CAN MOBILE BANKING INFLUENCE DEPOSITOR’S FUND?
AN EVIDENCE REVIEW

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Abstract: Mobile banking is a phenomenon that is having a profound effect on the global financial services industry. The growth of global mobile banking users is in an exceptionally rapid phase. However, the competition for deposit may increase the pressure on the bank cost and thus will affect the profit of the banks. Thus, the main objective of this study is to investigate the impact of using mobile banking to depositor’s fund. Therefore, the dependent and independent variables have been identified and determinants using 16 Islamic banks in Malaysia over the period of 2008 to 2017. It is revealed that mobile banking has a significant impact on the depositor’s fund. The finding of this study is pertinent to the fact that, the growth of mobile banking acceptance among Islamic banks in Malaysia has changed the way banks offer services to their customers.

Keywords: Depositor’s Funds, CAMEL Components, Mobile Banking, Islamic Banks.

Introduction
The emerging of Islamic finance as an effective tool for financing development not only for Muslim countries but also for non-Muslim countries. According to Alawode (2015), main financial markets have discovered that Islamic finance has already became mainstream within the global financial system to help eliminate extreme poverty and also bring prosperity together. Nowadays, global Shariah-compliant financial asset is estimated at around US$2 trillion comprises bank and non-banking institutions, capital market, money market, and Takaful.

The Islamic banking is a banking system which is in parallel with the value system and spirit of Islam and the principles of operation is according to Shariah Law (Summit Bank, 2016). This Islamic banking operation is generally transform the conventional money lending system to an asset-backed financing. One of the factors that arises in development of Islamic bank is
that Muslims do not want to put their money in the conventional financial system as the return is based on interest (ISRA, 2016).

Malaysia has been recognise as one of the leading country in Islamic Finance after the first operation of Islamic bank 30 years ago (Malaysia Reserve, 2015). There are 16 fully-fledged licensed Islamic financial institution in Malaysia including several foreign-owned bank. According to World Bank (2016), Malaysia stand on number two with the total asset USD156.70 billon from all region of Islamic banking asset, first place in the South and Southeast Asia region.

There are several reason for the successful of Islamic finance and banking in Malaysia. According to Andria (2014), there are three main roles involved in which the first role is the openness of Malaysia to the Islamic finance market. Second, the role of BNM which introducing the International Centre for Education in Islamic Finance (INCEIF) and Islamic Banking and Finance Institute of Malaysia (IBFIM). Third, the Malaysian itself which play an important role in the success of Islamic banking operation. Malaysian especially Muslims awareness are increasing and they understand the important of Islamic finance and its differences from conventional banking.

The behaviour of customers towards Islamic banks can be seen by using the variables of bank deposit. According to Law of Malaysia (2013), bank deposit in Islamic banks or called Islamic deposit is the sum of money or any precious metal or stone or any articles that prescribed by the Minister, on the recommendation of the bank, accepted, paid or delivered, in accordance of Shariah. There is a big changes where all the deposit used to be guaranteed by Malaysian Deposit Insurance Corporation (PIDM), now are not guaranteed for the money that is classified as an investment account that used contract like mudarabah (The Edge, 2014). This act is seen to be directly affected the deposit in bank. For example, even though there is no guaranteed in capital of investment account, customers can potentially earn a high return (The Star Online, 2015).

![Figure 1: Deposit Funds of Islamic Banks in Malaysia](source: BNM, 2018)
Such as in Figure 1 shows the deposit funds in Malaysian Islamic banks from 2007 until 2018. The trend of total deposit in Malaysia is keeping increasing where it starting only RM38,514 million in 2007 until RM395,279 million in 2017. Thus, this study will emphasis on depositor fund on what factor could affect the result of increasing deposit fund year by year. Several internal factor variables will be chosen to find the possible factors that attract customers toward Islamic banks.

However, bank performance is one of the important issues in the banking sector. According to Avkiran, 1995 (as cited in Rostami, 2015) bank performance is measured by using a combination of financial ratio analysis, benchmarking or by measuring profit against cost. According to Rozzani & Rahman (2013), bank performance is referred to the proportions of bank in generating profit. One of the aspects that enables bank to analyse their financial and operational activities based on the CAMEL (capital adequacy, asset quality, management, earning and liquidity) framework (Hasbi & Haruman, 2011). Other than that, the revolution of mobile banking also could affect the performance of the bank. According to Shevlin (2018), the introducing of mobile banking facilities is one of the crucial part of banking system. It could increase the interest of consumer and providing facilities like paying bills and checking balances.

However, mobile banking has several issues like security, maintenance and so on. Raza et al. (2017), stated that mobile banking platform are the bigger target to be hacked. Hackers can easily steal customer’s money and banking data when the online transactions happen. This issue will affect the activities of customers through mobile banking and could possibly affect bank performances.

Thus, the aim of this study is to explore the impact of implementing mobile banking to the depositor’s fund. Research has found evidence that mobile banking facilities are one of the crucial part of banking system. It could increase the interest of consumer to deposit funds in bank and thus improve the profitability of the banks. Therefore, data variable of depositor’s fund and mobile banking are analysed based on annual data series from period of 2008 until 2017. However, this study used five bank’s specific variables, CAMEL as controlled variables.

**Literature Review**

In the banking sector, the essential of securing the deposits and the transaction of a daily operation that might affect bank performance. According to Soana, 2011 (as cited in Macharia, 2016), efficiency theory describe that large bank with huge experience and current technology will bring an opportunity to reduce the cost and earn a high profit in investment.

Following Davis (1989), the primary objective of the technology acceptance theory is to predict the usage and acceptance of information systems and technology by the individual user. Meanwhile, according to Surendran (2012), this theory has been widely applied in studies that investigate the technological acceptance behaviour in various information system constructs.

Vijayan, Perumal, & Shanmugam (2005) also supported the behaviour of the specific technology used. They stated that certain banking transaction like check account balance, fund transfer and pay bills are suitable as it does not really need actual personal contact to use it. Thus, bank has a responsibility in providing and maintaining the quality of internet banking as a customer are aware of the environment changes.
Additionally, according to Raza, Naveed and Ali (2017) provide further empirical evidence on the relationship of mobile or internet banking toward bank deposit. This study find that deposit is positively and highly significant affected the mobile banking implementation in Pakistan. While, Singh and Sinha (2016) analyses the study of mobile banking and its impact on banking transaction from customers in the case of Indian banks. 10 banks are being used which consists of 5 public banks and 5 private banks in year of 2005 until 2015. The result shows that mobile banking transaction has increased significantly for the selected Indian banks in 10 years.

Susanto (2017) and Farah, Hasni and Abbas (2018) are among the studies which provide empirical supports on the mobile banking application based on the service quality. For instance, Susanto (2017) analyses the Indonesian data and find that mobile banking is significantly and positively have effect on the level of service at commercial banks with the value of significance at level 0.05. The impact from implementation of mobile banking led to the increasing of the banking transaction to Rp. 6447 Trillion or RM 1.74 trillion. While Farah, Hasni and Abbas (2018) studies the mobile banking adoption in banking sector of Pakistan. This study shows that the variables used which are performance expectancy, perceived risk and trust for the bank are highly significant to the usage of the mobile banking.

According to Kabeer and Mannan (2013), they finds that the intention of consumer in using mobile banking services is due to the social influence, perceived risk, perceived usefulness and ease of used. The most significant is social influence where consumers are believe that they should exercise the use of technology. This study is conducted in Pakistan where they are using questionnaire on 372 respondents in two largest cities which are Karachi and Hyderabad. Also, Hosseini, Fatemifar and Rahimzadeh (2015) studied about the effective factor on adopting mobile banking on customers in Iran. They are using only one sample of bank which is Saderat Bank that consist of 350 respondents are using mobile banking services. The result from this research show that among all variables used, the cost of using and profitability of banks are ranked higher by customers as an effective factors in their usage of mobile banking.

While, Abubakar (2014) investigate the effect of electronic banking growth of deposit money banks in Nigeria using a time series data in the period from 2006 to 2012. The result reveals that there are a positive and significant relationship between mobile banking and total deposit. While Kashmari, Nejad and Nayeb yazdi (2016) purpose of their study is to evaluate the financial innovation like internet banking and mobile banking for banks to attract deposit. The study is conducted in Iran using data from 23 Iranian banks in the year of 2007 until 2013. The result based on Granger causality test shows that every variables used including mobile banking has causal relation in affecting the increases banks share to attract deposit.

**Data and Methodology**

By using an unbalanced panel data, the data were collected from Fitch Connect database based on annual financial report for each Islamic banks and Bank Negara Malaysia website. Three models are tested namely none effect, fixed effect and random effect model, respectively. The best model is selected based on Likelihood ratio and Hausman test. Most of the data were tested using E-view 9.0 software. Financial information of 16 Islamic banks in Malaysia is collected for the year 2008 to 2017. The time period was chosen as it seem to fit the study on during and after financial crisis occurred. Table 1 shows that the total of all Islamic banks are involved.
The dependent variables used in this study is depositor’s fund (DF). The purpose of this study is to analyse the variability of DF while the influencing of independent variables occurred. Therefore, DF variable are considered the mainly interested variable in this study. It also used as a tool to measure the behavioural of customers of Islamic banking institutions (Abusharbeh, 2016). According to Abel (2013), bank cannot survive if there is no deposit. This mean, bank need deposit from savers to operate and keep existing in the industry. Thus, this study are following Hasbi and Haruman (2011), Abusharbeh (2016) and Olimov, Hamid and Mufraini (2017) use DF variable as a dependent variable and it is measured as below:

\[
\text{Depositor Fund (DF)} = \text{Demand Deposit} + \text{Investment Deposit}
\]

However, there are six (6) independent variables used in this study. Five (5) of them are component of CAMEL (capital adequacy, asset quality, management efficiency, earning and liquidity) and the other component is information technology expenses of the banks.

**Mobile Banking**

Mobile banking is one of the components of information technology expenses for banks. This is as independent variables and the main objective of this study. For this variable, the data were collected in Bank Negara Malaysia website. Table 2 below shows the mobile banking subscribers for Islamic banks in Malaysia.
Table 2: Mobile Banking Subscriber for Islamic Banks in Malaysia

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Amount (RM Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>574.60</td>
</tr>
<tr>
<td>2009</td>
<td>675.00</td>
</tr>
<tr>
<td>2010</td>
<td>898.50</td>
</tr>
<tr>
<td>2011</td>
<td>1,560.30</td>
</tr>
<tr>
<td>2012</td>
<td>2,446.20</td>
</tr>
<tr>
<td>2013</td>
<td>4,378.80</td>
</tr>
<tr>
<td>2014</td>
<td>5,639.20</td>
</tr>
<tr>
<td>2015</td>
<td>7,278.80</td>
</tr>
<tr>
<td>2016</td>
<td>8,794.80</td>
</tr>
<tr>
<td>2017</td>
<td>11,348.20</td>
</tr>
</tbody>
</table>

Sources: BNM, 2018

**Capital Adequacy**

There are several measurements to represent capital adequacy like capital adequacy ratio, debt-equity ratio, total advances to total assets ratio and government securities to total investment ratio. But, in this study only chooses the capital adequacy ratio (CAR) as a proxy to capital adequacy. Ebhodaghe (1991) argue that CAR is when the capital is able to absorb the losses situation and also able to cover the banks fixed assets. Thus, bank can have a reasonable surplus for ongoing operation and expansion in the future. Liu & Pariyaprasert (2014) stated that this risk-weighted CAR is to measure the capital of the bank with the percentage of the bank risk-weighted assets. Thus, the calculation of CAR is like:

\[
\text{Capital Adequacy Ratio (CAR)} = \frac{\text{Bank Capital}}{\text{Risk Weighted Total Asset}}
\]

**Asset Quality**

Liu and Pariyaprasert (2014) stated that asset quality show the situation of bank’s asset risk and also its financial performance. There are three ratios that represent the asset quality which are nonperforming loan to total asset, loan to total asset and nonperforming loan to total loan. In this case, nonperforming loan to total asset is selected as a proxy to asset quality. In Islamic banking operation, the term used is nonperforming financing (NPF). The lower of this ratio, the higher the earning of asset quality. Thus, it is calculated as follows:

\[
\text{Nonperforming Financing (NPF)} = \frac{\text{Amount of Default from Financing}}{\text{Total Financing}}
\]

**Management efficiency**

There are two ratio to represent management efficiency stated by Liu and Pariyaprasert (2014), operating expenses to net operating income and operating expenses to total asset. This study used operating expenses to net operating income (OEOI) as a proxy to management efficiency as it record the management soundness (Abusharbeh, 2016). Sarker (2006) argues that OEOI can be used to represent the management efficiency of the banks. The calculation given as follows:

\[
\text{Operating Expenses to Operating Income (OEOI)} = \frac{\text{Operating Expenses}}{\text{Net Operating Income}}
\]
Earning
There are several ratios used to represent earning. For example, net interest margin, return on equity/asset, net profit margin and so on. This study will choose return on asset (ROA) as a proxy to represent earning of the bank. Atikogullari, 2009 (as cited in Liu and Pariyaprasert, 2014) stated that earning ability is a very crucial determinant of bank performance and profitability. It helps bank increase their fund, and keep survive in the market. ROA is defined as net income divided by total assets. Therefore, it is calculated by:

\[
\text{Return on Asset (ROA)} = \frac{\text{Net Income}}{\text{Total Assets}}
\]

Liquidity
Liquidity is the ability of the bank to fulfill short term liability and at the same time maintain their solvency (Liu and Pariyaprasertin, 2014). There are several ratios can be used to represent liquidity. For example, total investment to total assets ratio and cash to deposit ratio. For this study, the financing to deposit ratio (FDR) will be used as a proxy to liquidity where as Hasbi and Haruman (2011) also use it representing the measurement of liquidity of Islamic banks. The calculation of FDR as follows:

\[
\text{Financing to Deposit Ratio (FDR)} = \frac{\text{Total Financing}}{\text{Total Deposit}}
\]

Findings and Discussion
Table 3 shows the descriptive statistics of the dependent variables and the independent variables of Islamic banks in Malaysia. The dependent variable is DF, the independent variables are CAR, NPF, OEOI, ROA, FDR and MB. The number of observation for this study is 143. The result indicated that the mean for DF is 9.6163 and the standard deviation is 1.2615.

Table 3: Descriptive Statistic of Variables for Islamic Banks in Malaysia.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>STD. DEV.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>9.6163</td>
<td>9.6323</td>
<td>1.2615</td>
<td>143</td>
</tr>
<tr>
<td>CAR</td>
<td>2.5652</td>
<td>2.5209</td>
<td>0.2671</td>
<td>143</td>
</tr>
<tr>
<td>NPF</td>
<td>5.5315</td>
<td>5.5921</td>
<td>1.2198</td>
<td>143</td>
</tr>
<tr>
<td>OEOI</td>
<td>3.9604</td>
<td>3.9480</td>
<td>0.3034</td>
<td>143</td>
</tr>
<tr>
<td>ROA</td>
<td>4.2884</td>
<td>4.3472</td>
<td>0.2416</td>
<td>143</td>
</tr>
<tr>
<td>FDR</td>
<td>-0.2906</td>
<td>-0.2357</td>
<td>0.7899</td>
<td>143</td>
</tr>
<tr>
<td>MB</td>
<td>7.9984</td>
<td>8.3845</td>
<td>1.0111</td>
<td>143</td>
</tr>
</tbody>
</table>

For independent variables, the mean value for CAR is 2.5652 and the value of standard deviation is 0.2871. While the value of mean for NPF is 5.5315 and its standard deviation is 1.2198. Next, for the value of mean of OEOI is 3.9604 and the standard deviation is 0.3034. Meanwhile, mean for FDR is 4.2883 with standard deviation of 0.2416. For the ROA, the mean result is -0.2906 and its standard deviation is 0.7899. Last, for MB, mean is 7.9984 while its standard deviation is 1.0111. The more amount of standard deviation shows the huge gap of the variance of dataset. It means that huge values of standard deviation resulted to the huge of spread among data.

Table 4 below shows the normality test of this study. The Skewness and Kurtosis result from the descriptive analysis are used to determine the normality of the dataset. The Skewness values
should be less than three (3) and Kurtosis values should be less than 10. The result from Table 4 below shows that most of the data are within the targeted values while variable of ROA shows Kurtosis values over than 10 (11.6250).

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>CAR</th>
<th>NPF</th>
<th>OEOI</th>
<th>FDR</th>
<th>ROA</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
<td>0.1849</td>
<td>1.0978</td>
<td>0.4863</td>
<td>0.1315</td>
<td>-1.0454</td>
<td>-1.8942</td>
<td>-0.3029</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.9373</td>
<td>5.6393</td>
<td>3.6062</td>
<td>3.7236</td>
<td>4.8450</td>
<td>11.6250</td>
<td>1.6343</td>
</tr>
<tr>
<td>Observation</td>
<td>143</td>
<td>143</td>
<td>143</td>
<td>143</td>
<td>143</td>
<td>143</td>
<td>143</td>
</tr>
</tbody>
</table>

The result of not normal distribute are not a big problem on panel dataset with big observation. According to Buthmann (2018), the data that used specific tools like t-test, analysis of variance (ANOVA) or individual control chart need the data to be distribute normally. But for the practitioner that are not using this specific tool, they don’t have to worry whether the data is distributed normally or not. There are several reason for non-normal of dataset mention by Buthmann (2018), like extreme values of data, insufficient data discrimination and so forth.

This study employed also the Pearson correlation analysis. The objective is to find the strength level of relationship among variables. Thus, from Table 5 below, the overall result shows normal correlation where there is a negative and positive correlation between the variables. The lowest correlation is between CAR and NPF and between FDR and MB which id 0.0733 and 0.0747 respectively. While, there is one high correlation which is between DF and NPF that shows 0.8776.

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>CAR</th>
<th>NPF</th>
<th>OEOI</th>
<th>ROA</th>
<th>FDR</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDF</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>-0.1686</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPF</td>
<td>0.8776</td>
<td>-0.0733</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEOI</td>
<td>-0.4569</td>
<td>0.3897</td>
<td>-0.3592</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.3072</td>
<td>-0.1221</td>
<td>0.3853</td>
<td>-0.2133</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDR</td>
<td>0.6147</td>
<td>-0.2349</td>
<td>0.5845</td>
<td>-0.5461</td>
<td>0.2761</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MB</td>
<td>0.2669</td>
<td>0.0930</td>
<td>0.1234</td>
<td>0.1223</td>
<td>0.4968</td>
<td>-0.0747</td>
<td>1</td>
</tr>
</tbody>
</table>

From the correlation matrix above, multicollinearity between the independent variables can be detected. But, the correlation result shows no multicollinearity has occurred. The highest correlate is between variables NPF and FDR where the result is 0.5845. But, the requirement for multicollinearity is 0.80. However, the correlation matrix is not enough to detect multicollinearity between independent variables. Thus, the VIF test is conducted using SPSS software. Table 6 below shows no multicollinearity appeared in this dataset where the tolerance values are more than 0.20 and the VIF are less than 10.
Table 6: Variance Inflation Factor (VIF) Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>.472</td>
</tr>
<tr>
<td>NPF</td>
<td>.596</td>
</tr>
<tr>
<td>ER</td>
<td>.407</td>
</tr>
<tr>
<td>ROA</td>
<td>.500</td>
</tr>
<tr>
<td>FDR</td>
<td>.682</td>
</tr>
<tr>
<td>MB</td>
<td>.808</td>
</tr>
</tbody>
</table>

Table 7 below shows the Hausman test for this study. Precisely, the p value for this model is 0.0000 that indicate significant to the level of 0.05 (p<0.05). Thus, reject hypothesis null that stated random affect are suitable and accept hypothesis alternative that stated fixed effect are more appropriate to be used in this panel model.

Table 7: Hausman Test

<table>
<thead>
<tr>
<th>Correlated Random Effects - Hausman Test</th>
<th>Test cross-section random effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Summary</td>
<td>Chi-Sq. Statistic</td>
</tr>
<tr>
<td>Cross-section random</td>
<td>139.166465</td>
</tr>
</tbody>
</table>

The Fixed Effect Model (FEM) regression analysis is performed using EVIEW 9.0 software. The result from FEM regression analysis is presented in the Table 8 below. The coefficient ($\beta$) shows the contribution for each independent variables to the dependent variable.

Table 8: Result for Fixed Effect Model Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected Signs</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>+</td>
<td>-0.0993</td>
<td>-0.9422</td>
<td>0.3480</td>
</tr>
<tr>
<td>NPF</td>
<td>-</td>
<td>0.0594</td>
<td>1.0263</td>
<td>0.3068</td>
</tr>
<tr>
<td>OEOI</td>
<td>-</td>
<td>-0.2836</td>
<td>-2.5903</td>
<td>0.0108**</td>
</tr>
<tr>
<td>ROA</td>
<td>+</td>
<td>0.0269</td>
<td>0.6738</td>
<td>0.5017</td>
</tr>
<tr>
<td>FDR</td>
<td>+</td>
<td>-0.6626</td>
<td>-5.9152</td>
<td>0.0000***</td>
</tr>
<tr>
<td>MB</td>
<td>+</td>
<td>0.4299</td>
<td>18.3302</td>
<td>0.0000***</td>
</tr>
<tr>
<td>C</td>
<td>N/A</td>
<td>10.0760</td>
<td>13.9837</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

$R^2$ 0.9789  
Adjusted $R^2$ 0.9752  
F-Statistic 267.1572  
Prob F-Statistic 0.000000  
N 143  

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Table 8 shows the regression result for the Islamic Bank in Malaysia. The F-statistic explains that the overall significance of the model that is found to be significance at 0.0000 level with the adjusted R-square of 0.9789. The R-square shows that all the independent variables, namely CAR, NPF, OEOI, FDR, ROA and MB could explain 97.89% changes in ROA. There are two (2) variables are found to be significance at level 1% which is FDR, and MB. While variables OEOI is also significance but at the level of 5%. However, variables CAR, NPF and ROA are not significant.

There are only three variables significance (OEOI, FDR and MB) in this study. The other three variables are not significant (CAR, NPF and ROA). While three of the result are different from expected sign. Therefore, this study develops the multiple linear regression as follows:

\[
DF = 10.0760 - 0.0993\text{CAR} + 0.0594\text{NPF} - 0.2836\text{OEOI} + 0.0269\text{ROA} - 0.6626\text{FDR} + 0.4299\text{MB} + \epsilon
\]

From the equation above, it can be interpreting that the constant is 10.0760. When, CAR increase 1 percent, DF will decrease 0.0933 percent. While if NPF increase 1 percent, DF will increase 0.0594 percent. Then, when OEOI increase 1 percent, DF will decrease 0.2836 percent. After that while ROA and MB increase 1 percent, DF will increase 0.0269 and 0.4299 percent respectively. Last, when FDR increase 1 percent, DF will decrease at 0.6626 percent.

The coefficient estimation for MB is 0.4299 with t-value of 18.3302 (p<0.01). This result show that the increase in MB 1 percent, the DF will increase at 0.4299 percent. The result show that a positive significant relationship between MB and DF. Therefore, this result also reject null hypothesis H0. The result is similar with previous study conducted by Abubakar (2014), Raza et al. (2017), Singh & Sinha (2016) Susanto (2017), and Farah et al., (2018) which also found positive and significant relationship between both variables. This result shows that customers are believing in mobile banking while making any transaction involving banks. Thus, the result is consistence with the expected result for this study.

Next, the coefficient estimation for CAR is -0.0993 with t-value of -0.9422. This result indicates the increase of CAR 1 percent, DF will decrease at 0.3551 percent. The result show that there is no significant relationship between CAR and DF. Thus, this result accept null hypothesis H0. Most of the previous study found that even though there is negative relationship between CAR and DF, the result still significant to the level of 0.01 and 0.05. However, this study finding is different where there is no relationship between CAR and DF. This result is supported by a study done by Olimov et al. (2017).

After that, the coefficient estimation for NPF is 0.0594 with t-value of 1.0263. This result shows that the increase in NPF 1 percent, the DF will increase at 0.0594 percent. The result shows that a positive relationship but not significant between NPF and DF. Therefore, this result accept null hypothesis H0. This result is supported by Olimov et al. (2017). Even though there are finding from Abduh & Alias (2014), Desta (2016) and Muiruri (2017) that stated that NPF is positively and significant affect bank performance that shows how well bank manage the financing that somehow will attract a high depositors. But, this study found that NPF are not influence the DF.
Where the coefficient estimation for OEOI is -0.2836 with t-value of -2.5903 (p<0.05). This result indicates the increase of OEOI 1 percent, DF will decrease at 0.2836 percent. The result shows a negative significant relationship between OEOI and DF. Thus, this result reject null hypothesis $H_0$. The result is similar to Abusharbeh (2016), Olimov et al. (2017) that show a negative relationship too. The result is similar to the expected sign in this study. But, the previous study shows a non-significant of both variables. That’s mean, OEOI still affecting depositor fund even though in negative ways.

The coefficient estimation for ROA is 0.0269 with t-value of 0.6738. This result shows that the increase in ROA 1 percent, the DF will increase at 0.0269 percent. The result shows that there is no significance value between ROA and DF. Therefore, this result accept null hypothesis $H_0$. This result contradict with expected sign of this study. But, the result is supported Olimov et al. (2017) that the ROA variables are not significant. This indicates that the increases in ROA, DF will show no sign of affected.

Last, the coefficient estimation for FDR is -0.6626 with t-value of -5.9152 (p<0.01). This result indicates the increase of FDR 1 percent, DF will decrease at 0.6626 percent. The result shows a negative significant relationship between FDR and DF. Thus, this result reject null hypothesis $H_0$. This findings is supported by Rengasamy (2014) where in his study, he found that from all eight local commercial banks, there is one banks that its loan to deposit ratio is negatively affect the bank performance. Thus, if the FDR has increases that would makes the FD decreases.

**Conclusion**

As a conclusion, this study is conducted to investigate the impact of bank performance on depositor’s fund. The scope of this study is on the Malaysia Islamic banks. There are 16 Islamic banks are being investigated starting from the year 2008 until 2017. This study is using panel data and most of the data are tested using E-view software except for VIF test that using SPSS software.

From this study, five components of CAMEL analysis are used as independent variables: capital adequacy ratio, nonperforming financing, operating incomes to operating expenses, return on asset and financing to deposit ratio. This study also brings new main independent variable to be investigated which is mobile banking. From findings, it reveals that only three variables (operating incomes to operating expenses, financing to deposit ratio and mobile banking) are significant effect on depositor’s fund. However, the rest three variables (capital adequacy ratio, nonperforming financing and return on asset) are not significant.

The method used in order to determine the impact of bank performance on depositor fund is a fixed effect model (FEM). The result from these regression shows that mobile banking (MB), operating incomes to operating expenses (OEOI) and financing to deposit ratio (FDR) are the highest affecting to the depositor’s fund. While, in order to determine the relationship of each variable, this study conducted a Pearson Correlation Test and VIF test. From this test, this study can have a clear information about the values of correlated variables. For example, the correlation between DF and NPF is the highest which is at 0.8776 even though there is no significant relationship between them. Apart from that, there is no multicollinearity detected which concluded that the independent variables are not intercorrelated.

Apart from that, other than developing new technology or update financial technology to sustain as a good competitor in the industry, the bank should also maintain their responsibility to secure whatever related to the customers. For example in term of security of customer information.
This is due to the highly significant of mobile banking and positively relationship to the depositor’s fund. There is a security policy by BNM that bank has to follow. The security policy should be improved from times to times as there is a lot of cases like loss of data information of CIMB customer (NST Online, 2017) or even BNM itself are one of the victims of being attack by hacker (The Straits Times, 2018). Thus, the policy should be strengthened to avoid the loss of trust among customers.

References


