

The Impact of Liquidity on Islamic Bank's Profitability

Faiza Maqbool

Abstract— Islamic Banking is a key area in economies of all Muslim countries, where customers are willing to invest their money in banks which are in accordance to Shariah and Islamic laws. In Pakistan it is also a growing field and now customers are more aware of investments and products that are prohibited in Islam and demand those products and processes that are Halal. In Pakistan number of Islamic banking institutions has reached to 19, among which 5 are full-fledged Islamic private commercial banks and the rest are conventional banks with Islamic banking branches. These institutions are following all the requirements that are necessary to pursue a Halal transaction. This study is an attempt to find the profitability and liquidity relationship of full-fledged Islamic banks operating in Pakistan. Key variables used to identify the direction and strength of the relationship among profitability and liquidity are Return on Asset (ROA), cash to total assets, investment to total assets and net advances to total assets. This study has analyzed the panel data through simple regression analysis. Results show that liquidity has inverse relationship with Islamic banks profitability.

Index Terms— Islamic Banks, Profitability, Liquidity, Return on Asset, Advances Net to Provision to Total Assets Ratio, Investment, s Loan Turn Over.

1 INTRODUCTION

Islamic banking is banking followed by the rules and principles of Islam and in accordance with Shariah rules and obligations. Islamic banking is also viewed as interest free banking strategies to satisfy customer needs and demands and also to create those economic activities which add value to economic system. Islamic banks are playing pivotal role in the development of financial sector. Although the financial sector of Pakistan is dominated by conventional banks but due to the arising need of customers towards Islamic banking products and processes, a small sector consisting of Islamic banks is now present in the financial sector of Pakistan. Many commercial banks have developed their Islamic banking systems for their customers. Islamic banking is one of the most growing field in Islamic countries.

Over a last decade many full-fledged Islamic banks are introduced in the economy and so many customers are shifting their accounts from conventional to Islamic banks. Competitions among conventional banks and different innovated financial products of conventional banks give hard competition to Islamic banks. It is very difficult for Islamic banks to design new product in accordance with the Shariah law to compete among traditional banks. Liquidity is one of the key factors that drive a bank's performance and profitability.

This study is an attempt to find out the key relationship of banks profitability and liquidity by focusing on liquidity ratio of full-fledged Islamic banks of Pakistan. Generally all liquid investment earns low or little profit, due to which overall profitability of bank is also hurt. In case of Islamic banks this is very critical decision because usually Islamic banks do not invest in interest bearing securities. Banks profitability and

liquidity are inter-related to each other

In previous studies it was found that banks profitability and liquidity have negative relationship. This research is an effort to check the relationship of banks profitability and liquidity of full fledged Islamic banks in Pakistan. The focus of this research paper is liquidity as independent variable and profitability as dependent variable. Liquidity of banks are measured with cash to total assets, investment to total assets and advances net to total assets. Profitability of a bank is measured through return on Assets.

2 LITERATURE REVIEW

It was analyzed that in the case of conventional banks of US and Canada there is a impact of liquid assets on bank profitability. Banks that hold some liquid assets have improved profitability. But after optimum level of liquid assets holding, the bank's profitability is decreased. It is also observed that this relationship differs depending on bank's business model and the economy structure of a country.

It was found that in the European, North American and Australian conventional banks from 1972 to 1981 the direct relationship exists between liquid assets and banks profitability.

Different ratios are used in statistical test to find out the relationship between profitability and liquidity. A direct relationship exist between the ratio of bank loans to total assets, LOANTA.

It was shown from previous studies that banks that are well capitalized have access to less risky sources of funds which improve banks profitability.

The relationship between the bank performance and internal characteristics of Islamic banks were analysed through several bank ratios and it was concluded that banks profitability have positive relation with capital accumulation and negative relation with loan ratios. This finding is consistent with studies held previously. Some other factors which are major

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factors for any banks profitability also include taxes and macro economic factors.

Another study by Saira Javaid on internal factors of bank's profitability shows that capital, loans and total assets play pivotal role in any banks profitability. The study shows that higher total assets do not mean that bank is generating higher profits. Higher loans definitely increases the profitability of banks but one interesting fact which is observed here is that if a bank is showing losses than higher loans have negative impact on its profitability. ROA always react positively with Total deposit to total assets and total equity to total assets.

Past studies on Islamic bank profitability over the period of 2006-2009 have documented that profitability of Islamic banks also hurt upon mismanagement of assets and liabilities.

3 METHODOLOGY

This study is conducted on purely Islamic banks of Pakistan. This study only includes five banks because they are the only Islamic banks operating in Pakistan. It includes Meezan bank, Bank Islami, Dubai Islamic bank, Burj Bank and Al-baraka Islamic bank.

The variables in this research paper are liquidity and profitability. Liquidity is an independent variable and measured through cash to total assets, investment to total assets and advances net to total assets ratios. The dependent variable in this study is profitability and is measured through return on assets. This study is purely based on only internal factors that affect banks profitability. The data gather in this paper is purely secondary data and collected for six consecutive years that is from 2007 to 2012. The data is gathered from financial statements and publications, published by banks and State bank of Pakistan. Simple regression is used in this study to analyze the relationship of liquidity and profitability.

4. RESEARCH QUESTION:

The impact of liquidity on Islamic bank's profitability.

Hypotheses:

H01 = There is no relationship between the Islamic bank's profitability and cash to total assets ratio.

HA1 = There is relationship between the Islamic bank's profitability and cash to total assets ratio.

H02 = There is no relationship between the Islamic bank's profitability and investment to total assets ratio.

HA2 = There is relationship between the Islamic bank's profitability and investment to total assets ratio.

H03 = There is no relationship between the Islamic bank's profitability and advances net to provision to total assets ratio.

HA3 = There is relationship between the Islamic bank's profitability and advances net to total assets ratio.

5 DATA ANALYSIS

Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
CTA	30	6.68	27.76	12.9873	5.16160	.946	.427
ITA	30	7.98	55.55	26.4980	11.18016	.632	.427
AD	30	27.43	59.49	41.8863	9.80563	.340	.427
ROA	30	-3.03	1.51	-.1983	1.26875	-.703	.427
Valid N (listwise)	30						

Descriptive statistics shows that the variables are normally distributed and regression can be applied to these variables to identify the relationship among them. All the values of skewness lie between the range of 1 and -1, so we consider them to be approximately normally distributed. Cash to total assets and investment to totals assets are positively skewed, advance to total assets is also positively skewed. ROA is negatively skewed.

H01 = There is no relationship between the Islamic bank's profitability and cash to total assets ratio.

HA1 = There is relationship between the Islamic bank's profitability and cash to total assets ratio.

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.159 ^a	.025	-.009	1.27475	.025	.728	1	28	.401	.759

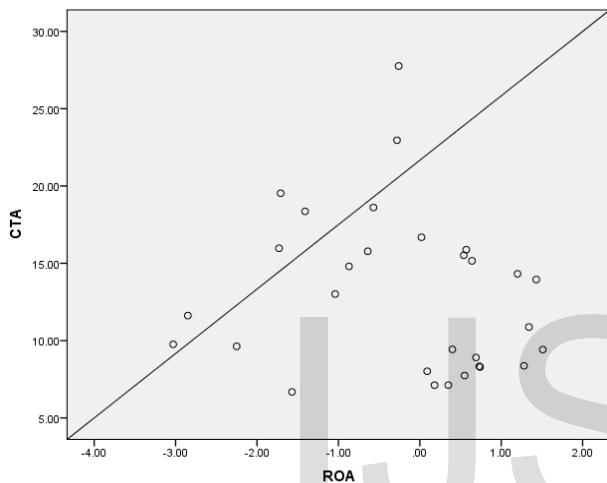
a. Predictors: (Constant), CTA
b. Dependent Variable: ROA

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.310	.639	.484	.632	-1.000	1.620
	CTA	-.039	.046	-.853	.401	-.133	.055

a. Dependent Variable: ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.298 ^a	.089	.056	1.23261	.089	2.726	1	28	.110	.748

a. Predictors: (Constant), ITA
b. Dependent Variable: ROA



For hypothesis1:

It is analyzed by the model summary that R2 that is the coefficient of variation which show goodness of a model fit represent that 2.5% of variance in ROA is being explained by CTA. Durbin Watson Statistic shows that it is positively auto correlated.

The coefficient table is very important as it drives the equation.

$$ROA = 0.310 - 0.39 X$$

The scatter plot shows that they have if CTA is low that ROA will be high.

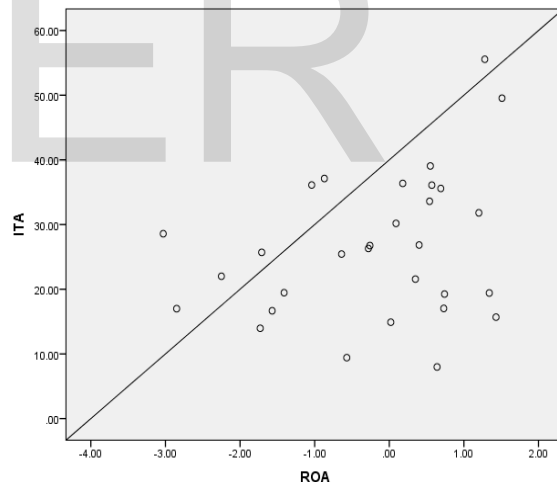
The equation above shows that there is an inverse relationship so the null hypothesis is not rejected.

H₀₂ = There is no relationship between the Islamic bank's profitability and investment to total assets ratio.

H_{A2} = There is relationship between the Islamic bank's profitability and investment to total assets ratio

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.094	.587	1.863	.073	-2.297	.109
	ITA	.034	.020	1.651	.110	-.008	.076

a. Dependent Variable: ROA



For hypothesis 2

It shows that only 5.6 % in variance in dependent variable is predicted by investment to total assets.

$$ROA = -1.094 + 0.39 X$$

The regression equation and scatter plot show positive relationship so we reject the null hypothesis and says that if investment in total assets is high they will generate high ROA.

H₀₃ = There is no relationship between the Islamic bank's profitability and advances net to provision to total assets ratio.

H_{A3} = There is relationship between the Islamic bank's profitability and advances net to total assets ratio

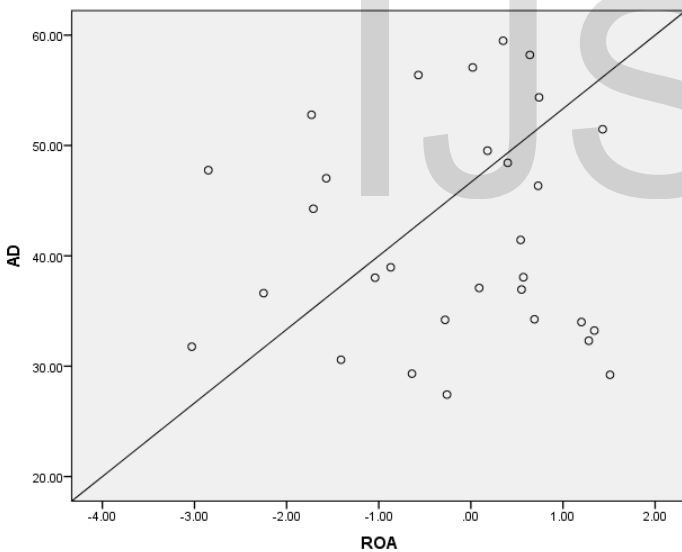
Model Summary ^b

Model Summary ^a										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.019 ^a	.000	-.035	1.29098	.000	.010	1	28	.922	.753

a. Predictors: (Constant), AD

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Beta	Lower Bound
1	(Constant)	-.300	1.051	-.286	.777	-2.453	1.852
	AD	.002	.024	.019	.922	-.048	.053

a. Dependent Variable: ROA



For hypothesis 3

It shows that only 3.6 % in variance in dependent variable is predicted by advances.

$$ROA = -.300 + 0.002 X$$

The regression equation and scatter plot show positive relationship so we reject the null hypothesis and conclude that as advances increases, ROA will also be increased and all the Statistics supports this relationship

6 CONCLUSION

This study concludes that in case of Islamic banks if liquidity is measured by cash to total assets ratio, than high cash gives low profitability.

If it is measured by investment to total assets than positivity is clearly examined. Higher investments give higher profitability.

In case of Islamic banks advances net of provision of total assets shows high co linearity with ROA and positive relation is identified.

By conducting the study on relationship between liquidity and Islamic bank profitability is is concluded that they inverse relationship. Investment to total assets predicts that if bank invest more in assets than liquidity will be low and profitability will be high.

It shows that Islamic banks also experience negative relationship between liquidity and profitability

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