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EFFICIENCY ANALYSIS OF COST COMPARE TO ASSETS ON SHARIA BANK WITH OFFICE CHANNELING

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Abstract

Efficiency is a theoretically parameter that can be used to measure the bank performance. This research aims to find out the factors that can cause the efficiency value difference of Sharia Bank (Unit Usaha Syariah/UUS) in Indonesia, especially which have the office channeling facility. The research data is monetary data of Sharia Bank exclude BPD (Bank Pembangunan Daerah/Local Development Bank). It was obtained from Bank of Indonesia. Then, it was divided into input and output variables. The determination of input output variables at this research uses parametric approach, Stochastic Frontier Approach (SFA). Its input output variables consist of Total Loan, Total Effect, Labor Cost, Interest Cost, Total Cost and compare to Total Asset. The methods used in this study are measured in percentage. Closer to 100% means a bank acts more efficient. In each period (2011-2015), there are efficiency score, which is resulted by comparing one bank to others in sample. It implies that one bank acts as the most efficient bank in each year relatively to others. The efficiency score for the most efficient bank is 100%.The result of the analysis shows the mean of score for all of bank (UUS exclude BPD) is more than 99% which is nearly 100%. And the highest score is Bank OCBC NISP Tbk.

Keywords*: Efficiency, Bank, Sharia, Office Channeling*

1. INTRODUCTION

Islamic values are very concerned about professionalism and touch directly the real sector. Thus, optimizing Islamic banks in all aspects is expected to have a direct impact in increasing the real sector to strengthen the Indonesian economy (Zahara, 2008).

According to the Chairman of the Indonesian Association of Islamic Economic Experts (IAEI) Agustianto Mingka said (infobanknews.com, 4 January 2016), if infrastructure projects being intensively undertaken by the government, should Islamic bank can take a role. Islamic bank can do syndicated financing with Islamic bank or join with conventional bank. It is predicted that in 2016, the growth of Islamic bank assets is estimated at 15%. In 2016, the competition will be marked by the increasingly tight competition in financial services business, since the coming of the ASEAN Economic Community (MEA/Masyarakat Ekonomi ASEAN).

According to Department Head of Islamic Banking (OJK/Otoritas Jasa Keuangan/Financial Services Authority) Ahmad Buchori (2015) said that lots of factors also affect the development of Islamic bank in 2016.

According to Ade Candra Kusuma in

Kartika Dyan K. (2010), office channeling is the conventional bank offices with serving transactions in Islamic principles.

The implementation of office channeling will boost the growth of the Islamic banking industry significantly and clearly (Agustianto, 2008).

At the time of efficiency measurement, banks are faced with conditions of how to obtain optimal levels of output with existing input levels. (Muliaman D. Hadad, et al, 2003)

The problem between the concept of bank efficiency and the fact that Islamic banks run office channeling have better financial performance, so in accordance with the concept/theory needs to be proven whether it is true that Islamic banks running office channeling have good efficiency. In addition, with Bank Indonesia Regulation 14/26/PBI/2012, the opening of new Branches for banks was restricted. Therefore, the implementation of office channeling is an efficiency expectation for Islamic Banks. If efficiency has been achieved and productivity has increased, so cost for the bank will decrease, and expected profit will increase and give positive impact for bank financial performance.

Based on the above background, the authors take the title "Cost Efficiency Analysis Compare to Assets on Islamic Banks with Office Channeling."

2. LITERATURE REVIEW

Research on efficiency especially with frontier approach in banking started by Sherman and Gold (1985). They apply the frontier approach to the banking industry with a focus on measuring the efficiency of bank's savings and loan operations. Since then, many studies have used the frontier approach to measures the efficiency of banking (Hanim, et al., 2006).

Measurement of efficiency level with frontier approach is divided into two: first, the deterministic approach commonly called non parametric approaches or is popular with Data Envelopment Analysis/DEA. Second, the Stochastic Approach, this approach is classified as an approach parametric, using Econometric Frontier.

In this research the authors use Stochastic Approach.

2.1 Data Envelopment Analysis (DEA)

DEA is a mathematical programming technique used to measure the efficiency of a set of decision-making units in managing the same type of inputs used to produce output units of the same type. DEA was first developed by Farrel (1957) which measures the efficiency of one input technique and one output to multi input and multi output, using a framework of relative efficiency value as the ratio of inputs to output. Initially DEA was popularized by Charness, Cooper and Rodhes (1978) using Constant Return to Scale (CRS) and developed by Banker, Charnes, Cooper (1994) for the Return to Scale Variables (VRS).

2.2. Stochastic Frontier Approach

In measuring efficiency with the Stochastic Frontier Approach, according to Kumbhakar (2000) can be done through an output-oriented approach for technical efficiency measurement, and an input oriented approach for cost efficiency measurement.

The Bank establishes earning assets through the intermediary function, thus the bank's cost structure can be classified as a function of the output, input, random error and inefficiency level. The level of cost efficiency is between 0 and 1. The efficiency level 1 shows the optimal efficiency level of 100%.

The SFA method uses the value of *u* (controllable error) to obtain an efficiency value, because in the SFA method the component error (*u*) is the basis of the calculation. In the cost efficiency analysis, the value of *u* obtained is the value of cost

inefficiency (Kumbhakar and Lovell, 2000).

In Stata 12.0 the SFA model is tested with a likelihood-ratio test of sigma_u = 0 to test whether the sample data can be worked out for a cross-section (frontier) or panel model.

3. RESEARCH METHOD

Author uses the data for this research's object are Islamic Banks in Indonesia which have Office Channeling Service (Exclude BPD/Bank Pembangunan Daerah/Regional Development Bank) during the period of 2011-2015.

This research focuses on cost efficiency. To analyze cost efficiency required parametric method using Stochastic Frontier Approach (SFA). Then the residual values of the cost function assumption are used to calculate the efficiency. In this research the SFA model for panel data with pooled effect assumption (the time effect is negligible) which can be considered as cross section data.

SFA analysis model in this research refers to Cobb Douglas function that made some adjustments, as follows:

$$\ln TC_i = a_0 + a_1 \ln P_{1,i} + a_2 \ln P_{2,i} + a_3 \ln Q_{1,i} + a_4 \ln Q_{2,i} + v_i - u_i$$

or

$$\ln TC_i = a_0 + a_1 \ln P_{1,i} + a_2 \ln P_{2,i} + a_3 \ln Q_{1,i} + a_4 \ln Q_{2,i} + e_i$$

With ei = vi-*u*i where index i = 1, 2, ..., n with n is the number of observation data.

LnTC = Total Costs
LnP1 = Labor Expense
LnP2 = Profit Sharing Expense
LnQ1 = Total Financing
LnQ2 = Total Securities

Furthermore, the statistical test to see the effect of all variables on Total Cost in Stata 12.0 is done statistical test as follows:

1) Coefficient test of determination (R2) to measure how far the ability of the model in explaining the variation of the dependent variable.
2) Wald Test (Chi-Square Test) to see the simultaneous effect of independent variables. The assessment is satisfied if the value of P-value (Sig.) ≤α with α is set at 5%.
3) Z test to find out whether there is partial influence of the independent variable. This test shows a significant influence if the value of P-value (Sig.) ≤α with α is set at 5%.

4. RESULT AND DISCUSSION

4.1. Results

4.1.1. Statistics of Data

Based on the Financial Statements obtained from the Indonesia Stock Exchange for the period 2011-2015, the data from each of the research variables are as follows:

Table 4.1. Total Assets of Islamic Banks (Period: 2011-2015)

No	Bank	Total Assets (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	182,689,351	185,353,670	165,837,996	131,798,595	101,324,002
2	PT Bank MayBank Indonesia Tbk	157,619,013	143,365,211	140,600,863	115,772,908	94,919,111
3	PT Bank CIMB Niaga Tbk	238,849,252	233,162,423	218,866,409	197,412,481	166,801,130
4	PT Bank Tabungan Negara (Persero) Tbk	171,807,592	144,582,353	131,169,730	111,748,593	89,121,459
5	PT Bank Danamon Indonesia Tbk	188,057,412	195,820,856	184,337,964	155,791,308	142,292,206
6	PT Bank OCBC NISP Tbk	120,480,402	103,111,114	97,510,106	79,141,737	59,834,397
7	PT Bank Sinarmas Tbk	27,868,688	21,259,549	17,447,455	15,151,892	16,658,656

Source: Indonesia Stock Exchange

Table 4.2. Total Cost of Islamic Banks (Period: 2011-2015)

No	Bank	Total Cost (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	17,989,857	15,489,340	11,181,487	8,370,750	7,303,264
2	PT Bank MayBank Indonesia Tbk	15,061,697	14,238,908	11,187,364	8,094,739	7,344,979
3	PT Bank CIMB Niaga Tbk	18,615,357	16,953,871	14,244,515	12,542,818	12,094,971
4	PT Bank Tabungan Negara (Persero) Tbk	13,553,526	12,124,781	9,410,871	7,519,104	6,673,090
5	PT Bank Danamon Indonesia Tbk	24,319,713	24,889,358	21,077,895	18,519,799	16,926,398
6	PT Bank OCBC NISP Tbk	8,074,891	6,875,623	5,522,470	4,553,912	3,878,616
7	PT Bank Sinarmas Tbk	2,587,730	1,844,717	1,379,286	1,337,255	1,402,920

Table 4.3. Total Financing of Islamic Banks (Period: 2011-2015)

No	Bank	Total Financing (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	125,540,703	131,094,037	118,004,926	93,379,285	67,990,379
2	PT Bank MayBank Indonesia Tbk	104,081,038	97,916,092	95,364,127	76,017,558	62,748,748
3	PT Bank CIMB Niaga Tbk	170,588,608	169,188,308	149,627,573	140,732,390	122,931,369
4	PT Bank Tabungan Negara (Persero) Tbk	136,905,226	114,345,618	99,330,214	80,430,049	62,619,586
5	PT Bank Danamon Indonesia Tbk	167,440,890	173,693,806	166,670,953	113,136,985	98,845,005
6	PT Bank OCBC NISP Tbk	84,827,363	67,554,409	63,221,059	52,177,614	40,794,602
7	PT Bank Sinarmas Tbk	17,284,637	13,479,658	10,021,393	8,959,015	8,480,015

Source: Indonesia Stock Exchange

Table 4.4. Total Securities of Islamic Banks (Period: 2011-2015)

No	Bank	Total Securities (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	14,906,661	18,857,281	10,847,327	5,498,585	8,328,833
2	PT Bank MayBank Indonesia Tbk	6,931,036	6,730,279	6,529,220	3,088,115	2,371,139
3	PT Bank CIMB Niaga Tbk	9,859,144	10,865,179	9,795,632	6,019,924	4,417,744
4	PT Bank Tabungan Negara (Persero) Tbk	1,807,561	5,436,970	4,201,682	1,013,796	733,953
5	PT Bank Danamon Indonesia Tbk	6,375,902	8,855,931	7,717,347	7,306,823	4,819,809
6	PT Bank OCBC NISP Tbk	3,838,124	13,192,037	12,113,018	6,408,098	7,062,286
7	PT Bank Sinarmas Tbk	2,643,608	1,457,454	1,365,340	1,233,039	1,909,786

Table 4.5. Profit Sharing Expense of Islamic Banks (Period: 2011-2015)

No	Bank	Profit Sharing Expense (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	9,933,923	10,117,024	6,791,044	4,377,456	3,966,675
2	PT Bank MayBank Indonesia Tbk	7,417,237	7,468,118	5,399,510	3,771,250	3,435,904
3	PT Bank CIMB Niaga Tbk	10,932,399	10,123,389	7,749,512	6,486,352	6,864,464
4	PT Bank Tabungan Negara (Persero) Tbk	8,155,133	7,342,747	5,129,554	4,091,760	3,785,873
5	PT Bank Danamon Indonesia Tbk	8,772,424	9,311,649	6,599,794	5,936,173	6,033,390
6	PT Bank OCBC NISP Tbk	4,802,088	4,162,855	3,009,857	2,358,155	1,931,724
7	PT Bank Sinarmas Tbk	1,049,263	806,881	563,787	671,392	798,535

Source: Indonesia Stock Exchange

Table 4.6. Labor Expense of Islamic Banks (Period: 2011-2015)

No	Bank	Labor Expense (in Million Rupiah/Year)				
		2015	2014	2013	2012	2011
1	PT Bank Permata, Tbk	2,223,497	2,269,027	2,093,150	1,939,294	1,510,459
2	PT Bank MayBank Indonesia Tbk	2,330,531	2,142,564	2,355,970	1,654,184	1,386,973
3	PT Bank CIMB Niaga Tbk	4,156,096	3,281,221	3,229,054	2,881,704	2,227,739
4	PT Bank Tabungan Negara (Persero) Tbk	1,929,346	1,564,254	1,613,152	1,486,938	1,321,601
5	PT Bank Danamon Indonesia Tbk	4,833,889	5,810,672	5,712,891	5,163,381	4,413,075
6	PT Bank OCBC NISP Tbk	1,705,772	1,468,683	1,357,879	1,172,793	949,353
7	PT Bank Sinarmas Tbk	424,708	336,819	281,952	227,061	144,926

Source: Indonesia Stock Exchange

From the data above is processed into a ratio to the assets, then in this research description of each research variables are as follows:

Table 4.7. Descriptive Statistics of Islamic Banks (Period: 2011-2015)

Variable (in Ratio/Total Assets)		Mean (%)	Std. Dev. (%)	Min (%)	Max (%)
Dependent (Y)	Total Cost/Total Assets (TC)	8.523	1.907	1.907	12.172
Independent (X1)	Total Financing/Total Assets (Q1)	71.183	7.369	7.369	82.048
Independent (X1)	Total Securities/Total Assets (Q2)	6.054	2.950	1.949	9.660
Independent (X2)	Profit Sharing Expense/Total Assets (P1)	4.124	0.319	0.319	4.445
Independent (X2)	Labor Expense/Total Assets (P2)	1.725	0.612	0.612	3.011

Source: secondary data that is processed

From table 4.7 we found the dependent variable (Y) as a Total Cost/Total Assets (TC) is shown from mean 8.523% with standard deviation 1.907%.

For the independent variable (X1) as the output of Total Financing/Total Assets (Q1) is shown from mean 71.183% with standard deviation 7,369%.

For the independent variable (X1) as the output of Total Securities/Total Assets (Q2) is shown from mean 6.054% with standard deviation 2.95%.

For the independent variable (X2) as the input of Profit Sharing Expense/Total Assets (P1) is shown from mean 4.124% with standard deviation 0.319%.

For the independent variable (X2) as the input of Labor Expense/Total Assets (P2) is shown from mean 1.725% with standard deviation 0.612%.

4.1.2. Data Analysis

4.1.2.1. Cost Efficiency Analysis Based on Stochastic Frontier Approach

From the results of Cross Section Stochastic Frontier Analysis obtained output of the prediction model of cost efficiency level as follows:

lnTC = 0.75 - 0.1646lnQ1 + 0,0076lnQ2 + 0.2367lnP1 + 0.7355lnP2

The equation above shows that the variable labor expense (lnP1) which the regression coefficient is 0.2367 indicates that if the exponent of the labor expense increased 1%, the total cost will increase by 23.67%. And the profit sharing expense (lnP2) with regression coefficient is 0.7355 indicates that if the exponent increase by 1% then the total cost will increase by 73.55%.

While the financing variable (lnQ1) with regression coefficient -0.1646 indicates that if the exponent increased by 1% then the total cost will decrease by 16.46%. And the securities variable (lnQ2) with regression coefficient 0,0076 indicates that if the exponent increases by 1% then total cost will increase by 0.76%.

From the result of data processing using Stata 12.0, obtained P-value equal to 1,000 (P-value>0,05), so the test is concluded that the data sample is suitable to be done with Stochastic Frontier Analysis for cross-section model (frontier).

Below is the result of data processing in Stata 12.0 application using Stochastic Frontier Analysis for cross-section model (frontier), as cost efficiency rating of the bank:

Table 4.8. Cost Efficiency Rating of The Bank

No.	Bank	Cost Efficiency Rating of The Bank (%/Year)					
		2011	2012	2013	2014	2015	Average
1	PT Bank OCBC NISP Tbk	99.976	99.979	99.980	99.974	99.974	**99.977**
2	PT Bank CIMB Niaga Tbk	99.972	99.977	99.976	99.971	99.968	**99.973**
3	PT Bank Tabungan Negara (Persero) Tbk	99.971	99.975	99.973	99.966	99.969	**99.971**
4	PT Bank Permata, Tbk	99.972	99.977	99.974	99.965	99.959	**99.969**
5	PT Bank MayBank Indonesia Tbk	99.971	99.974	99.969	99.958	99.961	**99.967**
6	PT Bank Sinarmas Tbk	99.966	99.964	99.970	99.966	99.964	**99.966**
7	PT Bank Danamon Indonesia Tbk	99.942	99.945	99.949	99.937	99.937	**99.942**

Source: secondary data that is processed

Table 4.8 shows that the cost efficiency is close to 100%, which is very good level of cost efficiency. This result is inline with the prediction that Islamic Banks with office channeling have good efficiency because the operational costs only bear the cost sharing proportionally for each transaction. The examples of proportionally expenses such as building rental and maintenance, labor expenses for salary of Teller, Customer Service, Branch Manager and IT (Information Technology) expenses.

4.1.2.2. Test Analysis Influence All Variables on Total Cost

After the descriptive statistics and the analysis of the cost efficiency level for the bank, then the next is the test of the influence for all variables on the total cost on the bank's efficiency. The tests performed are as follows:

1) Testing Coefficient of Determination (R2)
   As discussed earlier, the Stochastic Frontier Model involves all variables for the bank formulated as follows:

   lnTC = 0.75-0.1646lnQ1 + 0,0076lnQ2 + 0.2367lnP1 + 0.7355lnP2 + e

   While the results of calculations using Stata 12.0 application obtained the following coefficient of determination:
   The coefficient of determination (R2) obtained by 0.8561 means that the lnTC diversity capable of being described in lnP1, lnP2, lnQ1, and lnQ2 together is 85.61% with the remaining 14.39% explained by error (e) or other variables not included in regression model.
2) The regression test coefficients simultaneously with the Wald test (Chi-Square test).
   From the test results, the statistical value of Chi-Square (Wald chi2 (4)) test is 208,28 and P-value (Prob>chi2) 0,0000 so the test can be concluded that there are concurrent effects of lnP1, lnP2, lnQ1, and lnQ2 to lnTC, because P-value <0.05.
3) Individual regression test coefficients with Z test.
   From the test results, the conclusions are:
   a) The value of P-value (Sig.) for the variable lnP1 is obtained at 0.032 (P-value <0.05) so the test can be concluded that there is significant influence of lnP1 to lnTC of 0.2367 (positive influence).
   b) The value of P-value (Sig.) for the lnP2 variable is 0.000 (P-value <0,05) so it can be concluded that there is significant lnP2 influence on lnTC of 0.7355 (positive influence).
   c) The value of P-value (Sig.) for the variable lnQ1 is obtained by 0.003 (P-value <0.05) so the test can be concluded that there is significant influence lnQ1 to lnTC of -0.1646 (negative influence).
   d) The value of P-value (Sig.) for the variable lnQ2 is obtained at 0.0076 (P-value> 0,05) so the test can concluded that no significant influence of lnQ2 variable to lnTC can be interpreted if any increase or decrease of securities has no effect on total cost.

4.2. Discussion

4.2.1. Cost Efficiency Rating of The Bank Based on Stochastic Frontier Approach

From the results of the research that has been stated above, it is known that the level of cost efficiency shows the average value as follows:

1) PT Bank OCBC NISP Tbk 99.977%
2) PT Bank CIMB Niaga Tbk 99.973%
3) PT Bank Tabungan Negara (Persero) Tbk 99.971%
4) PT Bank Permata Tbk 99.969%
5) PT Bank Maybank Indonesia Tbk 99.967%

6) PT Bank Sinarmas Tbk 99.966%
7) PT Bank Danamon Indonesia Tbk 99.942%

All calculations are done in the form of ratio to total assets of each bank.

This shows that the cost efficiency of each bank and overall>99%, close to perfect value that is 1 (100%). So it can be concluded the excellent cost-efficiency level for each bank. This result is inline with the daily banking operations for Islamic Bank with office channeling which have good efficiency because in terms of cost only bear the cost sharing proportionally for each transaction.

Based on the results of the research can be seen the difference in cost efficiency among all Islamic Banks is not significant and all show a number close to 1 (100%). The best efficiency level is PT Bank OCBC NISP Tbk, which was 99.973%.

The results of this research support previous research, such as:

1) Bhava Wahyu Nugraha (2013) states that "From the Non-Government Bank group which analysis results show 100% efficiency level only Bank Bukopin, Bank CIMB Niaga, Bank Danamon, Bank Ekonomi Raharja, Bank Permata and Bank Pundi Indonesia."
2) Edy Hartono (2009) states that "Based on Cross Section Stochastic Frontier Analysis, the value of banking efficiency in Indonesia is close to 100% (> 99%)."

With the result of research for cost efficiency level at Islamic Bank with office channeling in period 2011-2015 based on Stochastic Frontier Approach is 100% (> 99%), hence can be concluded that this research is inline with some previous research. Thus the results of this research can be said to be equivalent to previous research results and not contradictory but mutually supportive.

4.2.2. The Biggest Variables Effect of Cost Efficiency Based on Stochastic Frontier Approach

From the results of the research that has been discussed above is known that the variables which have affect the level of cost efficiency with the cross-section model Stochastic Frontier Analysis can be described as follows:

1) Labor expense variable has positive regression coefficient (0.2367).
2) Profit sharing expense variable has positive regression coefficient (0.7355).
3) Total securities variable has positive regression coefficient (0,0076).
4) Total financing variable has negative regression coefficient (-0.1646).

The results of this research support previous research, such as:

1) Rafika Rahmawati (2015) states that "The regression coefficients for: labor expenses, profit-sharing expenses and securities are positive. And for financing is negative. "
2) Edy Hartono (2009) states that "The regression coefficients for: labor costs, funding costs and securities are positive. And for financing is negative. "

With the result of the research on the variables used based on Stochastic Frontier Approach approach, it can be concluded that this research is inline with some previous research, that is the regression coefficient for variables: labor expense, profit sharing expense and securities have positive effect. And for financing is negative. So it can be seen that the financing factor is very significant to reduce the total cost of the bank and make the bank more efficient. Thus the results of this research can be said to support previous research and not contradictory.

While to see the effect of variables simultaneously has been done with the Wald test (Chi Square), where the results obtained that there are simultaneous/joint effects of all research variables, such as: labor expense, profit sharing expense, securities and financing on total cost.

The results of this research also support

previous research (Edy Hartono, 2009) which states that "There are simultaneous/joint effects of lnP1, lnP2, lnQ1 and lnQ2 to lnTC because P-value <0.05."

Thus related to the research on the influence of variables simultaneously also in line with the results of previous research.

In addition, to see the influence of each variable that has been done using the Z test obtained the following results:

1) The profit-sharing expense positively affects on the total cost.
2) The labor expense positively affects on the total cost.
3) The financing negatively affects on the total cost.
4) The securities have no effect on the total cost.

The results of this research support previous research (Rafika Rahmawati, 2015) which states that "Labor Expenses in general have a positive effect on Total Cost. Profit Sharing Expenses generally have a positive effect on Total Cost. Financing in general has a negative affects on Total Cost. Securities are known to have no effect on Total Cost."

So it can be concluded that the results of research related to the influence of each variable to total cost also support previous research.

5. CONCLUSION

Based on the analysis and discussion of cost efficiency in Islamic Banks with office channeling service during the 2011-2015 period which has been described in the previous chapter can be concluded:

1) The cost efficiency level of each Islamic Bank based on the Stochastic Frontier Approach is close to 100% and all banks produce > 99%. So it can be concluded that the Islamic Banks which have office channeling service have excellent cost efficiency on the period of 2011-2015, because almost no wasted cost (inefficiency<1%). This result is inline with Bank Indonesia appeals to further optimize office channeling as an effort to boost Islamic Bank in Indonesia in particular and national banks in general, in order to improve the Indonesian economy.
2) The components of the research variables that have the greatest impact on the cost efficiency level of each Islamic Bank as follows:
   a. In terms of variable labor expense and profit sharing expense have an effect on total cost. However, the most significant is the profit sharing expense variable because the impact is very high, 73.55% for every 1% increase.
   b. In terms of financing variables and securities that have a very influential is the financing because it can minimize (reduce) the total cost up to 16.46% for every 1% increase. While the securities does not significantly affect the total cost because it only increases the total cost of 0.76% for every 1% increase (<1%).
   c. Based on the test of the influence of all variables on the total cost of the Islamic Bank there is influence simultaneously.
3) From the conclusion of point 2, the strategy that needs to be applied in order to create cost efficiency in Islamic Bank in Indonesia are:

a. Leveraging conventional bank for Islamic transaction (office channeling). Get the benefit from branch network facilities, human resources and technology from the parent.
b. Minimize unnecessary costs so the total cost becomes smaller, and will affect the efficiency of the bank either partially or simultaneously.
c. Increase financing in such a way to provide better results, because it can minimize (reduce) the total cost up to

16.46% for every 1% increase.

d. Islamic bank should innovate among others: establishing good pricing, developing innovative products, increasing promotion, improving service quality, enhancing cooperation with other institutions so the bank have a good competitiveness in the market to boost revenue generation.
e. Improve human resource performance by: creating a lean bank organizational structure, training programs to improve the quality of human resources, appointing the right people in strategic positions within a bank, establishing a specific Policy for the employees are concerned with the efficiency of the bank.

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