
**EFFECT OF REPAYMENT CAPACITY AND INSTALLMENT TO
DISPOSABLE INCOME RATIO COMPONENTS ON RETURN RATES OF
PUBLIC BUSINESS FINANCING
(STUDIES AT PT. BANK BRI SYARIAH MALANG SOETTA BRANCH
OFFICE)**

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ABSTRACT

The ratio of the return rates on nonperforming financing of Islamic banking has not generally been improved. There are several financing problems at PT Bank BRI Syariah Malang Soetta Branch Office in its financial statements. The distribution of micro, small, and medium enterprises financing is not always expeditious due to inaccurate analysis. This study aims to identify and analyze the effect of the components of repayment capacity and installment to disposable income ratio on the return rates of public business financing. This research was a quantitative study with an explanative design. A survey method was the approach used to obtain data. There are 203 debtor data with nonperforming financing at PT Bank BRI Syariah Malang Soetta Branch Office used in this study. The analysis technique used was a comparative analysis. By using logistic regression and comparative analysis, the results show that the RPC components affecting the return rates include working capital, business profits, operating costs, household expenses, business turnover, and BRIS installments.

Keywords: Comparative Analysis; Correlation Analysis; IDIR; PBF; RPC

INTRODUCTION

Indonesia is one of the countries implementing the dual banking system, namely, conventional banking and Islamic banking (Ismail, 2011). Until now, the collection and distribution of the funds have become the main business of banking as the bank will get the revenue, increasing its productivity level. The revenue obtained from channeling funds or financing is in the form of interest for conventional banks or profit sharing for Islamic banks, and income from interest or profit sharing is the largest revenue for the bank.

A bank offers various kinds of financing facilities or products, and the financing facility currently being supported by the government is the people business credit (KUR) or commonly known as public business financing (PBF) in Islamic banking. This type of PBF is focused on prospective debtors with micro, small, and medium enterprises (MSMEs). According to the data from the presentation of policy and development program for MSMEs (toward MSMEs 2020–2024), the contribution of Indonesian MSMEs itself was still low to national exports, that is, 15.80% or around US\$ 23 billion of total non-oil and gas exports. The contribution of Indonesian MSMEs was also lower than that of other ASEAN countries such as Vietnam (20.00%) and Thailand (29.50%). The low contribution of MSMEs itself was due to the lack of cash flow to MSMEs from banks, where the total credit or financing channeled by commercial banks was less than 20% (or around Rp. 1,000 trillion) from Rp. 5,300 trillion distributed to MSMEs.

Islamic banking faces serious problems. The phenomenon that has occurred in the last 5 years is still a hot topic, where that the ratio of return rates on nonperforming financing of Islamic banking has not improved in terms of handling nonperforming financing (CNBC Indonesia, 2019). At the end of 2016 and 2017, the ratio of return rates on nonperforming financing of Islamic banking reached 4.42% to 4.76%. These figures are very high in comparison to conventional banks with return rates of 3.85% and 3.69% on problem financing.

Based on Islamic Banking Statistics and Indonesian Banking Statistics data from the Financial Services Authority (OJK) over the past year, the ratio of return rates on nonperforming

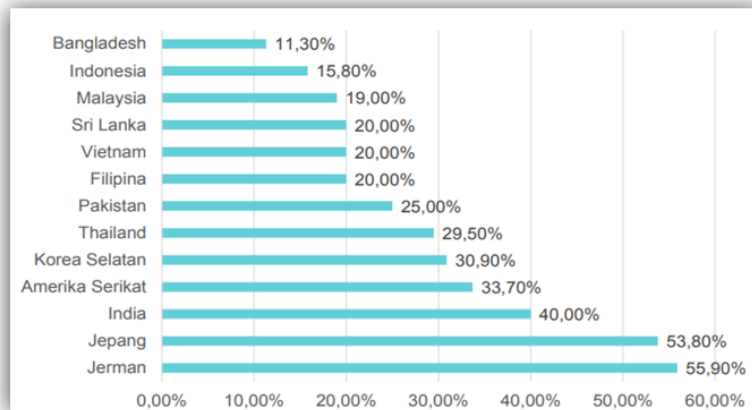


Figure 1. Ratio of Return Rates on Nonperforming Financing

Source: <http://www.depkop.go.id>

Islamic banking financing is still considered quite alarming, although the figures for this period indicate the existence of a decrease in the return ratio compared with the previous period. However, these figures are still quite high in comparison to those on conventional banking. When viewed from the total distribution, Islamic banking financing distributed only Rp. 2,634,778 billion, about 3.87% of the total distribution of conventional banking financing, which was Rp. 68,102,000 billion.

As shown in Figs. 2 and 3, the ratio of the return rates on nonperforming financing was very unbalanced with the total financing distribution. In conventional banks, the total financing distribution was much higher than that of Islamic banks. In reality, however, the return rates on Islamic bank financing were much lower. This phenomenon also occurs in one of the big Islamic banks, namely, PT Bank BRI Syariah Tbk, with a return rate of 4.5% on nonperforming financing during the first semester of 2019. This number has decreased compared to the previous period that reached a return rate of 4.98% on nonperforming financing (Kontan.co.id, 2019). In the quarterly reports for the past year, the ratio of return rates on nonperforming financing was quite high, with an average of 4.35%.

Being one of the leading modern retail banks offering a variety of financial services with the easiest access for a more meaningful life as its vision, PT Bank BRI Syariah Tbk also provides facilities for people business credit financing products, which means that PT Bank BRI Syariah is taking part in the process of developing and improving MSMEs in Indonesia to support government programs in empowering community businesses.

The graph shows that the distribution of MSME financing by PT Bank BRI Syariah has decreased, leading to the decline of the bank's revenue as PBF is the main program. This happened because in 2018, the ratio of return rates on nonperforming financing of PT Bank BRI Syariah reached 4.97%. Therefore, PT Bank BRI Syariah improved the financing supervision system before and after the decision on financing disbursement, which caused PT Bank BRI Syariah to channel less MSME financing compared to the previous period.

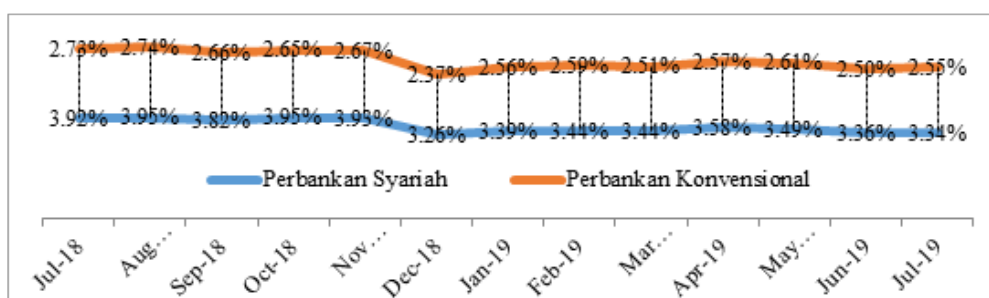


Figure 2. Ratio of Return Rates on Nonperforming Financing

Source: <https://www.ojk.go.id>

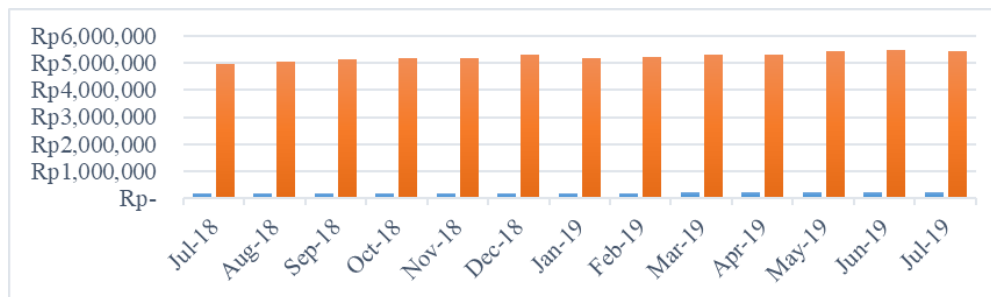


Figure 3. Ratio of Return Rates on Nonperforming Financing

Source: <https://www.ojk.go.id>

PT Bank BRI Syariah Malang Soetta Branch Office is located in Malang City, East Java Province. PT Bank BRI Syariah Malang Soetta Tbk Branch Office has channeling funds totaling 5,280 units of financing products, and 2,082 units were channeled in the form of PBF. In conducting these fund distribution activities, PT Bank BRI Syariah Malang Soetta Branch Office always prioritizes the 5C principle credit analysis. By prioritizing the 5C principle, PT Bank BRI Syariah Malang Soetta Branch Office can determine the length of the loan period and the yield amount, among others, so PT Bank BRI Syariah can decide to approve or reject the financing proposal made by the prospective debtor. However, the distribution of financing provided by PT Bank BRI Syariah Malang Soetta Branch Office to MSMEs is not always facile, because some financing problems still exist in its financial statements. The distribution of MSME financing is not always facile due to inaccurate analysis; therefore, the authors want to observe how the factors in the repayment capacity index and installment to disposable income ratio can affect the return rates on financing and as the main analysis implemented by PT Bank BRI Syariah Malang Soetta Branch Office in the distribution of financing.

Repayment capacity is one of the indexes for the analysis carried out by banks in assessing the feasibility of financing disbursement. The calculation focuses on assessing the capacity of prospective debtors, which is one of the focuses of bank assessment in the 5C principle. The purpose of the repayment capacity (RPC) calculation index is to assess the ability of prospective debtors to carry out their obligations. The results of the RPC calculation can estimate how many times the prospective debtor will be able to make facile repayments. Meanwhile, the installment to disposable income ratio is an index that calculates the percentage of the debtor eligibility to obtain financing from the bank. The percentage must not exceed the maximum limit set by bank policy. The maximum limit that can be approved by PT Bank BRI Syariah Malang Soetta Branch Office is 80%.

Research conducted by Teresa (2012) shows that RPC significantly affects the return rates on credit. However, there is a negative correlation between RPC and the rates of credit repayment. Chikita (2014) stated that the determination of the financing provision in BRI Syariah has six stages. In addition to these six stages, BRI Syariah KCP Setiabudhi also uses the basic concepts of financing, namely, character, capacity, capital, collateral, and condition. The IDIR calculation method in BRI Syariah lies in the capacity. The IDIR calculation method used in assessing the feasibility of providing financing for small (micro) businesses has a positive effect on the level of ROI profitability.

This study aims to identify and analyze the effect of the index calculation of RPC and installment to disposable income ratio (IDIR) on the return rates on PBF at PT Bank BRI Syariah Malang Soetta Branch Office. Both index calculations of RPC and IDIR are the core analyses applied by PT Bank BRI Syariah Malang Soetta Branch Office in its financing distribution.

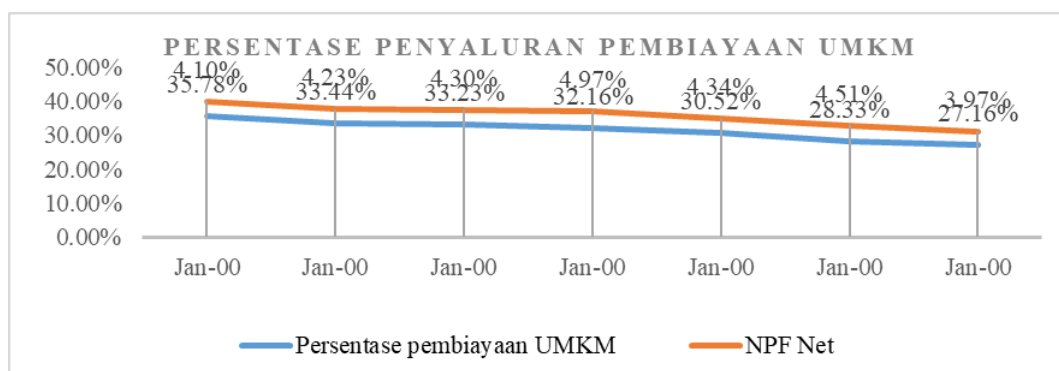


Figure 4. Percentage of MSME Financing Distribution by PT Bank BRI Syariah Tbk (Quarter)
Source: <https://www.brisyariah.co.id>

LITERATURE REVIEW

Financial management (credit management) is a process carried out by a bank in an integrated manner in channeling its planned and administered funds to avoid the risk of financing (credit) itself. The financial management functions to manage the channeling funds by the bank properly and in line with the bank's vision, mission, and objectives. According to Ismail (2011), financial analysis is a process carried out by a bank to assess a financing application that has been submitted by a prospective debtor. The application of basic principles in providing financing as well as in-depth analysis to prospective debtors will assist banks in avoiding the risk of financial problems and returning the capital flows of bank. The 5C principles by Ismail (2011) are character, capacity, capital, collateral, and condition of economy.

RPC is one of the analyzes performed by banks in assessing the feasibility of financing disbursement and focuses on assessing the capacity of prospective debtors. This is one of the focuses of bank assessment in the 5C principle. In PBF, the RPC value is obtained by calculating the ratio by dividing the loans or installments of the prospective debtor in other locations with the net profit obtained by the prospective debtor, multiplied by 75%. The 75% figure has been determined by the bank, assuming that 75% of the income is a cost that can be used to pay its obligations in the bank and the remaining 25% is used for unexpected expenses by prospective debtors. The results of this RPC calculation will determine how many times the prospective debtor will be able to return the distributed financing. The analysis of the RPC applied by PT Bank BRI Syariah Branch Office Malang Soetta in PBF is calculated as follows:

In addition to the RPC calculation index, other calculations, such as IDIR, are used by banks to determine the feasibility of financing distributed to prospective debtors. The IDIR calculates the percentage of the total loan or installments of the prospective debtor (loans or installments in other locations + loans or installments at the bank), which is then divided by the potential debtor's disposable income, multiplied by 100%. The percentage from the IDIR calculation must not exceed the maximum limit set by bank policy, which is usually around 70–80%. If the percentage result of the IDIR exceeds the maximum limit, the distribution of financing is deemed not feasible to prospective debtors. PT Bank BRI Syariah Malang Soetta Branch also applies the calculation index of the IDIR in distributing PBF and sets the maximum limit that can be approved as 80%. The following is the calculation of the IDIR applied by PT Bank BRI Syariah Malang Soetta Branch Office in PBF:

It will be risky for the bank if the distribution of PBF is carried out without any financing analysis. Debtors can provide fictitious information, making the financing unfit for distribution. As a result of errors or lack of prudential principles in conducting financial analysis, financing becomes nonperforming and stuck. Nonperforming financing also becomes difficult to invoice due to inaccurate debtor information. According to the Bank Indonesia Circular Letter Number 12/11/DPNP/31 March 2010, the return rates on financing are classified into five groups, namely, performing (P), special attention (SA), sub-performing (SP), in doubt (D), and nonperforming (NP).

According to Luh (2012), several factors that influence the return rates on financing are grouped into three parts based on their characteristics: individual characteristics, business characteristics, and credit characteristics. Meanwhile, Gabriela (2017) also stated that several factors that influence the return rates on financing can be grouped into debtor characteristics and business characteristics. Apart from these two groups of characteristics, there is another factor that can influence the occurrence of nonperforming credit, which is the economic factor.

METHODS

The quantitative research with an explanative (explanatory) design was used to determine the factors affecting the PBF return rates in the RPC and IDIR calculation indexes at PT Bank BRI Syariah Malang Soetta Branch Office. A survey approach was used to obtain the data. The survey method is a method that uses a questionnaire as the main instrument for data collection (Sandu et al., 2015). This study only focuses on the effect of the RPC and IDIR variables on the return rates (i.e., PBF). Thus, matters relating to the relationship between variables in PBF will be the supporting/complementary materials in this research.

Population and Sample

The population in this study included all debtors of PBF at PT Bank BRI Syariah Malang Soetta Branch Office. The total population is 2082 debtors, consisting of two subpopulations, namely, PBF debtors with the return rates on performing financing and PBF debtors with the return rates on nonperforming financing. Meanwhile, the minimum sample size described by Anak and Anik (2017) for research using statistical data is 30. The same goes to the explanatory method, where the accepted minimum sample size is 15 subjects per group. In this study, the authors used purposive sampling as a sampling technique. Based on this, the sample criteria in this study were micro PBF debtors and small PBF debtors at PT Bank BRI Syariah Malang Soetta Branch Office that was still active until the end of 2019 and have been running for at least 2 years.

Data Collection and Analysis Techniques

Data was collected using several methods, including (1) questionnaire, which was distributed to PBF debtors at PT Bank BRI Syariah Malang Soetta Branch Office; (2) interview, which was conducted in an unstructured manner to the account officer in charge of the micro PT Bank BRI Syariah Malang Soetta Branch Office; and (3) documentation, which involved 203 data related to debtors with PBF nonperforming returns at PT Bank BRI Syariah Malang Soetta Branch Office with several classifications, including gender, age, latest formal education, number of family dependents, debtor status, length of business, business operating hours, working capital, business profits, operating costs, household expenses, business turnover, BRIS installments, other installments, and total installments. The data collection also followed the purposive sampling technique.

The data were analyzed through quantitative analysis. The type of quantitative analysis technique used in this research was inferential statistical analysis to draw conclusions and make decisions based on the analysis.

Table 1. Variable Operational Definition

No.	Type of PBF	Total
1	Micro PBF	83
2	Small PBF	120
Total		203

Source: Authors Illustration (2020)

Correlational Analysis: Logistic Regression

Correlation analysis is an analysis to identify the correlation or influence between two or more variables. In correlation analysis, a logistic regression analysis model was used to observe the effects of the factors contained in the RPC and IDIR indexes on the return rates on PBF at PT Bank BRI Syariah Malang Soetta Branch Office. The logistic regression used was binary logistic regression, where the response variable has only two values (Gujarati, 2003), namely, performing and nonperforming, with no classical assumption test (normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test). According to Agus and Nano (2016), the classical assumption test is a statistical requirement that must be fulfilled in multiple linear regression analysis based on the ordinary least square (OLS). Thus, regression analysis that is not based on OLS does not require the classical assumptions test, such as logistic regression or ordinal regression. The logistic regression model used was as follows:

$$Li = Ln = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

Research Hypothesis

Based on the above description, the stages required to test the hypothesis are as follows:
H1: Debtor's ability to make a repayment based on the RPC and IDIR index, namely, working capital, business profits, operational costs, household expenses, business turnover, BRIS installments, and other installments. RPC and IDIR affect the return rate on PBF at PT Bank BRI Syariah Malang Soetta Branch Office.

RESULTS

Data Analysis in the RPC Components

Operating Costs

The operational cost variable produces a significance value (sig.) of 0.006 with a negative regression coefficient of -1.838. The significance level value (sig.) was smaller than $\alpha = 5\%$, indicating that H_0 was rejected. This means that the operational cost variable has a partially significant effect on the return rates on financing. The negative regression coefficient implies that the higher the operational costs, the lower the chances of the return rates on financing. The odds ratio variable for operating costs was 0.159, describing one unit increase in operating cost will reduce the return rates on financing by 0.159 times from the previous one.

Business Profits

The business profit variable produces a significance value (sig.) of 0.011 with a negative regression coefficient of -2.699. The significance value (sig.) was smaller than $\alpha = 5\%$, indicating that H_0 was rejected. This portrays that the business profits variable has a partially significant effect on the return rates on financing. The negative regression coefficient results indicate that the higher the business profits, the less the chances for the return rates on financing. The odds ratio of the business profit variable was 0.067, describing that one unit increase in business profit will reduce the chances of a return on financing by 0.067.

Business Turnover

The business turnover variable produces a significance value (sig.) of 0.011 with a positive regression coefficient of 2.185. The H_0 hypothesis was rejected because the result of the significance value (sig.) was smaller than $\alpha = 5\%$. This means that the business turnover variable has a partially significant effect on the return rates on financing. The positive regression coefficient portrays that the business turnover is parallel with the return rates on financing. The odds ratio of business turnover was 8.890, indicating that one unit increase in the business turnover will increase the return rates on financing by 8.890 times from the previous one.

BRIS Installments

The BRIS installment variable produces a significance value (sig.) of 0.018 with a negative regression coefficient of -0.134. The significance value (sig.) was smaller than $\alpha = 5\%$ (H_0 was rejected), which means that the BRIS installment variable has a partially significant effect on the return rates on financing. The negative regression coefficient indicates that the BRIS installment

contradicted with the chances of return rates on financing. The odds ratio for the BRIS installment variable was 0.875, which means that one unit increase in the BRIS installment will reduce the return rates on financing by 0.875 times from the previous one.

Household Expenses

The household expense variable produces a significance value (sig.) of 0.033, smaller than $\alpha = 5\%$ (H_0 was rejected), indicating the household expense variable has a partially significant effect on the return rates on financing. The positive regression coefficient results (1.593) describe that the household expenses are in line with the chances of the return rates on financing. The odds ratio of the household expense was 4,919, which portrays one unit increase in household expenses will increase the return rates on financing by 4,919 times from the previous one.

RPC

The RPC variable produces a positive regression coefficient of -0.259 with a significance value (sig.) of 0.550, which was greater than $\alpha = 5\%$, indicating that H_0 hypothesis was accepted. It means that the RPC variable has a partially insignificant effect on the return rates on financing. The odds ratio of the RPC variable was 0.772, which means that one unit increase in the RPC will reduce the return rates on financing by 0.772 times from the previous one.

Data Analysis in IDIR Components

Operational Costs

The operational cost variable produces a significance value (sig.) of 0.006 ($\alpha < 5\%$), indicating that H_0 was rejected. This means that the operational cost variable has a partially significant effect on the return rates on financing. The negative regression coefficient results (-1.838) imply that the operational costs contradicted with the chances of the return rates on financing. The odds ratio for operating costs was 0.159, which means that an increase in one-unit operating cost will reduce the return rates on financing by 0.159 times from the previous one.

Business Profits

The business profit variable produces a significance value (sig.) of 0.011 with a negative regression coefficient of -2.699 . The significance value (sig.) was smaller than $\alpha = 5\%$ (H_0 was rejected), which means that the business profits variable has a partially significant effect on the return rates on financing. The negative regression coefficient implies the negative relationship where the higher the business profits, the less the chances for the return rates on financing. The odds ratio of the business profit variable was 0.067, which means that one unit increase in business profit will reduce the chances of a return on financing by 0.067 times.

Business Turnover

The business turnover variable produces a significance value (sig.) of 0.011, which was smaller than $\alpha = 5\%$ (H_0 was rejected), which means that the business turnover variable has a partially significant effect on the rate of return on financing. The business turnover variable also produces a positive regression coefficient of 2.185, which portrays that the business turnover parallels with the chances of the return rates on financing. The odds ratio for the business turnover was 8.890, which means that one unit increase in the business turnover will increase the return rates on financing by 8.890 times from the previous one.

BRIS Installments

The BRIS installment variable produces a significance value (sig.) of 0.018 with a negative regression coefficient of -0.134 . The significance value (sig.) was smaller than $\alpha = 5\%$ (H_0 was rejected), which means that the BRIS installment variable has a partially significant effect on the return rates on financing. The negative regression coefficient indicates that the BRIS installment contradicted with the chances of return rates on financing. The odds ratio for the BRIS installment variable was 0.875, which means that one unit increase in the BRIS installment will reduce the return rates on financing by 0.875 times from the previous one.

Household Expenses

The household expense variable produces a significance value (sig.) of 0.033, smaller than $\alpha = 5\%$ (H_0 was rejected), indicating the household expense variable has a partially significant effect on the return rates on financing. The positive regression coefficient results (1.593) describe that the household expenses are in line with the chances of the return rates on financing. The odds ratio of the household expense was 4,919, which portrays one unit increase in household expenses will increase the return rates on financing by 4,919 times from the previous one.

Other Installments

The variable of other installment produces a significance value (sig.) of 0.065 with a negative regression coefficient of -0.074 . As the significance value (sig.) was greater than $\alpha = 5\%$, then the H_0 hypothesis was accepted, indicating that the other installment has a partially insignificant effect on the return rates on financing. The odds ratio for other installment variable was 0.929, which portrays that one unit increase in another installment will reduce the return rates on financing by 0.929 times from the previous one.

Total Installment

The total installment variable produces a significance value (sig.) greater than $\alpha = 5\%$ (0.077) (the H_0 hypothesis was accepted), which means that the total installment variable has a partially insignificant effect on the return rates on financing. The total installment variable also produces a positive regression coefficient of 1.394. The odds ratio of the total installment variable was 4.030, which means that one unit increase in the total installment will increase the return rates on financing by 4.030 times from the previous one.

IDIR

The IDIR variable produces a significance value (sig.) of 0.135, greater than $\alpha = 5\%$, indicating that the H_0 hypothesis was accepted. This means that the IDIR variable has a partially insignificant effect on the return rates on financing. The IDIR variable also produces a positive regression coefficient of -0.480 . The odds ratio value of the IDIR variable was 0.619, which means that one unit increase in IDIR will reduce the return rate on financing by 0.619 times from the previous one.

DISCUSSION

The Effect of Operational Costs on the Return Rates on Financing

From the logistic regression analysis, it is known that the higher the operational costs for a debtor's business, the lower the chances that the debtor will return the financing facilely. When the operational costs are high, it means that the expenses to be borne by the debtor will be even greater, and it will reduce the fund allocation that has been provided by the debtor to make a refund. It leads to the lower ability of debtors to pay installments or return on financing. If the debtor's income is fixed but the debtor's operational costs or expenses increase (unexpected costs), then the chances for nonperforming financing may occur.

The results of this study are per the RPC and IDIR index calculation theory, which states that operating costs will affect the RPC and IDIR indexes. Increased operational costs or business costs will have an impact on reducing the net profit and disposable income, affecting the RPC and IDIR index calculation. The RPC and IDIR indexes are considered to reflect the ability of a debtor to pay back the financing.

The Effect of Working Capital on the Return Rates on Financing

The working capital variable has a significant effect on the return rates on financing and has a positive relationship with a positive regression coefficient value of 0.382. It shows that as the working capital owned by the debtor is increased, the chances of the debtor returning the financing facilely will also increase. The debtor must have initial working capital in running their business. If the debtor relies solely on working capital distributed by the bank, a deficit in business funds and business fails may occur, causing the debtor to fail to make a refund (nonperforming

financing). Therefore, working capital is one of the variables that must be considered by banks as it can affect the ability of debtors to pay back the distributed financing.

The results of this study were in line with research conducted by Kadek et al. (2017), which states that accounting information, such as balance sheets, is needed by banks to assess how the debtor is running their business (business ability) and to find out whether the debtor can make credit repayments facilely or not. However, the results of this study contradict the results of research by Sena (2007), which explains that when a debtor's working capital increases, it will increase the credit risk. When the working capital of the debtor increases, the creditor is more confident in providing greater credit, and the risk of nonperforming loans increases.

The Effect of Business Profits on the Return Rates on Financing

From the results of the logistic regression analysis, the business profits variable has a significant effect on the return rates on financing, which states that when the profit earned by the debtor is getting higher, the chances of the debtor paying the refund facilely will get lower. It can happen because when the debtor gets high business profits, the debtor is likely to use their income for personal needs, thereby increasing the borne expenses. Several cases also show debtors' behavior when they received high business profits, thinking that their business must continue to grow and will add financing from other parties which will also increase the debtor's loans, while the profits earned run unstably.

The results of this study contradict previous research by Luh (2012), which states that business profit has a significant effect on credit return and has a positive correlation, as business profit is a source of credit repayment so that business profit can affect the repayment ability of the debtor. This finding also contradicts the research by Gabriela (2017), which explains that as the business profit is getting higher, the business management capability of the business owner will get better, and the debtor is expected to pay off loans with a high business profit rate.

The Effect of Business Turnover on the Return Rates on Financing

The business turnover variable has a significant positive effect on the return rates on financing, indicating that as the business turnover is increased, the chances of the debtor to repay the financing facilely will also increase. Business turnover is the debtor income obtained from their business activities. The debtor's ability for repayment is determined by the income earned as it is a source of funds that will affect the debtor's ability to pay. When the debtor's business income decreases, the debtor's repayment ability will also decrease as the debtor will not have enough funds for repayments.

The results of this study are in line with previous research conducted by Anita (2015) that explains the business turnover variable has a significant and positive influence, as the business turnover is a source of financing repayments so it can affect the debtor's ability to repay. The greater the monthly business turnover of a debtor, the greater the debtor's ability to make the financing repayments as there is an extra budget available for installments.

The Effect of BRIS Installments on the Return Rates on Financing

The BRIS installment variable has a significant and negative effect on the return rate on financing. BRIS installment is the number of installments owed by the debtor from the distributed financing by PT Bank BRI Syariah Malang Soetta Branch Office. BRIS installment will negatively affect the return rates because the debtor loans are in line with the number of installments. The number of installments that must be paid by the debtor will affect the repayment ability. As the repayment ability is getting lower, the debtor will find it difficult to make high repayments, causing nonperforming financing.

The results of this study contradict the research result by Anna and Dwi (2011), which explains that the variable of monthly liability, in this case principal installments and interest, has a significant and positive correlation to credit repayment. The increase in the number of liabilities per month will be followed by an increase in credit repayments with the same shifts, as the increase in liabilities per month that must be fulfilled by the debtor is still under the debtor's ability to pay.

The Effect of Household Expenses on the Return Rates on Financing

In contrast to the operational cost variable, the household expense variable has a significant and positive effect on the return rates on financing, which means that the higher the household costs incurred by the debtor, the higher the possibility of the debtor to make repayments facilely. It is because household expenses are not a fixed cost and will not reduce the allocation of funds that have been provided by the debtor to make repayments (which are fixed costs). Thus, the increase in household expenses will not cause the nonperforming financing for the debtor.

The results of this study contradict the research results of Teresa (2012), which show that household expenditures do not have a significant effect and have a negative correlation on RPC. Teresa stated that as the number of family dependents increases, the debtor's expenses would also increase, leading to nonperforming financing. The results of this study do not follow the calculation theory of the RPC and IDIR indexes, which explains that an increase in household costs will have an impact on the decrease in net profits and will affect the calculation results on the smaller RPC index. A smaller RPC index indicates the decrease in disposable income, thus affecting the calculation results of the greater IDIR index.

The Effect of Other Installments on the Return Rates on Financing

Other installments are the number of installments by the debtor from financing disbursed by other parties. Other installment variable does not have a significant effect on the return rates on financing, as the bank has the other installments taken into consideration before disbursing the financing. If the bank continues to approve the financing, the bank has considered that the debtor can make a performing repayment on financing, so that the debtor will not experience problems in making refunds even though he/she has installments elsewhere.

The results of this research did not follow the RPC and IDIR indexes used by banks, in which the other installment variable has a significant effect on the calculation results of the RPC and IDIR indexes that will reflect the debtor's ability to make financing repayments. The results of this study also contradict the study by Visit et al. (2005), who argue that loans or credits at other banks have a significant effect and have a negative correlation to credit repayment, stating that the more installments the debtor has, the higher the chances of nonperforming credit to occur.

The Effect of Total Installments on the Return Rates on Financing

The total installment is the number of installments owed by the debtor from several parties, including PT Bank BRI Syariah Malang Soetta Branch Office. From the logistic regression analysis, the total installment variable does not have a significant effect on the return rates on financing. Just like the other installment variable, the total installment variable has become an initial consideration by the bank in deciding on the financing, so it is considered as a non-obstacle for the debtor to make the repayments. Besides, the debtor with a greater total installment means that he/she has a huge business with high capability and profitability. In this case, the bank may be confident in disbursing financing, and the debtor is considered capable to make a performing repayment.

This study supports the results of Luh's (2012) research, which explains the loan number variable does not significantly affect the rate of credit repayment as each debtor has gone through the analysis process regarding the loan number, and the bank considers the debtor to be able to repay it. In contrast, the research by Gabriela (2017) states that the loan number submitted can explain the debtor's repayment ability. The risk of nonperforming financing may increase as the loan number increased.

The Effect of RPC on the Return Rates on Financing

The RPC variable does not have a significant effect on the return rates on financing. It can happen because the indicators contained in the calculation of the RPC index do not have an influence or positive correlation with the return rate on financing. However, it is known that the calculation of the RPC index is the basis for banking analysis in determining whether the debtor is capable to make a repayment. The results of this study on the variables included in the calculation of the RPC index, such as business profits, household expenses, and installments, cause no significant effect of the RPC index on the return rates on financing.

The results of this study support Teresa's (2012) research result, which states that the increase in the RPC variable does not reflect a performing return rate on financing. It is because

when the debtor experiences an increase in business production costs that are not followed by the profit, the debtor prioritizes household expenses than his/her liabilities to make a repayment, and the funds obtained from the bank may be used to meet the household needs and pay debts. However, this study also contradicts the results of Mas's research (2018), which states the RPC has a positive impact in reducing the risk of nonperforming financing.

The Effect of IDIR on the Return Rates on Financing

The same with the RPC variable, the IDIR variable does not have a significant effect on the return rates on financing, because the indicators in the IDIR index calculation do not have an effect or a positive correlation to the return rate on financing. The indicators contained in the IDIR index calculation, such as variables of business profits, household expenses, BRIS installments, other installments, and total installments, do not have a significant effect on the return rates on financing.

The results of this study are in line with the result of Purlisana's research (2018), which states that the determination of the lease amount to the debtor by the calculation of IDIR index is not under Fatwa No. 09/DSN-MUI/IV/2000, resulting in the risk of nonperforming financing as the debtor is unable to pay his/her liabilities. However, the results of this study reject the results of Chikita's (2014) research, which explains that the calculation of the IDIR index used in assessing the feasibility of providing financing for small (micro) businesses has a positive effect on the ROI profitability rate. This study also rejects the result of Wery's research (2015), which shows that the indicators contained in the IDIR ratio have a significant effect on the risk of nonperforming financing of a debtor.

The Effect of Gender on the Return Rates on Financing

From the comparative analysis, the gender variable does not have a dependent correlation to the return rates on financing. Gender is considered to have no impact on running a business. As long as the debtor can manage his/her business facilely, the return on his/her financing will be considered as performing.

The results of this study are in line with research result of Gabriela (2017), which states that gender does not affect the occurrence of nonperforming credit because the bank only pays attention to the bookkeeping business transactions that are feasible to be financed. However, Anna and Dwi (2011) argue that the gender variable can determine the debtor's behavior in returning credit on time. Men tend to make the repayments more performing compared with women.

The Effect of Age on the Return Rates on Financing

There is a difference in the age proportion of debtors with performing and nonperforming financing, indicating that the age variable affects the behavior of a debtor in making repayments. Younger debtors tend to have higher productivity than older debtors in managing the business, so older debtors are more at risk of nonperforming financing than younger debtors. The level of productivity will affect the profit obtained by the debtor used for financing repayments. In addition, older debtors tend to have more household expenses than younger debtors. Thus, older debtors have relatively less profit compared to younger debtors. However, the chi-square value from the test results shows that the age variable does not have a dependent correlation to the return rate on financing.

The results of this study support the research conducted by Gabriela (2017), which states that age is considered not to effect the credit repayments, because the ability of the debtor's business is a major factor for banks in making a performing repayment. In contrast, research by Teresa (2012) states that as the respondents get older, the productivity level and the ability to adapt in the business section changes will be lower, which leads to relatively less net income of older respondents than younger respondents.

The Effect of Latest Formal Education on the Return Rates on Financing

The latest formal education has no dependency correlation with the return rates on financing. Formal education level does not determine the ability of a debtor to return the financing facilely; thus, it cannot be used as a benchmark to reduce the risk of nonperforming financing. In

general, a good debtor's character is in line with the formal education taken by the debtor. Good characteristics include having a sense of responsibility and discipline in paying its obligations. But in fact, a person's character is influenced by other factors such as customs and social environment.

This result support Luh's (2012) research, which explains that the level of education has no significant effect on credit repayment rates, as the character of the debtor is not only influenced by the level of education but also other factors such as customs or the culture of the surrounding environment. Gabriela (2017) also explains that the level of education is considered to not affect credit repayments because business innovation is needed to maintain and expand a debtor's business so that credit repayments can run facilely. The bank values that the level of education does not reflect the debtor's ability to manage a business for what has been learned in theory is different from what will be faced in the reality. The results of this study reject the research results of Anita (2015), which states that the level of education has a significant effect on the return rates on financing, because the level of education shows a person's daily personality and attitude. This means that the higher a person's education level, the more disciplined and responsible the debtor is in fulfilling the liabilities to pay the financing installments.

The Effect of Family Dependents on the Return Rates of Financing

The number of dependents in the family has no dependency correlation with the return rates on financing. The number of family dependents does not determine a debtor's ability to make a repayment facilely. Thus, it cannot be used as a benchmark to reduce the risk of nonperforming financing. As the repayment on financing is a fixed cost, the debtor's income will be reduced by the installment first, and the rest will be used for consumption or household needs.

Gabriela (2017) states that the number of family dependents is not an influence in repaying loans because most debtors already have their funds used for family needs. In contrast, Anita (2015) argues that the number of family dependents is parallel with household needs, which results in increased living expenses that must be fulfilled. Anna and Dwi (2011) also stated that debtors with more family dependents tend not to facilely repay their loans. Debtors who have a larger number of dependents will have a larger proportion of family expenditures so that the revenue allocation for other expenses (including paying credit) is smaller.

The Effect of Debtor Status on the Return Rates on Financing

As mentioned above, the number of family dependents has no dependency correlation with the return rates on financing. The position of the debtor in the family cannot determine a debtor's ability to make a repayment facilely, so it cannot be used as a benchmark to reduce the risk of nonperforming financing. For example, debtors with married status may have more risk rate than widows/widowers and unmarried debtors.

This result contradicts the theory that the debtor's status indicates how many family dependents the debtor will bear. When a debtor is married or is a widow/widower and acts as the head of the family, the number of dependents will increase and affect the debtor's ability to make the repayments. It is different from unmarried debtors who do not have family dependents and are assumed to make the repayments more facilely.

The Effect of the Length of Business on the Return Rates on Financing

The length of business does not have a dependency correlation on the return rates on financing. It can happen because several types of business do not require a lot of experience or special expertize, for example, a debtor who can choose the right target market so that it can compete and survive well. In addition, the variety of business products offered by debtors as a business owner is an important factor in determining the business development. For example, a business with no innovation or only offers one type of product will have difficulty to develop, even though the business has been running for a long time.

Luh (2012) argues that business experience has no significant effect on the return rates of credit repayment because high experience and expertize are unnecessary in opening a business. Business experience does not indicate good business capabilities or high operating profits. Even though the debtor's business has been running for years or generations, if it is unfollowed with innovation, it will lose against other entrepreneurs with more sophisticated technology to keep up with the flow of innovation (Gabriella, 2017). In contrast, Anita (2015)

shows that the length of business affects the return on mudharabah financing. A person's business experience often determines the success of the business. The longer a person runs a business, the more reliable the person is in managing the business. Thus, the profits will also increase, which in turn will be used for repayments.

The Effect of Business Operating Hours on the Return Rates on Financing

The daily operational hours of a business cannot determine the debtor's ability to return financing facily. This study shows that the debtors with 6–8 business operating hours are more likely to experience nonperforming financing than those with less (<5 h) and more (9–12 h and >12 h) operating hours. Operating hours are deemed ineffective in assessing the ability of debtors to make the repayment. If the business operating hours are not followed by the income obtained, it will increase the operational costs, such as salary expenses and electricity expenses, among others.

This result is in line with the theory of the RPC and IDIR indexes calculation, where an increase in business operating hours unfollowed by profit will increase the operating costs, affecting the calculation results of the RPC and IDIR indexes. If business operating costs increase as a result of increased operating hours unfollowed with profit, then the allocation for repayments will decrease. This leads to a decrease in the debtor's ability to repay the financing.

CONCLUSION

Based on the research results, among the ten factors in the RPC and IDIR components, only six factors have a significant effect on the return rates on PBF at PT Bank BRI Syariah Malang Branch Office Soetta. These factors are working capital, business profits, operating costs, household expenses, business turnover, and BRIS installments. It indicates that the analysis of these variables needs to be considered, as there is a variable that is not taken into account in the RPC and IDIR indexes, namely, working capital.

The results showed that several components of RPC and IDIR have no significant effect on the return rates in PBF at PT Bank BRI Syariah Malang Branch Office Soetta, namely, business profits, household expenses, BRIS installments, other installments, and total installments. This means that the RPC and IDIR analyses, which are the main analyses used by PT Bank BRI Syariah Branch Malang Soetta, need to be reconsidered, as both indexes cannot reduce the risk of nonperforming financing.

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REFERENCES

- Agus Tri Basuki dan Nano Prawoto. 2016. Analisis Regresi dalam Penelitian Ekonomi dan Bisnis. Depok : PT. Rajagrafindo Persada.
- Agus Widarjono. 2013. Ekometrika : Pengantar dan Aplikasinya. Jakarta : Ekonosia.
- Anna Maria Lubis dan Dwi Rachmina. Faktor-faktor yang Mempengaruhi Realisasi dan Pengembalian Kredit Usaha Rakyat. Forum Agribisnis. Institusi Pertanian Bogor, Bogor.
- Anita Rahmawaty. 2015. Faktor-faktor yang Mempengaruhi Tingkat Pengembalian Pembiayaan Mudharabah. Jurnal Ekonomi Syariah. Sekolah Tinggi Agama Islam Negeri Kudus, Kudus.
- Anwar Hidayat. 2012. Tutorial Rumus Chi Square Dan Metode Hitung. <https://www.statistikian.com/2012/11/rumus-chi-square.html>. Diakses pada Tanggal 5 Juli 2020.

- "Arah Kebijakan dan Program Pengembangan KUMKM. Menuju KUMKM 2020-2024". Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, [http://www.depkop.go.id/uploads/news/1564979879_Arah%20Kebijakan%20dan%20Program%20Pengembangan%20KUMKM%20\(Menuju%20KUMKM%202020-2024\).pdf](http://www.depkop.go.id/uploads/news/1564979879_Arah%20Kebijakan%20dan%20Program%20Pengembangan%20KUMKM%20(Menuju%20KUMKM%202020-2024).pdf). Diakses pada Tanggal 27 Oktober 2019.
- Chikita Syaraleni Putri. 2014. Pengaruh Penentuan Kelayakan Pemberian Pembiayaan untuk Usaha Kecil (Mikro) dalam Bisnis Riil Terhadap Tingkat Profitabilitas ROI dengan Menggunakan Metode IDIR (Installment to Disposable Income Ratio) pada BRI Syariah KCP Setiabudhi. Skripsi. Universitas Islam Bandung, Bandung.
- Dr. Sandu Siyoto, SKM., M.Kes dan M. Ali Sodik, M.A. (2015). Dasar Metodologi Penelitian. Yogyakarta: Literasi Media Publishing.
- Gabriela Lovita De Vega. 2017. Analisis Karakteristik Usaha dan Debitur UMKM untuk Menekan Risiko Kredit Macet (Studi Kasus pada Debitur UMKM Bank Jatim Cabang Blitar). Jurnal Ilmu Ekonomi. Universitas Brawijaya, Malang.
- Imam Ghozali. 2005. Aplikasi Analisis Multivariate dengan SPSS. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, Damodar. 2003. Ekonometri Dasar. Terjemahan : Sumaro Zain. Jakarta : Erlangga.
- Iqbal Hasan. 2002. Pokok-pokok Materi Metodologi Penelitian dan Aplikasinya. Gramedia Pustaka Utama.
- Ismail. 2011. Manajemen Perbankan : dari Teori Menu Aplikasi. Jakarta : Kencana.
- "Jokowi Minta Subsidi Bunga KUR Dobel di 2020". CNN Indonesia, <https://www.cnnindonesia.com/ekonomi/20191111175435-532-447407/jokowi-minta-subsidi-bunga-kur-dobel-di-2020>. Diakses pada Tanggal 24 Oktober 2019.
- Kadek Gita Dwitami, Edy Sujana, I Putu Gede Diatmika. 2017. Pengaruh Kemampuan Usaha, Karakteristik Debitur, RePayment Capacity, dan Informasi Akuntansi Terhadap Keputusan Pemberian Kredit Usaha Rakyat (KUR) pada PT. Bank Pembangunan Daerah Bali Cabang Singaraja. Jurnal Akuntansi. Universitas Pendidikan Ganesha, Singaraja.
- Karlinger. 2006. Asas-asas Penelitian Behaviour. Edisi 3, Cetakan 7. Yogyakarta : Gadjah Mada University Press.
- Kasmir. 2008. Bank dan Lembaga Keuangan Lainnya. Jakarta: Raha Grafindo Pustaka.
- Keputusan Presiden Nomor 14 Tahun 2015 tentang Komite Kebijakan Pembiayaan Bagi Usaha Mikro, Kecil, Dan Menengah.
- Konsep dan Definisi Perusahaan Industri Pengolahan. Badan Pusat Statistika, <https://www.bps.go.id/subject/9/industri-besar-dan-sedang.html>. Diakses pada Tanggal 24 Oktober 2019.
- Laporan Bulanan Debitur Seluruh Unit Kerja Kantor Cabang Malang Sotta PT. Bank BRI Syariah Bulan Juli Tahun 2019.
- "Laporan Publikasi Triwulanan Bulan Maret, Juni, September, dan Desember Tahun 2018-2019 PT. Bank BRI Syariah Tbk". BRISyariah, https://www.brisyariah.co.id/tentang_hubInvestor.php?f=lapkeu&idp=cfe9d05a2a0800cd03a9856df0760e35. Diakses pada Tanggal 07November 2019.
- "Laporan Tahunan PT. Bank BRI Syariah Tbk Tahun 2018". BRISyariah, https://www.brisyariah.co.id/images/upload/reports/c8b2561a533fa87d44300219e0308eb2_Laporan_Tahunan.pdf. Diakses pada Tanggal 07November 2019.
- Laurensius Marshall Sautlan Sitanggang "NPF masih tinggi, perbankan syariah siapkan strategi". Kontan.co.id, <https://keuangan.kontan.co.id/news/npf-masih-tinggi-perbankan-syariah-siapkan-strategi>. Diakses pada Tanggal 24 Oktober 2019.
- Luh Ikka Widyanthi. 2012. Pengaruh Karakteristik Debitur UMKM Terhadap Tingkat Pengembalian Kredit Pundi Bali Dwipa (Studi Kasus nasabah pada PT. Bank Pembangunan Daerah Bali Kantor Singaraja). Jurnal Ilmu Ekonomi. Universitas Brawijaya, Malang.
- Mas Ach Azm Mukminin. 2018. Implementasi RePayment Capacity pada Pembiayaan Griya iB Hasanah untuk Mengurangi Risiko Nasabah Wanprestasi di BNI Syariah KCPS Sidoarjo. Skripsi. Universitas Islam Negeri Sunan Ampel, Surabaya.
- Pasal 1 Peraturan Bank Indonesia Nomor 5/8/PBI/2003 Tentang Penerapan Manajemen Risiko Bagi Bank Umum.
- Pasal 1 Undang-Undang Perbankan Nomor 14 Tahun 1967 Tentang Pokok-pokok Perbankan.

- Pasal 1 Undang-undang Perbankan Nomor 7 Tahun 1992 Tentang Perbankan.
- Pasal 1 Undang-Undang Perbankan Nomor 10 Tahun 1998 Tentang Perubahan atas Undang-undang Perbankan Nomor 7 Tahun 1992 Tentang Perbankan.
- Pasal 8 Undang-undang Nomor 10 Tahun 1998 Tentang Perubahan atas Undang-undang Perbankan Nomor 7 Tahun 1992 Tentang Perbankan.
- Peraturan Menteri Keuangan No.135/PMK.05/2008 Tentang Fasilitas Penjaminan Kredit Usaha Rakyat.
- Peraturan Menteri Keuangan No.10/PMK.05/2009 Tentang Perubahan Kedua atas Peraturan Menteri Keuangan No.135/PMK.05/2008 Tentang Fasilitas Penjaminan Kredit Usaha Rakyat.
- Purlisana Sidikhin Aliya. 2018. Analisis Penerapan Akad Ijarah Pembiayaan Talangan Haji dan Umroh di BMT Tamzis Bina Utama. Tugas Akhir. Universitas Muhammadiyah Yogyakarta, Yogyakarta.
- Prof. Dr. Anak Agung Putu Agung, SE., M.Si dan Dr. Anik Yuesti, SE., MM. 2017. Metode Penelitian Kuantitatif dan Kualitatif. Yogyakarta : ABPublisher.
- Rahajeng Kusumo Hastuti. "Ketua LPS: Kondisi Perbankan Syariah Cukup Berat". CNBC Indonesia, <https://www.cnbcindonesia.com/syariah/20190606191828-29-76983/ketua-lps-kondisi-perbankan-syariah-cukup-berat>. Diakses pada Tanggal 24 Oktober 2019.
- Sena Durguner and Dr. Ani L. Katchova. 2007. RePayment Capacity of Balanced Panel Data Approach. Journal of Applied Economics and Policy. Department of Agricultural and Consumer Economics University of Illinois at Urbana-Champaign, and Department of Agricultural Economics University of Kentucky.
- "Statistik Perbankan Syariah (SPS) Bulan Juli – Desember Tahun 2018 – 2019". Otoritas Jasa Keuangan, <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Default.aspx>. Diakses pada Tanggal 26 Oktober 2019.
- "Statistik Perbankan Indonesia (SPI) Bulan Juli – Desember Tahun 2018 – 2019". Otoritas Jasa Keuangan, <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Default.aspx>. Diakses pada Tanggal 26 Oktober 2019.
- Surat Edaran Bank Indonesia Nomor 12/11/DPNP/31 Maret 2010 Tentang Perubahan Kedua atas Surat Edaran Bank Indonesia Nomor 3/30/DPNP tanggal 14 Desember 2001 perihal Laporan Keuangan Publikasi Triwulanan dan Bulanan Bank Umum serta Laporan Tertentu yang Disampaikan kepada Bank Indonesia.
- Surat Edaran Bank Indonesia Nomor 13/23/DNP/25 November 2011 Tentang Perubahan atas Surat Edaran No. 5/21/DPNP perihal Penerapan Manajemen Risiko bagi Bank Umum.
- Teresa M. G. Hutabarat. 2012. Analisis Repayment Capacity Kredit Usaha Rakyat Sektor Agribisnis pada Bank Rakyat Indonesia Unit Cibungbulang – Borgor. Skripsi. Institut Pertanian Bogor, Bogor.
- Uma Sekaran. 1992. Metodologi Penelitian Untuk Bisnis. Diterjemahkan oleh Kwan Men Yon, 2006, Edisi 4, Buku 2, Jilid 2. Jakarta : Salemba Empat.
- Undang-undang Nomor 9 Tahun 1995 Tentang Usaha Kecil. Undang-undang Nomor 20 Tahun 2008 Tentang UMKM.
- Visit Limsombunchai, Christopher Gan, and Minsoo Lee. 2005. An Analysis of Credit Scoring for Agricultural Loans in Thailand. American Journal of Applied Science. Commerce Division, Lincoln University, Canterbury, New Zealand and School of Business and Management, American University of Sharjah, Sharjah United Arab Emirates.
- Wery Febrianto. 2015. Pengaruh Installment to Disposable Income Ratio dalam Mempertimbangkan Permohonan Kredit Terhadap Risiko Gagal Bayar Calon Debitur pada PT Bank "X". Skripsi. Universitas Pasundan, Bandung.

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