseen cash needs are met at reasonable costs. From a liability's perspective, liquidity risk arises when depositors withdraw funds in one go or in large quantities, while from the asset side, banks are exposed to liquidity risk if demand for loans increases. In the financial system, banks' liquidity can be branded into two types: funding (or liability) liquidity risk and market (or asset) liquidity risk. While, market-liquidity risk is related to the banks' inability to easily offset or sell assets at the market price as a result of inadequate market strength or market disturbance, funding-liquidity risk associated to the risk whereby the bank is not able to meet efficiently its obligations as they become due (Basel Committee on Banking Supervision, 2019). In fact, most banks failures, whether they are Islamic or conventional, are due to the difficulties in managing their liquidity needs (Abdul Majed, 2003).

In the past decades, most Islamic countries have adopted structural reforms in light of the increasing size, stability and efficiency of financial systems. Openness abroad and internal structural reforms of the financial sector are two independent processes, and they work for the same purpose, the development of a competitive and effective financial system. Islamic financing is an increasingly recognized phenomenon in global financial markets. It originated in the Middle East, where the growth rates of equity financing today exceed conventional banking assets (eg in Egypt,Saudi Arabia, Bahrain, Kuwait and Qatar). In 2014, nominal bank assets grew by 34% in the GCC (EY, 2015). As a result, equity financing has become systematically important in the Middle East, but also in Asia (IMF, 2017). In 2015, total nominal financial services worldwide totaled US \$ 1.88 trillion, of which US \$ 1.497 trillion are nomi-

nal banking assets (IFSB, 2016). So, Islamic finance is a type of financing activities that must comply with Sharia (Islamic Law). The concept can also refer to the investments that are permissible under Sharia.

The common practices of Islamic finance and banking came into existence along with the foundation of Islam. However, the establishment of formal Islamic finance occurred only in the 20th century. Nowadays, the Islamic finance sector grows at 15%–25% per year, while Islamic financial institutions oversee over \$2 trillion. The main difference between conventional finance and Islamic finance is that some of the practices and principles that are used in the conventional finance are strictly prohibited under Sharia laws.

(https://corporatefinanceinstitute.com/resources/knowledge/finance/islamic-finance/).

Islamic banking has grown widely over the last thirty years all over the world through the emergence of an ever-increasing number of banks, branches, accounts and the amount of capital that is invested (Khan, 2010). Good testimony supporting this claim is that many international conventional financial institutions such as Citigroup, ABN Amro, Bank of America, Standard Chartered, Union Bank of Switzerland, HSBC, JP Morgan, Barclays, Kleinwort Benson, Deutsche Bank and Lloyds TSB are now offering Islamic finance services through their Islamic windows. Consequently, the Islamic financial industry has become an essential player in the global financial market. Furthermore, since 1999 both the Dow Jones and FTSE provide specialised indices for Shari'ah compliant activities since 1999 (Khan, 2010; Aggarwal and Yousef, 2000). Thus, it can be stated with conviction that Islamic banking is considered considered as one of the fastest developing industries, with a growth rate that doubles every passing year(Mohammad, 2013).

Therefore, this paper provides an overview of the inherent principles of Shari'a and the main guidelines of Islamic finance in relation to liquidity risk. In addition, the focus is on the implementation of specific technologies and

policies as well as the initiative to propose special types of supervision to provide high quality services to meet the objectives of Islamic finance and thus develop a better understanding of liquidity risk management.

As a result of the development and changes in the nature of banking businesses, Islamic banks are exposed to very different kinds of risks. Many factors play significant role in the occurrence of risks, such as increased volatility in the market; rapid development of financial innovations; and increases or changes in competitive and regulatory environments (Iqbal and Mirakhor, 2007). Besides the risks that conventional banks face, Islamic banks have to deal with additional types of risks (See figure 1).

Risk Profile of Islamic Banking Business Risks Governance Risks Financial Risks Credit Risk Operational Risk Rate of Return Risk Market Risks Transparency Risk Displaced Mark-Up Risk Commercial Risk Fiduciary Risk Liquidity Risk Sahariah Risk A/L Mismatch Risk Solvency Risk Equity Risk Reputation Risk Islamic Banks

Figure 1: Risk Profile of Islamic Banking

Source: Iqbal & Mirakhor (2008) (Modified).

As the interest-based loan is prohibited by Shariah, liquidity risk is more serious for Islamic banks as compared with their conventional counterparts (Ahmad and Khan, 2001). For instance, Islamic banks cannot utilize the financial instruments used for liquidity risk management which are accessible on the market to conventional banks such as the inter-bank market, the secondary market for debt instruments, and discount windows from the lender of the last resort; this being the central bank. Such discount windows and debt instruments are interest-based, therefore, they are not Shariah compliant. Nevertheless, it has been observed that liquidity risk can play a critical role in bringing financial crisis to the doorstep of Islamic banks. All the categories of risks such as credit risk, operational risk etc., conclude in the structure of a liquidity problem for individual banks and the banking sector as a whole; therefore, it sometimes becomes hard to study these risks in an isolated manner (Ali, 2004), as each one of them is interlinked.

Egypt has now Shariah-compliant operators including three full-fledged Islamic banks; Faisal Islamic Bank of Egypt, Al Baraka Bank-Egypt, and Abu Dhabi Islamic Bank.

Those banks have around 234 branches by the end of September 2018 growing 15 percent compared to 2017. The banks provide 40 Islamic services and products to 3 million clients.

Besides, Egypt has also 3 important branches for Islamic services (EG-BANK Islamic banking services is consistent with the principles of Shari'a, Misr branch for Islamic banking services and Ahli branch for Islamic services). An Islamic bank is a bank that complies with the principles of Shari'a in all financing, banking and investment transactions. The Islamic banking sector is expected to widely grow during 2019 after apply the Islamic Sukuk in Egypt (Arabfinace, 2019)

The volume of Islamic banking in Egypt registered 220 billion Egyptian pounds by the end of September 2018 in comparison to 207 billion pounds by

the end of June 2018 and the total financial position of the Islamic banking has reached 290 billion pounds by the end of September 2018, capturing 6 percent of the market share, and that the Islamic deposits have increased to record 250 billion pounds by the end of September 2018 compared to June 2018. Islamic banking has achieved growth rates of 22 percent (The Egyptian Islamic Finance Association, 2019).

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### 2. LITERATURE REVIEW

Ismal (2010a) discussed the liquidity risk management of Islamic Banks of Indonesia and argued that these banks reduce the liquidity risk from both internal and external sources. This is because of Shari'ah values and principles that must be followed. While Vicary (2010) discussed a global overview of liquidity management in Islamic financial institutions. It also investigates the challenges and issues, which affect the effective liquidity management, Shari'ah-compliant, liquidity management risk, liquidity market infrastructures and cross-border, as well as integrated liquidity monitoring and supervision.

Ariffin (2012) analyzed the liquidity risk management and disclosure to show the relationship between banks' financial performance measures and liquidity risks using ROA and ROE of the Islamic Banks in Malaysia during 2006–2008; the study attempts to determine the influence of the worldwide financial crisis on the Islamic Banks liquidity risks and general financial performance. Findings contribute toward enriching the literature on the liquidity risk of the Islamic Banks by providing an in-depth understanding on issues related to liquidity risk management by the Islamic Banks.

Iqbql (2012) viewed liquidity risk management as the larger risk management of both the conventional and Islamic banking sector. This research investigated the size of the bank, NPL ratio, ROA, ROE capital adequacy ratio (CAR) with the management of liquidity risk of CBs versus IBs of Pakistan. Findings indicate a significant positive relationship between liquidity risk management and CAR, ROA, ROE and a bank's size in both banking systems, whereas a significant negative relation of NPL is found in both models.

Sanwari SR, Zakaria RH (2013) investigate the existence of a long-run relationship between conventional interest rates and rates of return on deposit of Islamic banks in the contemporary dual banking systems on a cross-country basis. The study employs ARDL (Autoregressive Distributed Lag) modeling approach to cointegration analysis. The study finds the existence of the long run relationship between rates of return on deposits of Islamic banks and interest rates on deposits of conventional banks during the period 2007 – 2015. The study also finds a bidirectional causal relationship running between rates of return on deposits of Islamic banks and conventional interest rates. The study statistically provides empirical insight into the relationship between the rate of return on deposits of Islamic banks and the conventional interest rate on a cross-country basis using an ARDL model. Ramzan M, Zafa MI (2014) build up a study to review the factors affecting liquidity risk management in Islamic banks of Pakistan. The data collected is from 2007-2011 where the authors used financial data of 5 Islamic banks. Permanent cause, OLS analysis has been applied. The analysis exposed statistically positive relationship of asset base or size of the bank and with liquidity risk in the predictable hypothetical model, whereas the rest of the net operating capital depicts statistically irrelevant relationship with liquidity risk. Ferrouhi EM (2014) build up a study to

assess the performance of major Islamic banks of Morocco. In Morocco, the author used financial data of the six Islamic banks, where the data collected was from 2001 to 2011. It was applied Pooled Ordinary Least Square (POLS). His findings were based on the standard ranking of each ratio, showed that the liquidity of Islamic banks in Morocco is better than others. The study of Ahmed N, Akhtar MF, Usman M (2011) build up a study to review the Islamic banks of Pakistan: a proportional study between Conventional and Islamic banks. The data collection is from 1994– 2009 where the authors have used financial data from 17 Islamic banks. It has been applied to Correlation and OLS analysis. The consequences suggest that total assets (size) are negatively related to liquidity. ROA positively correlates with liquidity. The provision of liquidity by the Islamic banking plays an important role in inflation and past inflation variables (CP). The gross domestic product is extensively directly comparative. In both models CAR negatively relates to liquidity.

The research of Nevine Sobhy, A. M. (2017) aims to analyze and compare the effectiveness of liquidity risk management of Islamic and conventional banking in Egypt to ascertain which of the two banking systems are performing better. A sample of six conventional banks (CBs) and two Islamic banks (IBs) in Egypt was selected. Using the liquidity ratios, the investigation involves analyzing the financial statements for the period of 2004–2011. The data were obtained from Bank scope database. The research found that in Egypt, CBs perform better in terms of liquidity risk management than IBs. The liquidity risk management significant differences between IBs and CBs could be attributed more cash availability to CBs than to IBs, in addition, Egyptian Central Bank regulations on capital and liquidity requirements for IBs disconcert IBs' performance.

Effendi and Disman (2017) analyze also the influence of micro-economy or bank-specific to the liquidity risk in Islamic and conventional banks. The data in this study using secondary data consists of 20 Islamic banks and 12 conventional banks obtained from seven countries, namely Albania, Saudi Arabia, Bahrain, Malaysia, Dubai, Qatar and Indonesia from 2009 to

2015. This research method is based on quantitative techniques using panel data regression. The results showed that in the Islamic and conventional bank found the best model is the fixed effect model. The variables that affect the liquidity risk in Islamic banks are the CAR, FEXP, FLP and NPF. While the variables that affect liquidity risk in conventional banks are FEXP, FLP, NPL and ROA. In Islamic banking NIM, ROA and SIZE does not affect the liquidity risk, and CAR, NIM and SIZE not affect the liquidity risk in Conventional banks.

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The role of IBs is very important for investors, depositors and business institutions. Liquidity risk is one of the important issues that face these banks in Egypt. Thus, more studies and efforts are required to rate and scale liquidity risk management.

#### 3. RESEARCH METHODOLOGY

### 3-1 Sample and Data Collection

For this study, the sample data of consists of 3 Egyptian Islamic banks. The explanation of the time frame is all available data of 2013 to 2017. The type of sample which I used is convenes sampling.

Data for each year have been compiled from the financial statements of the two sets of those banks. The data for all banks in the sample was compiled from a Bank scope database, with a few individual banks' data compiled from the annual reports from their respective websites. The collated secondary data derived from the bank's financial statements and were transformed into percentages and ratios.

#### 3-2 Research Model

$$Y1 = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 3X3 + \varepsilon$$

*Y*=Dependent variable

 $\alpha$  =intercept of the line

 $\beta$  =Regression coefficient

X=Independent variable

 $\varepsilon$  =Error term

### 3-3 Model Specification

The following regression models will be used to test for the determinants of financial performance

$$ROE = \alpha 1 + \beta 1 (CTA) + \beta 2 (LTD) + \varepsilon$$
  
 $ROA = \alpha 1 + \beta 1 (CTA) + \beta 2 (LTD) + \varepsilon$ 

Where:

 $\alpha$  = Intercept

.CTA = Cash to Total Asset Ratio

LTD = Loan to Deposit Ratio

 $\alpha$  = Error Term

Liquidity risk is the independent variable of this study. Explanation of dependencies and independent variables along with their representations are specified in table, and the list of Islamic banks that are considered for this study are specified in table. Descriptive, correlations and regression analysis are applied to study and evaluate the effects of independent variables on the dependent variable.

Dependent Variables=Return on Equity, Return on Assets

Independent Variables=Cash to Total Asset Ratio, Cash to deposit Ratio

### 3-4 Schematic Diagram

The researcher checks the correlation of dependent and independent variables. In this research, Loan to deposit ratio and cash to total asset ratio are independent variables and the dependent variable is Return on Asset (ROA), Return on equity (ROE) (Figure 2).

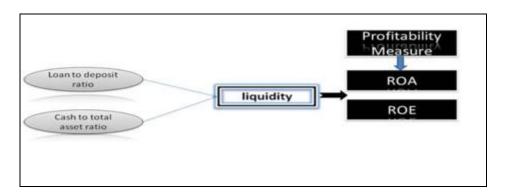


Figure 2 (Liquidity Risk management model )

### 3-5 Hypothesis

The researcher alternate hypothesis estimates a positive impact of liquidity risk management on the financial performance of overall Egyptian Islamic banks.

There are H1 and H2 are arranged in the following manner:

- H1: ROA is positively correlated with the impact of liquidity risk management on the financial performance of overall Egyptian Islamic banks.
- H2: ROE is positively correlated with the impact of liquidity risk management on the financial performance of overall Egyptian Islamic banks.

 $\alpha = 5\%$ 

Decision Criteria=Reject H0, if P value is less than  $\alpha$ . Or "Accept" H0, if P value is greater than  $\alpha$ 

#### 4. EMPIRICAL ANALYSIS

# **Descriptive Study**

Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a representation of the entire population or a sample of it. Descriptive statistics are broken down into measures of central tendency and measures of variability, or spread. Measures of central tendency include the mean, median and mode, while measures of variability include the minimum and maximum variables, and the kurtosis and Skewness. The descriptive analyses are conducted on all variables. There are two profitability indicators (ROA and ROE) and independent variables have positive mean values ranging from 0.78 to 11. On the additional, standard deviation measures the dispersion figures. The higher standard deviation value is (8.322). In contrast, the lower standard deviation is 0.22. ROA and cash to total asset ratio are negatively twisted. On the additional loan to deposit ratio and ROE are positively skewed. The probability values of all variables also

show significant results. Because its values are less than 5%, which shows normality in the data (Table 1).

Table 1: Descriptive statistic Overall Egyptian Islamic Banks

	ROA	ROE	Loan_to_deposit	Cash_to_Assets
Mean	0.70400	1.05000	3.91260	16.18299
Median	0.70600	1.05400	3.93576	16.20390
Max.	0.71622	1.08862	11.65562	25.12433
Min	0.60123	1.01252	0	3.24789
Std. Dev.	0.023586	0.028544	4.85460	4.08065
Skewness	0.001543	0.20112	0.87463	1.11547
Kurtosis	1.183984	1.45418	2.225873	2.70749
Probability	0.003385	0.14752	000122	0.00014
Sum	21.2224	32.4791	121.214	480.123
Sum Sq. Dev	0.032145	0.04891	855.121	1001.21
Observations	30	30	30	30

The regression analysis is a domain form to estimate the risk management in the Islamic banking sector. When variables are stationary, then pool regression is applied to data after that run the random effect model and fixed effect model. After running both the models Hausman test is applied, which gives the suggestion for which model is best to be applied to the fixed model or random mode. Hausman null hypothesis representing that a random model is appropriate and alternative hypothesis fixed effect is appropriate. If the null hypothesis is rejected then fixed effect model can be applied, but if Hausman suggests that the random effect model is applied and then Lagrange test is applied to justify either the random effect model is better or pool is better. After that OLS assumption test is run to check the multicollinearity and there is no issue of multicollinearity in the data. Heteroscedasticity which is null hypothesis is constant variance and the alternative is no constant variance. The models specified in the study were estimated using Ordinary Least Squares (OLS) multiple regression. The regression analysis was carried out SPSS statistical software. The panel data were obtained from the financial statements of the 6 banks. The first result is that of ROE as the dependent variable, while the second one is that of ROA.

After applying the Hausman test the above mention table shows the result. The probability value is greater than 5%. It means we cannot reject the alternative hypothesis and accept the null hypothesis that is a random effect model is appropriate for our research.

The estimated regression result presented in Tables 2a and 2b is satisfactory in terms of the algebraic signs of the coefficients as they conform to our a priori theoretical expectation. Specifically, the predictable equation shows that loan to deposit ratio and cash to total asset ratio are increasing functions of return on equity.

Table 2a: ROE.

Test Summary	Chi-Sq. Statistic		Chi-Sq. d.f	•	Prob			
Cross-section random	0		2		1			
Cross-section test variance is invalid. Hausman statistic set to zero.								
WARNING: estimated co	WARNING: estimated cross-section random effects variance is zero.							
Cross-section random effects test comparisons:								
Variable	Fixed	Rar	ndom Va	r(Diff.)	Prob.			
Loan_to_deposit_ratio	0.000266	0.000	0.0	00000	1.0000			
Cash_to_total_asset_rati	0.003668	0.003668		00000	1.0000			

Table 2b: ROE

Variable	Coefficient Std. Error		t-Statistic	Prob		
С	0.98841	0.011366	77.216	0		
Loan_to_deposit_ratio	0.000266	0.000542	0.695	0.61		
Cash_to_total_asset_ratio	0.003668	0.000550	4.741	0		
Effects Specification  Cross-section fixed (dummy variables						
R-squared	0.695047	Mean dependent var		0.688		
Adjusted R-squared	0.322274	S.D. dependent var		0.214		
F-statistic	2.444531	Durbin-Watson stat		2.218		
Prob F-statistic	0.002136					

On the other hand, a percentage increases in loans to deposit ratio and cash to total asset ratio. It would affect the return on equity positively 0.000266 percent and 0.003668 percent respectively. This means that there is a positive significant relationship between Loan to Deposit Ratio and profitability indicator ROE in other words, as Loan to Deposit Ratio increases the Bank profitability also Increases. Vice versa on the other hand Cash to total Asset ratio shows insignificant on profitability indicator ROE.

The statistical characteristics of the equation are quite strong. All the coefficient estimates are statistically significant at the 5 percent level. This is because the prob (t-static) of the coefficient estimates are less than 0.05 which by inference from statistical decision theory is indicative of statistical significance. The R2, coefficient of determination, of 0.695047 is quite high. It indicates an excellent goodness of fit of the estimated regression line. This means that if we plot the actual data to the estimated regression line most of the data will cluster around it. In addition, the R2 shows that 69.50 percent of the total variation in returns on the asset is explained by the joint influence of independent variables. The balance 30.50 percent is explained by other variables

not taken by the model which is why the stochastic error term was specified in the econometric model.

The overall regression result is statistically significant at the 5 percent level. This assertion is based on the F-statistic with a value of 2.444531 and probability (F=statistic) which is less than 0.05 and thus is statistically significant in line with statistical decision theory. The Durbin-Watson statistic of 2.218 thus, the t- statistic, R2 and F- statistic are statistically reliable and the entire regression result is acceptable. According to Mule et al. the DW statistic values in the range of 1.5 to 2.5 are relatively normal. Further, Field suggests that values under 1 or more than 3 are a definite cause for concern. The consequence also showed the Loan to Deposit Ratio and has an insignificant relationship with probability indicator ROE because the probability value in greater than 5% which can be interpreted as the acceptance of the null hypothesis. On the other hand, Cash to Total Asset Ratio has a positive relationship with ROE because its probability value is less than 5%, which can be interpreted as the rejection of the null hypothesis. After applying the Hausman test the over mention table shows the result. The probability value is greater than 5%. It means we cannot reject the alternative hypothesis and accept the null hypothesis that is a random effect model is appropriate for our research.

Result and Discussion The estimated regression result presented in Tables 3a and 4b is satisfactory in terms of the algebraic signs of the coefficients as they conform to our a priori theoretical expectation. Definitely, the estimated equation shows that loan to deposit ratio is decreasing function of return on asset. The estimated equation shows that cash to total asset ratio is increasing function of return on asset.

## Table 3a: ROA

Test Summary	Chi-Sq. Sta	tistic Chi	i-Sq. d.f.	Prob.			
Cross-section random	0		2	1			
Cross-section test variance is invalid. Hausman statistic set to zero.							
WARNING: estimated cross-section random effects variance is zero.							
Cross-section random effects test comparisons:							
Variable	Fixed	Random	Var(Dif	f.) Prob.			
Loan_to_deposit_ratio	-0.003011	-0.003011	0.0000	00 1.0000			
Cash_to_total_asset_ration	o 0.000480	0.000480	0.00000	1.0000			

# Table 3b: ROA.

Variable Co		pefficient	Std. Error	t-Statistic	Prob		
C		0.68845	0.006166	66.216	0		
Loan_to_deposit_ratio -		0.003011	0.000271	-2.695	0		
Cash_to_total_asset_ratio (		0.000480	0.000288	1.141	0.021		
Effects Specification							
Cross-section fixed (dummy variables							
R-squared		0.595032	Mean dependent var		0.592		
Adjusted R-squared		0.552235	S.D. dependent var		0.021		
F-statistic		6.547522	Durbin-Watson stat		2.114		
Prob F-statistic		0					

Conversely, a percentage decrease in loans to deposit ratio would affect return on asset negatively 0.003011percent and increase cash to total asset ratio would affect return on asset positively 0.000480

The statistical characteristics of the equation are quite strong. All the coefficient estimates are statistically significant at the 5 percent level. This is because the prob (t-static) of the coefficient estimates are less than 0.05 which by inference from statistical decision theory is indicative of statistical significance. The R2, coefficient of determination, of 0.706048 is quite high. It indicates an excellent goodness of fit of the estimated regression line. This means that if we plot the actual data to the estimated regression line most of the data will cluster around it. In addition, the R2 shows that 59.5 percent of the total variation in returns on the asset is explained by the joint influence of independent variables. The balance 40.50 percent is explained by other variables not captured by the model which is why the stochastic error term was specified in the econometric model. The general regression result is statistically significant at the 5 percent level. This assertion is based on the F-statistic with a value of 6.547522 and probability (F=statistic) which is less than 0.05 and thus is statistically significant in line with statistical decision theory. The Durbin-Watson statistic of 2.114 thus, the t- statistic, R2 and F- statistic is statistically reliable and the entire regression result is acceptable. According to Mule et al. the DW statistic values in the range of 1.5 to 2.5 are relatively normal. Further, Field suggests that values under 1 or more than 3 are a definite cause for concern. The outcome also showed the Loan to Deposit Ratio and has a significant relationship with probability indicator ROA because the probability value is less than 5% which can be interpreted as the rejection of the null hypothesis. On the other hand, Cash to Total Asset Ratio has a significant relationship with ROA because its Probability value is less than 5%, which can be interpreted as the rejection of the null hypothesis.

#### 5. CONCLUSION

This paper draws mutually the main findings of the observed results of the research study, including the implications of the findings, the limitations of

the study and recommendations for future research. As until that time stated, a country's economic development, among numerous other factors, is based on its financial sector's performance, particularly the financial institutions working in that country; with the banking sector being the most outstanding. Due to the banking sector's considerable role in the welfare and loyalty of any economy, it is authoritative to constantly monitor and evaluate banks' financial performance to guarantee that the economy's financial sector is operating proficiently. Accordingly, the principle of this research was to estimate the financial performance of Egyptian Islamic banks over the period 2013/2017 using the regression model. The precise objectives of the study were to explore the performance of Islamic banks using; loan to deposit ratio, cash to total asset ratio and liquidity as financial performance determinants.

The conclusion of my objective was achieved through descriptive statistics, and it was fulfilled that Egyptian Islamic banks in a loan to deposit, cash to total asset ratio, while they are weaker in liquidity management. Financial position is determined by the financial statements of the relevant sector. The results of ratio analysis of profitability made clear that the return on asset or return on equity of Islamic banks is affecting the management of liquidity risk. Banks are the financial sector of our economy. Islamic banks are known sector of our economy and get profit and growth day by day. Islamic country the banks of this country follow the Islamic rules and principles in banking and give knowledge to his customers or other people through some network that what is Islamic banking? And which products and functions are performed by Islamic banks as compared to Commercial banks. We can't neglect the role of Islamic banks in achieving a big contribution to the economic development of the Egyptian economy day to day. Islamic banking attracts consumers or people to invest money and maximize profits according to Islamic law and within the limits of Islamic law. What is the return on total income is determined by the ratios. Islamic banking grows rapidly both in size and number day to day. The day will also come when Islamic banking is come to a large sector of our economy like Commercial banking and generate higher profits like Commercial banks. Islamic banking or Islamic products or function are the need of our economy nowadays because our economy is too much filled with interest-based businesses which are forbidden in Islam. Banks generate further cash for the economy by turning deposits into loans. Our study shows that deposits have a positive association with bank liquidity. Bonner et al. also had similar findings. On the other hand, Alger and Alger and Kashyap et al. found a negative relationship between deposits and bank liquidity. This finding implies that with an increase in deposits, banks should also increase their liquidity holding so that a bank run can be avoided in case of high deposit withdrawal (Kashyap AK, Rajan R, Stein JC (2002)). Loan to total assets ratio Cash to deposit ratio has a positive and significant impact on the profitability (ROA, ROE) of overall commercial banks with the 5% significance level. This outcome shows that when the increase in the loans to total assets ratio cash to deposit ratio will generate the income that increases the profitability of overall commercial banks. This also found the similarity in the studies of Faisal, HusniKhrawish et al. and Syafri [13-17]. Limitations and Recommendations for Future Research Area For the occasion, study works like to recommend the readers to explore the factors which affect the profitability, liquidity risk of commercial and Islamic banks. When we will know those factors, we can suggest better use of resources to enhance profitability, the liquidity of commercial and Islamic banks. If we know the factors affecting the profitability and find the better use of resources to manage those factors, we can lead small size banks to better profitability, which will lead to dividend payments and ultimately increase in shareholder's wealth value as well.

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