Bank Valuation in Malaysia: An Empirical Comparison of Conventional and Interest-Free (Islamic) Banking Models

Charlie CHAROENWONG
Nanyang Technological University

Ramin Cooper MAYSAMI
Jackson State University

David K. DING
Singapore Management University, davidding@smu.edu.sg

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Charlie Charoenwong
Associate Professor of Finance
Nanyang Business School
Nanyang Technological University
Singapore

Ramin Cooper Maysami♣
Dean, and Professor of Economics and Finance
College of Business
Jackson State University

David K. Ding
Associate Professor of Finance
Lee Kong Chian School of Business
Singapore Management University

INTRODUCTION

Islamic banking, according to institute for Islamic Banking and Insurance "refers to a system of banking or banking activity that is consistent with the principles of the Shari'ah (Islamic rulings) and its practical application through the development of Islamic economics. Shari'ah prohibits the payment or acceptance of interest charges (riba) for the lending and accepting of money, as well as carrying out trade and other activities that provide goods or services considered contrary to its principles.[1]"

The Islamic solution, commonly referred to as Profit & Loss Sharing (PLS), "suggests an equitable sharing of risks and profits between the parties involved in a financial transaction," according to VentureLine.[2] The same source continues, "in the banking business, there are three parties - the entrepreneur or the actual user of capital, the bank which serves as a partial user of capital funds and as a financial intermediary, and the depositors in the bank who are the suppliers of savings or capital funds. There are two different partnerships of the type mentioned in Islam: the partnership between the depositors and the bank, and the partnership between the entrepreneur (or the borrower) and the bank. Under this proposal, financial institutions will not receive a fixed rate of interest on their outstanding loans, rather, they share in profits or in losses of the business owner to whom they have provided the funds. Similarly, those individuals who deposit their funds in a bank will share in the profit/loss of the financial institution."

♣ Corresponding Author: Dean and Professor of Economics & Finance, College of Business, Jackson State University, Jackson, Mississippi; Tel: 910-987-2311, e-mail: ramin.maysami@icloud.com
[1] http://www.islamic-banking.com/what_is_ibanking.aspx

[2] https://www.ventureline.com/accounting-glossary/P/profit-and-loss-sharing-definition/

Currently, there are over 300 Islamic financial institutions worldwide across 75 countries. According to the Asian Banker Research Group, The World's 100 largest Islamic banks have set an annual asset growth rate of 26.7% and the global Islamic Finance industry is experiencing average growth of 15-20% annually, as reported by Bank Negara Malaysia, the Malaysian Central Bank.[3] Bank Negara further proclaims that "today, Malaysia's Islamic finance continues to grow rapidly, supported by a conducive environment that is renowned for continuous product innovation, a diversity of financial institutions from across the world, a broad range of innovative Islamic investment instruments, a comprehensive financial infrastructure and adopting global regulatory and legal best practices. Malaysia has also placed a strong emphasis on human capital development alongside the development of the Islamic financial industry to ensure the availability of Islamic finance talent. All of these value propositions have transformed Malaysia into one of the most developed Islamic banking markets in the world.

Comparison of various performance measures between conventional banking system and the Interest-Free Islamic banking systems are inevitable. Ding, Maysami, and Charoenwong (2012), for example, compared the returns from Islamic banking system to the returns from conventional banks through evaluating the differences in equity returns from the two banking types in Malaysia. They concluded that the returns from Islamic equity and returns from conventional equity had no significant differences. This, they said "would make sense since in a market driven scenario, the principle of Islamic PLS holds as the growth of the Islamic funds are dependent on the equity growth of the businesses that the funds were being invested in. Thus, the returns generated by the Islamic PLS scheme would be highly dependant on the market and economic conditions, as would be the return from conventional equity.[4]"

The thrust of the current article is to examine the underlying factors and variables that guide the valuation of a sample of five Malaysian banks—four hybrid banks engaged in both Islamic and conventional banking facilities and one which provides only Islamic financial products. The goal is to understand the fundamental differences in the value drivers for the two banking systems.

The study employs the traditional financial and accounting information obtained for the 5-year period beginning 1999 obtained from the annual financial reports of the following publicly listed financial institution: Malayan Banking Berhad (MayBank), Public Bank Berhad (Public Bank), Hong Leong Bank Berhad (Hong Leong), Southern Bank Berhad (SBB), and Bank Islam Malaysia Berhad (BIMB), the fully Islamic institution. May 1999 is selected because it coincides with the introduction of the Syariah Index at the Kuala Lumpur Stock Exchange (KLSE). Data was collected through the CEIC Asia Economic Database.[5]

The gathering of data from financial institutions in a single country offers a simplifying advantage for an exploratory study such as ours where we have effectively removed the effects

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[3] http://www.bnm.gov.my/index.php?ch=fs_mfs&pg=fs_mfs_bank#Overview
[4] Ding, David, Ramin Cooper Maysami, and Charlie Charoenwong, "The Influence of the Islamic Profit and Loss Sharing Scheme on Return from Investment and Deposit Accounts: An Empirical Study," *The Journal of International Business Research and Practice,* Vol. 6 (2012), pp. 122-127.

[5] CEIC Asia Economic Database from CEIC Data Company Ltd (CEIC), which sources its data directly from over 150 major government statistical agencies, over 80 recognized non-government issuing agencies, and over 300 reference statistical publications through direct data distribution arrangements.

of cross-country variables such as market size, investor behavior, and differing economic and political climates from the statistical and empirical analysis. A cross-country analysis of the Islamic banking value drivers, in itself, would be a logical extension of the current study.

The selection of Malaysia for this analysis is for several reasons. Malaysia boasts a strong economy and a sound banking system; Malaysia's vibrant and well-structured Islamic banking sector currently accounts for over 10% of the market activity; Malaysian Islamic banks operate side-by-side conventional banking institutions and are regulated with a parallel set of rules, as established by the Islamic Banking Act (IBA) of 1983, authorizing Band Negara Malaysia (BNM), the country's central bank, to supervise and regulate Islamic banks; Accordingly, Islamic banking regulations in Malaysia are well-established and explicitly reported by BNM, providing researchers with a clear understanding of the institutional issues which may otherwise influence the results of an investigative empirical study such as ours.

Methodology and Hypotheses

We employ Chung and Pruitt's (1994) approximation of Tobin's (1969) q as a standardized performance measure of the banks' value so as not to subject the figures to the scale biases inherent in other measures of value based on simple differences such as Market Value Added (MVA) or Economic Value Added (EVA). The approximate q used here is simply defined as follows:

$$\text{Approximate } q = (MVE + PS + DEBT) / TA \tag{1}$$

where MVE is the product of the bank's share price and the number of shares of common stock outstanding; PS is the liquidating value of the bank's outstanding shares of preferred stock; DEBT is the value of the bank's short-term liabilities plus the book value of the bank's long-term debt less the value of its short-term assets; and TA is the book value of the bank's total assets. The above data is readily available and was collected from the reported financial and accounting statements of the five publicly listed institutions.

The approximate q values of each of the four banks offering both Islamic and conventional banking services, as well as that of the single pure Islamic bank are set as the dependent variable and regressed against five independent variables often suggested in the literature:

$$q = \beta_0 + \beta_1[\text{Islrev}] + \beta_2[\text{Inddir}] + \beta_3[\text{ROE}] + \beta_4[\text{TA}] + \beta_5[\text{Leverage}] + \varepsilon \tag{2}$$

where *Islrev* is the proportion of the bank's total revenue attributable to Islamic Banking operations; *Inddir* is the proportion of independent directors sitting on the board of the bank; ROE[6] is the bank's return on equity ratio; *TA* is a logarithm of the bank's total assets; and *Leverage* is the bank's financial leverage ratio.

A Pearson's Correlation test is run on the variables in the regression model (equation 2) to find the correlation of values between all possible pairs of the dependent and independent variables used. The regression is then run via four different regression models revolving

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[6] Return on Asset (ROA) has also been separately used in place of ROE in the analysis. The conclusions drawn from the analysis using ROA were found to be similar and thus not reported in this paper.

around the basic regression formula so as to examine the significance of each of the individual independent variables to the regression model.

In the first model, only *Islrev* is selected as the single independent variable in the regression. *Inddir* is added as a second independent variable in the second model to investigate the impact of corporate governance on the model. In the third model, *Inddir* was replaced with the other three factors--*ROE*, *TA* and *Leverage*--together with *Islrev*, in order to investigate the impact of such common variables upon bank value in the absence of *Inddir*. All five variables are included in the fourth and final regression model.

Results:

Based on the Pearson's Correlation coefficients (Table 1) the value of *ROE* is highly correlation with the values of *TA* (coefficient of 0.554) and *Islrev* (-0.632), both significant at the 1% level. Additionally, *ROE* is positively and significantly correlated (at the 5% level) with *Inddir* (0.423). *TA*, interestingly, is correlation with all other variables--negatively with *Islrev* (-0.516) and positively with the rest. Results were significant at the 1% level. This shows the significance of *TA* in banks having a major impact on its operations and ultimately, its value, hence the high correlation against all other variable values.

Leverage has no significant correlation with the variables other than its correlation with *TA* as previously mentioned. *Inddir* has a positive correlation with *ROE* (0.423) at the 5% level, signifying the impact of good corporate governance on a bank's returns. In addition to the strong correlation with TA, *Islrev* is negatively correlated with return on equity, *ROE*, (-0.632) at the 1% significance level.

Table 2 shows the results of our four-model regression analysis. When *Islrev* is employed as the single independent variable (column 1), the adjusted R^2 of 0.138 implies that this model can explain only 13.8% of all the variation in the dependent variable. The explanatory power of *Islrev* is somewhat more significant at the 5% level, despite its lack of explanatory power for *q*. The addition of *Inddir* to the second (column 2) improves the explanatory power of the model for variation in *q* slightly, with an improved adjusted R^2 of 0.158. However, *Inddir* is not a statistically significant variable in the model.

The third model, with the removal of *Inddir* and the additions of *ROE*, *TA* and *Leverage* as variables in the regression, significantly improves the explanatory power of the model, with adjusted R^2 of 0.524. The significance of *Islrev*, however, decreases, as exhibited by the t-value of -1.727 and the reduced beta coefficient of -0.066. Meanwhile, both *Leverage* and *TA* are significant at 1% level, with *TA* showing a relatively high beta coefficient of 0.308. *ROE*, even though not significant here, has a rather high beta coefficient of -0.630.

Finally, the addition of *Inddir* back into the fourth regression model, increases the adjusted R^2 to 0.544, signifying a further increase in the explanatory power of the model. *Islrev* continues to remain not significant. However, the combination of *Inddir* with the other variables *ROE*, *TA* and *Leverage* have improved its significance such that it is now significant at even a 1% level, in addition to increased absolute value of its beta coefficient to -0.218. *ROE* has also shown an increased significance (significant at a 5% level), as well as a significant beta coefficient of -0.738.

These results imply the lack of a significant influence in value from the utilization of a high proportion of Islamic Banking operations. As a matter of fact, the differences in returns

from banks in the two different systems are significantly attributable to factors other than the operation of Islamic Banking facilities--Return on equity is the single most significant factor involved, with it exhibiting a large beta coefficient of -0.738. This large beta coefficient value shows that the banks' use of equity in generating revenues has a negative significance value creation.

Despite the basic fundamentals of Islamic Banking that treat depositor's funds as equity investments rather than as debt, Islamic Banks do not exhibit better return on equity figures on the management of their proportionally larger amounts of equity funds. Even if good return on equity figures were produced, it would likely lead to a decrease in value.

This is in contrast to the effects of *Leverage* on value, as exhibited by the low beta coefficient of -0.0345. Despite the high proportion of mainly conventional banks in the regression analysis, where depositors' funds are considered debt, the effect of leverage on value is surprisingly small, thereby implying that levels of debt financing used have no significant effects on value creation.

The beta coefficient of 0.271 for *TA* also implies that despite the use of approximate *q* values as the valuation medium for the five banks involved in the regression analysis, which attempts to remove scale and size biases, the size of the banks involved still has significant effects on value creation. This has been well-documented in the literature--the size momentum has a positive effect on revenue-generating activities due to the economies of scale opportunities that greater size can create.

Meanwhile, *Inddir* has been shown to have a surprising negative significant effect on value creation, as shown by a beta coefficient value of -0.218. Corporate governance as represented by *Inddir*, has a negative relationship with *q*, implying that greater levels of independence and transparency in a bank does not necessarily lead to higher value. It is however noted that corporate governance only exhibits significant effects when other factors are taken into account. In model (2), for example, *Inddir* has no significance on the variation in *q*, with its beta coefficient also exhibiting a lower value of -0.103.

These regression results have some interesting implications on banks, given that they now face certain important and far-reaching decisions revolving around the field of Islamic Banking. The growth levels and potential market size of the field has been well-documented in much literature and news reports. However, its results and impact on banks' values has been shown to be insignificant so far. Banks will have to make some difficult decisions with regards to their focus upon this field.

Conclusion

The results of this study show that differences in returns in IBS investment accounts and conventional fixed deposits are attributable to factors other than the differing nature of the banking systems involved. Other factors such as the banks' return on equity, total asset size, debt financing level and its level of corporate governance, are more significant factors that affect bank

value and hence differences in returns, rather than the level of Islamic Banking operations it carries out.

This has great implications on banks' business decisions – whether to adopt a short-term view to creating value, in which other factors such as ROE and TA are more attributive to value creation, and ignore the currently insignificant Islamic Banking operations; or to aim for a long-term decision and prepare for the potential growth and revenues that Islamic Banking could possibly bring in the future, since it is well-documented that Islamic Banking is the fastest growing financial field in the world. Banks will have to make difficult decisions on whether to adopt a short-term or a long-term view towards Islamic Banking and decide on the horizon of their focus upon it.

Table 1. Pearson's Correlation

Variable	ROE	TA	Leverage	Inddir
ROE	1.000	0.554**	0.238	0.423*
TA	0.554**	1.000	0.694**	0.517**
Leverage	0.238	0.694**	1.000	0.210
Inddir	0.423*	0.517**	0.210	1.000
Islrev	-0.632**	-0.516**	-0.193	-.185

* Significant at 5% level.
** Significant at 1% level.

Table 2. Regression Analysis

Model	(1)	(2)	(3)	(
Islrev	-0.0835	-0.0923	-0.0660	-
	(-2.200)*	(-2.416)*	(-1.727)	(
Inddir	-	-0.103	-	-
	-	(-1.238)	-	(
Leverage	-	-	-0.0383	-
	-	-	(-3.621)**	(
TA	-	-	0.308	(
	-	-	(5.250)**	(
ROE	-	-	-0.630	-
	-	-	(-1.753)	(
Adjusted R^2	0.138	0.158	0.524	(
F	4.842*	3.243	7.342**	(

*Significant at 5% level.
**Significant at 1% level.