# PROFITABILITY THROUGH ANALYSIS OF AMOUNT OF CREDIT AND LIQUIDITY LEVELS

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**Abstract:** Bank's business activities cannot be separated from public trust, so the health level of the bank needs to be maintained and the application of prudential principles in running its business. Banks are required to maintain the soundness level of the bank by paying attention to asset quality, capital adequacy, liquidity, management quality, and profitability, as well as solvency. This research has formulated several problems, namely: the relationship between the amount of credit, the level of liquidity, and profitability and to find out how much influence the amount of credit, the level of liquidity to profitability through Return on Assets (ROA). The purpose of the authors in conducting research is: to determine the relationship between the amount of credit, the level of liquidity, and profitability and to determine the influence of the amount of credit, the level of liquidity on profitability using ROA. The results of this study are recommended as input and information about the application of the amount of credit and the level of liquidity that can be used as the basis for the profitability as measured by ROA.
**Keywords:** Amount Of Credit, Level Of Liquidity, Profitability, ROA

## INTRODUCTION

The global economy during the last 50 years, which has grown rapidly, especially since entering the 1980s, has had an impact on the Indonesian economy, particularly the financial and banking industries. Globalization has an impact, especially in the financial and banking sectors, which is inevitable given the mutual interaction between one financial system and the financial system of another country. The emergence of various forms of financial institutions and new types of financial instruments encourage the government to make policies in the financial and banking sector. According to Law No. 10 of 1998 concerning Banking, that the bank is a business entity with operations collecting funds originating from the public in the form of deposits and then channeling them back to the public in the form of credit and several other forms to increase the standard of living of the people in general (https: //www.cermati. com)

The profitability of a banking company is the ability of banks to earn income in one or every period. Banking companies, like most companies, state that the profits of each company will greatly affect the sustainability of the company concerned, namely in the present and in the future. The company will get a profit if the amount of revenue/income earned is greater than its expenses. Bank income from the receipt of interest on loans,

services in the financial sector, premium shares, and others. The presence of non-performing loans, such as bad credit, has an impact on profitability that cannot be maximized. Less supervision (monitoring) of debtors results in late credit installments, resulting in credit arrears. An increase in lending was not automatically followed by an increase in profitability. Focus and be selective in determining the business sector and segments to be financed by credit. Supervision and review function at the level of all credit apparatus both before and after credit realization. Meetings are held regularly, presenting bank management and credit applicant offices with an agenda of discussing credit developments and the stability of the quality of performing loans strived for all loans. Based on data sources of credit extension and profitability from Bank BTPN Syariah, the profitability gain in 2013-2015 experienced an increase and decrease in 2016. This decrease was caused by several factors, namely the decline in bad credit results, which hindered the payment of credit installments which could lead to bad credit, business. debtors decline so that payments and debtors are delinquent are negligent in paying their credits so that the debtors are included in the blacklist category. Banks provide credit for the reason that, according to the nature of their business, they carry out the function of an intermediary institution between surplus units (excess funds) and deficit units (lack of funds). Banks obtain the main source of funds from public funds as a result, it is morally appropriate for the public to channel them back in the form of credit. As the implementation of monetary policy, banking is a business sector whose activities are regulated and limited. the credit provides a definite return so that the amount of income can be estimated. (Kasmir, 2015).

The liquidity of a bank illustrates that the company concerned can carry out all its short-term liabilities with some of the company's liquid assets. A bank is declared liquid if the bank can pay all its debts, especially current accounts, savings deposits and time deposits if there are claims by customers and can also grant all credit requests from prospective debtors that can be financed.

A liquidity ratio of 200% of a bank is the ideal ratio, but if it is less than that, the impact is not good, because if the value of the current assets decreases, the amount of current assets is insufficient to cover short-term liabilities, resulting in illiquid conditions, in case of total assets. if the value is too large, it has an impact on the emergence of idle funds known as idle funds. Of course, these things will affect the bank's operational activities. Guarantee for bank liquidity, in 2004 Bank BI decided to adjust the percentage of Statutory Reserves (GWM) with the amount of TPF (Third Party Funds) collected at each bank. GWM is the number of funds maintained by the bank in the form of a checking account balance with BI. In accordance with BI provisions, the amount of GWM is 5% of TPF. (www.idx.co.id) Funds from the wider community that are collected and in the form of deposits or funding are the main banking activity. Community choices for types of savings in banks are savings, current accounts, deposits, time deposits, and certificates of deposit. The bank provides remuneration or gifts for the savings. The next activity of a bank is to channel back the collected funds to people who need it in the form of loans or lending activities. This loan is known as credit. (Dendawijaya, 2009) explains that: "Credit is the provision of money or an

equivalent bill through a loan agreement or agreement between a bank and another party by requiring the borrower to repay the debt within a certain time frame and pay interest."

(Syahyunan, 2015) argues that generally, the ratios used in measuring liquidity are the Current Ratio, Quick Ratio, Cash Ratio, and Net Working Capital. The liquidity ratio is the ratio of cash and other current assets to current liabilities. The liquidity ratio can be divided into two parts, namely the ratio that compares cash sources to total current debt and the ratio that compares cash flow to the amount of current debt. The greater the liquidity ratio, then the certainly shows the good condition of a company. The purpose of the liquidity ratio is to determine the company's ability to pay its current liabilities. The profitability ratio is a measure of the company's management based on its management activities. Management effectiveness includes functional management activities, such as marketing, finance, operations, and human resources. Many factors influence the effectiveness of increasing or decreasing profits. Even so, the profits that the company gets can be illustrated by analyzing the profit ratio (Rangkuti, 2010).

(Rudianto, 2010). Receivables are a form of sale made by a company in which payments are in stages and are usually not in cash. The relationship between credit sales and trade receivables is stated as the accounts receivable turnover.

(Kasmir, 2015)". "Receivables turnover is a ratio that shows how fast the collection of receivables, the greater the better because the collection of receivables is done quickly (Subramanyam 2010)". Receivable turnover is included in one of the activity ratios (activity ratios) used to measure the effectiveness of the company's management in managing its assets.

## METHODS

The Stages Flowchart in this study is as follows: This study uses a verification method using the SPSS application. Determination of data using primary data, namely. 1. Determination of locus, 2. Data collection, 3. Determination of the number of samples Processing using statistical applications, namely SPSS with the classic assumption test, multiple regression analysis than using the hypothesis test, namely the T test and F test.

## RESULT AND DISCUSSION

**Discussion**
**Qualitative Analysis Results**
**Analysis of the amount of BTPN Syariah Credit.**

Extending the amount of credit is the main activity of banking after the activity of raising funds. Funds that have been collected from the community are then reprocessed and then distributed back to the community in the form of credit. There are many types of credit, including working capital credit, investment credit, trade credit, consumption credit, and so on. One type of working capital credit that is available at BTPN Syariah. Rural General Credit or commonly abbreviated as Credit. The amount of lending is a very important element and is calculated by banks because the amount of credit can show the amount of profit that banks can get with their assets or owner's capital. Based on data on the assets of the 2012

to 2019 consolidated financial statements at BTPN Syariah. So you can find out the amount of credit extended by BTPN Syariah is illustrated in the following graph:
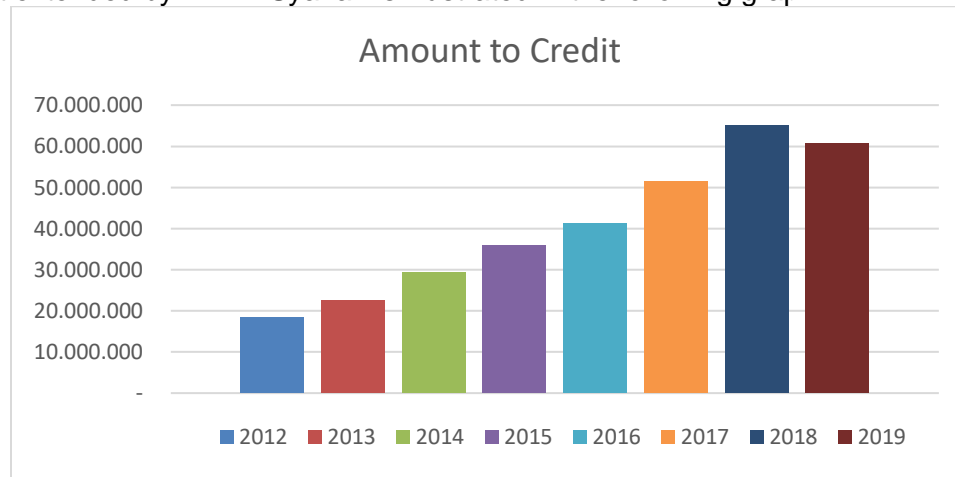


**Figure 1 Graph of BTPN Syariah loan amounts for 2012-2019**
Source: BTPN Syariah profitability data for 2012-2019

An explanation of the credit amount from the chart above is described as follows:

In 2012, the distribution of loans was still quite small, this was because not many people had applied for this credit. In 2013, the provision of credit this year experienced an increase, although it was not quite large, namely 22.09% from the previous year. This increase was due to the banks starting to carry out various kinds of promotions to the public through promotional media such as brochures. In 2014, there was also an increase in the provision of credit by 30.05%. The increase that occurred was not much different from the previous year. This increase is due in addition to the ongoing promotions because the bank continues to strive to provide the best service to its customers so that people who apply for credit are truly satisfied with the services provided, especially in this credit service. In 2015, there was an increase of 22.67%. This increase is due not only to the fact that the bank continues to provide the best service to its customers but also because this credit program has been felt to help the community in developing their business. In 2016, there was a decrease in the provision of credit by 25.67%, the decline that occurred was not that large. This decrease is because debtors do not pay attention to the completeness of the documents required for credit application which causes credit rejection so that the credit issued by the bank has decreased. In 2017 there was an increase of 14.36%. This increase occurred because the Bank made a program of giving gifts or souvenirs to debtors who were right to pay installments. In 2018, there was a significant increase of 24.73%.

The explanation above illustrates that the provision of credit for the period 2012 to 2018 has increased or increased almost every year, only in 2019 has there been a decrease. However, this decline is not that big when compared to the increase that has occurred. The

biggest increase occurred in 2014, which amounted to 30.5%. This is due to the large number of people who apply for credit at BTPN Syariah as a bank that is trusted to provide credit to help develop community businesses, especially in the agricultural, trade and business services sectors. This is according to the statement by Kasmir (2010) that "providing credit is to help investment funds and working capital funds for business customers who need funds. With these funds so that the debtor can expand and ".

**Liquidity Level Analysis at BTPN Syariah**
Liquidity is the ability of the bank to withdraw deposits/deposits by the deposit of the depositors of funds or even meet the needs of the community in the form of a credit to determine the ratio of the bank's liquidity level.
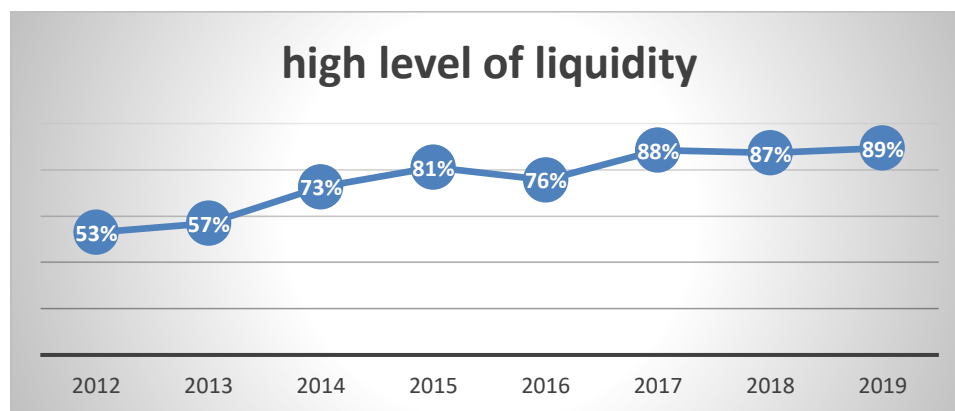


**Figure 2. Graph of BTPN Syariah liquidity levels for 2012-2019 per year**
Source: BTPN Syariah profitability data. Tbk in 2012-2019

The explanation regarding the acquisition of liquidity levels from the tables and graphs above is described as follows:  A bank is said to be liquid if the bank can pay off its debt obligations, repay its depositors and fulfill credit requests submitted without delay. The level of bank liquidity can be seen from the LDR ratio. LDR is a comparison between the entire amount of credit provided by a bank and the funds received by Bank (Dendawijaya, ,2009). In other words, the LDR is used to measure the number of third-party funds channeled in the form of credit.

**BTPN Syariah Profitability Analysis**
Profitability in this study is measured using return on assets, namely the ratio of earnings before tax divided by total assets. The greater the return on assets of a bank, this shows that the level of profit achieved by the bank is enlarging/increasing. The following is the development of profitability obtained by BTPN Syariah during the period 2012-2019:
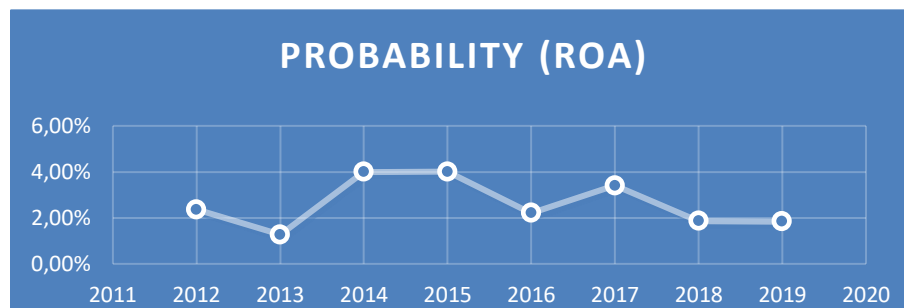
**Figure 3. Graph of BTPN Syariah profitability for 2012-2019 per year**
Source: BTPN Syariah profitability data for 2012-2019

An explanation of the acquisition of profitability from the tables and graphs above is described as follows:

The Bank maintains good performance if the level of profitability is high and can provide good dividends and the development of its business prospects is well fulfilled so that the value of the bank's shares in the secondary market will be accompanied by the number of third party funds that have been collected will be good. The value of shares and the amount of third-party funds that has increased is an indicator of increasing public trust in the bank. The management of a business strategy can be easily implemented if there is trust and loyalty from the owner of the funds to the bank.

**Quantitative Analysis Results**

Based on the results of processing data on the amount of credit and the level of liquidity on profitability at BTPN Syariah, the following regression results are obtained.

**Table 1.Regression Model Estimation Results**

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | -4.211 | 1.665 | | -2.530 | .053 |
| | Kredit | -1.26E-007 | .000 | -2.078 | -4.422 | .007 |
| | LDR | .158 | .035 | 2.132 | 4.536 | .006 |

a. Dependent Variable: ROA

Source: SPSS 2020 processing

Based on data processing in table 1, the prediction model for the variable amount of credit and level of liquidity on profitability is:

$$P = -4.21 - 0{,}00000013\ JK + 0.16\ LDR$$

The interpretation of the regression coefficient of the independent variables is as follows:
Each increase in the amount of credit of one trillion rupiah is predicted to reduce the company's profitability by 0.13 percent, assuming that the company's liquidity level does not change. Each 1% increase in the level of liquidity is predicted to increase the company's profitability by 0.16%, assuming the amount of credit does not change. A constant value of -4.21% percent indicates the predicted average profitability of the company if the amount of credit and the level of liquidity are equal to zero.

Classic Assumption Testing
In this study, the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test were tested because the independent variables used in this study were more than one and the data collected contained time-series elements (7 years of observation).

Normality Assumption Test
In this study, the Kolmogorov-Smirnov one-sample test was used to test the normality of the regression model.

**Table 2. Normality Assumption Test Results**

One-Sample Kolmogorov-Smirnov Test

|  |  |  | Unstandardized Residual |
|---|---|---|---|
| N |  |  | 8 |
| Normal Parameters [a,b] |  | Mean | .0000000 |
|  |  | Std. Deviation | .45771283 |
| Most Extreme Differences |  | Absolute | .188 |
|  |  | Positive | .156 |
|  |  | Negative | -.188 |
| Kolmogorov-Smirnov Z |  |  | .531 |
| Asymp. Sig. (2-tailed) |  |  | .940 |

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS 2020 processing

In table 2 it can be seen that the probability value (significance) obtained from the Kolmogorov-Smirnov test is 0.940. The probability value of the Kolmogorov-Smirnov test is greater than the 5% error rate (0.05), so the regression model is normally distributed.

Multicollinearity Assumption Test

This study uses the value of variance inflation factors (VIF) to determine whether there is multicollinearity in the independent variable.

**Table 3. Multicollinearity Assumption Test Results**

Coefficients [a]

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Kredit | .174 | 5.764 |
| | LDR | .174 | 5.764 |

a. Dependent Variable: ROA

Source: SPSS 2020 processing

Through the VIF value obtained as in table 3, it is illustrated that there is no strong enough correlation between the independent variables, so the VIF value of the two independent variables is less than 10 so that there is no multicollinearity in the two independent variables.

**Heteroscedasticity Assumption Test**
.In table 3.4 below, it can be seen that the significance value of each independent variable regression coefficient on the absolute value of the residual (error).

**Table 4. Heteroscedasticity Assumption Test Results**

Correlations

| | | | absolut_error |
|---|---|---|---|
| Spearman's rho | Kredit | Correlation Coefficient | -.310 |
| | | Sig. (2-tailed) | .456 |
| | | N | 8 |
| | LDR | Correlation Coefficient | -.476 |
| | | Sig. (2-tailed) | .233 |
| | | N | 8 |

Source: SPSS 2020 processing

Based on the correlation value shown in table 4 above shows an indication that the residual (error) that appears from the regression equation does not occur heteroscedasticity, this is illustrated by the significance value of each correlation coefficient of the two independent variables with absolute error (0.456 and 0.233) still greater than 0.05.

**Autocorrelation Assumption Test**

The autocorrelation test uses the Durbin-Watson test so that it can be seen whether there is autocorrelation in the regression model and the Durbin-Watson value through the estimation results of the regression model.

**Table 5. Durbin-Watson Value for Autocorrelation Test**

**Model Summary** [b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .899[a] | .808 | .732 | .54157 | 2.816 |

a. Predictors: (Constant), LDR, Kredit

b. Dependent Variable: ROA

Source: SPSS 2020 processing

The results of processing the Durbin-Watson statistical value (DW) = 2.82, based on table d with an error rate of 5%, the number of independent variables = 2 and the number of observations n = 8, the resulting lower limit of the table value (Dl) = 0.559 and the upper limit (Du) ) = 1.777. Because the Durbin-Watson regression model value (2,816) is between 4-Du (2,223) and 4-Dl (3,441), that is, the area where there is no decision, it cannot be concluded whether there is autocorrelation in the regression model.

**Table 6. Test Runs Results to Ensure Autocorrelation**

**Runs Test**

| | Unstandardized Residual |
|---|---|
| Test Value [a] | .02631 |
| Cases < Test Value | 4 |
| Cases >= Test Value | 4 |
| Total Cases | 8 |
| Number of Runs | 6 |
| Z | .382 |
| Asymp. Sig. (2-tailed) | .703 |

a. Median

Source: SPSS 2020 processing

Through the results of runs tests in table 6, it can be seen that the significance value of the Z test (0.703) is still greater than 0.05, which indicates that there is no autocorrelation in the regression model.

The four regression assumptions are met with the BLUE (best linear unbias estimation) requirements so that the conclusions obtained from the regression model can be considered to have described the real situation.

**Partial Correlation Analysis**
        Partial correlation is used to determine the strength of the relationship between the independent variables (amount of credit and level of liquidity) with profitability, respectively. Through partial correlation, the effect of each independent variable on profitability will be sought when the other independent variables are constant.
'
Correlation of total credit with profitability when the level of liquidity does not change
The correlation coefficient between the amount of credit and profitability when the level of liquidity does not change can be seen in the following table.

**Table 7. Coefficient of Partial Correlation of Asset Structure with Profitability**

| Control Variables | | | Kredit | ROA |
|---|---|---|---|---|
| LDR | Kredit | Correlation | 1.000 | -.892 |
| | | Significance (2-tailed) | . | .007 |
| | | df | 0 | 5 |
| | ROA | Correlation | -.892 | 1.000 |
| | | Significance (2-tailed) | .007 | . |
| | | df | 5 | 0 |

*Correlations*

Source: SPSS 2020 processing

        The relationship between the amount of credit and profitability when the level of liquidity does not change is 0.892 in a negative direction. This means that the relationship between the amount of credit and profitability is very strong when the level of liquidity does not change. The negative sign illustrates that when the amount of credit increases, while the level of liquidity does not change, it will decrease the company's profitability. Then the magnitude of the effect of the amount of credit on the company's profitability when the company's liquidity level remains (-0.892) 2 □ 100% = 79.6%.

**Correlation of level of liquidity with profitability when the amount of credit does not change**
        The correlation coefficient between the level of liquidity and profitability when the amount of credit does not change can be seen in the following table.

**Table 8. Partial Correlation Coefficient of Liquidity Level with Profitability**

**Correlations**

| Control Variables | | | LDR | ROA |
|---|---|---|---|---|
| Credit | LDR | Correlation | 1.000 | .897 |
| | | Significance (2-tailed) | . | .006 |
| | | df | 0 | 5 |
| | ROA | Correlation | .897 | 1.000 |
| | | Significance (2-tailed) | .006 | . |
| | | df | 5 | 0 |

Source: SPSS 2020 processing

The relationship between the level of liquidity and profitability when the amount of credit does not change is 0.897 in a positive direction. This means that the relationship between the level of liquidity and profitability is very strong when the amount of credit does not change. A positive sign illustrates that when the level of liquidity increases, while the amount of credit does not change, the company's profitability will increase. Then the magnitude of the influence of the level of liquidity on company profitability when the amount of company credit remains (0.897) 2 ☐ 100% = 80.5%.

Based on the results of the calculation of the influence on profitability, it can be seen that between the two independent variables, the level of liquidity has a greater influence on profitability than the amount of credit.

**Multiple Correlation and Coefficient of Determination**

The coefficient of determination is a value that states the size of the joint influence of the independent variables on the dependent variable. In the problem being studied, namely the effect of the amount of credit and the level of liquidity on profitability at BTPN Syariah, the following coefficient of determination is obtained.

**Table 9. Coefficient of Determination**

**Model Summary [b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .899[a] | .808 | .732 | .54157 | 2.816 |

a. Predictors: (Constant), LDR, Kredit
b. Dependent Variable: ROA

Source: SPSS 2020 processing

The value of R in table 9 shows the strength of the relationship between the two independent variables (amount of credit and level of liquidity) simultaneously with company profitability. So the research problem is known that simultaneously the two independent

variables (amount of credit and level of liquidity) have a very strong relationship with company profitability. The multiple correlation value (R) of 0.899 is between 0.80 to 1.00 which is classified as a very strong correlation criterion.

While the R-Square value is 0.808 or 80.8 percent, which means that the two independent variables of the amount of credit and the level of liquidity simultaneously affect the changes that occur in profitability by 80.8 percent. In other words, together the two independent variables (amount of credit and level of liquidity) contribute 80.8% to changes in profitability at BTPN Syariah. The remaining effect of several other factors that were not observed was 19.2%.

Furthermore, it is tested whether the amount of credit and the level of liquidity have an effect on profitability at BTPN Syariah.

**Testing the Regression Coefficient Together**

Hypothesis testing used the F-test statistic obtained through the ANOVA table as shown in table 3.8 below:

**Table 10. Anova for Testing the Regression Coefficient Together**

ANOVA[b]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 6.185 | 2 | 3.092 | 10.543 | .016[a] |
| | Residual | 1.467 | 5 | .293 | | |
| | Total | 7.651 | 7 | | | |

a. Predictors: (Constant), LDR, Kredit

b. Dependent Variable: ROA

Source: SPSS 2020 processing

Based on the ANOVA table, it can be seen that the F value of the data processing results is 10.543 and compared with the F value of the table. From the F table at $\alpha = 0.05$ and degrees of freedom (2; 5), the Ftable value is obtained at 6.944. Because Fcount (129.654) is greater than Ftable (6.944), then at an error level of 5% ($\alpha = 0.05$) it was decided to reject Ho1 so that Ha1 was accepted. This means that the amount of credit and the level of liquidity simultaneously have a significant effect on profitability at BTPN Syariah with a confidence level of 95%.

**Partial Regression Coefficient Testing**

In testing the partial regression coefficient, the effect of each independent variable on the dependent variable will be tested. The test statistic used in partial testing is the t test. The table value used as a critical value in the partial test (t test) is 2.571 which is obtained from the t table at $\alpha = 0.05$ and 5 degrees of freedom for two-party testing.

### The Effect of Amount of Credit on Profitability

The tcount value of the total credit variable is -4,422 with a significance value of 0.007. Because the value of tcount (-4.422) is smaller than the negative t table (-2.571), then at an error level of 5% Ho2 is rejected so that Ha2 is accepted. This means that the amount of credit has a significant effect on profitability at BTPN Syariah with a confidence level of 95%. The direction of influence is negative, indicating that the greater the amount of credit, the more likely it is to reduce profitability.

### The Effect of Liquidity Level on Profitability

The t-count value of the liquidity level variable is 4.536 with a significance value of 0.006. Because the value of t count (4.536) is greater than t table (2.571), then at an error level of 5% it was decided to reject Ho3 so that Ha3 was accepted. This means that the level of liquidity has a significant effect on profitability at BTPN Syariah with a confidence level of 95%. The direction of influence is positive, indicating that an increase in the level of liquidity tends to increase profitability.

### CONCLUSION

Based on the results of research conducted using annual data on BTPN Syariah from 2012 to 2019, the following conclusions were obtained:
The amount of credit extended by BTPN Syariah between 2012 - 2018 continued to increase, only in 2019 it decreased. However, the decline was not that big when compared to the increase that occurred. The results of the regression analysis show that between the amount of credit and the profitability of BTPN Syariah there is a relationship in the opposite direction, where if the amount of credit increases when the level of liquidity does not change, then the profitability of BTPN Syariah will decrease. The test results show that partially the amount of credit has a significant effect on the profitability of BTPN Syariah. The results of the regression analysis show that there is a unidirectional relationship between the level of liquidity and the profitability of BTPN Syariah Indonesia, where if the level of liquidity increases when the amount of credit does not change, then the profitability of BTPN Syariah will increase. The test results show that partially the level of liquidity has a significant effect on the profitability of BTPN Syariah. Taken together, the amount of credit and the level of liquidity have a significant effect on the profitability of BTPN Syariah.

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