A Study of Malaysian Islamic Banks Competitiveness (Logit Regression Approach)

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*Abstract:*Banking sector plays an important role in Malaysia development. The specific objective of this study was therefore to what extent Islamic Banks increased competition in banking sector in Malaysia. With the aid of annually data from the BNM, the study covered the period 2002 to 2012. The present study used the Logit regression, the dependent variable was taken by means of dummy, which takes zero for typical and 1 with regard to Islamic banks. By utilizing SPSS, twenty six financial ratios associated with 14 banks were being thoroughly checked by means of enter, forward and backward options inside the search of best variables to distinguish between Islamic and also conventional banks. Our main findings are that Islamic banking banks are better in profits comes to operating income and the diminution in the value of underlying tangible assets arising from loss, damage or non-maintenance of the asset presents another kind of risk that is not of any concern to traditional bond holders. Sharing of losses adversely affect the incentives of both the issuer and the investor making the Islamic debt non-competitive in international or domestic market.

Keywords: Islamic banks, Shari'ah law, Competitiveness, Logit Regression, Malaysia.

I. INTRODUCTION

Islamic banking defines to a banking system that comprises with Islamic law also referred as Shari'ah law. The underlying principles that rules Islamic banking are profit sharing between parties and mutual risk the fairness assurance for all and that transactions are based on an underlying asset or business activity. These principles are assisted by core values of Islamic banking whereby activities that maintain entrepreneurship, commerce, and trade and bring societal benefit or development is motivated. The Islamic finance industry ofMalaysia has been in existence for 30 years.
Malaysian Islamic banks have operated in a competitive industry, particularly since the global financial crisis hit in 2008, [1] described Islamic banking as no longer a business entity operated only to fulfill the religious obligations of the Muslim community, but more significantly, it is striving to fulfill the needs and demands of new customers.

The approval of Islamic Banking Act 1983 enhanced the first Islamic banking to be set up and thereafter with the Islamic financial system liberalization several financial institutions of Islam have been set up. Currently the assets of Islamic banking attained United States $65.6 bn with an average development rate of 18 to 20 percent yearly[2]. According to[3] in the emergence of liberalization and competitiveness, Islamic banks must be much entrepreneurship and creative to handle survival and business.

According to [4], the Islamic banking industry in Malaysia has been growing in terms of assets at an average rate of 18 percent per annum since 2000. In the first seven months of 2011, Islamic banking assets in Malaysia rose 15 percent to 389.3 billion ringgit (USD$123billion), strengthening the country's position as the global hub for Shari'ah-compliant financing. Presently, Malaysia has the most established Shari'ah regulatory and legal infrastructure in the world and the Islamic capital market now exceeds $1 trillion ringgit and is growing as rapidly as the conventional capital market [5].

The literature underscores the [6] point out the, a large number of banking firms have diverted some of their operations away from conventional practices by setting up Islamic windows or establishing full-fledged Islamic banks. Malaysia is striving to be regional hubs for Islamic financial services. In 2010, there were a total of seventeen Islamic banking institutions actively operating in the country [7].

The broad objective is to investigate to what extend Islamic banks increase the competition in banking sector in Malaysia. The study employed annually data from 2002-2012 and the data was sourced from the Bank Negara Malaysia (BNM). The remained of the paper is structured as follows. Section 2 summarizes the literature review. In Section 3 discusses the methodology and data; Section 4 we outline the basic model we argue that it is necessary to apply Logit Regression approach. Section 5 presents the results and findings and section 6 concludes.

II. LITERATURE REVIEW

The published literature underscores the market structure of Islamic banking industry in Malaysia [8]use 17 banks during the period from 2001 to 2005; they tested the degree of competition using the H-statistic by[9]. And found that, the Islamic banks in Malaysia earned their revenue in the condition of monopolistic competition. [10] Was among the first researchers to measure the effect of competition on bank profitability. He used entry into the market as a proxy for competition. Emery's findings were that competition had no significant impact on profits. [11]Examined the effect of new entry on competition. His results indicated that there was no relationship between entry and competition. Similarly, [12]found a weak adverse relationship between competition and the rate of entry. [13] Examined the impact of foreign banks on the profitability of domestic banks. They found that the existence of foreign banks produced an unwavering impact on the profitability of various types of banks.

According to [7] in Malaysia the positive perception of customers towards Islamic banking is far much difficult due to the fact that banks of Islam has to compete with long set up conventional banks in a dual banking system. Malaysia has a dual banking system in 1983 whereby the system of Islamic banking performs in analogous with conventional system. Presently the former is indicated by 27 institutions of banking involving 18 conventional banking institutions and 9 Islamic banks providing Islamic banking services and products under the IBS (Islamic Banking Scheme) also referred as Islamic windows.

[14]Into their study compare the actual efficiency of Conventional and Islamic system trust banks by using a sample of 35 unit banks involving Malaysia. Using Info Envelopment Approach, a good efficiency measurement technique, they take a couple of inputs Expense Proportion and Portfolio Turnover Proportion, and one result, Return. Their findings reveal how the efficiency of Islamic unit trusts goes into parallel to their own Conventional counterparts adding that a few of the Islamic unit believe in banks performed greater than average in Overall Factor Productivity. [15]Conducted study to examine the efficiency involving full-fledged Islamic banks and also the Islamic windows with Malaysia. Using non parametric approach by consumers i.e. data envelope approach they figured the efficiency involving full-fledged Islamic banks was greater than Islamic windows with Malaysia.

When weighed against conventional banks, the authors found how the efficiency of traditional banks in Malaysia remains better than Islamic financial institutions. In the report "Using accounting ratios to tell apart between Islamic and conventional banks from the GCC region" [16] have had a novel method to highlight the exclusive feature of Islamic financial institutions from conventional financial institutions via the comparative link between accounting ratios. Accounting Ratios describe their bond between several types of accounting values for you to elaborate the comparison among them. They have figured although the mean values with the results of data processing ratios are similar, nor interpret a difference but after the non-linear classification techniques are employed on these kind of results, the Islamic financial institutions are correctly distinguishable. His study is targeted at the financial community of GGC region. The fact how the contextual studies with social sciences cluster its own value, our work concentrates on Malaysian banks.

III. METHODOLOGY AND DATA

Distinction one of many results of data processing ratios of Islamic as well as conventional banks as a result of linear techniques associated with taking means as well as checking statistical distinctions, if any, most notable is given.

Conventional banks are better with the earnings while in the management of running expenses both banking banks show no significant differences, which consequently, is boosting conventional banks' ROA and ROE An improved ROE in conventional banks is referred since the signal of obtaining more funds on the deposit in the investments of these banks, than the actual equity funds, which results in a higher get back to these equity slots. Our descriptive statistics result opposite to that particular of GCC countries [16]where by Islamic banks display higher profitability.

GCC answers are also opposite to the present study, since [16]expresses that while investing, Islamic banks use deposits since the sources of finances, while in true of Malaysian this statement does work for conventional banking banks, instead of Islamic banking banks.

An annually data set, covering the fourteen (15) Islamic and conventional banks that operated between 2002 and 2012, was constructed for use in estimation. The data obtained from bank Negara Malaysia included the balance sheets and the profit and loss accounts, profitability ratios, bank efficiency ratios, asset quality ratios, Risk ratios and liquidity ratios.

TABLE 1

List of BanksIncluded in the Data Sample

No.	Name	Type
1	Affin Islamic Bank Berhad	Islamic
2	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	Islamic
3	Alliance Islamic Bank Berhad	Islamic
4	Standard Chartered Bank Malaysia Berhad	Conventional
5	Asian Finance Bank Berhad	Islamic
6	Bank Islam Malaysia Berhad	Islamic
7	Bank Muamalat Malaysia Berhad	Islamic
8	Malayan Banking Berhad	Conventional
9	HSBC Amanah Malaysia Berhad	Islamic
10	RHB Islamic Bank Berhad	Islamic
11	CIMB Islamic Bank Berhad	Islamic
12	Public Bank Berhad	Conventional
13	RHB Bank Berhad	Conventional
14	Citibank Berhad	Conventional

Source: Bank Negara Malaysia 2014

IV. MODEL COMPARISON BETWEEN CONVENTIONAL AND ISLAMIC LOGIT MODELS

The Logit regression, in proceeding part of this paper, witnesses that the Islamic banks associated with Malaysian have lower costumer base into their portfolio that is always to say that their investments possess a bigger part through equity funds as well as show lower ROE. By saying in which Islamic banks are more efficient in his or her operational income as well as operational expenses, our study goes parallel to the results of [17], and partially welcomes H1 that Islamic banking banks are better in profits comes to operating income. Below is the annual (2002-2012) data from the Bank Negara Malaysia (BNM).

1. *Profitability Ratios:*

   i.   Return on Assets = $ROA = \dfrac{NetIncome}{AverageTotalAssets}$

   ii.   Return on Equity = $ROE = \dfrac{NetIncome}{Averag\,eStock\,holde\,r'sequity}$

   iii. Profit Margin = $PM = \dfrac{NetIncome}{OperatingIncome}$

   iv. Return on Deposits = $ROD = \dfrac{NetIncome}{AverageTotalCustome\,r'sDeposit}$

   v.   Return on Shareholder Capital = $ROSC = \dfrac{NetIncome}{Share\,holderContributedCapital}$

vi. Net Operating Margin = $NOM = \dfrac{Operating Profit or Income}{Interest Income}$

2. *Bank Efficiency Ratios:*

i. Interest Income to Expenses = $IEE = \dfrac{(Interest Income - Interest Expenses)}{Average Total Laons and Advances}$

ii. Operating Expense to Assets = $OEA = \dfrac{Operating Expenses}{Average Total Assets}$

iii. Operating Income to Assets = $OIA = \dfrac{Operating Income}{Average Total Assets}$

iv. Operating Expense to Revenue = $OER = \dfrac{Operating Expenses}{Operating Income \; (Revenue)}$

v. Asset Turnover = $ATO = \dfrac{Interest Income}{Average Total Assets}$

vi. Net Interest Margin = $NIM = \dfrac{(Net Interest Income - Net Interest Expenses)}{Average Total Assets}$

vii. Net non-interest Margin= $NIM = \dfrac{(Net Non-Interest Income - Net Non-Interest Expenses)}{Average Total Assets}$

3. *Asset Quality Ratios:*

i. Provision to Earning Assets = $PEA = \dfrac{Provision for Loan Losses}{Average Total Loa ns and Advances}$

ii. Adequacy of Provision for Loans = $APL = \dfrac{Allowance for Loan Losses at t\ heend of t\ he year}{Average Total Loans and Advances}$

iii. Write-off Ratio = $WRL = \dfrac{Write-off of Loans d\ uring t\ he year}{Average Total Loans and Advances}$

iv. Loan Ratio = $LR = \dfrac{Average Total Loans and Advances}{Average Total Assets}$

v. Loans to Deposits = $LTD = \dfrac{Average Total Loans a\ nd Advances}{Average Total Customer Deposits}$

4. *Liquidity Ratios:*

i. Cash to Assets = $CTA = \dfrac{Cash}{Average Total Assets}$

ii. Cash to Deposits = $CTD = \dfrac{Cash}{Average Total Customer Deposits}$

5. *Risk Ratios:*

i. Deposits to Assets = $DTA = \dfrac{Average Total Customer Deposits}{Average Total Assets}$

ii. Equity Multiplier = $EM = \dfrac{Average Total Assets}{Average Stock holde r's Equity}$

iii. Equity to Deposits =

$$ETD = \frac{Average\ Shareholder's Equity}{Average Customer Total Deposits}$$

iv. Total Liabilities to Equity =

$$TLE = \frac{Average Total Liabilities}{Average Stock\ holder's Equity}$$

v. Total Liabilities to Shareholder's Capital = $TLSC = \frac{Average Total Liabilities}{Share holder Contibuted Capital}$

vi. Retained Earnings to Total Assets = $RETA = \frac{Retained Earnings}{Average Total Assets}$

TABLE 2.

Descriptive statistics of mean differences among IB & CB * (Annual 2002-12)

Accounting Ratio	Mean $_{IB}$	Mean $_{CB}$	Significance
ROA	-0.002932582	0.014628547	0.000
ROE	0.018098899	0.211583962	0.000
PM	0.017163685	0.474701101	0.032
ROD	-0.004620426	0.020365403	0.000
ROSC	0.128397231	0.793935109	0.000
NOM	0.429178286	0.419019265	0.912
IEE	0.124684933	0.073296431	0.000
OEA	0.007344241	0.010317930	0.092
OIA	0.032686248	0.031412132	0.774
OER	0.141875270	0.634239317	0.125
ATO	0.078957755	0.090891315	0.069
NIM	0.041531565	0.041734177	0.966
NNIM	-0.037692199	-0.011004152	0.000
PEA	2.245980594	0.026051243	0.136
APL	2.245980594	0.026051243	0.136
WRL	0.001028719	0.009530633	0.135
LR	0.385940459	0.564658658	0.000
LTD	0.642744181	0.857743473	0.221
CTA	5.537798173	0.190182506	0.154
CTD	8.820142638	0.256313022	0.148
DTA	0.632340270	0.809967757	0.002
EM	6.042803262	15.791419041	0.000
ETD	0.586639959	0.50784781	0.000
TLE	16.530539499	156.476754594	0.160
TLSC	18.817282462	504.576368881	0.155
RETA	1.093302988	0.020815904	0.440

V. DISCUSSIONS AND RESULTS

The competition between two varieties of banks, Islamic and also conventional, is found through the use of Logit regression type. This is employed to represent the likelihood of occurrence associated with two mutually exclusive events through the dependent variable by means of one or zero. Because the variable bank type, either Islamic or typical, occurs in the particular dichotomous form, the equation for this variable can be mined out by means of Logit regression.

Thus, this study put on logistic regression model for the 26 accounting ratios for our data set associated with 69 observations. The dependent variable was taken by means of dummy, which takes zero for typical and 1 with regard to Islamic banks. By utilizing SPSS, all twenty six financial ratios associated with 14 banks were being thoroughly checked by means of enter, forward and backward options inside the search of best variables to distinguish between Islamic and also conventional banks.

After an exhaustive search forward technique of Logit identified both variables and eventually triggered the following equation, with the T stats inside the parenthesis.

Who bears the loss in the benefit? If the issuer has to bear this threat the Logit model isn't longer an attractive instrument in accordance with the bond problems. In case this investor is remaining holding the case the demand for Logit model will probably be subdued. Sharing of cutbacks adversely affect this incentives of the issuer and this investor making this Islamic debt non-competitive inside international or home market.

The tendency to retain maturity, the limited flow of new issues, and lack of new items particularly structured products would be the constraints that are generally impeding the liquidity along with tradability of Islamic Logit model. Another group of risks for Islamic banks may arise as a result of commingling of resources with shareholders along with smoothing of returns to the unrestricted investment company accounts holders.

In addition to financial intermediation, a great many other functions performed by bank within the modern economies possess similar importance for that development and procedures of Muslim economic climates. Nevertheless, the traditional consumer banking system is counter for the religious thought connected with Muslims; therefore, the concept of Islamic banking was endorsed in respond to the market by the Muslim scholars to help fill the hole in banking process.

Islamic banking seeks guidance from the specific branch connected with Shari'ah (Islamic Law) termed Fiqhul-Muamalat (Islamic regulations on transactions). This will depend on several prohibitions such as Riba(Interest), and permissions such as trade. Such prohibitions are in promoting social harmony within the transactions for mutual benefits of the society and avoid unjust having a weaker party, while permissions are to help encourage real fiscal activity. This means Islamic banking has to be an asset insured (involving certain things or papers representing constructive ownership) along with promotes real fiscal activities [18].

Even more, Islamic banks must go after ethical and social criteria. The distinguishing standard that Islamic banking institutions follow is, zero Riba (Interest), no Gharar (uncertainty in regards to the future outcome), [19], additionally, gambling and investment decision in haram products may also be forbidden [20].

Annual findings based on the model depicted in this paper shows that the diminution in the value of underlying tangible assets arising from loss, damage or non-maintenance of the asset presents another kind of risk that is not of any concern to traditional bond holders. Who bears the loss in the value? If the issuer has to bear this risk the Sukuk is no longer an attractive instrument relative to the bond issues. In case the investor is left holding the bag the demand for Sukuk is likely to be subdued. Sharing of losses adversely affect the incentives of both the issuer and the investor making the Islamic debt non-competitive in international or domestic market.

Islamic finance faced some problems in terms of liquidity management and tradability. As the key issues pertaining to the Islamic financial modes are sorted out by the regulators the markets will develop instruments for liquidity management by Islamic financial institutions. The tendency to hold on to maturity, the limited flow of new issues, lack of new products particularly structured products are the constraints that are impeding the liquidity and tradability of Islamic Sukuk. Another set of risks for Islamic banks may arise due to commingling of funds with shareholders and smoothing of returns for the unrestricted investment accounts holders. In order to analyze the above ratios of both types of banks, the annual Logit model was used.

VI. CONCLUSION

In this paper we examine whether the Islamic Banks increased the competition in banking sector. We use 14 banks in Malaysia between 2002 and 2012. A logistic regression model was used for the 26 accounting ratios for our data set associated with 69 observations.

The actual test forms a third cluster by combining the two first and next clusters. Because the distance of this bunch from 0 is greater than the first and second cluster, this cluster signifies that ratios from PEA to help RETA show an identical trend which is actually less similar compared to trends shown with first and next cluster. The fourth cluster inside the diagram shows that when TLE, TLSC, CTA and CTD are as part of the third cluster, the correlation on the list of ratios becomes weak mean that they fall in the dissimilarity region. So the conclusion above discussion and results conclude to say that upon the outcomes of accounting percentages of Islamic and conventional banks, those two types of banks are often competitive. Among studied models, the Logit regression model pointed out that there are two percentages that have a common inference which the Islamic banks are generally relatively smaller with regards to their conventional banks.

These results are usually in line to the particular practical facts, which Islamic banks are generally newer, relative to help conventional banks; consequently, they have not penetrated this market as such. In other words that for the particular further growth regarding Islamic banks it really is imperative upon these phones draw more customers, both at the liability and asset area products.

Such studies placed the results upon the particular stats of information technology ratios. A further strive is possible to get the outcomes from other type of ratios, instead regarding accounting. Since local circumstance has its esteemed set up the social scientific discipline researches, the study can be utilized in a diverse scenario to Malaysia.

This research usually takes it data on the banking sector regarding Malaysia, and since Islamic banking came here in 2005; our sample dimension was compelled being for 5 a long time only. Hence, your research can be replicated inside a different country, the location where the Islamic banks will work parallel to traditional, over a history of greater than 5 years.

REFERENCES

[1]. Dusuki, A. W., & Abdullah, N. I. (2007). Why do Malaysian Customers Patronize Islamic Banks? International Journal of Bank Marketing, 25(3), 143-160. http://dx.doi.org/10.1108/02652320710739850.

[2]. Islamicfinanceinfo (2012), Overview of Islamic Banking in Malaysia, available at http://www.islamicfinanceinfo.com.my/discover-islamic-banking/overview-islamic-banking-malaysia, accessed on 18th January 2014.

[3]. Bahari Z B (2009), The Changes of Product Structure in Islamic Banking: Case Study of Malaysia, 2 Day Conference on Islamic Perspectives on Management and Finance, UK.

[4]. Aziz, Z. A. (2006). Islamic Banking and Finance Progress and Prospects: Collected Speeches 2000-2006. Bank Negara Malaysia, Kuala Lumpur.

[5]. Ministry of Finance, Malaysia, 2011-2012 Economic Report.

[6]. Rima Turk Ariss (2012), Competitive conditions in Islamic and conventional banking: A global perspective, Review of Financial Economics 19 (2010) 101–108, Elsevier Inc.

[7]. Bank Negara Annual Reports 2005, 2011, 2012 and 2013 Central Bank of Malaysia, Kuala Lumpur.

[8]. Muhamed Z. Abdul Majid and FadzlanSufian (2012) the Nexus between Economic Freedom and Islamic Bank Performance: Empirical Evidence from the MENA Banking Sectors 8th International Conference on Islamic Economics and Finance.

[9]. Panzar and Rosse (1987). Testing for 'monopoly equilibrium. Journal of Industrial Economics 35, 443-456.

[10]. Emery, John T. (1971), "Risk, Returns, and the Morphology of Commercial Banking", Journal of Financial and Quantitative Analysis, Vol. 6, No. 2, March, pp. 763-776.

[11]. Rhoades, Stephen A. (1980), "Entry and Competition in Banking", Journal of Banking and Finance, Vol. 4, No. 2, June, pp. 143-150.

[12]. Lindley, James T., James A. Verbrugge, James E. McNulty and Benton E. Gup (1992), "Investment Policy, Financing Policy and Performance Characteristics of De Novo Savings and Loan Associations", Journal of Banking and Finance, Vol. 16, pp. 313-330.

[13]. Steinherr, A. and Ch. Huveneers (1994), "On the Performance of Differently Regulated Financial Institutions: Some Empirical Evidence", Journal of Banking and Finance, Vol. 18, pp. 271-306.

[14]. Saad, N. M., Majid, M. S., Kassim, S., Hamid, Z., &Yusof, R. M. (2010). A comparative analysis of the performance of conventional and Islamic unit trust banks in Malaysia. International Journal of Managerial Finance, 6(1), 24-47.

[15]. Mokhtar, H. S., Ahmad, Abdullah, N., &Alhabshi, S. M. (2008). Efficiency and competition of Islamic banking in Malaysia Humanomics, 24(1), pp 28-48.

[16]. Olson, D., &Zoubi, T. A. (2008) "Using accounting ratios to distinguish between Islamic" The International Journal of Accounting,43, 45–65.

[17]. Yudistira, D. (2003). Efficiency in Islamic banking: An empirical analysis of 18 banks. Department of Economics, Southborough University, U.K., working paper.

[18]. Ahmad, W., &Luo, R. H. (2010). Comparison of Banking Efficiency in Europe: Islamic versus Conventional Banks. International Finance Review, 11, 361–389.

[19]. IIIE (1999). IIIE's Blueprint of Islamic Financial System. International Islamic University Islamabad, Malaysia.

[20]. Khan, F. (2010). How Islamic is Islamic Banking? Journal of Economic Behavior & Organization, 76, 805–820.