

An Analysis on the Effect of Performance Factors and Technology Aspect on Market Share of Sharia-Compliant Banking in Indonesia

1stMuhamad Sandy
Universitas Islam Negeri Syarif
Hidayatullah
Jakarta, Indonesia
m.sandi@gmail.com

2ndAde Sofyan Mulazid
Universitas Islam Negeri Syarif
Hidayatullah
Jakarta, Indonesia
adesofyanmulazid@uinjkt.ac.id

3rdFaizul Mubarak
Universitas Islam Negeri Syarif
Hidayatullah
Jakarta, Indonesia
fazymubarak@uinjkt.ac.id

Abstract—This study aims to analyze the influence of the Operational Efficiency Ratio (OER), Return on Assets (ROA), Non-Performing Financing (NPF) and Electronic Banking towards a market share of sharia-compliant banking in Indonesia. Secondary data was used from the annual report of the Financial Services Authority Board (OJK) related to Sharia Commercial Bank (BUS) and Sharia Business Unit (UUS) performance 2011-2015. Panel Data Regression used to analyze data. Result found that both partially and simultaneously OER, ROA, NPF, and Electronic banking affect Market Share of sharia-compliant banking significantly in Indonesia.

Keywords—Performance factors, technology aspects, market share

I. INTRODUCTION

In this modern era, banking contributes very considerably to advancing a state's economy. Nearly all sectors related to various financial activities always needs bank service. In undertaking financial activities, we can be independent of the banking world, either individually or institutionally, either socially or corporately. The presence of sharia-based bank is still relatively new, only in 1990. However, discussion about sharia bank as the basis of Islamic economy has begun since the early 1980s. Meanwhile, an initiative to establish Sharia Bank in Indonesia was made by the Indonesian Ulema Council (Indonesian: Majelis Ulama Indonesia-MUI) on August 18-20, 1990. The birth of the first Sharia Bank in Indonesia constituting the product of MUI's banking teamwork was indicated with the establishment of PT Bank Muamalat Indonesia (BMI), the establishment document of which was signed on November 1, 1991. BMI has currently had tens of subsidiaries distributed in such big cities as Jakarta, Surabaya, Bandung, Makassar, and etc. [1].

The activity of Sharia-compliant banking in Indonesia started with the issuance of Law No.7 of 1992 about Banking, implicitly accommodating the profit-sharing system. The establishment of PT. Bank Muamalat Indonesia, Tbk (PT BMI) in 1992 is a milestone for national sharia-compliant banking as the one operating based on the sharia principle. However, the development of sharia banking runs more slowly than that of the conventional bank until today.

In 1998, the government proposed sharia-compliant concept into Law No.10 of 1998 about the amendment to Law No.7 of 1992 about Banking. It was then followed with the issuance of Bank of Indonesia's Law No. 23 of 1999 about Bank of Indonesia. Bank of Indonesia gives the public as wide as possible the opportunity of establishing bank organizing business activity based on sharia principle, including giving the public bank the opportunity of opening subsidiary conducting activities based on sharia principle.

Around its 23-year age, the development of sharia-compliant banking in Indonesia is not delightful. Market share of sharia-compliant banking is still around 5%, and even in the last 3 years, it's market share growth is stagnant. Indonesia's and world's economic growths are getting slower; inflation rate and Gross Domestic Product (GDP) affect the growth of sharia-compliant banking. Just like other national companies, sharia-compliant banking is also very sensitive to and affected significantly by economic condition. The slower economic growth makes economic dynamics less conducive to the development of the real sector. It impacts the growth rate of sharia banking asset.

Table 1. Indonesian Macroeconomic Data

| Indicator | Unit | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------|------|----------|----------|----------|-----------|-----------|-----------|
| Economic Growth | % | 6.17 | 6.03 | 5.58 | 5.02 | 4.79 | 5.02 |
| Inflation | % | 3.79 | 4.3 | 8.38 | 8.36 | 3.35 | 3.02 |
| GDP (trillion) | IDR | 7,831.73 | 8,615.70 | 9,546.13 | 10,569.71 | 11,531.72 | 12,406.81 |

Source: Bank of Indonesia & Statistics Indonesia

From the data presented in table 1, it can be seen that economic growth decreases continuously from 6.17% in 2011 to 4.67% in some years but 2015 and increases again in 2016 to 5.02% in 2016. The inflation rate has decreased in the last two years compared with the very high one in 2014. Inflation rate is 3.79% in 2011 and 4.3% in 2012. In 2013, Indonesia encountered sufficiently high inflation of 8.38% constituting the highest rate in the period of 2011-2016. This condition decreases by 0.0% to 8.36% in 2014, then by 3.35% and by 3.02% in 2016. Performance, high operational cost, and non-performing loan lead to a decrease in the profit of sharia-compliant profit. Table 2

presents the development of sharia-compliant banking in recent years.

Table 2.

Data of Sharia-Compliant Bank's Performance

| Indicator | Unit | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------|------|---------|---------|---------|---------|---------|-------|
| Market share | % | 3.98 | 4.58 | 4.89 | 4.89 | 4.87 | 5.30 |
| Total Asset (Billion) | IDR | 195.467 | 195.018 | 242.276 | 272.243 | 296.262 | 356.5 |
| Asset Growth | % | 1.49 | 1.34 | 1.24 | 1.12 | 1.09 | 20.23 |
| CAR | % | 16.30 | 14.13 | 14.42 | 15.74 | 15.02 | 16.63 |
| FDR | % | 88.94 | 100.00 | 100.32 | 91.50 | 92.14 | 85.99 |
| NPF | % | 2.52 | 2.22 | 2.62 | 4.33 | 4.34 | 4.42 |
| OER | % | 78.41 | 74.97 | 78.21 | 94.16 | 94.38 | 96.22 |
| ROA | % | 1.79 | 2.14 | 2.00 | 0.79 | 0.84 | 0.63 |
| Profit (IDR Trillion) | IDR | 0.239 | 2.466 | 3.230 | 1.733 | 1.786 | 2.096 |
| Number of Banks | # | 35 | 35 | 34 | 36 | 36 | 34 |

Source: Banking Service Authority & Indonesia Statistics

From table 2, it can be found that total asset of sharia-compliant banking seems to increase continuously from 145.467 Billion Indonesian Rupiah in 2011 to 356.5 Billion Indonesian Rupiah or more than twofold within 5 years (2011-2016). However, the growth rate decreases during 2011-2015. These small asset number and market share show that sharia-compliant banking industry has not been able to stimulate and accommodate the need for banking service corresponding to the very large target market. Thus, sharia-compliant banking has not been able yet to contribute significantly to improving the people prosperity, as can be seen from its small business scale (as reflected in the total asset and costing) and low public participation (as reflected in the amount of third party's fund) compared with that of conventional banking. Sharia-compliant banks have not had much to do with the attempt of raising Indonesian people's economic degree, particularly marginal economic performers'. Meanwhile, the number of the poor Indonesian population is still sufficiently high. Therefore, the growth of sharia-compliant banking should be accelerated to address the people's need and to show off its effectiveness in giving solution to the national economy. The presence of sharia-compliant banking can be felt if only it has had a significant portion in the national economic order.

Overall, the performance of sharia-compliant banking is not good. CAR decreased from 16.63% in 2011 to 15.02% in 2015. NFP reaches 4.42% in 2016 increases very much compared with that of 2.52% in 2011. The operational cost of sharia banking is very high; OER has reached 96.22%. The increase in NPF and OER directly decreases ROA and profit of sharia-compliant banking. ROA decreases from 2.14% in 2012 to 0.62%, while profit decreases from 3.2 trillion in 2013 to only 2.1 trillion in 2016.

Compared with the performance of conventional banking, the performance of conventional banking is still far better, particularly viewed from key indicators of ROA, OER, and NPF.

Table 3.
Data of Sharia-compliant and Conventional Banking performances

| Indicator | Unit | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------|------|-------|-------|-------|-------|-------|-------|
| Sharia ROA | % | 1.79 | 2.14 | 2.00 | 0.79 | 0.84 | 0.63 |
| Conventional ROA | % | 3.60 | 3.11 | 3.08 | 2.85 | 2.32 | 2.23 |
| Sharia OER | % | 78.41 | 74.97 | 78.21 | 94.16 | 94.38 | 96.22 |
| Conventional OER | % | 91.94 | 74.10 | 74.08 | 76.29 | 81.49 | 82.22 |
| Sharia NPF | % | 2.52 | 2.22 | 2.62 | 4.33 | 4.34 | 4.42 |
| Conventional NPL | % | 2.17 | 1.87 | 1.77 | 2.16 | 2.49 | 2.93 |

Source: Financial Service Authority

From table 3, ROA, OER, and NPF values between sharia-compliant and conventional banking. ROA of conventional banking decreases not as much as that of sharia banking. An evaluation is required to find out the factors affecting the profitability of sharia-compliant banking. NPF of sharia-compliant banking is much higher than that of conventional banking. In 2016, NPF of sharia-compliant banking was 4.42%, it worsens from that of 2.52% in 2011. Conventional bank encounters not substantial decrease, NPL ratio increased from 2.17% in 2011 to 2.93% in 2016. The increased NPF will then reduce the bank capital amount because the income received by the bank is used to compensate for the high NPF. Furthermore, the increased NPF will affect the bank in distributing loan in the next period.

II. LITERATURE REVIEW

In addition to performance factors, another factor affecting market share viewed from technology is e-banking. Accessibility to financial service accessibility can improve the growth of sharia-compliant bank's market share amid the limited network of sharia-compliant banking office and the decelerating growth of Sharia-compliant Bank. Bank Muamalat Indonesia that has applied e-banking before the issuance of Bank of Indonesia's policy, of course, affects the market share of the company.

Banking industry usually builds on efficient service and is always required to introduce a variety of services to accelerate the banking transaction process. Varying instruments, such as automatic teller machine (ATM) and etc., are used to help the banking sector maintain ongoing improvement. Some studies have been conducted on the effect of banking component on profitability and market share of the banking industry. Although the implementation of ATM in the United States of America reaches saturation, the distribution of ATM still tends to increase in other hemispheres such as Australia, China, Canada, Germany, and the UK. The relationship of Information technology (IT) to investment and company performance has been studied, and some researchers have investigated the effect of self-service technology (SST) in general and ATM in particular on the company's cost-efficiency.

In their study, Scholnick et al. [2] provided a comprehensive survey on credit card, debit card, and ATM. They concluded that point of sale (debit card) and substituted ATM transaction, and an additional cost of ATM affects point of sale volume significantly. Valahzagh and Blandi in their study entitled "The impact of electronic banking on profitability and market share: Evidence from banking industry" found that there is

no technological facility affecting the market share significantly [3]. However, there is a positive and significant relationship between Bank size and market share. Considering this study, the author wants to study further the effect of e-banking on the market share of sharia-compliant banking in Indonesia.

The development of electronic banking (e-banking) enters into a new stage in the presence of technology in the financial field called Fin Tech. If the transaction in the financial field, such as cash withdrawal, transfer, payment, etc., was known previously, Fintech is present to give more than that, the easiness to access financial products and to make the transaction easier, safer, and more straightforward. Customers can access financial service more easily using a smartphone or laptop.

Several phenomena aforementioned profoundly affect the development of the market share of sharia-compliant banking. Therefore, this research is conducted to study the factors affecting the market share of sharia-compliant banking in Indonesia. Factors affecting market share, viewed from the financial performance of the sharia-compliant bank, are among others OER, ROA, NPF, and technology aspect by electronic banking.

III. METHOD

This research aimed to study the effect of performance and technology factors on the market share of sharia-compliant banking in Indonesia. The proxy of performance factor is represented by Operational Efficiency Ratio (OER), Return on Assets (ROA), and Non-Performing Financing (NPF), while that of technology aspect by Electronic Banking. The data employed in this study was data of Sharia-compliant Public Bank and Sharia-compliant Business Unit having complete data report in Financial Service Authority (Otoritas Jasa Keuangan) during 2011-2015. The sample of research employed was data of Sharia-compliant Public Banks and Sharia-compliant Business Units existing in Indonesia including Bank Tabungan Pensiunan Nasional Syariah, Bank Muamalat Indonesia, Bank Syariah Mandiri, Bank Mega Syariah, Bank BRISyariah, Bank Syariah Bukopin, Bank BNI Syariah, Bank Jabar Banten Syariah, BCA Syariah, Bank Victoria Syariah, Maybank Syariah Indonesia, Bank Panin Syariah, and Bank Tabungan Pensiunan Nasional Syariah.

The method of analyzing data used in this research was a panel data regression analysis. Panel data was a combination of time series and cross-section data. Data were processed using Eviews 9.0 software. Panel regression in this study was used to examine the effect of OER, ROA, NPF, and Electronic Banking on the Market share of Sharia-compliant Banking. The test was conducted at a significance level (α) of 5 percents. The panel regression model used for hypothesis testing was as follows:

The regression equation was formulated below:

$$Y_{it} = \beta_0 + \beta_{1t} LNX_{1it} + \beta_{2t} LNX_{2it} + \beta_{3t} LNX_{3it} + \beta_{4t} LNX_{4it} + \varepsilon$$

Where:

- Y_{it} = Market Share
- X_{1it} = OER
- X_{2it} = ROA
- X_{3it} = NPF

- X_{4it} = Electronic Banking
- i = i entity
- t = t Period

IV. RESULT

From table 4, the mean value shows the average value of all the variables either dependent or independent. The median shows the mean value of all independent and dependent variables. Similarly, the maximum value and minimum value; this value indicates the highest and lowest value of the data in each variable. The standard deviation indicates the heterogeneity is occurring in the data under study or can be said as the average number of variability within a set of observational data. The purpose of the variance is to see the diversity of data an instrument made so that the data or variables can be assessed its validity. The greater the number of variances, the more diverse the data and the smaller the value of variance, the more similar data. In this case, it proved that the data in this study is relatively diverse. Skewness shows the tendency of a curve that can be seen from the difference in the mean, median, and mode. If the three data center concentrations are at the same point, then it is said to be symmetric or customarily distributed data. Whereas if it does not mean data is not symmetrical or not normally distributed. In addition, the score of Normality Test can be seen from Jarque-Bera (JB) probability value. The result of the test above shows that all variables are distributed normally as the probability value of all variables > 0.05 .

Table 4. Descriptive Statistics

| | Y | X ₁ | X ₂ | X ₃ | X ₄ |
|--------------|-----------|----------------|----------------|----------------|----------------|
| Mean | 251311.0 | 86.05833 | 1.365000 | 3.408333 | 177.5845 |
| Median | 257309.5 | 86.28500 | 1.315000 | 3.475000 | 152.2495 |
| Maximum | 356500.0 | 96.22000 | 2.140000 | 4.420000 | 374.3750 |
| Minimum | 145467.0 | 74.97000 | 0.630000 | 2.220000 | 39.05500 |
| Std. Dev. | 74807.95 | 9.810108 | 0.682781 | 1.054863 | 121.1402 |
| Skewness | -0.052789 | -0.031751 | 0.045717 | -0.045170 | 0.586104 |
| Kurtosis | 2.009808 | 1.090915 | 1.140838 | 1.071042 | 2.193270 |
| Jarque-Bera | 0.247907 | 0.912159 | 0.866211 | 0.932261 | 0.506222 |
| Probability | 0.883421 | 0.633763 | 0.648492 | 0.627426 | 0.776382 |
| Sum | 1507866. | 516.3500 | 8.190000 | 20.45000 | 1065.507 |
| Sum Sq. Dev. | 2.80E+10 | 481.1911 | 2.330950 | 5.563683 | 73374.69 |

The results of data processing using panel regression can be seen in the following table

Table 5. Result of Estimated Model

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 63.39286 | 0.884936 | 71.63553 | 0.0089 |
| X1 | -12.67690 | 0.211805 | -59.85173 | 0.0106 |
| X2 | -0.840533 | 0.014995 | -56.05402 | 0.0114 |
| X3 | 3.269543 | 0.052918 | 61.78488 | 0.0103 |
| X4 | 0.343455 | 0.001052 | 326.6051 | 0.0019 |
| R-squared | 0.999998 | Mean dependent var | | 12.39405 |
| Adjusted R-squared | 0.999988 | S.D. dependent var | | 0.319555 |
| S.E. of regression | 0.001098 | Akaike info criterion | | -10.91619 |
| Sum squared resid | 1.21E-06 | Schwarz criterion | | -11.08972 |
| Log likelihood | 37.74857 | Hannan-Quinn criter. | | -11.61086 |
| F-statistic | 105922.2 | Durbin-Watson stat | | 3.005056 |
| Prob(F-statistic) | 0.002304 | | | |

This study uses panel data, which is a combination of time series and cross-section data so that the model determination has three approaches in choosing the best

model, namely ordinary least square, fixed effect, and random effect. The approach is tested using the Chow Test, Housmant Test, and Lagrange Multiplier Test.

Chow Test

To find out the best model in panel data testing, dummy variable can be added, so that it can be found that intercept is different and can be tested using F-statistic F. This test can be used to find out whether or not panel data regression technique with Fixed Effect is better than panel data regression model without dummy variable or Common effect method. The null hypothesis in this study states that intercept is equal or in other words, the appropriate model to panel data regression is a common effect, and alternative hypothesis states that intercept is not equal or the model appropriate to panel data regression is fixed effect.

F statistic value (0.002304) will follow the distribution of F statistic with a degree of freedom of m for the numerator and n-k for the denominator. M is the number of restrictions in the model without the dummy variable. The number of restrictions is the number of individuals subtracted with number one. n is a number of observation and k is a number of the parameter in the Fixed Effect model. A number of observation (n) is a number of individuals multiplied with a number of periods, while a number of the parameter in the fixed effect model (k) is a number of variables added with the number of an individual. When the F statistic value is higher than F critical, the null hypothesis is not supported, meaning that the appropriate model to panel data regression is Fixed Effect. On the contrary, when F statistic is lower than F critical value, a null hypothesis is supported, meaning that the appropriate model to panel data regression is Common Effect model.

Hausman Test

Hausman has developed a test to choose which one is better than the Common Effect, whether Fixed Effect or Random Effect method. This Hausman test is based on the idea that Least Squares Dummy Variables (LSDV) in Fixed Effect method and Generalized Least Squares (GLS) in Random Effect method are efficient, while Ordinary Least Squares (OLS) in Common Effect is inefficient. On the other hand, the alternative is that the OLS method is efficient and GLS is inefficient. Therefore, null hypothesis testing is that the results of estimation test on both are not different so that the Hausman test can be done based on such different estimation.

Hausman Statistic test followed Chi-Squares statistic distribution with degree of freedom (df) as many as the number of independent variables. The null hypothesis is that the appropriate model to panel data regression is Random Effect model and the alternative hypothesis is that the appropriate model to panel data regression is Fixed Effect model. When Hausman Statistic value is more than Chi-Squares critical value, the null hypothesis is not supported, meaning that the appropriate model to panel data regression is Fixed Effect model. On the contrary, when Hausman statistic value is less than Chi-Squares critical value, a null hypothesis is supported, meaning that the appropriate model to panel data regression is Random Effect model. Hypothesis; H₀: Common Effect; H₁: Fixed Effect.

The comparison is used when F statistic is more (>) than F table so that H₀ is not supported, meaning that the most

appropriate model to be used is a fixed effect. Otherwise, if F statistic is less (<) than F table, H₁ is supported, and the model used is a common effect [4]. The result of redundant fixed-effect or likelihood ratio for this model has F probability value less than Alpha (0.05), so that H₀ is not supported and H₁ is supported; this result shows that the appropriate model is a fixed effect (because F probability value is 0.002304 < 0.05). Other tests (Hausman and LM test) can be conducted through the same steps as shown by the example above. Hausman test is identical with the random effect model, while the LM test or Lagrange Multiple is identical with the common effect model.

Lagrange Multiplier Test

Widarjono suggests that to find out whether or not the random effect model is better than the common effect model to be used in the Lagrange multiplier (LM) test [4]. This random effect significance test was developed by Breusch-Pagan. The test is based on the residual value of the common effect method. This LM test is based on chi-squares distribution with degree of freedom (df) as many as the number of the independent variable. The null hypothesis states that the appropriate model to panel data regression is a random effect. When LM statistic value is more than chi-squares critical value, the null hypothesis is not supported meaning that the model appropriate to panel data regression is a random effect model. Otherwise, when LM statistic value is less than chi-squares critical value, the null hypothesis is supported, meaning that the appropriate model to panel data regression is common effect model.

Furthermore, testing the standard assumption to test the data is normal, free from autocorrelation, multicollinearity, and heteroscedasticity. From the test results obtained that the data is normal and the data is free from autocorrelation, and heteroskedasticity.

Partial Regression Test (t-test) and Simultaneous Regression Test (F Test)

Partial regression test (t-test) shows that coefficient regression of OER variable is -0.12677 with t value of -59.852 and significance value of 0.0106 < 0.05, indicating the negative significant effect of OER on MS. Coefficient of regression value for ROA variable is -0.841 with t value of 56.054 at significance value of 0.0114 < 0.05, indicating the positive significant effect of ROA on MS. Considering the result of research as shown in table above, coefficient of regression value of NPF variable is 3.269 with t value of 61.785 and significance value of 0.0103 < 0.05, indicating the significant positive effect of NPF on MS. Coefficient of regression value of EB variable is 0.343 with t value of 326.605 and significance value of 0.002 > 0.05, indicating the positive significant effect of EB on MS.

Simultaneous regression test (F Test) is intended to find out the effect of regression coefficient simultaneously on the dependent variable. F statistic test shows whether or not all independent variables included in the model has a simultaneous effect on the dependent variable. The test is conducted by comparing the significance value with α value specified (0.05) or 5%. If the significance value < 0.05, H₀ is not supported, meaning that independent variables affect the dependent variable simultaneously. If the significance value > 0.05 or 5%, H₀ is supported, meaning that independent variables do not affect the dependent variable simultaneously. Considering the result of statistic test on the

fixed-effect model, the output of regression shows significance value of $0.002 < 0.05$ (5%), so that it can be concluded that OER, ROA, NPF, and EB variables simultaneously affect Market Share variable significantly.

Coefficient of Determinacy (R²), Considering the table of output for the fixed-effect model, it can be seen that R-square value is 0.999, meaning that OER, ROA, NPF, and EB simultaneously contribute to MS by 99%, while the rest of 1% is explained by other variables excluded from this research model.

V. DISCUSSION

OER affects Market Share. OER variable has a significance value (sig.) of 0.0106 or less than 0.05 (α). It means that H₀ is not supported and H_A is supported, or the hypothesis stating that there is a significant effect of OER on market share is supported. It is in line with Rahman (2016) study finding that at the beginning of the observation, the OER variable has a very dominant effect (7.18%) compared with other variables [5]. This finding confirms that OER variable affects the market share of the sharia-compliant bank very dominantly in the long term. While a variety of factors drives cost efficiency, it is the technical efficiency which brings in better market performance through pricing power in the Indian airline industry [10].

ROA affects Market Share. ROA variable has significance (Sig.) of 0.114 less than 0.05 (α). It means that H₀ is not supported and H_A is supported, or the hypothesis stating that there is a significant effect of ROA on market share is supported. Purboastuti et al. (2015) study suggested that ROA variable affects positively and significantly the market share of sharia-compliant banking in Indonesia [6]. This result is confirmed with Saputra (2014) study concluding that ROA variable affects the market share significantly and positively [7].

NPF affects Market Share. NPF variable has significance (Sig.) of 0.0103 less than 0.05% (α). It means that H₀ is not supported and H_A is supported, or the hypothesis stating that there is a significant effect of NPF on market share is supported. It is supported with previous studies finding that NPF variable affects the market share of the sharia-compliant bank more dominantly in the long term. It is in line with Granger's causality test, in which NPF has a causal relation with the market share of a sharia-compliant bank.

Meanwhile, from the result of an impulse response function test, it can be seen that MSR responds positively to NPF shock, and NPF responds negatively to Market Share shock [5]. Another study also suggested that the NPF variable affects the market share of sharia-compliant banking in Indonesia negatively and significantly [6]. NPF is also known as affecting Market Share negatively and significantly [7].

Electronic Banking affects Market Share. Electronic Banking variable has significance (Sig.) of 0.0019 less than 0.05% (α). It means that H₀ is not supported and H_A is supported, or the hypothesis stating that there is a significant positive effect of Electronic Banking on market share is supported. This finding is different from Valahzaghada and Bilandi, finding that there is no

technology facility affecting the market share positively, but there is a significant positive relation between technology facility and market share [3]. In other studies related to Electronic Banking use such as Kenneth et al. investigating the effect of fund transfer on financial performance and market share of commercial bank enlisted in Nairobi Stock Exchange concluded that Money Services Transactions affects the financial performance and the market share of commercial bank in Kenya positively [8]. This research also suggests that access to mobile money service affects financial performance and market share positively.

OER, ROA, NPF, and Electronic Banking affect Market Share. OER, ROA, NPF, and Electronic Banking variables have significance (Sig.) of 0.002304 less than 0.05 (α). It means that H₀ is not supported and H_A is supported, or the hypothesis stating that there is a significant positive effect of OER, ROA, NPF, and Electronic Banking on market share is supported. This study is in line with such previous studies as Kashmari et al. finding that electronic banking innovation affects market share [9]. Another study conducted by Valahzaghada and Bilandi (2014) suggested that the use of Pin Pad affects ROA, while the use of ATM and POS (Point of Sales) has no significant effect on profitability [3].

Furthermore, the study found that technology facility affects market share positively. The industry is currently inherent to the technology, thereby making technology one of the keys to survival in an industry. Technology can bring about the change in undertaking daily routine in the term of communication, interaction, banking, and shopping for daily needs. All activities are not independent of technology today.

VI. CONCLUSION

OER variable affects market share significantly. It is indicated with significance (Sig.) value of 0.0106 less than 0.05 (α). ROA variable affects the market share of sharia-compliant banking in Indonesia significantly. It can be seen from the significance (Sig.) value of 0.0114 less than 0.05 (α). NPF variable affects the market share of sharia-compliant banking in Indonesia significantly. It can be seen from the significance (Sig.) value of 0.0103 less than 0.05 (α). Electronic Banking variable affects the market share of sharia-compliant banking in Indonesia significantly. It is indicated with the significance (Sig.) value of 0.0019 less than 0.05 (α). OER, ROA, NPF, and EB variables simultaneously affect the market share of Indonesian sharia-compliant banking significantly. It can be seen from the significance (Sig.) value of 0.002304 less than 0.05 (α). Out of the four independent variables, Electronic Banking variable is the most significant one. It indicates that technology contributes very considerably to the development of the market share of sharia-compliant banking in Indonesia.

REFERENCES

- [1] Kashmir, 2014. *Dasar-Dasar Perbankan*. Jakarta: PT. Raja Grafindo Persada.
- [2] Scholnick, B., Massoud, N., Saunders, A., Carbo-Valverde, S., & Rodriguez-Fernandez, F. 2008. *The Economic of Credit Cards, Debit Cards, and ATMs: A Survey and Some*

- New Evidence. *Journal of Banking and Finance*. 32(8):1468-1483.
- [3] Valahzaghari, M. K., & Bilandi, E. B. 2014. The Impact of Electronic Banking on Profitability and Market Share: Evidence on Banking Industry. *International Journal of Industrial Engineering Computations*. 4(12):2531-2536.
- [4] Widarjono, Agus. 2007. *Ekonometrika: Teori dan Aplikasi Untuk Ekonomi dan Bisnis*. Yogyakarta: Ekonisia FE Universitas Islam Indonesia.
- [5] Rahman, Aulia. 2016. Analisis Faktor-faktor yang Mempengaruhi Market Share Bank Syariah. *Journal Analytica Islamica*. 5(2):291-314.
- [6] Purboastuti, Nuraini., Anwar Nurul., and Suryahani, Irma. 2015. Pengaruh Indikator Utama Perbankan Terhadap Pangsa Pasar Perbankan Syariah. *Journal of Economics and Policy*. 8(1):13-22.
- [7] Saputra, Bambang. 2014. Faktor-faktor Keuangan yang Mempengaruhi Market Share Perbankan Syariah di Indonesia. *Jurnal Akuntabilitas*. 7(2):123-131.
- [8] Kenneth, Tarus., Samson, Njenga Gitahi., Kibas, Peter., Chepkilot R., and Koima, Joel. 2016. Influences of Fund Transfer on Financial Performance and Market Share of Commercial Banks Listed At the Nairobi Securities Exchange, Kenya. *International Journal of Managerial Studies and Research*. 4(11):84-92.
- [9] Kashmari A., Nejad, AHG., and Nayebyazdi, A. 2016. Impact of Electronic Banking Innovations on Bank Deposit Market Share. *Journal Internet Bank Commer*. 21(1).
- [10] Saranga, H., & Nagpal, R. 2016. Drivers of Operational Efficiency and Its Impact on Market Performance in The Indian Airline industry. *Journal of Air Transport Management*, 53, 165-176.