

THE DETERMINANTS OF CONSUMER LOAN; AN INSIGHT FROM BANK XYZ OFFICE BRANCH ABC

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ABSTRACT: *Banking sector in Indonesia has a market share of around 80% of the entire financial system. The bank has an important function in the economy of a country, namely as a financial intermediary, which collects funds from the public that has a surplus of funds in the form of deposits and redistributes the funds to the people who need funds or fund deficits in the form of credit. In channeling the funds, banks should pay attention to the quality of credit because if in the future there is a problem loan or non-performing loan (NPL), it will harm the bank itself. Bank XYZ is one of Indonesia's longstanding banks in Indonesia and is also known as a focused and consistent bank in the micro, small and medium enterprises sector with a credit growth of 12.14% in 2017. Loans disbursed or granted are expected to be runs smoothly until the credit is declared complete or paid off, but the potential for risk will always exist, one of them is the risk of default (default) which can lead to an increase in non-performing loans (NPLs) of 2.16% in 2017. The highest NPL credit in the Bank XYZ is in the consumer segment, which is 41%. The research to see the factors that influence the consumer credit NPL of Bank XYZ uses secondary data with the variable of NPL, gender (X1), age (X2), marital status (X3), education (X4), occupation (X5), tenor / time period (X6), collateral value (X7), and the ratio of installments to income (X8). Based on the results of logistic regression analysis, it is known that the variables that affect the NPL of XYZ Bank's consumer credit are gender (X1), education (X4), occupation (X5), tenor / time period (X6), at a significant level of 10%.*

KEYWORDS: bank, kredit konsumen, non performing loan, regresi logistik

INTRODUCTION

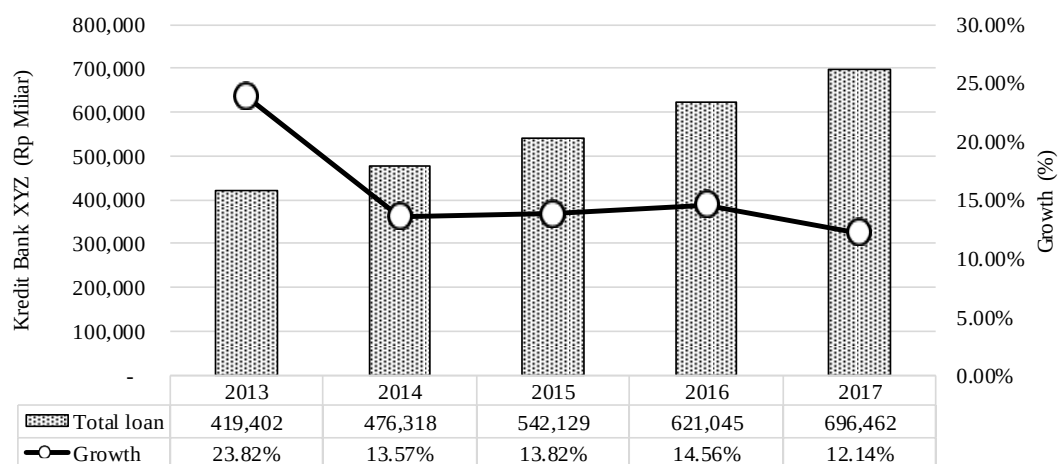
Banks are financial institutions that have an important role in a country's economy that can affect the economy both micro and macro. Banking has a large market share of around 80% of the overall financial system in Indonesia. The bank has an important function in the economy of a country, namely as a financial intermediary, which collects funds from the public that has a surplus of funds in the form of deposits and redistributes the funds to the people who need funds or fund deficits in the form of credit.

Based on data from the Indonesian Banking Statistics, the number of commercial banks based on BUKU (Commercial Bank Business Group) up to December 2017 reached 102 banks with a total of 30,473 offices. The improvement in the banking intermediary function can be seen from the increasing number of public funds that have been successfully channeled back by banks to the public in the form of loans (credit) which are expected to be able to boost the country's economic recovery. Based on data from the Indonesian Banking Statistics year up to 2016 commercial banks in Indonesia were recorded to have channeled funds (credit) of Rp. 4,781,959 billion grew by 8.35% from 2016 with the average distribution for the last five years of Rp. 4,062,764 billion.

Bank Indonesia as an institution that has the authority to control bank interest rates also has a role in the amount of bank credit interest rates. The high level of SBI interest rates can cause bank lending rates to increase so that it can affect the ability of debtors to repay their loans. This also can lead to the potential risk of debtor defaults (defaults) which causes an increase in the ratio of Non-Performing Loans (NPLs). This is evidenced by Alam (2008) in his research found that Bank Indonesia Policy No.7 / 2 / PBI / 2005 is a factor that influences the level of NPL. The level of NPL after the implementation of the policy is greater than before the implementation of the policy.

There are many factors that can lead to NPLs, such as the recession and economic crisis, the misuse of credit by the debtor, the inability of the debtor to manage the funds provided, or it can also occur as a result of the bank's internal factors, namely the weakness of the bank in analyzing the creditworthiness. One factor that causes NPL and failure to pay by debtors is collateral (Deng and Liu, 2008). Indrawati (1997) in her research stated that internal and external factors are factors that cause NPL or non-performing loans. The first factor is the bank's inability to supervise and monitor the debtor's business. The second is the error in decision making on the analysis of business feasibility. Third, the existence of factor x, namely "magic letter" which can cause loss of professionalism and integrity factors. According to Pius (1997), the causes of NPL consist of three things, namely the bank, debtor, and external factors of the debtor and bank. Included in the bank's internal factors, namely credit analysis that does not follow the 5C's (Character, Capacity, Capital, Collateral and Condition of Economics) rules, for example the bank deliberately raises the value of collateral or the bank does not regularly monitor. And that is included in the internal factors of the debtor, among others, the existence of misuse of the credit given. While external factors, both banks and debtors, include, among others, declining economic conditions or natural disasters.

Bank XYZ is one of the banks in Indonesia that has been established for a long time in Indonesia and is also known as a focused and consistent bank in the micro, small and medium business sector. The following is Bank XYZ's credit growth from 2013 to 2017.



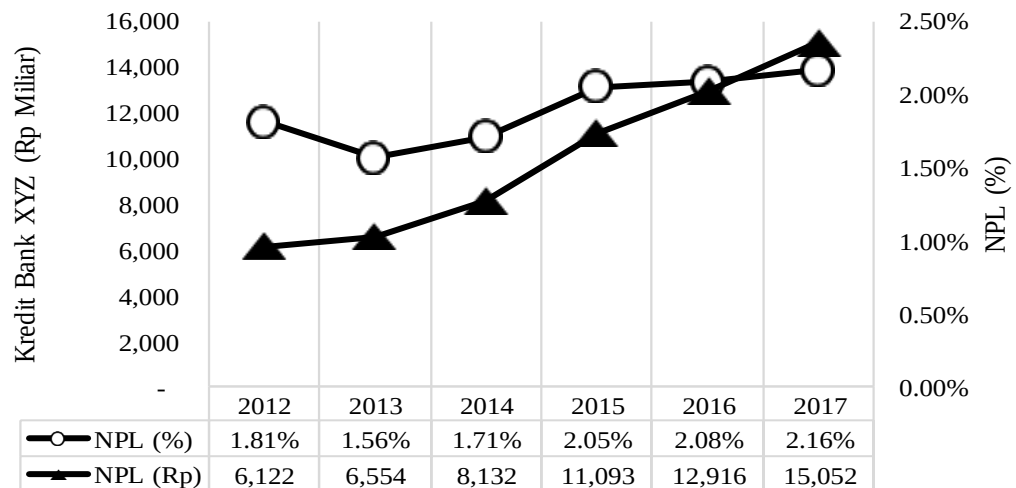
Sources: Bank XYZ's financial statements (processed)

Figure 1 Loan's growth of XYZ Bank from 2013 to 2017

Based on Figure 1, it can be seen that Bank XYZ's credit has increased from 2013 to 2017. The highest growth occurred in 2013 at 23.82%. This is due to the significant growth in the Bank

XYZ micro credit segment, which is Rp. 24 trillion. This is in line with the bank's main business focus.

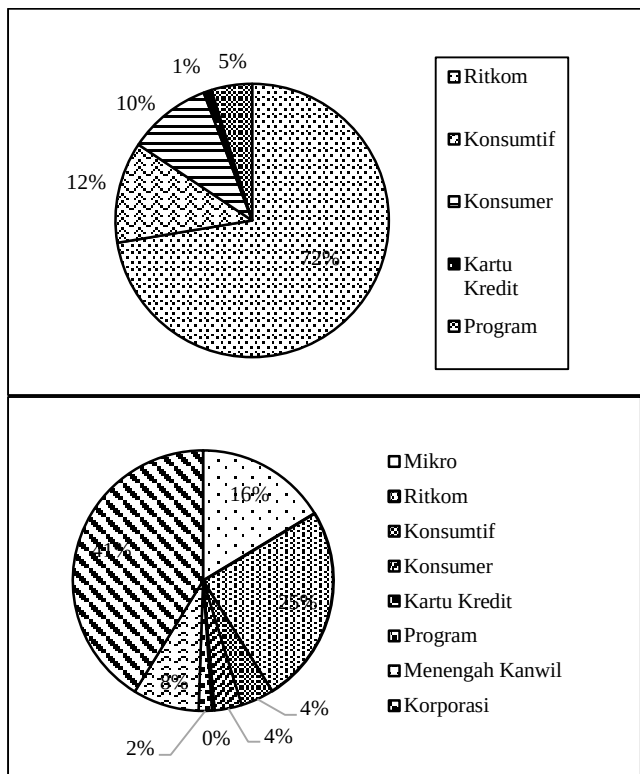
Loans channeled or given are expected to run smoothly until the credit is declared complete or paid off, but the potential for risk will always exist, one of them is the risk of default (default) which can lead to an increase in non-performing loans. Bank XYZ's non-performing loan growth from 2013 to 2017 is presented in Figure 2.



Sumber: Data laporan keuangan Bank XYZ (diolah)

Figure 2 Bank XYZ's NPL growth from 2013 to 2017

Along with the development of the banking business in Indonesia, Bank XYZ actively participates in other banking business competition. One of them is in the consumer credit or consumption credit sector. Bank XYZ first actively participated in the competition in the consumer credit segment in 2007 by issuing 3 (three) types of loans, namely Mortgage Loans (KPR), Vehicle Loans (KKB), and Multi-purpose Loans (KMG). Although Bank XYZ itself is a new player in this sector, Bank XYZ has shown significant growth over the past five years. The NPL composition in each Bank XYZ segment can be seen in Figure 3 and Figure 4 below.



Sumber: Laporan keuangan Bank XYZ (diolah)

Figure 3 Bank XYZ's NPL composition per loan segment in retail banking sector in 2017

Figure 4 Bank XYZ's NPL composition per loan segment in 2017

Based on the background, to further examine what factors affect the NPL of Bank XYZ's consumer credit. This is done with the aim of obtaining a scientific description of the causes of the increasing number of NPLs in the work unit.

LITERATURE

Definition of Credit

According to Musthikaningtyas (2011) credit comes from the Latin credere, which means "trust". Getting credit means gaining trust. The purpose of the statement is that the creditor believes that the credit given / distributed will be returned by the credit recipient in accordance with the agreement / agreement and there will be no bad credit. There are three keys to credit, namely:

1. Provision (Provider) of money, by the lender (creditor) to the debtor.
2. Returns (repayment) of borrowed money within the agreed period.
3. Interest that must be paid together.

Therefore, the rationale for lending by a financial institution or bank to individuals or business entities is based on trust (Tjoekam, 1999).

According to Law No. 10 of 1998 Article 1 paragraph 11 concerning amendments to Law No. 7 of 1992 credit is the provision of money or equivalent claims, based on a loan agreement between banks and other parties which requires the borrower to repay the debt after a certain period of time with interest. The viability of a bank is greatly influenced by the size of the loans disbursed because most banks in Indonesia still rely on credit to meet operational needs and gain profits. In the practice of lending, credit quality itself must be considered. This means that the higher the quality of credit that is given or is indeed worthy to be channeled, it will minimize the risk of non-performing loans. Some types of loans extended by banks (Sutojo, 2007) are as follows:

A. Types of credit seen from the destination

1. Productive Credit

Productive credit is a credit that aims to facilitate the production process, starting from the time of collection of raw materials, processing, to the process of selling finished goods.

2. Consumptive Credit

Consumptive credit is credit that is channeled to debtors to obtain goods or other needs in order to meet the needs for consumption.

B. Credit type seen from time period

1. Short Term Loan, is a credit with a maximum term of one year.

2. Medium Term Loan (Intermediate Term Loan), is a form of credit with a term of one to three years.

3. Long Term Loans, is a form of credit with a maturity of more than three years.

4. Demand loan or call loan, is a form of credit that can be requested at any time.

C. Credit type is seen from the purpose of use

1. Working capital credit / exploitation credit

Working capital loans are long-term loans provided to finance working capital requirements from a company (working capital loan).

2. Investment credit

Investment loans are medium and long-term loans that are given to finance new projects or an investment loan project.

3. Consumer credit

Consumer credit is a loan provided by a bank or other financial institution to an individual party, for consumption purposes by buying, renting, or by means of other credit, individual credit, consumer credit.

D. Types of credit according to the economic sector

1. Agriculture, labor and agricultural facilities.
2. Mining sector.
3. Industry sector.
4. The electricity, gas and water sectors.
5. Construction sector.
6. Trade, restaurant and hotel sectors.
7. Community social services sector

Non Performing Loan (NPL)

Loans provided by banks, including the distribution of consumer loans, always carry risks. This risk can be in the form of late payment since the date of maturity. Therefore, it needs effort from the creditor to minimize the occurrence of bad credit. According to Eriani et. al. (2012), non-performing loans can be caused by intentional (internal) factors of the debtor and / or external factors beyond the ability of the debtor's control.

Based on The Letter of Bank Indonesia No. 7/3/DPNP January 31st, 2005 to all commercial banks that carry out conventional business activities in Indonesia, credit quality is classified as current, special mention, substandard, doubtful, and bad. According to performance, business prospects, debtor performance, and ability to pay. Credit quality provisions are determined as follows:

1. Current (right)

A credit can be said to be smooth if:

- a. Payment of principal and / or interest installments on time.
- b. Have an active account mutation.
- c. A portion of credit guaranteed with cash collateral (cash collateral).

2. Special Mention

It is said that in particular attention if it meets the criteria, among others:

- a. There are arrears in principal and / or interest installments that have not exceeded 90 days.
- b. Sometimes it becomes an overdraft.
- c. There is rarely a violation of the contract agreed.
- d. Account mutations are relatively active.
- e. Supported by new loans.

3. Substandard

It is said to be substandard if it meets the criteria including:

- a. There are arrears in principal and / or interest installments that have exceeded 90 days.
- b. Overdrafts often occur.
- c. There was a violation of the contract that was agreed for more than 90 days.
- d. The relative frequency of accounts is relatively low.
- e. There are indications of financial problems faced by the debtor.
- f. Weak loan documents.

4. Doubtful

It is doubtful if it meets the criteria including:

- a. There are arrears in principal and / or interest installments that have exceeded 180 days.
- b. A permanent overdraft occurs.
- c. A default of more than 180 days occurred.
- d. Interest capitalization occurs.
- e. Weak legal documents, both for credit agreements and collateral bindings.

5. Bad (loss)

It is said to be jammed if it meets the criteria, among others:

- a. There are arrears in principal installments and / or interest that has exceeded 270 days.
- b. Operational losses are closed with new loans.
- c. In terms of law and market conditions, guarantees cannot be disbursed at a fair value.

According to Asrof (1994), non-performing loans are one of the risks of payment, especially if the expected source of payment is not enough to pay off debt. In addition, non-performing loans occur due to the failure of repayment from the resulting agreement so that delays in receipt of potential losses.

Based on Bank Indonesia provisions in Kuncoro and Suhardjono (2002), there are three groups of collectibility which are non-performing loans or NPLs, namely:

1. Substandard loan with the following criteria:

- a. There are arrears in principal or interest installments that have exceeded 90 days.

- b. Overdrafts often occur.
 - c. The frequency of account mutations is relatively low.
 - d. There was a violation of the contract that was agreed for more than 90 days.
 - e. There are indications of financial problems faced by the debtor.
 - f. Weak loan documentation.
2. Doubtful loan (doubful) with the following criteria:
- a. There are arrears in principal installments of funds or interest that has exceeded 180 days.
 - b. A permanent overdraft occurs.
 - c. A default of more than 180 days occurred.
 - d. Interest capitalization occurs.
3. Bad loan (loss) with the following criteria:
- a. There are arrears in principal installments of funds or interest that has exceeded 270 days.
 - b. Operational losses are closed with new loans.
 - c. In terms of law and market conditions, guarantees cannot be disbursed at fair value.

In principle, the status of the NPL is based on the timeliness of the customer to pay the obligation, either in the form of interest payments or principal repayments. The high level of NPL is strongly influenced by the ability of banks to carry out the crediting process well, as well as in terms of credit management, including monitoring (monitoring) after credit is channeled and control measures if there are indications of credit irregularities, as well as indications of default (Djohanputro and Kountur 2007).

Bank Indonesia has determined the maximum NPL limit for banks, which is 5%. If a bank is able to reduce the NPL ratio below 5%, then the potential profit that will be gained will be even greater because banks will increasingly save money needed to form a loss reserve for problem loans or Allowance for Earning Assets Losses.

METHODOLOGY

Data

This research was conducted using secondary data analysis methods. Data and data sources used are presented in Table 1.

Table 1 Data and data sources

Data	Data sources
NPL historical data	Bank XYZ Head Office
Debtor profile data (gender, age, marital status, education, occupation, loan term, collateral, and debt burden ratio)	Bank XYZ Branch Office ABC

ABC Branch Office NPL Historical Data is data on consumer credit NPL 2013-2017. Debtor profile data used includes data on income, installments, credit ceiling, tenor, education and employment.

Variables

Variables obtained from the consumer credit debtor database are independent variables (X) and there are dependent or dependent variables (Y) used in this study, namely NPL. The details and explanations of the variables used are in accordance with Table 2.

Table 2 Details of the variables used

Kode Variabel	Variabel	Kategori	Keterangan
Y	<i>Non-Performing Loan</i>	0	<i>performing loan</i>
		1	<i>non performing loan</i>
X ₁	Gender	0	Women
		1	Men
X ₂	Age		Numeric
X ₃	Marital status (<i>dummy</i>)	0	Married
		1	Others
X ₄	Education	1	Elementary
		2	Junior high school
		3	Senior high school
		4	Bachelor
		5	Master degree
		6	Doctoral
X ₅	Occupation	1	<i>Fixed income</i>
		2	<i>Non-fixed income</i>
X ₆	Loan term (bulan)		Numerik
X ₇	Collateral (Rp)		Numeric
X ₈	Debt burden ratio		Numeric

Logistics Regression

Binary regression model is a model used to determine the relationship between independent variables (X) and the dependent variable (Y) is binary. The dependent variable (Y) follows the Bernoulli distribution with the probability distribution function:

$$f(Y = y) = \pi^y (1 - \pi)^{1-y}, D$$

with $y = 0$ or 1 and π is the probability for $y = 1$

In logistic regression, the logit interface function is needed, logit transformation as a function of $\pi(x)$ is:

$$g(x) = \ln\left[\frac{\pi(x)}{1 - \pi(x)}\right] = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n$$

So, in general the equation is:

$$g(x) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_8 X_8$$

Information:

$g(x)$ = Non-Performing Loan

X_1 = Gender

X_2 = Age

X_3 = Marital status

X_4 = Education

X_5 = Occupation

X_6 = Loan term

X_7 = Collateral

X_8 = Debt burden ratio

$\beta_1, \dots, \beta_9$ = The coefficient of each variable

Tests on the parameters in the model as part of efforts to examine the role of explanatory variables in the model. According to Hosmer and Lemeshow (1989) to know the role of all explanatory variables in a model together can be used G-test statistics. In this study, the hypothesis to be tested is:

$H_0: \beta_1 = \beta_2 = \dots = \beta_8 = 0$ (there is no influence between the independent variable and the dependent variable)

H_1 : there is at least one $\beta_i \neq 0, i = 1, 2, \dots, 8$ (there is an influence between the independent variable and the dependent variable)

G-test statistics are defined as:

$$G = -2 \ln \frac{L_0}{L_n}$$

Information:

L_0 = function likelihood without explanatory variables.

L_n = function likelihood with n explanatory variables.

If the null hypothesis (H_0) is correct, the G-test statistic will spread the distribution χ^2 with degrees of freedom n. So that H_0 is rejected if G is greater $\chi^2_{n(\alpha)}$ or p-value is smaller than α , which means it can be concluded that the explanatory variables as a whole affect Non-performing loans.

The coefficient interpretation for the logistic regression model is to see the odds ratio. The logit model coefficient β_i , reflects the change in the value of the logit function $g(x)$ to change one unit of the explanatory variable (x). In the logit model analysis, the odds ratio formula is:

$$\Psi = \exp \beta_i = \exp [g(1) - g(0)]$$

The interpretation of the odds ratio shows an independent variable (X) with a nominal scale, with a tendency for $Y = 1$ at $X = 1$ equal to Ψ times compared to $X = 0$. The odds ratio can also be written in the formula:

$$\Psi = n / 1 - n$$

Where in this study n reflects the inconsistency of credit payments, while $1 - n$ reflects the smoothness of payments. Results from odds ratios can be interpreted to be more than one (> 1) and less than one (< 1).

RESULTS

The variables analyzed to determine the factors that influence NPL in ABC Branch XYZ Bank are gender (X_1), age (X_2), marital status (X_3), education (X_4), occupation (X_5), loan term (X_6), collateral (X_7), and debt burden ratio (X_8). Logistic regression models are used to examine the influence of factors on NPL. The results of logistic regression obtained the following models:

$$\text{Log NPL} = -0.455 X_1 + 0.018 X_2 + 0.373 X_3 - 0.995 X_4 + 0.586 X_5 + 0.004 X_6 + 0.000 X_7 - 0.250 X_8$$

Table 3 Details of the variables used

Variable Code	Coefficient	Significance (P)	Odds Ratio
Konstanta	-4.172	0.000	0.015
X ₁	-0.455	0.050*	0.634
X ₂	0.018	0.234	1.018
X ₃	0.373	0.177	1.452
X ₄	-0.995	0.007*	0.370
X ₅	0.586	0.027*	1.797
X ₆	0.004	0.067*	1.004
X ₇	0.000	0.689	1.000
X ₈	-0.250	0.277	0.779
Log-likelihood = 722.605			
G = 21.642, P-value = 0.006			

Table 3 lists the results of logistic regression variables that are thought to have an influence on NPL. At a confidence level of 90% ($\alpha = 0.10$), the value of the G test in this logistic regression model is 21.642 with a value of $P = 0.006$. This shows that the value of $P = 0.007 < \alpha = 0.10$ then reject H_0 , meaning that there is at least one independent variable that has a significant effect or a significant regression model. Based on the P value, it can be concluded that one of the genders, age, marital status, education, employment, credit tenor, collateral value, and installment versus salary ratio has a significant effect on NPL.

Based on Table 3, information on the regression model produced, the coefficient of each variable and the magnitude of the effect can be obtained. Variables that have significant influence are gender (X_1), education (X_4), occupation (X_5), and loan term (X_6).

The Influence of Gender Against NPL

The influence of gender variables (X_1) on NPL can be seen from the P value, which is equal to 0.050 (less than 0.1) which means that the effect is significant at the level of 10%. If you see the coefficient value of -0.455, this indicates that the relationship between gender and NPL is negative. That is, debtors who experience the most NPL or bad credit are debtors with female gender. The odds ratio of 0.634 indicates that female debtors have a bad credit risk of 0.634 times greater than male debtors. The results of this study are relevant to research conducted by Samti (2011) and Nasser (2017) which shows that the ability of female debtors to repay credit is no better than male debtors. However, this result is different from the research conducted by Attua (2016) and Ofori et al. (2014) which shows that the failure rate to pay for male sex is higher when compared to women.

The Influence of Age Againsts NPL

The influence of age variables (X_2) on NPL can be seen from the P value, which is equal to

0.234 (more than 0.1) which means that age does not significantly affect NPL at the level of 10%. Chakravarty (2013) states that the higher the age of the debtor, the less likely to be at risk of default because the debtor is considered to have experience in managing its finances. However, this is contrary to the debtor at the XYZ Bank ABC branch office. Percentage of debtors at the age of 31-40 years who experienced defaults of 2.9%. But in the age range of 41-50 years, the percentage of debtors who experienced default failed increased by 3.8% and at debtors with more than 50 years of age by 2.1%.

The Influence of Marital Status Againts NPL

The significance value on the marital status variable (X_3) shows the P value of 0.177 which is more than the real level of 0.1. This shows that the status of the debtor's marriage does not have a significant influence on the occurrence of NPL. This is because the percentage of bad debtors who are married is smaller than the other marital status of 2.6% (Table 3). This is in line with the results of the research of Ozdemir and Boran (2004), where debtors who have been married are timelier in making loan repayments when compared to debtors who have other marital status. A person who is married is more responsible and mature in his position as a bank debtor (Agarwal et al. 2011).

The Influence of Education Againts NPL

The effect of education variables (X_4) on NPL can be seen from the P value, which is equal to 0.007 (less than equal to 0.1) which means that the effect is significant at the level of 10%. The coefficient value of -0.959 indicates that the higher the level of education of the debtor, the less potential for having loss or bad credit. This is relevant to research conducted by Musthikaningtyas (2011) which shows that the higher the level of education of the debtor, the lower the risk of default. At Bank XYZ ABC branch office, it is known that the biggest non-performing loans contributors are debtors with a secondary education level of 6.3%. Chong (2010) stated that the higher the level of education, the better the credit management.

The Influence of Occupation Againts NPL

The influence of occupation variables (X_5) on NPL can be seen from the P value, which is equal to 0.027 (less than 0.1) which means that the effect is significant at the level of 10%. If you see the coefficient value of 0.521, this indicates that the relationship between work and NPL is positive. That is, debtors who experience the most NPL or bad credit are debtors with non-fixed income types of work or jobs with non-fixed income each month. The odds ratio value of 1.797 shows that debtors with non-fixed income types of work have a bad credit risk of 1.797 times greater than the types of fixed income jobs.

The Influence of Loan Term Againts NPL

The influence of tenor / time period (X_6) on NPL can be seen from the P value, which is equal to 0.067 (less than 0.1) which means that the effect is significant at the level of 10%. The results of this study are relevant to the theory proposed by Musthikaningtyas (2011) and Tanzil (2015) that loan terms have a significant effect on NPL. Loan term is determined by the bank against the debtor. In Table 3, the coefficient value on the tenor / time period variable is 0.004. This shows that the relationship between tenors and NPLs is positive, meaning that the longer the tenor / credit period, the greater the likelihood of default (NPL). This is relevant to research conducted by Agarwal et al. (2011) which states that if the loan repayment period is longer, it will have an impact on the decline of funds turnover and bank liquidity so that banks will

consider credit with a longer loan term.

The Influence of Collateral Againsts NPL

The effect of collateral value variable (X_7) on NPL can be seen from the P value, which is equal to 0.689 (greater than 0.1) which means that the value of assets used as collateral to banks from debtors does not have a significant effect on the 10% level of NPL occurrence. Collateral value can be derived from the results of an assessment of public appraisal services or an internal assessment of a bank. This is due to the collateral value obtained is the collateral value at the time of the credit process. Where collateral does not become a core part in calculating debtor's repayment ability, but as a material consideration for the credit breaker in processing the debtor's credit. Judging from the odds ratio of 1.000, which is more than one, the age variable has more influence on the inconsistency of payment, which is 1.000 times compared to the smoothness of payment.

The Influence of Debt Burden Ratio Againsts NPL

Significance value of the debt burden ratio (X_8) is 0.277 which is more than 0.1. Which means that the debt burden ratio does not have a significant effect on the occurrence of NPL. Judging from the odds ratio of 0.779 which is less than one, then debt burden ratio has more influence on the smoothness of payment, which is equal to 0.779 times compared to the inconsistency of payment.

Managerial Implications

The research that has been conducted is expected to provide benefits for Bank XYZ, especially the ABC Branch Office in recommending the assessment of prospective borrowers during the loan application process, especially consumer loans. This is needed to overcome adverse selection problems, where the Bank XYZ needs to know the characteristics of the debtor when analyzing documents submitted by prospective borrowers. Through the analysis of these documents, Bank XYZ can obtain data and information needed to assess or select prospective borrowers. Ranjan and Dhal (2003), stated that loan requirements have a significant influence on non performing loan. Bank XYZ can also select prospective debtors with characteristics based on gender, education, occupation, and terms. Managerial implications that need to be considered are:

1. The development of the model generated by this research is the first step for further development, such as predicting the ability of debtors to pay credit, predicting the time the debtor will default, and the segmentation or product category that allows bad credit.
2. Conduct a more in-depth observation by conducting field visits before giving a decision whether or not prospective debtors get credit. Alhassan et al. (2013) research shows that credit risk is a bank loan behavior, so it is necessary to conduct a direct review.
3. Credit quality is expected to be better because the incoming credit has been through a selection with the parameters that have been tested. The hope of Bank XYZ is to pay attention to the following matters:
 - a. Gender is a factor that influences the occurrence of NPL. Therefore, recommendations for Bank XYZ analyze more deeply the prospective female debtors related to income data, loan history, loan repayment patterns.

- b. Based on education, Bank XYZ considers debtors who have taken tertiary education.
 - c. Based on the work, Bank XYZ can provide guidance to debtors with non-fixed income jobs in order to always allocate funds to productive businesses.
 - d. Based on the tenor / tenure, Bank XYZ can further set a period of time by considering the maximum amount of credit, debtor's ability to pay, and type of business.
4. Conduct loan restructuring, that is by rescheduling loan installment, provide a reduction in interest rate, so that the new installment amount is obtained. This has to be done because based on the results of an evaluation conducted by the debtor having difficulty paying the installment.
 5. Reanalyse all consumer the relationship managers on ABC branch, considering they are the main door for prospective debtors to get a loan.

CONCLUSION

Based on the research and analysis that has been done, it can be concluded that the factors that significantly influence the NPL are gender (X_1), education (X_4), occupation (X_5), and loan term (X_6) on alpha 10%.

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