

Determinants of Bank Management Confidence Level in Indonesia moderated by Bank Scale

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Abstract

This study examines the determinants of management confidence level of listed bank on the Indonesian Stock Exchange. The confidence level referred to confidence in deciding the deposit interest rate given to customers. The lower the interest rate compared to the other, the bank's management is more confident. This means that with lower deposit interest, management remains confident that customers remain loyal. This research used Model Panel Data to estimate determinants Banks Management Confidence Level in Indonesia moderated by Bank Scale. Banking ratio and macroeconomic data for period 2017 and 2021 become variable research in this paper.

This research found that CAR and NPL has positive and significant effect on IETDR at level of Significant of 5%. Inflation and COVID have negative and significant effect on IETDR. Bank Scale or Bank Book as moderating variable could strength to IETDR for CAR and NPL.

JEL classification numbers: C33, G21, L25, M21, N25, O16, P34.

Keywords: Confidence, CAR, NPL, ROA, covid, Inflation, Interest Rate, Customer Satisfaction.

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1. Introduction

The years of 2017 till 2021 were the period that full of dynamics for individuals, companies and the governments. Before the year of 2020, the global conditions were quite stable, but since 2020 they turned to change drastically marked with 2 (two) very important incidents, namely the Covid-19 pandemic since 2020 and the Russia – Ukraine war since 2021. During the spreading of the Covid-19, people could not do activities as usual due to the implemented government's policy to prevent the transmission of the Covid-19 virus applying the *Large-Scale Social Restrictions* policy and *social distancing*. The industries which require high mobility and physical presence have been particularly affected by this pandemic, such as tourism, transportation, automotive, construction, and others. The Covid-19 pandemic is a very worrying incident, especially related to the bad credit problems due to the presence of debtors' inability to repay their loans. Refer to the research done by Tiwu (2020) insisted that the Covid-19 pandemic has a significant impact and positive relationship with the Non-Performance Loans (NPL) of special purpose credit of banks in Indonesia. If the NPL increases significantly, it will reduce the customer confidence so it will have an impact on the bank performance. The customer trust is an important factor in the banking industry.

Many factors affect the customer trust in banks. Some of the previous studies disclosed such facts. A study implemented by Ojeaga and Odejimi (2014) in regards the impact of interest rates on total deposit found that interest rates probably increase the bank deposit while the income is also found to affect bank deposits in general. Based on Cahyono *et. al.* (2021) in research on the factors that influence the depositor trust in the conventional and Islamic banks in Indonesia, it was found that the depositor trust is significantly affected by the conventional bank interest rates and yield rates equivalent to the Islamic banks.

Atmaja (2018) conducted research on the service quality and customer satisfaction on the customer loyalty to BJB Bank found that the service quality is an important factor in determining the customer satisfaction or dissatisfaction and it's the beginning of the birth of the consumer loyalty. According to the research done by Ozatac *et.al* (2016), conducted in North Cyprus, found that the good and strong relationships in the banking sector build the trust between the customers and the bank employees and offer the customer satisfaction. The positive word of mouth has a major role in creating the customer satisfaction.

The survey on bank trust in China in 2012 conducted by Fungáčová and Weill (2018) found that the age and satisfaction with financial situation contribute trust in banks. Fungáčová *et. al.* (2019) conducted research related to trust in banks using World Values Survey (52 countries, 2010–2014 period) found that man tend to trust banks less than women. The trust in banks tends to decrease with the age and education but increase with the income. The trust can be eroded by the internet access but can be enhanced by the access to television. Additionally, the trust in bank affected by economic values, religious, and political. Notably, religious individuals tend to put greater trust in banks.

The research conducted on the Polish market by Piotrowski (2020) comparing the banking sector in Poland with the global trends shows that trust in banks in recent years can be increased by financial stability, improved quality of services provided, and concern for security as the main factors. On a global scale, high trust in banks also has an efficient problem resolution/complaint handling as important determinant. In addition to, Western and Eastern countries have different level of trust in the banking sector that can be identified by the cultural factors as determinants. External sources and banks can produce trust and confidence based on the efficient operation as the informational intermediaries. As an interdisciplinary concept, bank's information production and protection of micro- and macro-stability are indispensable element of bank to establish trust and confidence (Basaran and Bagheri, 2020).

The lower deposit interest rates are offered by large, geographically diversified banking organizations compared to their competitors (Hannan & Prager, 2006). They also found the deposit interest rates are negatively related to the number of local banking markets although after controlling the organization size. Dewi and Haryanto (2015) found that inflation rate, Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) have significant effect on Time Deposit Interest Rate of the Commercial Bank in Indonesia. Research about the impact of interest and inflation rates on deposits' behavior of banks in Egypt conducted by Mohamed Youssef *et al.* (2022) found that the deposits' behavior of banks has association with the inflation rate volatility but no association with the interest rate volatility.

Based on all the descriptions above, we have not yet found any research that tests the confidence level of bank management in making policies using secondary data. Due to, we used the secondary data to conduct research to test this level of confidence by applying the deposit interest rate that set by the banks' managements as an indicator. Because deposit interest rates fluctuate within a year, we use *Interest Expense to Total Deposit Ratio (IETDR)* as a proxy and it is used as indicator of the level of management confidence. This ratio is the aggregate interest rate on deposits provided by the banks to their customers. This ratio is used as one of management's considerations in making decisions regarding the deposit interest rates. The determinants used are risk factors and operational factors such as efficiency and profitability. Risk factors use *Capital Adequacy Ratio (CAR)* and *Non-Performing Loan (NPL)* as proxies. Operational factors use *Return on Asset (ROA)* and *Efficiency Ratio (EFR)* as proxies. For macroeconomic variable, *Inflation (IF)* and *Interest Rate (IR)* from Bank Indonesia are used and Bank scale functions as moderating variable.

2. Literature Review

2.1 Bank

Based on Rose and Hudgins (2013), a bank can be defined in terms of (1) perform the economic functions, (2) services, and (3) legal basis. The function in the economy, bank as financial intermediation is involved in the transfer of funds from

savers to borrowers and in paying for goods and services. Insurance coverage, financial planning, investment banking (security underwriting), and a variety of other innovative financial products are included as their financial intermediation function. In general, now banks become the providers of financial services.

As a company, the bank also has management who manages the company effectively and efficiently, both for profit and managing risk. One of the policies or decisions made by management is to determine the amount of bank interest rates for both deposits and loans. Many factors need to be considered in determining bank interest rates, such as risk factors, customers, competition with other banks, service quality (customer satisfaction) and so on.

Banks in Indonesia is divided into 4 scales based on the core (tier 1) capital. The bank scales are named as *Bank Umum berdasarkan Kegiatan Usaha* (BUKU) refers to Bank Indonesia regulation No. 14/26/PBI/2012 about Business Activities and Office Networks Based on Bank Core Capital. This regulation has been revised by Financial Services Authorities with regulation No. 6/POJK.03/2016 about Business Activities and Office Networks Based on Bank Core Capital. In 2021, bank scale has been changed into *Kelompok Bank berdasarkan Modal Inti* (KBMI) by Financial Services Authorities with regulation No. 12/POJK.03/2021.

2.2 Customer Satisfaction, Trust dan Confidence

In general, satisfaction is a pleasure or disappointment feeling from a person by comparing his/her expectation with reality (Kotler *et. al.*, 2022). People feel dissatisfied if the reality is below their expectations. People feel satisfied if the reality matches with their expectations. People feels highly satisfied or delighted if the reality exceeds their expectations. Expectations result from marketers and competitors' information and promises, past buying experience, friends and associates' advice and public information and discourse.

In banking, the trust is very important in the relationship between the bank and its customers. With the trust, transactions will be occurred. Ennew and Sekhon (2007) studied that the trust in financial services, define that the trust is the individual's willingness to accept vulnerability on the basis of positive expectations about the intentions or behavior of others in the situations characterized by the interdependence and risk. For a narrower scope, Sirdeshmukh *et. al.* (2002) defined the trust as the customer expectations that service providers (in this case is banks) can be held and can be relied on the fulfillment of their promises.

Some factors become the determinants of trust. Doney & Cannon (1997) distinguished benevolence and credibility. Benevolence is the extent to which the institution is genuinely interested in the customer's welfare. Credibility is the expectation that the word or written statement of the institution can be relied on and that promises will be kept. Järvinen (2014) showed in many European countries, consumers' trust in their banking relationships is quite low, fortunately there are also countries where banking relationships are generating trust among consumers and functioning well.

Van Esterik-Plasmeijer and van Raaij (2017) conducted a survey in The Netherlands, found that the most important determinant of bank trust is integrity. Other determinants that also significant are customer orientation, transparency, and competence. Trust is a strong predictor of loyalty. Stability, competence, transparency and value congruence are the determinants of bank loyalty. If the customer satisfaction is maintained properly (especially if it can be delighted) then the service provider will gain the trust of the customer. With the existence of trust from customers, it will provide a level of management confidence in making programs or adopting a policy.

3. Methodology

3.1 Research Design

This research wants to explore the effects of some bank internal and external variables on the level of management confidence in the banks. This research could be mentioned as exploring causalities between variables in the banks. This research could be categorized as a Quantitative Research.

3.2 Variable and Data

The data used in this study are yearly secondary data from Indonesian banks listed on Indonesia Stock Exchange (IDX) whose first stock registrations before 2010. There are 28 banks that meet these criteria, but 27 banks are included as one of the banks does not have a complete data set in the annual report. The period of data sample was 5 years, 2017-2021.

The Dependent Variable is *Interest Expense to Total Deposits Ratio (IETDR)* as proxy and it is used as an indicator for the level of management confidence. This ratio is the aggregate interest rate on deposits provided by the banks to their customers. This ratio is used as one of management's considerations in making decisions regarding deposit interest rates.

The Independent variables come from the risk and operational factors such as efficiency and profitability. The risk factors use *Capital Adequacy Ratio (CAR)* and *Non-Performing Loan (NPL)* as proxies. The operational factors use *Return on Asset (ROA)* and *Efficiency Ratio (EFR)* as proxies. For macroeconomic variables, we use *Inflation (IF)* and *Interest Rate (IR)* from Bank Indonesia. The moderating variable is Indonesian Bank Scale. The data of banks were taken from the bank annual reports by downloading from their websites for the period of 5 years (2017-2021). Meanwhile the data for macroeconomics variables were taken from Bank Indonesia's website for the same period. We added "COVID-19" as dummy variable to be able to distinguish global conditions before and after the Covid-19 pandemic. All data were compiled and became panel data.

Note; for Efficiency Ratio, the formula is shown below:

$$EFR = \frac{\text{Non Interest Expense}}{NII + \text{Non Interest Income}}$$

3.3 Model

In this study, we use panel data regression for estimation. The equation of the panel data based on the defined variables are:

$$\begin{aligned} IETDR_{it} = & \beta_0 + \beta_1 CAR_{it} + \beta_2 NPL_{it} + \beta_3 ROA_{it} + \beta_4 EFR_{it} + \beta_5 IF_{it} \\ & + \beta_6 IR_{it} + \beta_7 COVID_{it} + \beta_8 BB_{it} + \beta_9 (BB_{it} * CAR_{it}) \\ & + \beta_{10} (BB_{it} * NPL_{it}) + \beta_{11} (BB_{it} * ROA_{it}) \\ & + \beta_{12} (BB_{it} * EFR_{it}) + \beta_{13} (BB_{it} * IF_{it}) \\ & + \beta_{14} (BB_{it} * IR_{it}) + \beta_{15} (BB_{it} * COVID_{it}) + \varepsilon_{it} \end{aligned}$$

3.4 Panel Data

Making models in econometrics, data form often uses cross-sections and time series data, but there is a times when the data is a combination of them both. Due to the data form, we need a model that can be used and helpful to make an estimation. This estimation model is called panel data.

Panel data estimation model in general (also called *Common Effect Model* or *Pooled Model*) according to Brooks (2019) is:

$$y_{it} = \alpha + \beta x_{it} + u_{it}$$

Where:

$i = 1, 2, \dots, k$: Cross-section data index

$t = 1, 2, \dots, n$: Time series data index

u_{it} : Disturbance

Fix Effect Model (FEM) is *Pooled model* alternative where *Disturbance* (u_{it}) is separated become an *individual specific effect* (μ_i) and a *remainder disturbance* (v_{it}), so the equation become:

$$y_{it} = \alpha + \beta x_{it} + \mu_i + v_{it}$$

μ_i captures the impact of different unit cross-section characteristics on y_{it} that are not explained in the model.

Next alternative model called *Random Effect Model* (REM) or sometime called *Error Component Model*. REM equation is:

$$y_{it} = \alpha + \beta x_{it} + \omega_{it} \text{ dimana } \omega_{it} = \varepsilon_i + v_{it}$$

ε_i is used to capture heterogeneity between *cross section* unit.

Some tests are used to determine the model of panel data:

Chow Test

Chow test is used to determine either CEM or FEM. FEM estimation will produce individual μ value for each *cross-section* data. If each μ has the same value then CEM is selected for candidate, otherwise FEM is selected for candidate. *Chow test* compare μ value of each *cross-section* data. *Chow test* hypothesis:

$$\begin{aligned} H_0: & \mu_1 = \mu_2 = \dots = \mu_N \\ H_1: & \text{if 1 or more } \mu \text{ have different value.} \end{aligned}$$

From the result of *Chow test*, if *p-value* of *cross-section chi-square* is $\leq 5\%$ then reject H_0 , the candidate model is FEM. But if *p-value* of *cross-section chi-square* is $> 5\%$ then accept H_0 , the candidate model is CEM

Hausman Test

Hausman test is used to determine either FEM or REM. REM has disadvantage that no endogeneity is allowed. It means that there is no significant correlation between the *error* values and the *independent variables* in the model. *Hausman test* used to test the correlation (*covariant*) between error value ω_{it} and variable x_{it} . *Hausman test* hypothesis:

$$\begin{aligned} H_0: & Cov(\omega_{it}, x_{it}) = 0 \\ H_1: & Cov(\omega_{it}, x_{it}) \neq 0 \end{aligned}$$

From the result of *Hausman test*, if *p-value* of *cross-section random* is $\leq 5\%$ then reject H_0 , the candidate model is FEM. But if *p-value* of *cross-section random* is $> 5\%$ then accept H_0 , the candidate model is REM.

Lagrange Multiplier (LM) Test

LM test is used to determine either CEM or REM. LM test uses Breusch-Pagan and then called *Breusch-Pagan LM Test*. REM estimation will produce individual v value for each *cross-section* data. If there is no random effect then $var(v)$ value is zero. *Breusch-Pagan LM* hypothesis:

$$\begin{aligned} H_0: & \sigma_v^2 = 0 \\ H_1: & \sigma_v^2 \neq 0 \end{aligned}$$

From the result of *Breusch-Pagan LM test*, if *p-value* of *Breusch-Pagan* is $\leq 5\%$ then reject H_0 , the candidate model is REM. But if *p-value* of *Breusch-Pagan* is $> 5\%$ then accept H_0 , the candidate model is CEM

4. Empirical Result

The empirical Results will be explained into two topics discussion. Descriptive data will be explained for first explanation and followed by Causalities between variable.

4.1 Descriptive Data

As mentioned previously, this section discusses the descriptive data on the variables used in this research. The descriptive data can be overviewed as follows.

Table 1: Descriptive statistics for all variables

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Observations
IETDR	0,053239	0,054516	0,131076	0,009683	0,018398	0,267762	4,340431	11,71992	0,002851	7,187271	0,045357	135
CAR	0,214629	0,2024	0,4882	0,0901	0,065303	1,319148	5,900166	86,46509	0	28,9749	0,571435	135
NPL	0,03595	0,03	0,2227	0	0,026706	3,357748	21,0733	2091,048	0	4,8532	0,09557	135
ROA	0,007621	0,0104	0,0474	-0,1475	0,025106	-2,643435	14,40667	889,1056	0	1,0289	0,084463	135
EFR	0,965513	0,606649	13,00423	0,278943	1,314128	6,42992	54,74868	15993,57	0	130,3443	231,4089	135
IF	0,02602	0,0272	0,0361	0,0168	0,007369	-0,0015	1,459828	13,34327	0,001266	3,5127	0,007276	135
IR	0,045	0,0425	0,06	0,035	0,009117	0,550482	1,893939	13,69964	0,00106	6,075	0,011137	135
COVID	0,4	0	1	0	0,491723	0,408248	1,166667	22,65625	0,000012	54	32,4	135
BB	2,792593	3	4	1	0,923138	-0,092763	1,969038	6,172323	0,045677	377	114,1926	135
BBCAR	0,607101	0,5712	1,428	0,0901	0,270454	0,395142	2,826637	3,682152	0,158647	81,9587	9,801504	135
BBNPL	0,092487	0,088	0,3198	0	0,053462	1,349631	6,670951	116,7857	0	12,4857	0,382994	135
BBROA	0,03312	0,0308	0,16	-0,295	0,064267	-1,207547	7,915283	168,7089	0	4,4712	0,55345	135
BBEFR	2,334148	1,838749	26,00846	0,557887	2,626873	6,427961	53,0149	15000,56	0	315,1099	924,6621	135
BBIF	0,07189	0,0672	0,1444	0,0168	0,030675	0,587367	2,689757	8,303924	0,015734	9,7052	0,126092	135
BBIR	0,124907	0,12	0,24	0,0375	0,04741	0,46405	2,845372	4,979707	0,082922	16,8625	0,301193	135
BBCOVID	1,17037	0	4	0	1,547944	0,77998	1,956073	19,81832	0,00005	158	321,0815	135

This research uses the Bank Management Confidence Level as the topic of discussion that it becomes a dependent variable. The *Interest Expense to Total Deposits Ratio (IETDR)* as proxy of Bank Management Confidence Level has mean value of 5.3239% and the standard deviation of 1.8398%. Meanwhile the *Interest Rate* has mean value of 4.5% and the standard deviation of 0.9117%. The mean value of the *ITDR* is less than 6% but it is higher than the mean value of the *Interest Rate*.

The Capital Adequacy Ratio as measurement of the bank soundness is measured applying a ratio between the capital to risk weight asset that should be provided by a bank every time. The mean value of *Capital Adequacy Ratio (CAR)* is 0.214629 with the minimum value 0.0901 (9,01%). It shows that the mean value of *CAR* is higher than the regulated minimum *CAR* (8%) and all the banks pass the regulated minimum *CAR*.

The Non-Performing Loan (NPL) is a measurement of how the banks manage their credits and the rule is issued by Central Bank. The mean value of *Non-Performing Loan (NPL)* is 0.03595 (3,6%) and standard deviation is 0.026706. These show that banks included in this study have met the healthy criteria in average based on the Bank Indonesia Circular Letter No. 6/23/DPNP year 2004 which is should be below 2%.

The Return on Asset is a measurement of how the banks manage their assets and the returns. This ratio is measured by applying the net income to total asset ratio. This means how much the banks provide the return of the asset management. The mean value of *Return on Asset (ROA)* is 0.007621 (0.762%) and the standard deviation is 0.025106. These show that banks included in this study have unhealthy criteria in average based on Bank Indonesia Circular Letter No. 6/23/DPNP year 2004.

As mentioned previously, the efficiency ratio is the ratio between non-interest expense to net interest income and non-interest income. This ratio states how the company does efficiency in the banks. The Efficiency Ratio is the ratio between the mean value of Efficiency Ratio (*EFR*) and it is 0.965513 and the standard deviation is 1.314128. These show that the banks in average on this study are unable to control expenses other than the interest expense, but if we look into the minimum values, there are some banks that are able to control expenses other than the interest expense properly.

The inflation is a measurement to see the fluctuation of commodity prices of a nation. The mean value of Inflation (*IF*) is 0.02602 (2,60%) and the standard deviation is 0.007369. these show that purchasing power in average is fairly stable although there is a small price increase identified.

The interest rate is a measurement for macroeconomic variable. The mean value of *Interest Rate (IR)* is 0.045 (4.5%) and the standard deviation is 0.009117. This result shows that the interest rate is stable with a small deviation occurs.

4.2 Causality Effect

This sub-section will explain the causalities used in the panel data model in this research. Before estimating the panel data, this research got through a multicollinearity test for all independent variables. Multicollinearity can be measured based on the coefficient of correlation among the independent variables. Gozali (2013) stated that testing for multicollinearity can be done by applying Variance Inflation Factor (VIF). According to Gujarati and Porter (2009: 338), the correlation between variables is considered non-existent if the correlation value among variables is not more than 0.5. Based on the test, there found 3 pairs of variables have correlations, i.e., ROA-BBROA, EFR-BBEFR and COVID-BBCOVID. Then, this research also did the elimination for heteroscedasticity using cross-section weights in Eviews Program. In the Panel Data Model, there will be three models, they are; Pooled Model (PM), Random Effect Model (REM) and Fixed Effect Model (FEM). The selection of model must be done to get the best

model used *Chow test*, *Hausman test* and *Breusch-Pagan LM Test*. The Fixed Effect Model will be applied in this paper because the samples in this research were not selected using random method. Judge *et.al* (1982), Wooldridge (2002), Greene (2008), Biorn (2017) and Sul (2019) stated that FEM can be used to estimate the model coefficient, because the sample were selected non-randomly. The estimation result of the panel data model is shown in the Table 2 below.

Table 2: Panel data estimation result with Random Effect Model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.099097	0.021115	4.693210	0.0000 ***
CAR	0.137083	0.042700	3.210375	0.0018 ***
NPL	0.240235	0.109830	2.187336	0.0311 **
ROA	-0.039989	0.029843	-1.339975	0.1834
EFR	0.000351	0.000685	0.512249	0.6097
IF	-1.228318	0.368289	-3.335200	0.0012 ***
IR	-0.411743	0.272965	-1.508408	0.1347
COVID	-0.027642	0.004199	-6.582959	0.0000 ***
BB	0.003730	0.007213	0.517157	0.6062
BBCAR	-0.053117	0.016623	-3.195331	0.0019 ***
BBNPL	-0.108702	0.052077	-2.087348	0.0395 **
BBIF	0.039073	0.103437	0.377749	0.7065
BBIR	0.053402	0.085645	0.623533	0.5344

Effects Specification			
Cross-section fixed (dummy variables)			
Weighted Statistics			
R-squared	0.916137	Mean dependent var	0.064168
Adjusted R-squared	0.882941	S.D. dependent var	0.030684
S.E. of regression	0.008206	Sum squared resid	0.006464
F-statistic	27.59806	Durbin-Watson stat	2.520183
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.844880	Mean dependent var	0.053239
Sum squared resid	0.007036	Durbin-Watson stat	2.672342

Based on the Table 2, using the level of significant of 5% to decide that the independent variables affecting the dependent variable of the level of the Bank Management Confidence. The CAR has significant and positive effect on the IETDR. The smaller the CAR value, the IETDR becomes smaller too. This means that with the smaller CAR value, the bank managements have confidence to reduce the deposit interest rate as one of the management solutions. This result is similar with the research result done by Dewi & Haryanto (2015).

The NPL has significant and positive effect on the IETDR. The smaller the NPL value, the IETDR becomes smaller. This describes that with the smaller NPL value, the bank management has confidence to reduce the deposit interest rate as one of the management solutions for the banks to achieve another goal, i.e., increasing profit.

The IF has significant and negative effect on the IETDR. The bigger the IF value, the IETDR becomes smaller. This denotes that with the bigger IF value, the bank managements have confidence to reduce the deposits interest rate as one of the management solutions.

In this research we used dummy variable to represent the COVID-19 Period. The COVID-19 has significant effect but negative on the IETDR. When the COVID value is 1, then the IETDR becomes smaller. This means that during the time of the Covid-19 pandemics, the bank managements have confidence to reduce the deposit interest rate as one of the management solutions.

This research used Bank Book or Bank Scale as a moderating variable for independent variables' effect on dependent variable. There found that the CAR and NPL (BBCAR and BBNPL) have significant effects but negative on the IETDR. Because the NPL, CAR and BB have positive impacts on the IETDR with the same value of the CAR and NPL, the bank managements with the bigger bank scales have more confidence to reduce the deposits interest rate as one of the management solutions.

This research found that ROA, EFR, IR, BB, BBIF (variable IF moderated by BB) and BBIR (variable IR moderated by BB) also have impact (positive or negative) on the IETDR but not significant.

Based on the estimation result on the table 2, all the variable simultaneously has significant effects on the IETDR. Referring to the R^2 value, the significant level of the estimation was affected by 84,49%, simultaneous variable that used in the estimation, the other of 15.51% was affected by unknown variables in this research.

5. Conclusion

Customer satisfaction has been studied very often but usually using primary data by applying customer interviews or questionnaires. From the results of the customer satisfaction studies, the managements will do a follow up action by launching some programs or policies.

Banking system is a financial service that relays on their customers satisfaction. The customer satisfaction depends on the services offered by the banks and also the internal conditions of the banks. Satisfied customer make the bank management become confidence when they make some programs or policies. One of their policies is determining deposit interest rate.

This research applied a different approach, the secondary data were used to test the bank management confidence level to determine the deposit interest rate as one of management solutions. The confidence level was observed by using aggregate of yearly applied deposit interest rate. There found that Capital Adequacy Ratio and Non-Performing Loan have positive and significant impacts on the bank management confidence level. This implies when the Capital Adequacy Ratio or the Non-Performing Loan decreases, the bank managements have confidence to reduce the deposit interest rate. The inflation and covid-19 pandemic have significant impacts but negative on the management confidence level. This explains when the inflation increased or The Covid-19 pandemic occurred, the bank managements have confidence to reduce the deposit interest rate. The Moderated Capital Adequacy Ratio and Non-Performing Loan by bank scale have significant impacts but negative on the management confidence level. This implies that the banks with similar Capital Adequacy Ratio or Non-Performing Loan with the bigger bank scale are more confidence to reduce deposit interest rate. The Return on Asset Efficiency Ratio, Interest Rate, Bank Scale, Moderated Efficiency Ratio, and Moderated Interest Rate have impacts (positive or negative) on the management confidence level but not significant.

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