

# Activity Analysis of Control for Micro Lending on Bank Nagari Pasar Raya Branch Padang

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**Abstract** *The purpose of this study was to determine whether control activities affect the provision of micro credit in Bank Nagari Pasar Raya Branch Padang. The object of this research is to control activities on the implementation of the provision of credit at Bank Nagari Pasar Raya Branch Padang, in particular regarding the use of documents, accounting records are used, the relevant organizational units and procedures for granting credit. Data was collected through secondary data. Logistic Regression data analysis technique was adopted for analyzing. This study shows that the control activities (policies/procedures) have a significant influence on total micro-credit.*

**Key words** Activity, control, micro credit, Bank Nagari, Pasar Raya

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## 1. Introduction

The extension of credit is one of the very many services that attract people and become a mainstay of a bank. Because it is not surprising if some say is the heart of business loans bank. It is the people, whether individual or corporate/business groups are no doubt to borrow from banks, to meet all the necessities of life or accelerate the business. But sometimes reality does not match the expectations of the bank itself. Many banks in general have difficulty with the credit arrears, meaning that the money lent experience congestion in the billing (Sutarno, 2003). With the risk assessment and control activities which are components of the internal control of credit security which will occur will be useful to minimize the risk - credit risk so that banks can overcome bad credit.

*Table 1.* List Total Customer Bad Debt (Micro) On Bank Nagari Pasar Raya Branch Padang years 2005-2009

No	Type of Micro Credit	YEAR				
		2005	2006	2007	2008	2009
1	KMK Multipurpose	7	8	6	10	11
2	KMK Multipurpose Longterm	5	5	14	20	21
3	KUMK Sup 005	-	1	1	-	1
4	KUKI	-	-	-	6	8
5	KPUM	-	-	-	-	1
<b>Total Customer</b>		<b>12</b>	<b>14</b>	<b>21</b>	<b>36</b>	<b>42</b>

**Source:** Bank Nagari Pasar Raya Branch Padang (processed data)

Bank Nagari Raya Pasar Branch Padang provides services to customers; one of these services is the provision of credit in various facilities. Types of loans offered are Personal Loans and Credit Commercial that in this study the author focuses more on micro credit. With the aim to empower people economically weak or small business sector is to provide an affordable source of business financing. One of the financing strategies for this group is a micro-enterprise credit (Sabirin, 2007).

From table 1 above we can see that the Bank Nagari Pasar Raya Branch Padang has increased bad debts for the last 5 years. This is evident from the data obtained in 2009 showed that the number of customers has bad credit as many as 42 customers. The problem faced by the Bank is what control

activities affect the provision of micro credit in Bank Nagari Pasar Raya Branch Padang? Referring to the problems mentioned above, then the goals will be achieved in this study is to determine whether control activities affect the provision of micro credit in Bank Nagari Pasar Raya Branch Padang.

Based on the description above writer is interested to analyze the extent of control activities can affect the provision of credit, especially in micro-credit in Bank Nagari Pasar Raya Branch Padang.

## **2. Literature review**

### **2.1. Control activities**

According to Arens and Loebbecke (2000), Control Activities are the "*policies and procedures other than the four other components to help provide assurance that the actions which must be completely implemented in achieving the goals of the organization in question*".

According to the COSO (the Committee of the Sponsoring Organizations) reports, control activities must involve the entire staff of the Bank, including Directors. Therefore, control activities will be effective if planned and implemented in order to control the identified risks. Control activities include establishing policies and procedures for control and verification process early to ensure that policies and procedures are consistently adhered to, and are an integral activity of any functions or activities of daily Bank.

As components of the control procedures in the internal control structure categories according to IAI is also an additional control procedures, control activities can be anything, but usually associated with one of the five general categories as follows:

1. Proper authorization of transactions and activities.
2. The existence of adequate segregation of duties.
3. The existence of adequate documentation and records.
4. The existence of adequate controls over access to and use of company assets and records.
5. The existence of checks on the performance conducted independently.

### **2.2. Type of management control**

According to the COSO reports, management control systems can be divided into five types:

1. Prevention control;
2. Detection control;
3. Correction control;
4. Direction control;
5. Compensative control.

Details of the above five types of control can be explained as follows:

#### **1. Preventive controls**

Prevention controls intended to prevent the occurrence of a fault. Control is designed to prevent unwanted outcome before it happened. Control of prevention is effective when the function or personnel carrying out its role. Examples of preventive controls include: honesty, competent personnel, segregation of duties, reviews the regulatory and dual control. However, preventive controls cannot guarantee no errors or iniquity, and other controls are still needed to complete it.

#### **2. Detective controls**

As the name implies detection controls are intended to detect an error that has occurred. Reconciliation of bank balances on the books match the bank with the cash balance is the key organization book detection control over cash balances. Control of detection is usually more expensive than preventive controls, but still needed on the grounds:

- a. Control detection to measure the effectiveness of prevention.
- b. Some mistakes cannot be effectively controlled through a system of preventive controls should be treated with the control of detection when the error occurred.

### *3. Corrective controls*

Corrective control the problems identified by the detection control. The goal is to make errors that have occurred do not happen again. Problems or errors can be detected by its own management or by auditors. If the problem or error is detected by the auditor, then the correction is a form of control in the form of follow-up implementation of auditor recommendations.

### *4. Directive controls*

Directive controls are carried out at the time of controlling the ongoing activity in order for the activities carried out in accordance with the policies or regulations. Examples of this control are the supervisory activities undertaken directly by superiors to subordinates or supervision by the foreman of the workers' activity.

### *5. Compensating controls*

Compensating controls intended to strengthen controls for neglect of a control activity. Direct supervision of business owners against their employees' activities on small businesses because of lack of separation of functions is an example of compensative control.

## **2.3. Understanding micro business loan**

According to the definition used in the Microcredit Summit (1997) in Wijono (2005), Micro Credit is a *"small amount lending program to the poor to finance productive activities which he did himself in order to generate income, allowing them to care for themselves and their families"*. Grameen Banking (2003) defines micro-credit as the *"Development of small amounts of loans to entrepreneurs who are too weak to qualify for access to loans from traditional banks"*. In granting loans to micro businesses conducted in stages. Starting from the stage of rescue, recovery, and development. However, in its development and then adapted to field conditions and in order to meet the demand for developed members of the fourth stage, named entrepreneur. Customers can not directly get a loan at this stage of the entrepreneur, but must go through the rescue, recovery, development, can the new entrepreneur. And that's to be seen installment notes and business development.

## **2.4. Micro business lending criteria**

Micro business loans are loans granted to businesses, where business has criteria for small businesses. Criteria for micro-enterprises and micro credit are:

1. Productive micro-enterprises are family-owned business or individual Indonesian citizen, the sale of at most Rp. 300,000,000.00 per year.
2. Micro-enterprise is a business that has a net worth of at most Rp. 50,000,000.00 not including land and building and has annual sales revenue of Rp. 300,000,000.00 (Law No.20 of Chapter IV of Article 6 of the micro, small, and medium).
3. Microcredit is lending under the Rp. 50,000,000.00 (Definition of Indonesia Bank).
4. Micro-credit lending program amounted to little for the poorest citizens to finance projects that he is working on its own to generate income, allowing them to care for themselves and their families (Microcredit Summit 1997).

## **2.5. Understanding procedures**

Definition of procedure according to Mulyadi (2001) that *"A sequence of clerical activity, usually involving several people in one department or more, are made to ensure uniform handling corporate transactions that occur repeatedly"*.

## **2.6. Related functions**

In the procedures for granting credit for not centered only one part only, then formed several functions. These functions will coordinate with each other to achieve the goals set by the bank. The related functions include:

1. Secretariat functions; this function is responsible for the acceptance of credit application and mail notification.
2. Billing functions, this function is responsible for collection of accounts receivable directly to the debtor based on a list that will be billed receivables.
3. Cash function, this function is responsible for receiving and spending money.
4. Accounting Function, this function is responsible for cash receipts and disbursements, and organizing financial reports.
5. Internal Audit function, this function is responsible for checking the accuracy of cash records held by the accounting function.

### **2.7. Documents used**

Documents are the forms used to record the transactions. Documents used in the lending system (Mulyadi, 2001) among others:

1. *Credit application form*. This form contains the writing ability of the borrower and the signature of the board as proof of delivery that the loan application in accordance with demand and working conditions.
2. *Receipt*. Made in triplicate receipt by the treasurer as proof of savings and loans have to spend money.
3. *Evidence of cash*. Created as a proof of cash from the bank after the loan disbursement.
4. *Evidence of cash receipts*. As proof of cash receipts from debtors when pay credit installments.
5. *Credit card*. Credit card was made to record the loan installment every month.

### **2.8. Accounting records used**

Accounting records are all records relating to all accounting transactions that occur, such as journals, ledgers, ledger and financial statements. The accounting records used in credit delivery system, among others:

1. *Public Journal*. Accounting records were used to record the reduction in accounts receivable from the elimination of transactions that are no longer collectible.
2. *Cash Expenditure Journal*. Used to record the granting of loans and transactions, cash disbursements.
3. *Cash Receipts Journal*. Cash receipts journal is used to record cash receipts from the return credit.
4. *Card receivables*. To record the receivable balances to each debtor.

Meanwhile, according Djumhana (2000), a reference in the framework of analysis and research in getting the confidence that the debtor has a bankable classification, including 5C, 4P and 3R.

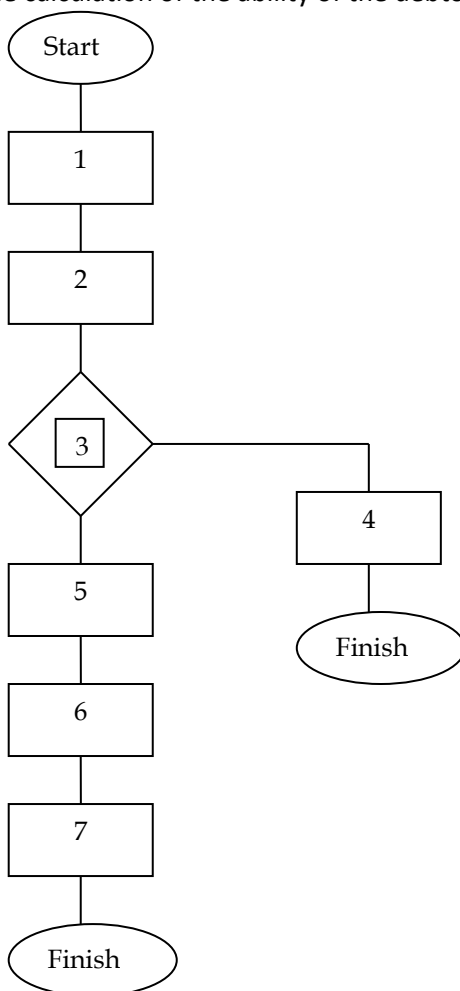
1. Character (the properties of the prospective borrower such as honesty, behavior etc.), in order to obtain the data on the character of the debtor, the bank can do it by gathering information from other bank reference.
2. Capital, it is a concern in terms of this capital is about the large and capital structure, including the performance results from the capital itself from the company if the debtor is a company, and in terms of revenue if the debtor is an individual.
3. Capacity (ability), attention is given to the debtor that is concerning leadership abilities and performance within the company.
4. Collateral, namely the ability of borrowers to provide collateral which is good and has value both legally and economically.
5. Conditions of economy, i.e. the condition that is rapidly changing, now that his concern include government policy, political, social, cultural and other aspects that can affect the economic condition itself.
6. Personality or the personality of the debtor is subjective aspects, but an important one in determining the provision of credit, and thus need to be collecting the data on the prospective borrowers.
7. Purpose or objectives, which became the spotlight of this aspect that is concerning the intended, use of the loan whether to use the activities that are consumptive or productive or used for activities that are or contain speculative elements.

8. Prospect or future financing of the activities that get the credit, while the elements that can be an assessment of the prospects are among the areas of business, business management, government policies and so forth.

9. Payment or method of payment, it is a concern for the example on the smooth flow of funds (cash flow). Return or reversal means that outcomes will be achieved from the activities that get the financing.

10. Repayment or refund calculation of activities that get financing or credit.

11. Risk Bearing Ability of the calculation of the ability of the debtor in the face of unexpected risk.



**Note:** The average time used is 21 working days

**Source:** Faried Wijaya (1996: 288)

*Figure 1. The Procedures of lending implementation*

Description:

These steps can be identified by crediting see picture below lending procedures.

1. Contact the credit Applicants expresses intent Executing Bank orally.
2. Examine the application executing bank credit.
3. What is the executing bank's decision:
  - 3.1 Rejecting the loan application
  - 3.2 Process credit applications
4. Executing bank sends a rejection.
5. Bank executive to discuss the loan application from the applicant.
6. Executing bank approved the loan application.
7. Implementing the bank's decision notified to the customer.

Procedures that form the network lending system, among others:

1. Credit application procedures:
  - a. Applicant to contact the bank executive.
  - b. Applicants fill out a credit application.
2. Application verification procedures:
  - a. Credit application is inserted into the credits for verification.
  - b. Investigated by officers of credit analysis.
  - c. Head of Credit Department approval.
3. Rejection notification procedures:
  - a. Credit analysis officer considers that the loan application is considered not feasible.
  - b. Officers went to the credit applicant to notify the reason for rejection of credit.
4. The procedures for processing approval
  - a. Part administrative type of credit slips.
  - b. Requested verification of the credit administration staff.
  - c. Requested authorization of directors and the Head of Marketing.
  - d. Customers hand over the terms of the completeness of credit.
  - e. Customer signed a loan agreement and supporting documents.
5. Credit disbursement procedures
  - a. The terms of credit completeness investigated truth by the administration.
  - b. The administration submitted the necessary documents to the cashier.
  - c. Part cashier create and issue money receipt.
  - d. Customer signed a loan receipt; accept the money and documents submitted.

From the results of previous research conducted by Shahputra on the analysis of the internal control structure of the credit delivery system and return to the Bank of West Kalimantan. When analyzing the existing internal control structure in the Bank of West Kalimantan, more discussion centered on the control environment and control activities undertaken by the Bank of West Kalimantan, especially in terms of granting and repayment of credit. From the analysis, the study revealed basically the Bank of West Kalimantan has been implementing sound internal control structure in accordance with the guidelines COSO, only difference may lie in the field. In this case seen some strengths and weaknesses of internal control processes that have been conducted by the Bank of West Kalimantan, both in terms of the control environment and control activities.

### ***2.9. Relationship control activities with the provision of micro credit***

Control activity is the establishment of policies and procedures in addition to four other components its means to help provide assurance that the actions which must be completely implemented in achieving the goals of the organization in question (Arens and Loebbecke, 2000).

Lending is one of very many services that attract people and become a mainstay of a bank. Because it is no wonder if some say business credit is the heart of this bank. In this time society, both individuals and corporate/business groups are no doubt to borrow from banks, to meet all the necessities of life or accelerate the business. Provision of micro credit loans are loans granted to businesses that are categorized middle class who meet the criteria. In lending these types of loans also establish procedures and policies set by the bank concerned.

One component of the system of internal control is a control activity that contains the policies and procedures to provide reasonable assurance that corporate objectives will be achieved. Control activities aim to find the mistakes, but more aimed at the prevention and reduction of risk of error in order to improve the effectiveness of the company/bank, especially in the provision of credit. So that can reduce the risks that arise if there are arrears of credit or bad credit opportunities, the control activity has positive influence on provision of micro credit.

Ha 1: Control activities have positive influence on the provision of micro credit.

### **3. Methodology of research**

#### **3.1. Research sites**

The author conducted research at Bank Nagari Pasar Raya Branch Padang, located at 2nd Floor Plaza Koppas Pasar Raya Padang.

#### **3.2. Object of study**

Study object is the object that is a focus of research. The authors focus the object of research on control activities on the implementation of the provision of credit at Bank Nagari Pasar Raya Branch Padang, in particular concerning:

1. Documents used;
2. The accounting records used;
3. Unit-related organizations;
4. Lending procedures.

#### **3.3. Measurement variables**

The variable is the object of research or something that becomes a focal point of research (Arikunto, 2002). Variables are divided into two independent variables and dependent variable. Variabel free (x) are the variables that influence and the dependent variable (y) is a variable that is affected. The variable in this study are:

##### *Activity Control (Y1)*

Control activities are policies and procedures other than the four other components that are intended to help provide assurance that the actions which must be completely implemented in achieving the goals of the organization concerned (Arens and Loebbecke, 2000). Control activities are dependent variables where measurement is measured by indicators of policy for the provision of micro credit. To measure how important the influence of variable control activities in the provision of micro credit, so the writer took the data from changes in policies established by the bank in the last 5 years i.e. from 2005 to 2009 by the Bank Nagari Pasar Raya Branch Padang.

##### *Micro Business Lending (X1)*

Provision of micro credit loans are loans given to entrepreneurs who are categorized middle class who meet the criteria. In lending these types of loans also establish procedures and policies set by the bank concerned. The system of credit by the banking world in general inter-bank that one with the other banks are not much different. The difference may only be located from the enactment of procedures and requirements with their respective considerations. Lending procedures in general can be distinguished between personal loans with a loan by a legal entity. While in the provision of micro credit in Bank Nagari Pasar Raya Branch Padang intended as development loans to entrepreneurs in small quantities that are too weak qualifications to be able to access the loans from traditional banks. Provision of micro credit is an independent variable in which the measurement is taken from the total data provided in micro-credit banks in the last 5 years and the data bank's asset quality in the last 5 years i.e. from 2005 until 2009 at Bank Nagari Pasar Raya Branch.

#### **3.4. Data collection**

Data used in this research is secondary data is the data obtained from the object of research. The data obtained from the documents concerning the micro-credit delivery system.

#### **3.5. Data analysis techniques**

The data analysis technique that is used as follows:

##### *Descriptive analysis*

This analysis is a description or explanation by making the tables, organize and analyze data. Descriptive statistics to explain or describe the various characteristics of the data. This method is used to assess the variables that exist in this study may thus be known level of effectiveness of control activities in

the provision of micro credit for the variable measuring credit control activities. In order to find the best model to be used in the study, the authors tested the hypothesis by Binary Logistic Regression.

#### *Data analysis techniques*

##### *Binary Logistic Regression*

If  $p_i$  declare an individual an opportunity to- $i$  has a value of  $Y = 1$ , then the logistic regression model with  $k$  independent variables can be written as:

$$\text{logit}(p_i) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k \quad (1)$$

with  $\text{logit}(p) = \log(p/1-p)$ .

Logistic regression model is a linear model of  $\text{logit}(p)$  with explanatory variables  $X$ . Just as in linear regression, we can get the values of intercept and slope of the model.

#### **4. Analysis and discussion**

##### **4.1. Descriptive analysis**

Data used in this study is micro credit data within the last 5 years i.e. from 2005 to 2009 on each type of micro-credit, which is described in the data about:

1. The presence or absence of changes in policies established by the bank for each type of micro credit in the last 5 years.
2. What is the total disbursed microcredit bank for each type of credit in the last 5 years.
3. Data quality earning assets ratio (KAP) of banks in the last 5 years.

The data above is that it can be viewed in the following table:

**Table 2.** The Policy/Procedure Changing Data of Giving Micro Credit Bank Nagari Pasar Raya Branch Padang 2005-2009

No	Type of Micro Credit	Year				
		2005	2006	2007	2008	2009
1	KMK Multiguna	1	0	1	1	1
2	KUMK Sup 005	1	0	1	1	1
3	KUKI	1	1	1	1	0
4	KPUM	0	0	0	1	1

**Source:** Bank Nagari Pasar Raya Branch Padang

From table 2 above explained that there are 4 types of micro-credit disbursed by banks, namely:

1. KUMK Multifunction (Micro Business Loans Commercial Multipurpose);
2. KUMK Sup 005 (Micro Small Credit and Small Sup 005);
3. KUKI (Informal Small Business Credit);
4. KPUM (Micro Care Credit).

Inside there are tables of probability value of each type of credit in 2005 until 2009, where 0 means no change in policy, while 1 means there are changes in policies.

**Table 3.** The Total Distribution of Credit Micro on Bank Nagari Pasar Raya Branch Padang 2005 – 2009 (in thousand rupiah)

No	Type of Micro Credit	Year									
		2005	%	2006	%	2007	%	2008	%	2009	%
1	KMK Multiguna	354,000	58.51	385,000	47.24	392,501	36.72	422,000	29.35	525,250	44.62
2	KUMK Sup 005	251,000	41.49	276,000	33.87	179,000	16.74	250,000	17.39	190,000	16.14
3	KUKI	0	0	153,988	18.89	497,504	46.54	765,984	53.27	452,000	38.39
4	KPUM	0	0	0	0	0	0	0	0	10,000	0.85
<b>Total</b>		<b>605,000</b>	<b>11.85</b>	<b>814,988</b>	<b>15.97</b>	<b>1,069,005</b>	<b>20.94</b>	<b>1,437,984</b>	<b>28.17</b>	<b>1,177,250</b>	<b>23.06</b>

**Source:** Bank Nagari Pasar Raya Branch Padang

Furthermore, table 3 in explain that the total micro-credit on each credit type from 2005 to 2008 as a whole continued to increase in the distribution of credit, except in 2009 which decreased by Rp.. 260 734 000, - while the percentage increase that is in 2005 with a total microcredit Rp. 605 000 000, - at 11.85%, in 2006 with a total microcredit Rp. 814 988 000, - amounting to 15.97%, in 2007 with a total microcredit Rp. 1,069,005,000, - at 20.94%, in 2008 with a total microcredit Rp. 1,437,984,000, - at 28.17%, in 2009 with a total microcredit Rp. 1,177,250,000, - at 23.06%. Means it can be said that the provision of microcredit in the last 5 years at Bank Nagari Pasar Raya Branch Padang is good.

*Table 4.* The Data of Micro Credit Productive Asset Quality on Bank Nagari Pasar Raya Padang 2005 – 2009

No	Year	Ratio KAP
1	2005	2,36 %
2	2006	2,37 %
3	2007	2,97 %
4	2008	3,53 %
5	2009	2,94 %

*Source:* Bank Nagari Cabang Pasar Raya Padang

From table 4 can be seen that the ratio of bank accounting firm from 2005 until 2008 continued to increase this, except in the year 2009. Because the bank's rating as stipulated by Bank Indonesia if the ratio of asset quality (KAP) is smaller than a health assessment criteria for banks that is equal to 10.35%, banks are categorized in the healthy group. So to say the Bank Nagari Pasar Raya Branch in the last 5 years is healthy. Thus, the data is processed above will produce how much influence the level of effectiveness of control activities conducted on the provision of micro credit in Bank Nagari Pasar Raya Branch in the last 5 years.

#### 4.2. Descriptive statistics

Descriptive statistics provide information about the data being processed is the number of samples, the minimum value, maximum value, mean value and standard deviation where the standard deviation is a deviation from the independent variable. Descriptive statistical results are presented in Table 5 below:

*Table 5.* The Descriptive Statistic Testing Result

	N	Minimum	Maximum	Mean	Std. Deviation
TKM	5	.1185	.2817	.199980	.0631782
KAP	5	.0236	.0353	.028340	.0048840
KP	5	.00	1.00	.8000	.44721
Valid N (listwise)	5				

Descriptive statistical test results for 5 samples in the form of measurement is the average value of total micro-credit (TKM) = 0.199980 with a standard deviation = 0.0631782 lowest value of total micro-credit to 5 samples = 0.1185 and credit scores micro for 5 samples = 0.2817. This means the value of microcredit to total micro-credit per year on average for the sample of 5 years amounted to 0.199980 with a homogeneous size distribution (below the average value) that is equal to 0.0631782 of 5 years that happened.

The average value of the test results of descriptive statistics for the variable quality of productive assets ratio (KAP) amounted to 0.028340, the standard deviation of 0.0048840 with the lowest score is 0.0236 and the highest value = 0.0353. This means earning assets to total earning assets by an average of 0.028340 with a homogeneous size distribution (below the average value) that is equal to 0.0048840 of 5 years that happened.

The average value of the test results of descriptive statistics for the probability variable policies/procedures amounted to 0.8000, with standard deviation of 0.44721, the lowest score is 0.00 and the highest score is 1.00. This means an average probability of 0.8000, with a homogeneous size distribution (below the average value) that is equal to 0.44721 from 5 years to happen.

#### 4.3. Partial correlation test analysis

In the hypothesis stated that there are significant control activities on micro lending means for each independent variable is the total micro-credit and asset quality is influenced by control activities in the form of policies in the provision of micro credit itself. For that variable correlation table above will be explained by the following:

Table 6. Correlations

Control Variables			TKM	KAP
KP	TKM	Correlation	1.000	.977
		Significance (2-tailed)	.	.023
		Df	0	2
	KAP	Correlation	.977	1.000
		Significance (2-tailed)	.023	.
		Df	2	0

Based on the above analysis of the correlation table can be valued at 0.977 significant variable is the total micro-lending micro-credit and asset quality has a positive relation to control activities (policies/procedures). This means that in the presence of control activities, the greater the total micro-credit banks, which are distributed and also the quality of productive assets, the bank will get better, so vice versa. While the result of a significant level of correlation coefficient of 0.023 < 0.05 sig which means the total micro-credit and asset quality has a significant relationship to the activities of bank control.

#### 4.4. Test of binary logistic regression analysis

##### Policy Probability Influence to Total Micro Credit

The test results of Binary Logistic Regression can be seen from the table below:

##### 1. Binary Logistic Regression Model

##### Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 <sup>a</sup> TKM	4.825	2.115	5.204	1	.036	7.591
Constant	-1.546	.819	3.563	1	.042	.143

a. Variable(s) entered on step 1: TKM

Results of testing the binary logistic regression model with dependent variable control activities in the form of policies (Y) obtained the following equation:

$$Y = \ln \left( \frac{\pi}{1-\pi} \right) = \beta_0 + \beta_1 X_1 \quad (2)$$

Where:

Y = bound binary variable (Y = 1 and Y = 0) which indicates the variable control activities (policies/procedures) were coded 1 = no change and 0 = no change

$\ln \left( \frac{\pi}{1-\pi} \right) = \text{Log odds}$   
 $X_1$  = independent variable  
 $\beta_0, \beta_1$  = regression coefficient logit model  
 $\beta_0 = -1,546$   
 $\beta_1 = 4,825$   
 $X_1$  = total micro-credit

Jadi :  
 $Y = \ln \left( \frac{\pi}{1-\pi} \right) = -1,546 + 4,825 \text{ total micro-credit}$   
 Or  
 $Y = \frac{\pi}{1-\pi} = \exp (-1,546 + 4,825 \text{ total micro-credit})$

## 2. Accuracy Test Binary Logistic Regression Model

Omnibus Tests of Model Coefficients					Model Summary			
		Chi-square	df	Sig.	Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Step 1	Step	4.786	1	.041	1	4.325 <sup>a</sup>	.527	.801
	Block	4.786	1	.041				
	Model	4.786	1	.041				
Hosmer and Lemeshow Test								
	Step	Chi-square	df	Sig.				
	1	3.711	3	.029				

From the above data can be output omnibus test states that the results of chi-square goodness of fit is 0.041, which means less than 0.05 indicates that  $H_0$  is rejected which means if a significant difference between control activities to total micro-credit disbursed by banks.

The result of Cox and Snell R Square is the size of  $R^2$  in multiple regressions based on likelihood estimation techniques with a maximum value of less than 1 so it is difficult to interpret. Nagelkerke R Square is a modification of the Cox and Snell coefficient to ensure that its value varies from 0 (zero) to one (one). This is done by dividing the value of Cox Snell R square with its maximum value. Nagelkerke  $R^2$  value can be interpreted as the value of  $R^2$  in multiple regressions. Viewed from SPSS output with a value of Cox Snell R Square of 0.527 and Nagelkerke  $R^2$  value is 0.801, which means the variability of control activities in the provision of credit that can be explained by the variability of total micro-credit amounting to 80.1% and the remaining 19.9% influenced by other variables outside the research model.

While the results of the Hosmer and Lemeshow Goodness-of-Fit Test is a significance of 0.029 which indicates that  $0,029 < 0.05$  sig so that  $H_0$  is rejected which means a significant difference between control activities to the total micro-credit disbursed by banks.

## 3. Binary Logistic Coefficient Test

### Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup> TKM	4.825	2.115	5.204	1	.036	7.591
Constant	-1.546	.819	3.563	1	.042	.143

a. Variable(s) entered on step 1: TKM

In binary logistic regression, t test was replaced with a Wald test. Signifiknasi Wald reported in the SPSS printout. In the results above Wald value for the variable X (the total micro-credit) = 5.204 to 0.036 or 3.6% significance. This means the possibility of receiving 3.6% Ho and accepts Ha likelihood of 96.4%. It could also be said the effect of X on Y logistics variables significant at  $\alpha = 5\%$ .

a. coefficient for variable X (the total micro-credit):

$$= \left( \frac{B}{S.E.} \right)^2 = (4.825/2.115)^2 = 5.204$$
 P-value = 0.036 is smaller than  $\alpha = 0.05$ , regression coefficient for the variable total microcredit significant.

b. for constants:

$$= \left( \frac{B}{S.E.} \right)^2 = (-1.546/0.819)^2 = 3.563$$
 P-value = 0.042 is smaller than  $\alpha = 0.05$ , then the regression coefficients for significant variables constant.

Thus, the explanation of data processing results can be concluded that the dependent variable i.e. control activities had a significant influence on the independent variables (total micro credit).

#### *Effect of Probability Policies/Procedures on the Quality of Productive Assets (KAP)*

The test results Binary Logistic Regression on SPSS output results can be seen from the table below:

#### 1. Binary Logistic Regression Model

##### Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	KAP	9.385	4.112	5.210	1	.042	6.266
	Constant	-43.750	21.586	4.107	1	.048	.583

a. Variable(s) entered on step 1: KAP

Results of testing the binary logistic regression model with dependent variable control activities in the form of policies (Y) obtained the following equation:

$$Y = \ln = \beta_0 + \beta_1 X_1$$

Where:

Y = bound binary variable (Y = 1 and Y = 0) which indicates the variable control activities were coded 1 = no change and 0 = no change

$$\ln \left( \frac{\pi}{1-\pi} \right) = \text{Log odds}$$

$X_1, X_2, \dots, X_k$  = independent variable

$\beta_0, \beta_1$  = regression coefficient logit model.

$$\beta_0 = -43.750$$

$$\beta_1 = 9.385$$

$X_1$  = KAP (asset quality)

So:

$$Y = \ln \left( \frac{\pi}{1-\pi} \right) = -43.750 + 9.385 \text{ KAP}$$

Or

$$Y = \frac{\pi}{1-\pi} = \exp (-43.750 + 9.385 \text{ KAP})$$

## 2. Accuracy Test Binary Logistic Regression Model

Omnibus Tests of Model Coefficients					Model Summary			
		Chi-square	df	Sig.	Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Step 1	Step	7.121	1	.015	1	2.883 <sup>a</sup>	.680	.897
	Block	7.121	1	.015				
	Model	7.121	1	.015				

Hosmer and Lemeshow Test				
Step	Chi-square	df	Sig.	
1	4.103	3	.045	

From the above data can be output omnibus test states that the results of chi-square goodness of fit is 0.015, which means less than 0.05 indicates that  $H_0$  is rejected which means if a significant difference between control activities to quality productive assets (KAP) bank.

The result of Cox and Snell R Square is the size of  $R^2$  in multiple regressions based on likelihood estimation techniques with a maximum value of less than 1 (one) so it is difficult to interpret. Nagelkerke R Square is a modification of the Cox and Snell coefficient to ensure that its value varies from 0 (zero) to one (one). This is done by dividing the value of Cox Snell R square with its maximum value. Nagelkerke  $R^2$  value can be interpreted as the value of  $R^2$  in multiple regressions. Viewed from SPSS output with a value of Cox Snell R Square of 0.680 and Nagelkerke  $R^2$  value is 0.897, which means the variability of control activities in the provision of credit that can be explained by variability in the quality of productive assets (KAP) of 89.7%. and the rest 10,3% influenced by other variables outside the research model.

While the results of the Hosmer and Lemeshow Goodness-of-Fit Test is a significance of 0.045 which indicates that  $0.045 < 0.05$  sig so that  $H_0$  is rejected which means if a significant difference between control activities on the quality of productive assets (KAP) bank.

## 3. Binary Logistic Coefficient Test

### Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup> KAP	9.385	4.112	5.210	1	.042	6.266
Constant	-43.750	21.586	4.107	1	.048	.583

a. Variable(s) entered on step 1: KAP.

In binary logistic regression, t test was replaced with a Wald test. Signifikansi Wald reported in the SPSS printout. In the results above Wald value for the variable X (KAP) = 5.210 to 0.042 or 4.2% significance. This means the possibility of receiving 4.2%  $H_0$  and accepts  $H_a$  likelihood of 95.8%. It could also be said the effect of X on Y logistics variables significant at  $\alpha = 5\%$ .

a. coefficient for variable X (the total micro-credit):

$$= \left( \frac{B}{S.E.} \right)^2 = (9.385/4.112)^2 = 5.204$$
 P-value = 0.042 is smaller than  $\alpha = 0.05$ , regression coefficient for KAP variables significant.

b. for constants:

$$= \left( \frac{B}{S.E.} \right)^2 = (-43.750/21.586)^2 = 4.107$$
 P-value = 0.048 is smaller than  $\alpha = 0.05$ , then the regression coefficients for significant variables constant.

Thus, the explanation of data processing results can be concluded that the dependent variable i.e. control activities had a significant influence on independent variables (KAP).

## **5. Conclusions and suggestions**

### **5.1. Conclusions**

Based on the research and discussion on this research, it can be concluded as follows:

1. The existence of control activities conducted in the form of changes in policies/procedures in the provision of micro credit have a significant effect on total micro credit which the Bank Nagari Pasar Raya Branch Padang. Where the contribution of variability in control activities in the provision of credit that can be explained by the variability of total micro-credit amounting to 80.1% and the remaining 19.9% are influenced by other variables outside the research model. Meanwhile, if viewed from a significant level of coefficients in the test via t test or Wald test also called for the variable X (the total micro-credit) = 5.204 with significance 0.036 or 3.6%, which means the possibility of receiving 3.6%  $H_0$  and accept  $H_a$  possibility amounted to 96.4%. It could also be said the effect of X on Y logistics variables significant at  $\alpha = 5\%$ , where  $H_0$  is denied the means to control activities significantly influence the total micro credit in Bank Nagari Pasar Raya Branch Padang.

2. The existence of control activities conducted in the form of changes in policies/procedures in the provision of micro credit have a significant effect on the quality of productive assets (KAP) which is in Bank Nagari Pasar Raya Branch. Where the contribution of variability in control activities in the provision of credit that can be explained by the variability of KAP of 89.7% and the remaining 10.3% are influenced by other variables outside the research model. Meanwhile, if viewed from a significant level of coefficients in the test via t test or Wald test also called for the variable X (KAP) = 5.210 with significance 0.042 or 4.2%, which means the possibility of receiving 4.2%  $H_0$  and accept  $H_a$  possibility of 95.8%. It could also be said the effect of X on Y logistics variables significant at  $\alpha = 5\%$ , where  $H_0$  is denied the means to control activities significantly influence the quality of productive assets (KAP) in Bank Nagari Pasar Raya Branch Padang.

### **5.2. Suggestions**

In the banking activities of credit is one important activity for the bank and make a significant contribution, especially in micro, then based on discussions and observations of the author in Bank Nagari Pasar Raya Branch Padang there are a few suggestions to be conveyed, among others:

1. In this research shows that the presence of control activities that have a significant effect on the total provision of microcredit and quality of productive assets (KAP), Bank Nagari should further enhance control activities in micro-lending bank's financial performance for the better.

2. Improving control activities such as the precautionary (prudential banking) in micro-lending procedures because it is very important in the assessment of appropriate creditor to give credit to bad credit can be overcome by the bank.

3. Conducting training specifically to bank employees involved in micro credit delivery system of how to control activities that can run effectively is to increase understanding and skills of bank employees so that later will automatically improve the performance of the employees themselves.

4. Intense competition in the world of business including banking, then you should Bank Nagari innovations on the type of micro credit which will actually help people so that middle to lower economic growth, the better.

5. For other researchers who want to conduct similar research using a broader population so the results will be responsibility.

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