

STABILITY OF ISLAMIC BANKS: EVIDENCE FROM NIGERIA

Fatima Muhammad Dabarako^a, Nissar Ahmad Yattoo^b, Tijjani Ridwanlah Adewale^c

^aDepartment of Islamic Studies, International Open University, The Gambia.

^{b,c}Department of Islamic Economics and Banking, International Open University, The Gambia.

ABSTRACT

This research studies the stability of Islamic banking through a closer observation of Jaiz Bank Nigeria. The study covers a period of seven (7) years (covering 2012 to 2018). Z-score has been used as a proxy for Bank Stability (SB) in order to derive the values of SB. Bank data as well as descriptive statistics were used. An analysis of the impact of macro-economic variables (Inflation and Δ GDP) on the Return on Assets (ROA) of Jaiz Bank as well as the ROA of some five conventional banks in Nigeria selected for the purpose of comparison. The SB figures of these banks were also compared to verify the most stable, over this period of seven years. The use of tables was employed to make data readable at a glance. This study found that Jaiz Bank is consistent with theoretical studies which expect a positive correlation of profitability with Δ GDP and a negative correlation with a rise in inflation and vice-versa. The conventional banks on the other hand were not consistent. Some of the banks behaved in a similar manner to Jaiz Bank at some point while some others had no clear pattern. However, the bank stability derived by SB(K) and SB(ROA) indicated that, conventional banks are more stable while SB(CAR) figures shows that Jaiz Bank is second, only to Access Bank and Jaiz Bank maintained smaller Stdv figures indicating a much smaller variation in the figures and therefore more stability.

KEYWORDS: Islamic Banking, Z-score, Banking Stability (SB), Capital Asset Ratio (CAR), Return on Assets (ROA), Conventional Banking, Risk.

1. INTRODUCTION

Bank Stability (SB) is the ability of the bank to be solvent and remain viable in difficult economic conditions by means of capital reserves. Usually, instability results from two factors: microeconomic factor, where the financial institution depends heavily on debt. The second factor is the macroeconomic factor which is due to high inflation and over leveraging. According to Minsky (1995) during periods of economic boom investments in speculative activities tend to increase and such investments are financed through debt. This causes a rise in interest rates. A persistent rise in interest rates weakens the financial system. Thus, detachment from the real financial system is the major reason for instability in the financial market. This has put Islamic finance under the spotlight in the world economy since the occurrence of the world economic crisis of (2007-8).

There have been numerous research studies since the 1980's on Islamic finance. Most of them were theoretical in nature; however, more recent research focuses on empirical studies. According to MI (2021), Islamic financial systems in 2017, grew at the rate of 8.3% worldwide at the total figure of \$2.05trillion against the previous year's (2016) figure of \$1.88trillion. The banking sector accounts for 71% of the total Islamic Finance figures. The other two sectors being Takaful (insurance) and Sukuk (Islamic bonds) account for the remaining 39%. In 2018, the sector expanded by 2% and this implies a retardation in the growth rate. In 2019, there was a growth rate of 14% with the figure reaching USD 1.99 Trillion. In 2020, the global growth rate was estimated at 7.61% showing a fall in the growth rate due to the effects of the pandemic (Covid 19). There was high volatility in the first and second quarters of the year-2021. This caused Islamic financial institutions to pay more attention towards protecting their capital base not bothering about expansion.

The promulgation of Banks and other Financial Institutions Decree (BOFID) 24 and 25 in 1991 sets pace to the momentum of Islamic banking (Daud et al., 2011). The bank to first establish an Islamic window was Habib Bank in 2001, then Stanbic Bank in 2008 and Intercontinental Bank in 2010. In 2011, Jaiz Bank began operation as a regional bank in northern Nigeria and subsequently became a full-fledged bank in 2016. As the stability of Islamic banking had already been under discussion long before the world economic crisis, empirical research began to appear after the occurrence of the economic crisis. Some research studies conclude that Islamic banks are more resilient to economics crises compared to conventional banks (Abdul-Majid et al., 2010; Hasan & Dridi, 2010; Miah & Sharmeen, 2015; Odeduntan et al., 2016; Pradiknas & Faturohman, 2015; Srairi, 2010). However, most previous research focused on developed Islamic bank markets such

as Malaysia, Saudi Arabia, and Bahrain to mention a few. As per the author's knowledge no study has been reported in the developing markets of Nigeria to investigate its Islamic banking stability. Furthermore, results from the developed markets may not fully represent developing markets in different environments and economies.

Therefore, this research aims at exploring the stability of Islamic banking in Nigeria through a study of Jaiz Bank from 2012 to 2018. A comparison will also be made of Jaiz Bank and some five conventional commercial banks to ascertain stability. The rest of the paper is organized in the following order: the second section contains the literature review, the third section is the methodology, where the formulae employed to calculate the Z-score which represents the bank stability are discussed. The fourth is analysis and data description where five conventional banks are compared with the Islamic bank (Jaiz Bank). The fifth section is about the impact of macro-economic variables on ROA of the banks. The result of the research is discussed in the sixth section and the final section summarizes and concludes the paper, showing the important points and possible impacts of Islamic banking on the economy.

2. REVIEW OF LITERATURE

The stability of banks has been the focus of attention all the time in world economic policies, but it caught the special attention of economists after the global economic crisis that took place in 2007. During the crisis, banks across the world witnessed a series of failures which led to their collapse. Researchers such as Bilgin et al. (2017); Dietrich and Wanzenried (2011) reported a huge impact of the crisis on the profitability of banks around the world. The funding structure of the banks was reported among the main reasons behind the crisis, as banks based on wholesale funding were affected more than the banks with depository funding. Banks in general suffered losses following the economic crises, but Islamic banks showed stronger resilience during the global financial crisis (DW, 2009).

The stability of banks is associated with proper functioning of the financial system (Belouafi et al., 2015), and both micro as well as macro-economic approaches explain the reasons behind the occurrence of instability in banks (IMF, 2004). Excessive risk, banking efficiency, banking concentration, size of the banking sector, government effectiveness, political stability, regulatory quality, investor protection, corruption control, and unemployment levels are reported among the significant determinants of banking stability. Supporters of Islamic banking report factors like share of equity in financing, market indiscipline, interest rate, investment in unreal assets among the main causes of instability in banks (Belouafi et al., 2015; Chapra, 2008; Minsky, 1995). Risk sharing principle and asset diversity make Islamic banks more resistant to adverse shocks

(Boumediene & Caby, 2009). There is a host of empirical evidence specific to the stability of Islamic banks in the available literature.

Hasan and Dridi (2010) analyzed the impact of financial crisis on Islamic and conventional banks, using data from eight countries, Bahrain, Jordan, Kuwait, Malaysia, Qatar, Saudi Arabia, Turkey and the United Arab Emirates, for a total of 120 banks. They tested the effects of crisis on profitability, credit growth and asset growth. Their results showed that Islamic banks had stronger resistance during the early stage of the crisis. Odeduntan et al. (2016) observed that Islamic banks have the potential of absorbing shocks and are not likely to experience financial problems in the immediate term, provided their liquidity ratios are regularly kept under check. Beltratti and Stulz (2012) investigated [the reason] why some banks performed better and [others] poorly during the 2007 and 2008 global financial crisis, using a global sample, they found that better performing banks had fewer leverage and lower returns before the crisis. Positive correlation has been reported between profitability and bank stability. Bashir (2003) noted that many regulators believe that return on assets is the best measure of bank efficiency. According to Jahn and Kick (2012) a safe and sound system ensures the optimal allocation of capital resource, and regulators therefore, aim to prevent costly banking system crisis and their associated diverse feedback effects on the real economy.

3. RESEARCH METHODOLOGY

As Jaiz Bank is the only full-fledged Islamic bank with a national presence in Nigeria, this research tests its stability and performance using appropriate tools (Z-Score and Financial Ratios). Results are compared with five top conventional banks operating in the country- First Bank, GTBank, Eco Bank, Zenith and Access Bank. Z-score and ratio analysis is performed using income statements of the banks from 2012 to 2018. The study tests the following hypothesis:

H₀: Islamic banking is not stable in Nigeria.

H₁: Islamic banking is very stable in Nigeria.

The Z-Score has been used by researchers over the years to find the stability of the banking sector (Belouafi et al., 2015). More than 55% of the studies on the stability of the financial system used the Z-Score stability indicator (Ozili, 2018, 2019). Z-Score is a popular measure of testing the soundness of a bank. It has an inverse relationship with the probability of bank insolvency. The higher the Z-score the more stable is the bank. A lower Z-score would indicate high insolvency risk. Regardless of the characteristics that govern the bank, Z-score remains a good measure as it tests the insolvency risk objectively using the bank data. The study employs Z-Score using three different approaches.

Z-Score is expressed as:

$$1. Z = \frac{(\mu ROA + Equity/Asset)}{SROA}$$

Adopted from Houston et al. (2010); Laeven and Levine (2009).

$$2. Z = \frac{ROA (Current Period) + Equity/Asset}{SROA}$$

Adopted from Beck and Laeven (2006); Hesse and Martin (2007).

$$3. Z = \frac{\mu ROA + CAR}{SROA}$$

Adopted from Uhde and Heimeshoff (2009).

Where:

Z= Stability of the Bank (SB).

μ = the Average performance of banks assets (ROA).

K= Equity as a percentage of total assets (CAR).

δ =the standard deviation of ROA as a proxy of the volatility of returns.

Stability of bank= f(Macro economic factors, bank variables specified and financial structure).

Thus, we have 3 research equations

$$SB(K) = c + \Delta GDP + CAR + INFL + ROA + DP + BC + NPL + EFF + e$$

$$SB(CAR) = c + \Delta GDP + CAR + INFL + ROA + DP + BC + NPL + EFF + e$$

$$SB(ROA) = c + \Delta GDP + CAR + INFL + ROA + DP + BC + NPL + EFF + e$$

Where:

SB= Stability of the bank.

C = Constant.

Δ GDP= The state of the economy measured as a change in real economy i.e., gross domestic product.

CAR=Capital Adequate Ratio (of the bank).

INFL= Inflation rate.

ROA= Profitability of the bank measured as Returns on Assets.

DP= Depth of financial system.

BN= Banking Concentration.

NPL= Ratio of Non-Performing Loan to gross loan (in this case, the ratio of non-performing investment to gross investment –*Mudarib*).

EFF= Efficiency of the bank measured as a cost of income ratio.

e =error term.

Table 1 below, gives the various definition of variables.

Table 1. Definition of variables

Definition of Variables		
SB	Bank Stability	$Z = \frac{\mu + k}{\sigma}$
C	Constant Variables	Those that can't be measured
Δ GDP	Change in per capital income	-
CAR	Capital Adequacy Ratio	$\frac{Tier1capital + Tier\ 2Capital}{Risk\ Weighted\ Asset}$
INFL	Inflation rate	-
ROA	Return on Assets	$ROA = \frac{Profits}{Total\ Assets}$
DP	Depth of Financial System	Size of the Institution in the industry
BC	Bank Concentration	Level of Bank's Concentration
NPL	Ratio of Non-Performing Loan	It has an inverse relationship with stability
EFF	Bank's Efficiency	$Eff = \frac{Cost}{Income}$

Source: The Author

4. ANALYSIS

4.1 Descriptive

Table 2, reports the statistics of Jaiz Bank compared to other conventional banks over the period under study (2012 to 2018). The monetary figures of assets, equity, liabilities, return on equity and profits are all in billions in the local currency (Naira). It is observable that the assets of Jaiz Bank have continued to increase rapidly over this period of seven years. The bank began operation with assets worth N14billion and by 2018, its assets had grown to over N100billion.

Table 2. Jaiz Bank Data and other Six Banks Compared

Bank	2012	2013	2014	2015	2016	2017	2018	
Jaiz Bank	Assets	14114813 000	33915651 000	44427942 000	52639244 000	66053824 000	87312609 000	1.08426 E+11
	Equity	10101866 000	10965994 000	11228685 000	11407407 000	13143784 000	13679148 000	131091 62000
	ROA	-0.052	-0.022	0.016	0.017	0.005	0.006	0.009
	CAR	77.0	71.0	63.0	-	27.0	33.0	21.0
First Bank	Assets	27706750 00	32465770 00	34908710 00	33323750 00	22510000 00	37770380 00	389141 2000
	Equity	37217600 0	35070900 0	42304700 0	45974700 0	48608700 0	57984200 0	584944 000
	ROA	0.026	0.018	0.022	0.011	0.022	-	-
	CAR	0.19	0.17	0.16	0.17	0.18	-	-
GT Bank	Assets	16203172 23	19043657 95	21266083 12	22776292 24	26133400 74	28249289 85	271252 1494
	Equity	28654000 0	32964700 0	34402189 9	40560834 8	47691785 3	58434436 1	511842 259
	ROA	0.053	0.045	0.042	0.041	0.049	0.057	0.062
	CAR	-	-	-	0.18	0.20	0.25	0.22
Zenith Bank	Assets	24368860 00	28786930 00	34238190 00	98784000 00	42837360 00	49554450 00	483365 8000
	Equity	43800300 0	47262200 0	51270700 0	54694600 0	61635300 0	70752500 0	675032 000
	ROA	0.041	0.033	0.027	0.010	0.028	0.031	0.034
	CAR	-	0.26	0.19	0.22	0.20	-	-

Source: Collected from Banks' Yearly Statements of Account.

4.2 Model

Z-score measures the disparity of variables from the default value. A high Z-Score indicates low risk, because it implies larger disparity from the insolvency risk. The reverse is the case, where a low Z-Score would imply high risk. The bank's stability figures calculated are represented by Z1, Z2, and Z3 represent the SB (K), SB (CAR) and SB (ROA) respectively.

Table 3 shows the bank stability figures across the seven years under study. For Jaiz Bank, the values of SB (K) and SB (ROA) are very close with very little and insignificant variations. Both are 28 in 2012 and end with 4 in 2018. While the SB (CAR) were larger at 30.7 but are regressed over the years till it has reached 8.4, in 2018.

Table 3. SB Figures of the Seven Banks Over the years Studied

	SB(K)	28.6	12.9	10.1	8.7	7.9	6.3	4.8
Jaiz Bank	SB(CAR)	30.7	28.3	25.2	0.0	10.8	13.2	8.4
	SB(ROA)	28.5	12.9	10.1	8.7	8.0	6.3	4.7
	SB(K)	12.67	10.17	11.14	12.41	20.31	14.44	14.14
First Bank	SB(CAR)	17.55	15.76	14.85	16.85	16.73	-	-
	SB(ROA)	12.6	10.2	11.4	13.0	20.3	-	-
	SB(K)	23.0	22.5	21.0	23.1	23.7	26.9	24.5
GT Bank	SB(CAR)	-	-	-	23.6	25.7	32.8	28.1
	SB(ROA)	3.0	22.5	21.0	23.1	23.7	26.7	24.5
	SB(K)	18.5	16.9	15.5	5.7	14.8	14.7	14.4
Zenith Bank	SB(CAR)	-	26.8	19.6	22.7	20.6	-	-
	SB(ROA)	28.6	16.9	15.5	5.7	14.8	14.7	14.4
	SB(K)	-	-	13.52	13.22	15.07	18.03	-
Eco Bank	SB(CAR)	-	-	-	-	-	-	-
	SB(ROA)	-	-	13.52	13.22	15.55	18.04	-
	SB(K)	34.20	33.84	36.44	28.45	28.45	37.98	28.52
Access Bank	SB(CAR)	56.47	46.21	-	-	51.34	46.21	43.64
	SB(ROA)	-	33.8	36.4	28.5	28.4	38.0	28.5

Source: The Author

Access Bank has the largest figures of SB (K) and SB (ROA), showing the least risk of insolvency compared to other six banks. However, its Standard deviation values are quite large. This implies wide disparity of the SB values over the years from the mean. Consequently, there is a great deal of fluctuation in its SB (K) and SB (ROA). GT Bank comes second in line. Yet, it has more consistency in the SB (K) and SB (ROA) values as indicated by the Standard deviation figures which are quite low, indicating very small disparities from the mean values. Zenith Bank and Eco Bank come third, with both banks having very close figures though Eco Bank has lower Stdv than Zenith Bank. Next is First Bank with lower SB (K) and SB (ROA) figures and high Stdv. However, Jaiz Bank is the least stable bank by this measure of SB (K) and SB (ROA). Its Stdv figures are also very large, second only to Access Bank.

On the contrary, the SB (CAR) shows a very different result. This measure puts Jaiz Bank at an advantage because it has very large CAR ratios since Islamic banks are based on real assets. By this measure, Jaiz Bank is second to Access Bank. Yet Jaiz Bank has a smaller Stdv figure which implies smaller disparities from the mean value. Jaiz Bank is however, at par with GTBank. While Jaiz Bank has a mean value of (16.65), GTBank has a mean value of (15.75) but GTBank has a smaller Stdv (3.93) as against (8.04) for Jaiz Bank. Meaning that the disparity of SB (CAR) figures from the mean is smaller in GTBank. Table 4 shows the descriptive statistics of all five conventional banks in comparison with Jaiz Bank (Islamic bank).

Table 4. Descriptive Statistics Table

Bank	Bank Stability	Median	Minimum	Maximum	Mean	Stdv
	SB(K)	8.7	4.8	28.6	11.32	8.04
Jaiz Bank	SB(CAR)	13.2	8.0	30.7	16.65	11.5
	SB(ROA)	8.7	4.7	28.5	11.30	8.04
	SB(K)	12.67	11.14	20.31	13.73	3.26
First Bank	SB(CAR)	16.73	14.85	17.55	9.75	8.01
	SB(ROA)	12.6	10.2	20.3	13.5	4.0
	SB(K)	23.1	21.0	26.9	23.5	1.82
GT Bank	SB(CAR)	24.7	23.6	32.8	15.75	3.92
	SB(ROA)	23.7	3.0	26.7	23.5	1.8
	SB(K)	14.8	5.7	18.5	4.4	4.1
Zenith Bank	SB(CAR)	20.1	19.6	26.8	12.8	12.2

	SB(ROA)	14.8	5.7	28.6	14.4	4.0
	SB(K)	14.3	13.22	18.03	16.55	2.20
Eco Bank	SB(CAR)	-	-	-	-	-
	SB(ROA)	14.5	13.22	18.04	14.95	2.21
	SB(K)	33.84	28.45	37.98	28.4	13.08
Access Bank	SB(CAR)	46.21	43.64	56.47	34.8	24.2
	SB(ROA)	33.8	28.4	38.0	27.7	12.5

Source: The Author

The descriptive statistics for SB(K) and SB(ROA) figures of Jaiz Bank are very close like the SB figures. The Mean and Median are 11.32 and 8.7 respectively, while the minimum is 4.8, the maximum is 28. The Stdv is 8.04 which indicates a wide disparity. The SB(CAR)'s descriptive statistics on the other hand are: 11.3 for Mean, 8.7 for Median, 8.0 for Minimum and 30.7 for Maximum. The Stdv is 11.5 which shows a wider disparity of figures. In the case of First Bank, the descriptive statistics are: for SB(K) and SB(ROA) Mean 13.73, Median 12.6, Minimum 14.8, Maximum 20.3 and an Stdv figure of 3.3 indicating a small disparity in the figures. The SB (CAR)'s descriptive statistics for First Bank on the other hand are: Mean 9.8, Median 16.7, with an Stdv of 8.0; which is very much larger than the SB(K) and SB(CAR) Stdv. Therefore, First Bank shows more stability by SB(K) and SB(CAR) measure relative to the SB(CAR) measure.

GTBank has a mean value of 23 and a median of 23 with an Stdv of 1.8 for SB(K) and SB(ROA). The values for Mean and Median here are both the same with a very low Stdv. Therefore, it correctly indicates a very small disparity. On the other hand, the Mean and Median of SB(CAR) are 15.7 and 24.7 respectively with an Stdv of 3.9. The disparity of SB(CAR) figures are larger for GTBank though it is also small. Eco Bank has 16.5 and 14.3 for Mean and Median respectively, with respect to SB(K) and SB(ROA) and a Stdv of 2.2. This shows low disparity. The SB(CAR) values could not be calculated due to lack of data and consequently, the descriptive data. Access Bank's Mean and Median for SB(K) and SB(ROA) are 28.4 and 33.84 respectively with Stdv 13.1, while the SB(CAR) has 34.8 and 46.2 as Mean and Median figures respectively. The Stdv 24.2 is quite large, which shows a very wide disparity.

4.3 The Impact of Macro Economic Variables on ROA of Banks

Macro-economic variables are expected to affect the stability of banks in the country. It is expected, that a rise in GDP of the country should have a positive impact on the stability of the bank, while the rise in the rate of inflation is expected to affect the bank stability negatively. This

is not always the case, as high inflation rates may have a positive impact on conventional banks. Table 5 shows how the banks' ROA changes in response to the macro-economic variables.

Table 5. Seven years' bank data from conventional banks and macroeconomic variable

Bank		2012	2013	2014	2015	2016	2017	2018
Jaiz Bank	ROA	-0.052	-0.022	0.016	0.017	0.005	0.006	0.009
First Bank	ROA	0.026	0.022	0.022	0.011	0.014	0.006	0.006
Eco Bank	ROA	0.014	0.002	0.014	0.020	0.004	0.005	-
Gtbank	ROA	0.053	.045	0.042	0.041	0.049	0.057	0.062
Zenith Bank	ROA	0.039	0.030	0.026	0.026	0.027	0.032	0.039
Access Bank	ROA	0.022	0.020	0.020	0.025	0.020	0.015	0.029
Macroecono	GDP	4.3	5.4	6.1	4.8	5.0	5.3	5.5
mic variable	INFL	9.3	6.6	6.3	7.0	11.4	10.7	9.5

Source: Author's work (ROA: Return on Assets, GDP: Gross Domestic Product, INFL: Inflation).

The ROA of Jaiz Bank fluctuated a lot. It began with a negative number, and that is expected because the bank had just begun operation. However, it grew and by the third year 2014, the number became positive and above one (1.6%). The year 2014 was the bank's break-even year. The economy had improved and GDP was (6.1%) at its peak. With a relatively lower rate of inflation of (6.3%). As inflation rose in 2015, and GDP dropped, there was a significant drop in the ROA. This continued to drop and fluctuate between 2016 and 2018. Therefore, Jaiz Bank's ROA behaved as expected. It rose with a rise in GDP and a fall in inflation, and vice-versa.

In the case of First Bank, ROA was at 2.6% in 2012 and this is the highest in the period studied. The GDP was low (4.3%) and inflation was high (9.3%), the ROA of First Bank continued to fall until it reached (1.1%) in 2015 and rose slightly in 2016(1.4%), then fell again to (0.6%) in both 2017 and 2018. Although GDP was at its peak in 2014, it did not have any positive impact on the bank.

Eco Bank's ROA in 2012 was 1.4% while inflation was at (9.3%) and GDP was (4.3%). In 2013, the rise in GDP (5.4%) accompanied by inflation (6.6%) did not have any positive effect on ROA (0.2%) of Eco Bank as it only fell further. However, an increase in the ROA (1.4%) occurred in 2014 with a rise in GDP (6.1%) and a fall in inflation (6.6%). ROA fell drastically in 2016 and 2017. Thus, Eco Bank's ROA fluctuated greatly.

GTBank had a relatively high ROA (13.1%) in 2012 during high inflation (9.3%) and low GDP (4.3%). In 2013, GDP increased to 5.1% with an inflation rate of (6.6%). This caused a slight fall in the bank's ROA. In 2014, there was a further decrease in the inflation rate (6.3%) with a rise in GDP (6.1%), causing a further decrease in the bank's ROA. However, from 2016 to 2018, ROA

continued to rise slightly and steadily. In the first three years, it is observable that GTBank had a positive correlation with inflation and a negative correlation with GDP but the reverse occurred in the second half.

From 2012 through 2016, Zenith Bank's ROA had a positive correlation with inflation, but by 2017-2018 the reverse occurred. Access Bank had an ROA that was similar to that of Eco Bank. It fluctuated greatly, not having a clear pattern. According to Bourke (1989) "Some studies have shown a positive relationship between profitability and inflation", and this was the case with some conventional banks, as high inflation rates encourage lending and hence, higher profits. Therefore, some conventional banks showed higher profits during high inflations although there are inconsistencies in this.

5. RESULTS AND DISCUSSION

Jaiz Bank's assets grew by 86% from 14 billion Naira in 2012 at the inception of the bank to 100 billion Naira in 2018. Though the ROA of the bank began with a negative number (-0.052) which was expected, it grew and became positive over time though it remained low till 2018 (0.009). Jaiz Bank has not been as profitable as the conventional banks (Jaiz Bank, 2012). Though the ROA of Jaiz Bank was the least compared to the conventional banks, its CAR remained the highest and was above the minimum requirement (of 10% to 15%) all through the years studied. It began with 77% in 2012 and continued to regress till it reached 21% in 2018. The SB(K) for most of the banks were very close and it was an unfavorable measure of SB for Jaiz Bank due to very poor profit rate while most of the conventional banks did quite well. On the other hand, measuring SB through CAR put Jaiz Bank at an advantage. By the measure of SB(CAR), Jaiz Bank was the second most stable bank after Access Bank. Jaiz Bank would slide upward when Stdv values are considered, as the Stdv of Jaiz Bank was smaller than those of Access Bank and this indicated smaller disparity of figures, thus more stability. Looking at the impact of macro-economic variables on the ROA, Jaiz Bank remains predictable as it responds according to theoretical evidence (i.e., a positive correlation between ROA and a rise in the change in the GDP and a fall in inflation and vice-versa). Therefore, the research concludes that a healthy economy will cause Islamic banking to grow and develop, and Islamic banking will in turn boost economic growth and development.

6. CONCLUSION

The stability of a bank is extremely vital to the survival of any bank and no doubt a matter of concern to both the management and the customers of the bank. This very factor has caused Islamic banks to be in the spotlight in recent years around the world. Bank stability is measured by a number of factors, which includes bank variables, return on assets (ROA) as it responds to

macro-economic variables as well as institutional factors. All things being equal, Jaiz Bank is expected to have stability and resist economic shocks if it adheres to the Shari'ah law since it espouses ethical values.

According to the findings of this research, Jaiz Bank would be expected to do well and be more buoyant in a healthier economy. This is because Islamic banks deal with real assets and as such have more protective strategies. For this reason, we find that the SB(CAR) values were quite high and by this measure, Jaiz Bank was second to Access Bank in terms of stability among all the six banks compared yet with a smaller Stdv value compared to that of Access Bank. This implies that the SB(CAR) figures over the years are closer to the mean. Thus, there is more consistency implying more stability.

However, SB(K) and SB(ROA) are quite low and Jaiz Bank by this measure is the least stable. Consequently, profit making is quite challenging to Jaiz Bank due to the unhealthy economy. According to Abduh and Omar (2012), "the relationship between Islamic banking development and economic growth is bidirectional, meaning that Islamic banking encourages economic growth just as economic growth would stimulate Islamic bank development".

It is noteworthy, that Z-score does not take account of the fact that Islamic banks have other protective measures due to their restrictions to real assets. The profit and loss sharing transactions allow Islamic banks to shift some risks to investors. This reduces the overall financial risks.

It is noteworthy here, that all five conventional commercial banks compared are decades older than Jaiz Bank. Consequently, they have better expertise, bank concentration, larger market share, and stronger legal backing (as legal backing for Islamic banking is quite recent and still ongoing). All these have given the conventional banks a competitive advantage, while Jaiz Bank is expected to improve in a healthier economy and become more stable as it deals in real assets.

BIBLIOGRAPHY

- Abduh, M., & Omar, M. A. (2012). Islamic banking and economic growth: the Indonesian experience. *International Journal of Islamic and Middle Eastern Finance and Management*, 5(1), 35-47.
- Abdul-Majid, M., Saal, D. S., & Battisti, G. (2010). Efficiency in Islamic and conventional banking: an international comparison. *Journal of Productivity Analysis*, 34(1), 25–43.
- Bashir, A.-H. M. (2003). Determinants of profitability in Islamic banks: Some evidence from the Middle East. *Islamic Economic Studies*, 11(1).
- Beck, T., & Laeven, L. (2006). Institution building and growth in transition economies. *Journal of Economic Growth*, 11(2), 157–186.
- Belouafi, A., Bourakba, C. A., & Saci, K. (2015). Islamic finance and financial stability: A review of the literature. *Journal of King Abdulaziz University: Islamic Economics*, 28(2).
- Beltratti, A., & Stulz, R. M. (2012). The credit crisis around the globe: Why did some banks perform better? *Journal of Financial Economics*, 105(1), 1–17.
- Bilgin, M. H., Danis, H., Demir, E., & Can, U. (2017). *Financial Environment and Business Development*. Springer.
- Boumediene, A., & Caby, J. (2009). The stability of Islamic banks during the subprime crisis. Available at SSRN: <https://ssrn.com/abstract=1524775> or <http://dx.doi.org/10.2139/ssrn.1524775>
- Bourke, P. (1989). Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking & Finance*, 13(1), 65–79.
- Chapra, M. U. (2008). The global financial crisis: can Islamic finance help minimize the severity and frequency of such a crisis in the future. A Paper Presented at the Forum on the Global Financial Crisis at the Islamic Development Bank On, 25.
- Daud, M., Mohd Yusof, I., & Abideen, A. (2011). The establishment and operation of Islamic Banks in Nigeria: Perception study on the role of the Central Bank of Nigeria. *Australian Journal of Business and Management Research*, 1(2), 14–29.

-
- Dietrich, A., & Wanzenried, G. (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of International Financial Markets, Institutions and Money*, 21(3), 307–327.
- DW. (2009). IMF Predicts Global Economic Contraction for 2009. <https://www.dw.com/en/imf-predicts-global-economic-contraction-for-2009/a-4112346>
- Hasan, M. M., & Dridi, J. (2010). The effects of the global crisis on Islamic and conventional banks: A comparative study. Available at SSRN: <https://ssrn.com/abstract=1750689> or <http://dx.doi.org/10.2139/ssrn.1750689>
- Hesse, H., & Martin, Č. (2007). Cooperative Banks and Financial Stability. <https://www.imf.org/external/pubs/ft/wp/2007/wp0702.pdf>
- Houston, J. F., Lin, C., Lin, P., & Ma, Y. (2010). Creditor rights, information sharing, and bank risk taking. *Journal of Financial Economics*, 96(3), 485–512.
- IMF. (2004). Evaluation of the Financial Sector Assessment Program (FSAP). <https://www.imf.org/External/NP/ieo/2004/fsap/082504.pdf>
- Jahn, N., & Kick, T. K. (2012). Early warning indicators for the German banking system: a macroprudential analysis. Available at SSRN: <https://ssrn.com/abstract=2796881> or <http://dx.doi.org/10.2139/ssrn.2796881>
- Jaiz Bank. (2012). Income Statement. <https://jaizbankplc.com/investor-relations/annual-report-and-accounts/>
- Laeven, L., & Levine, R. (2009). Bank governance, regulation and risk taking. *Journal of Financial Economics*, 93(2), 259–275.
- MI. (2021). *ISLAMIC FINANCE MARKET - GROWTH, TRENDS, COVID-19 IMPACT, AND FORECASTS (2021 - 2026)*. <https://www.mordorintelligence.com/industry-reports/global-islamic-finance-market>
- Miah, M. D., & Sharmeen, K. (2015). Relationship between capital, risk and efficiency: A comparative study between Islamic and conventional banks of Bangladesh. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(2), 203-221.
- Minsky, H. P. (1995). Financial factors in the economics of capitalism. In *Coping with financial fragility and systemic risk* (pp. 3–14). Springer.
- Odeduntan, A. K., Adewale, A. A., & Hamisu, S. (2016). Financial stability of Islamic banks: Empirical evidence. *Journal of Islamic Banking and Finance*, 4(1), 39–46.

-
- Pradiknas, T. Y., & Faturhman, T. (2015). Efficiency Of Islamic Banking Compared to Conventional Banking: Evidence from Indonesian Banking Sector. *Journal of Business and Management*, 4(5), 540–551.
- Srairi, S. A. (2010). Cost and profit efficiency of conventional and Islamic banks in GCC countries. *Journal of Productivity Analysis*, 34(1), 45–62.
- Uhde, A., & Heimeshoff, U. (2009). Consolidation in banking and financial stability in Europe: Empirical evidence. *Journal of Banking & Finance*, 33(7), 1299–1311.