Analysis on the Effect of Deposite and Financing on the Net Income (SHU) at KPN Al Ikhlas IAIN Batusangkar

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ABSTRACT
Cooperative is an institution founded by and for the members with the purpose to prosper the members with maximum achievement of outcome. The phenomenon that happened in Sharia civil servant cooperative Al-Ikhlas in IAIN Batusangkar from year of 2015 until the closing book in 2016, shows that member deposits and financing toward members has increased. Meanwhile, the net income is decreased. This phenomenon is interesting to investigate because it seems like the increasing of deposits and financing do not influence the net income. Consequently, This research aims to analysis the effect of deposit, such as special obligatory deposit, financing deposit and financing simultaneously and partially towards net income (SHU) at sharia civil servant cooperative (KPN) Al Ikhlas IAIN Batusangkar. This is a field research with quantitative approach during the year of 2015 and 2016 as the secondary data.
result of this research shows that partially, merely financing that has effect towards net income (SHU) with significance level accost 6% that is 0.059 on wald value in the amount of 3,561. While basic contribution, obligatory deposit, special obligatory deposit, financing deposit have no significant effect on net income (SHU). Furthermore, the amount of basic contribution effect, obligatory deposit effect, special obligatory deposit effect, financing deposit and financing simultaneously on net income (SHU) is 57.2%, while the remaining 42.8% is influenced by other factors that not examined in this research. It is suggested to the management of this sharia cooperative to find out another halal finance to increase financing so it can increase net income such as increasing member participation by gaining the amount of deposits.

**Keywords:**
Basic contribution, obligatory deposit, special obligatory deposit, financing deposit, net income (SHU)
PRELIMINARY

The main purpose of cooperative is to fulfill the basic needs of its member by operating economic activity simultaneously. Togetherness is the power of cooperative (Neni Sri Imaniyati: 2009). The increasing and decreasing of a cooperative is determined by the ability of its member to maintain the togetherness. To bring that purpose into reality, deposit and member participation in using cooperative funds holds a crucial part in cooperative. Hayatinufus, Lita Mulyati, Khaeriyatun Nisa. (2014) state that member deposits is one of crucial problems to manage a cooperative. The availability of member deposit that have a role as capital will really ensure cooperative activity. On the other hand, the lack of capital can inhibit the continuity of cooperative activity.

A lot of member deposit (Ferline Ariesta dan Yolamalinda. 2014) along with high member enthusiasm to utilize the fund in the form of loan (Dwinta Mulyanti dan Rina: 2017) will increase the growth of net income (SHU). The increasing of net income (SHU) is a target that has to be fulfilled by cooperative, because one of cooperative success can be seen from net income (SHU) acquisition that grow better every year. (Ichda Ayu Savitri. Sucihatiningsih DWP dan Margunani. 2012). Cooperative is able to automatically increase net income (SHU) acquisition every year in order to strengthen its financial structure.


One of that cooperative is sharia civil servant cooperative (henceforth KPN Al Ikhlas) IAIN Batusangkar that runs in loan and savings area with the purpose to prosper the members through the increasing of services in order to fulfill the needs of its member.
The savings that available in KPN Syariah Al-Ikhlas is divided into several kinds such as; basic contribution, obligatory deposit, special obligatory deposit, hajj deposit, qurban deposit, wadiah deposit and mudharabah deposit. Meanwhile, in the distribution of KPN Syariah Al-Ikhlas cooperative funds, it does not use the terms of loan but financing.

Based on Rizal’s research (2017) partially qurban deposit, wadiah deposit and mudharabah deposit in sharia civil servant cooperative have no positive and significant effect towards net income. Meanwhile hajj deposit has positive and significant effect towards net income with the contribution in the amount of 32.4%. It requires researchers to do further research, regarding things that influence net income in sharia civil servant cooperative Al Ikhlas. The writer will analyze from another deposit side such as; basic contribution, obligatory deposit, special obligatory deposit along with fund distribution through financing to member of cooperative.

Based on organizer’s financial statements data of sharia civil servant cooperative Al-Ikhlas, it can be obtained that the description of basic contribution, obligatory deposit, special obligatory deposit, financing and net income (SHU) are as follows:

<table>
<thead>
<tr>
<th>NO</th>
<th>Deposit, Financing and Net Income</th>
<th>December 2015</th>
<th>December 2016</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Basic Contribution</td>
<td>11,450,000.00</td>
<td>12,050,000.00</td>
<td>5.24</td>
</tr>
<tr>
<td>2</td>
<td>Obligatory Deposit</td>
<td>2,173,472,722.41</td>
<td>2,458,627,475.46</td>
<td>13.12</td>
</tr>
<tr>
<td>3</td>
<td>Special Obligatory Deposit</td>
<td>1,733,931,575.83</td>
<td>2,048,861,059.65</td>
<td>18.16</td>
</tr>
<tr>
<td>4</td>
<td>Financing Deposit</td>
<td>1,434,771,770.00</td>
<td>1,740,408,304.00</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Financing</td>
<td>132,852,207.00</td>
<td>156,495,372.00</td>
<td>17.80</td>
</tr>
<tr>
<td>6</td>
<td>Net Income</td>
<td>337,785,263.88</td>
<td>286,550,930.76</td>
<td>-15.17</td>
</tr>
</tbody>
</table>
The data above clearly shows that the growth of the highest deposit is special obligatory deposit in the amount of 18.16%, followed by obligatory deposit 13.12%, and the lowest growth is basic contribution in the amount of 5.24%. Meanwhile, the growth of finance is in the amount of 17.80%.

It, however, the growth of net income of sharia civil servant cooperative Al Ikhlas IAIN Batusangkar is decreasing, where on 2015, the amount of net income (SHU) is Rp. 337.785.263,88, on 2016 it decreasing into Rp. 286.550.930,76. It decreases in the amount of 15.17%.

Several researches related to this research have been investigated. Wiyono (2016) and Ayu Cahya Mentari (2014), for example, state that the amount of deposit has positive effect towards net income (SHU). Similarly, Ferline Ariesta and Yolamalinda (2014) found that member deposit has significant effect towards net income (SHU) rather than the amount of members and sales. M. Nur Rianto Al Arif and Hanifah (2017) also mention that the fund of third parties affect the profitability of bank. On the other hand, those researches above are different with the research of Ni Kadek Sumitra Dewik and I Made Jember (2016) that state the amount of deposit has negative and significant effect towards net income (SHU). Putri Marina Mustika Weny (2015) says that the amount of loan has no effect towards net income (SHU) along with the research of Ayu Astari (2015) that says partially, the loan of member has no effect towards net income (SHU). Different with M. Thamrin (2013) that state the loan of member, partially has positive effect towards net income (SHU) meanwhile member deposit partially has no effect towards net income (SHU).

Observing the previous researches that state deposit and loan of member have significant effect towards net income (SHU), there is a research gap that can be found where, there is incompatibility with sharia civil servant Al Ikhlas IAIN Batusangkar, based on organizer’s financial statements of sharia civil servant Al-Ikhlas, the amount of deposit and financing are increasing. Meanwhile, net income (SHU) are decreasing.

THE METHOD OF RESEARCH

This research investigates Sharia Civil Servant Cooperative Al-Ikhlas in IAIN Batusangkar by using secondary data that taken from monthly financial statements. The type of
data is cross section from 2015 until 2016 in the form of monthly financial statements consist of basic contribution effect, obligatory deposit effect, special obligatory deposit effect, financing deposit, financing and net income. The research questions are: (1) Is there any availability effect of basic contribution on net income of sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar; (2) Is there any availability effect of obligatory deposit on net income (SHU) sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar; (3) Is there any availability effect of special obligatory deposit on net income of Sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar; (4) Is there any availability effect of financing deposit on net income of sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar; (5) Is there any availability effect of financing towards net income of Sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar. 6) How much the effect of basic contribution, obligatory deposit, special obligatory deposit, financing deposit and financing on net income (SHU) of sharia civil servant cooperative Al-Ikhlas IAIN Batusangkar.

This research aims to explain how the effect of independent variables toward dependent variables. The sources of the data are the documentation in the form of monthly financial statements.

To find out the factors that influence net income, ordinal logistic regression are used with proportional odds model, proportional odds model are used if the assumption of parallel lines are fulfilled. Proportional odds model has intercept \( \alpha \) value for each cumulative logit and similar estimation value of \( \beta \), if the amount of dependent variable category are as much as \( J \), it will be formed \( J-1 \) cumulative logit exactly the same and the things that differentiate it is the intercept. The ordinal logistic regression model that stated by (Kleinbaum: 2008) is

\[
\text{logit}(p\ (Y=1) = \alpha_0 + \sum_{j=1}^J \beta_j X_j ,
\]

Dependent variables in this research are divided into 3 categories \( j=1, 2, 3 \) which are, 1= Low, 2= Middle, 3= High. The model that are formed if from these three categories as follows.

\[
\text{logit}[P(Y \leq 1 \mid x)] = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \\
\text{logit}[P(Y \leq 2 \mid x)] = \alpha_2 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5
\]

Ordinal logistic regression model used parameter estimation steps, parallel lines assumption test, Goodness of Fit Test, Simultaneous Test, Partial Test, Odds Ratio value calculation
RESULT AND DISCUSSION
Examination of Regression Analysis Requirements

The requirements that have to be fulfilled if hypothesis examination are using parametric statistic are the fulfillment of classic assumption which consist of normality, linearity, the relation of independent variables toward dependent variable and multi-co linearity. The summary of classic assumption result is as follows:

Table 2 the summary of classic assumption test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sig. Normality</th>
<th>Sig. linearity</th>
<th>VIF</th>
<th>Heteroscedasticity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>Y</td>
<td>0,007</td>
<td>4,748</td>
<td>0,267</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>X₂</td>
<td>Y</td>
<td>-</td>
<td>738,106</td>
<td>0,094</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>X₃</td>
<td>Y</td>
<td>-</td>
<td>785,825</td>
<td>0,213</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>X₄</td>
<td>Y</td>
<td>-</td>
<td>99,694</td>
<td>0,335</td>
<td>Not fulfilled</td>
</tr>
<tr>
<td>X₅</td>
<td>Y</td>
<td>-</td>
<td>4,860</td>
<td>0,990</td>
<td>Not fulfilled</td>
</tr>
</tbody>
</table>

Normality test was used to test whether the result of residual value from distributed regression are normal or abnormal. A good regression model is a model that has normal distribution of residual value. One Sample Kolmogrof-Smirnov test was used to find out data distribution, whether it followed normal distribution, Poisson, uniform or exponential. In this case, it used to find out whether residual distribution is distributed normally or abnormal. Residual are normally distributed if significance value is more than 0,05. Based on the calculation result by using Kolmogorov Smirnov formula with the help of SPSS program, it is obtained that the value of Kolmogorov-Smirnov Z in the amount of 0,602 and Asymp. Sig. (2-tailed) value in the amount of 0,861, it shows that residual from independent variables towards dependent variable are normally distributed.

The Table 2 shows that every contribution of independent
variables toward dependent variable are in significance level of $p < 0.05$. Therefore, it can be concluded that every independent variable is not linear toward dependent variable. Multicollinearity can be seen from Variance Inflation Factor index, if VIF index are not more than 10 it means that multicollinearity are not happened. Based on table 2, merely $X_1$ dan $X_2$ variables that having VIF lower than 10 while the remaining are bigger than 10, so it can be concluded that in variables $X_3$, $X_3'$ and $X_4$ multicollinearity are happened. Observing heteroscedasticity column, the index are bigger than 0.05. Therefore, it can be concluded that heteroscedasticity are not contained. Based on this explanation, it is figured out that classic assumption are not fulfilled, so the requirement to using parametric statistic are not fulfilled. Because classic assumption are not fulfilled so it means that multiple linear analysis cannot be used. Analysis that used in this research is ordinal regression analysis.

The Result of Ordinal Logistic Regression Analysis

Parallel Lines assumption test

The significant assumption in proportional odds model is parallel lines assumption that aims to find out whether assumption of every category has similar parameter or not. Hypothesis that is proposed to this examination is as follows.

$H_0$ : Model produce similar slope coefficient

$H_1$ : Model are not produce similar slope coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>-2 Log Likelihood</th>
<th>Chi-Square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Hypothesis General</td>
<td>22.464</td>
<td>.061b</td>
<td>5</td>
<td>1.000</td>
</tr>
<tr>
<td>General</td>
<td>22.404a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on calculation result using SPSS program, it was obtained the value of Chi-Square in the amount of 0.061 with significance 1.000 (>0.05), therefore, $H_0$ is accepted. Consequently, in the confidence level of 95% it can be stated that model which is obtained has similar parameter, so link function choice already appropriate or link function choice is right.
**Goodness of Fit Test**

The compatibility test aims to examine the compatibility model that obtained with data. In other words, model is supported by empirical data. Hypothesis that is proposed could be seen below:

H$_0$ Model are compatible with data  
H$_1$ Model are not compatible with data

<table>
<thead>
<tr>
<th>Table 4. Goodness-of-Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-Square</strong></td>
</tr>
<tr>
<td>Pearson</td>
</tr>
<tr>
<td>Deviance</td>
</tr>
</tbody>
</table>

Link function: Logit.

Based on the calculation result by using SPSS Program, it is obtained that *chi-square* Pearson in the amount of 19,685 with significance 0.998. Subsequently, *chi-square* Deviance value in the amount of 22,464 with significance 0.992. As a result H$_0$ is accepted. It means that the model is compatible with the empirical data or model is proper to use.

<table>
<thead>
<tr>
<th>Table 4 Model Fitting Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>Intercept Only</td>
</tr>
<tr>
<td>Final</td>
</tr>
</tbody>
</table>

Link function: Logit.

Model *intercept only* obtain -2log *likelihood* 52,483 value, if variables X$_1$ until X$_5$ are included into model, the result is, value of 2 log *Likelihood* decreased into 22,464. This transformation with chi-square value 30,018 and significance index in the amount of 0.000 that shows model with better independent variable compared to *intercept only*, therefore it can be concluded that model are fit.

**Simultaneous Test**

This examination aims to see the role of independent variables toward dependent variable simultaneously that can be used by using likelihood Ratio Test. The hypothesis is as follows.
\[ H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0 \]
\[ H_1 : \text{At least one } \beta_k \neq 0, \text{ where } k = 1, 2, 3, 4, 5. \]

Based on Pseudo value of R R-Square, it explains that variation level of net income (SHU) can be explained by independent variables of \( X_1 \) until \( X_5 \) simultaneously in the amount of 57.2%.

**Partial Test**

Partial Parameter test aims to examine each parameter of significance so it is known that which independent variables that has significant effect towards dependent variable. Hypothesis that submitted as follows.

\[ H_1 : \beta_i \neq 0, \ i = 1, 2, 3, 4, 5 \]

If naught hypothesis are rejected, it can be said that those independent variables are having significant effect toward net income. The estimation of parameter are shown in table 5 as follows.

<table>
<thead>
<tr>
<th>Location</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>-3.939E-8</td>
<td>8.427E-8</td>
<td>.218</td>
<td>1</td>
<td>0.640</td>
</tr>
<tr>
<td>X2</td>
<td>3.451E-8</td>
<td>8.504E-8</td>
<td>.165</td>
<td>1</td>
<td>0.685</td>
</tr>
<tr>
<td>X3</td>
<td>1.227E-6</td>
<td>1.153E-6</td>
<td>1.133</td>
<td>1</td>
<td>0.287</td>
</tr>
<tr>
<td>X4</td>
<td>1.069E-7</td>
<td>3.651E-7</td>
<td>.086</td>
<td>1</td>
<td>0.770</td>
</tr>
<tr>
<td>X5</td>
<td>4.171E-9</td>
<td>2.210E-9</td>
<td>3.561</td>
<td>1</td>
<td>0.059</td>
</tr>
</tbody>
</table>

Based on table 5 it is known that five variables which are predicted affect net income, there is no significant independent variables, yet the closest one is variable \( X_5 \) that is financing variable with significance 0.059 or in the confidence of 94%. Wald value of \( X_5 \) in the amount of 3.561 with significance 0.059 shows that financing value are having effect toward net income in the confidence level 94%. After doing all test, it can be concluded that the ordinal regression model equation with *proportional odds* as follows.
Logit (p1) = 66,518 + 1,227E-6X1 + 3,451E-8X2 - 3,939E-8X3 + 1,069E-7X4 + 4,171E-9X5
Logit (p2) = 70,846 + 1,227E-6X1 + 3,451E-8X2 - 3,939E-8X3 + 1,069E-7X4 + 4,171E-9X5

Pl1 = low probability dan Pl2 = high probability. If the effect of variable X5 (Loanta) toward net income can be interpreted X5 = 1 and others independent variable = 0 so:

\[
\begin{align*}
\text{Odds Ratio value calculation} \\
\text{The calculation of adds ratio aims to facilitate in understanding interpretation. Even though not every independent variable are significant, yet every independent variable is persistently calculated by adds ratio. The calculation result of Odds Ratio is as follows.}
\end{align*}
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Odds Ratio</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Contribution (X1)</td>
<td>1,227E-6</td>
<td>1.000001227</td>
<td>0.287</td>
</tr>
<tr>
<td>Obligatory Deposit (X2)</td>
<td>3,451E-8</td>
<td>1.000000035</td>
<td>0.685</td>
</tr>
<tr>
<td>Special Obligatory Deposit (X3)</td>
<td>-3,939E-8</td>
<td>0.999999961</td>
<td>0.640</td>
</tr>
<tr>
<td>Financing Deposit (X4)</td>
<td>1,069E-7</td>
<td>1.000000107</td>
<td>0.770</td>
</tr>
<tr>
<td>Financing (X5)</td>
<td>4,171E-9</td>
<td>1.000000004</td>
<td>0.059</td>
</tr>
</tbody>
</table>

Based on the calculation, it is obtained that odds ratio value for basic contribution is in the amount of 1,000001227 with significance 0.287 (>0.05). It means that basic contribution variables have no tendency to increase net income (SHU). Odds ratio value for obligatory deposit is in the amount of 1,000000035 with significance 0.685 (>0.05). It means that obligatory deposit variable has no tendency to increasing net income (SHU). Adds
ratio value for special obligatory deposit is in the amount of 0.999999961 with significance 0.650 (>0.05), it means that special obligatory deposit variables have no tendency to increasing net income (SHU). Odds ratio value for financing deposit is in the amount of 1.000000107 with significance 0.770 (>0.05), it means that financing deposit variables have no intention to increasing net income (SHU). Odds ratio value for financing is in the amount of 1.000000004 with significance 0.059 (>0.05), in the confidence level 95% are not significant, yet the closest on is financing variable in the confidence level of 94%. It means that financing variables have the tendency to increasing net income (SHU) 1%.

This research supports research finding done by Ni Kadek Sumita Dewik dan I Made Jember research (2016) who state that deposit has negative effect on net income in savings and loan cooperative or in this research is called that financing have positive effect toward net income. This research also strengthen the research result of M Thamrin (2013). He clearly concludes that partial member deposit has no effect on net income of cooperative. Meanwhile, loan (financing) of member are affected toward net income (SHU). Made Taman Ayuk (2013) also states that loan have positive and significant value toward net income (SHU). This research is counter the research of Putri Marina Mustika Weny (2015) that state the amount of loan are having no effect toward net income (SHU) along with the research of Astari (2015) that state partial loan of member have no significant effect toward net income.

CONCLUSION

This research concludes that the amount of effect among basic contribution (X_1), obligatory deposit (X_2), special obligatory deposit (X_3), financing deposit (X_4) and financing (X_5) simultaneously toward net income (SHU) is 57.2%. Meanwhile, partially merely financing (X_5) that affect net income (SHU) (Y) with significance is 0.059 in wald value of X_5 in the amount of 3.561. Meanwhile, basic contribution (X_1), obligatory deposit (X_2), special obligatory deposit (X_3), financing deposit (X_4) have no significant effect toward net income (SHU) (Y). This research, however, has several limitation such as not all variables that able to increase net income on sharia civil servant cooperative Al Ikhlas IAIN Batusangkar are researched. So, another variables that able to increase net income (SHU) are important to be tested, as mentioned by Novianita and Syamsul Hadi (2017) that
there is availability effect of cooperative knowledge, the quality of services and member participation toward net income (SHU). Last but not least, the researchers would like to suggest that the sharia cooperative supposed to find out another halal finance to increase finance, therefore, it can increase the net income, such as increasing member participation by gaining the amount of deposits.
REFERENCE


Listya Puji Rahayu. (2011). *Pengaruh Modal Sendiri dan Modal Pinjaman terhadap Perolehan Sisa Hasil Usaha (SHU) pada Koperasi Pegawai Republik Indonesia (KPRI) di Kabupaten*
Pati. (Skripsi Tidak Dipublikasikan). Semarang: University of Semarang.


