The Determinants of Banking Credit Disburshment and its Implications on the Return on Assets (ROA): Empirical Study to the Banks Listed on Indonesian Stock Exchange

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Abstract: This study aims to demonstrate empirically Determinants of Lending Banks and Implications Return On Asset on the bank listed on the Indonesia Stock Exchange in 2010-2014. Factors that influence the amount of Lending and the implications for ROA consists of: ROA ratio, CAR, GWM, LDR, NIM, NPL, and PDN. Methods using panel data (Cross Section and Time Series using a Hausman Test, Chow Test, and Lagrange Multiplier Test. The results showed that the determinant Lending, variables that significantly and the most dominant influence is NIM negative direction. Testing together shows that the variable ROA, CAR, GWM, LDR, NIM, NPL, and PDN affect Lending. Implications for ROA indicates that the variable ratio ROA, CAR, LDR and NPL ROA affect negatively, while variable reserve requirement, NIM, PDN and Lending positively affect ROA. The test is jointly concluded that the variable ROA, CAR, GWM, LDR, NIM, NPL, PDN and Lending jointly affect ROA of banks listed on the Stock Exchange. JPK variable on the dependent variable the first model did not significantly affect the ROA. This means that changes in the amount of bank lending did not contribute to the performance of banking profitability (ROA).

Key Words: Operating Expenses Operating Income (BOPO), Capital Adequacy Ratio (CAR), Statutory Reserve (GWM), Loan to Debt Ratio (LDR), Net Interest Margin (NIM), Non Performing Loan (NPL), Net Open Position (PDN), Credit Disburshment (JPK) and Return On Asset (ROA).

INTRODUCTION

In the midst of a slowdown in domestic economic trends and the weakening of the rupiah, Indonesia's financial sector performance, especially the banking industry remain solid with credit risk, liquidity risk, market risk which is maintained and supported by a strong capital resilience.

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Tablel 1
Banking General Conditions

Main Indicator		2012	TW I 2013	TW II 2013	TW III 2013	TW IV 2013
Total Aset	(TRp)	4,262.6	4,313.8	4,461.8	4.737.3	4,954.5
DPK	(TRp)	3,225.2	3,243.1	3,374.4	3,526.2	3,664.0
Kredit*	(TRp)	2,707.9	2,768.4	2,959.1	3,147.2	3,292.9
LDR*	(%)	84.72	86.11	88.38	89.92	90.55
NPLs Bruto*	(%)	1.87	1.97	1.88	1.89	1.77
CAR	(%)	17.32	18.92	17.98	18.00	18.36
NIM	(%)	5.49	5.41	5.43	5.48	5.40
ROA	(%)	3.08	2.99	2.98	3.01	3.03

* No Channeling

Source: Monetary Policy Report Quarter IV, 2013, Bank Indonesia
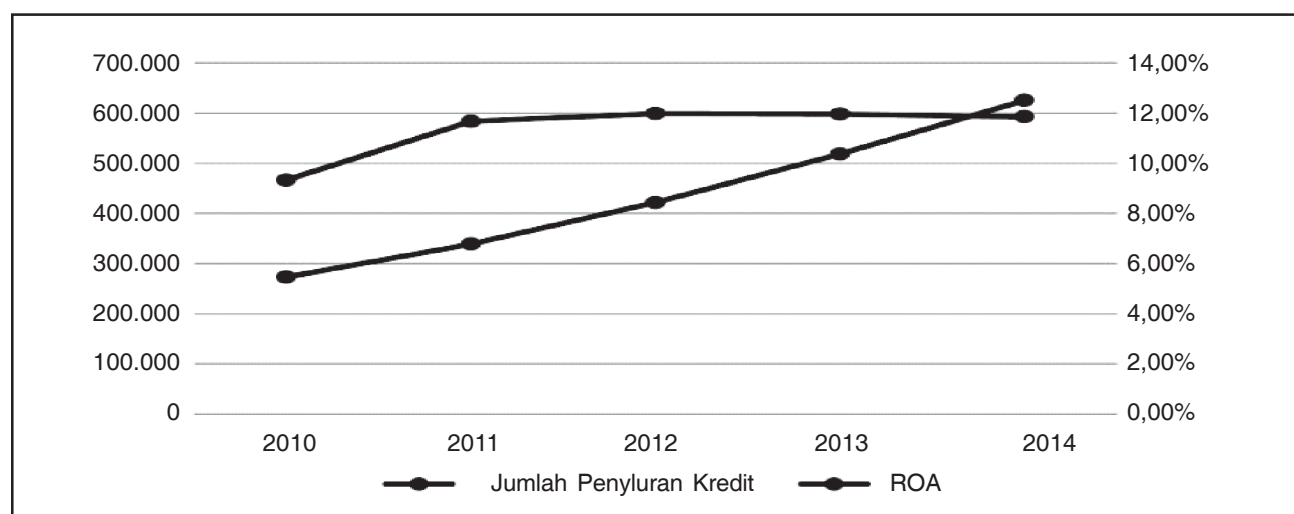
Figure 1: The Progress of Lending and ROA 20 largest banks period 2010-2014

Tahun	Jumlah Penyaluran Kredit	ROA
2010	273.245.000.000	9.33%
2011	339.059.000.000	11.67%
2012	421.628.000.000	11.98%
2013	518,503.000.000	11.96%
2014	625.372.000.000	11.85%

Figure 1. shows the development trend of the average amount of lending and ROA of 20 banks the greatest asset that the research samples. In line with the development trend of the overall banking JPK increased with declining growth, JPK's 20 largest banks are also experiencing similar conditions. Growth in bank lending has declined from 24.09% in 2011 to 20.61% in 2014. The slowdown in credit growth in line

with the adjustment process of the Indonesian economy is slowing, conditions weakening exchange rate and declining optimism on credit growth will come, so impact on bank lending.

In line with the decline in bank lending growth has little impact on profitability. This is evident from the return on assets that are subject to fluctuating growth from 2010 to 2014. This shows an unusual phenomenon, on the one hand the growth of bank lending declined, while growth in ROA fluctuated. It is as if to indicate that the development of bank lending did not affect the bank's profitability.

THEORETICAL REVIEWS

Yulhasnita (2013) argues that if banks in the troubled state bank operations will be disrupted, including the activities of the banking intermediation function. Wijayanto, Andi danSutarno (2010) showed the opposite result CAR positive and significant effect on the amount of lending. Where banks in lending policy refers also to the CAR level achieved the previous year. Setiawati (2012) which states that the effect was not significant posed by GWM towards lending. Tan (2012) which states that the NIM negative effect on lending. This is because in Indonesia NIM is one of the main sources of income so that when the bank high NIM, it can be said credit interest will also be high. This led to high credit interest people will think twice about doing credit. And will cendurung save their money in the bank to get a high interest. The difference with the findings Igan and Tamirisa (2007) and Prayudi (2011) which states NIM has a positive effect on lending. The greater the ratio NIM indicates that bank lending even greater.

Yuda and Revelation (2010), and Mukhlis (2011) who concluded bawha NPL ratio and significant negative effect on bank lending. In line with the results of his research and findings Pratama (2010) and Meydianawathi (2007). Subandi and Ghozali (2013), Hutagalung (2011), Herawati, Vinola (2008), Puspitasari (2009), Yuliani (2007), and Mawardi (2005) which showed that BOPO significant negative effect on ROA. In contrast to the results of Merkusiwati, Ni Ketut Lely Aryani (2007) which shows BOPO positive effect on ROA. Research conducted Eng (2013) showed no effect on ROA ROA. FebryAmithya (2012) and Werdiningtyas (2002) which showed that the CAR significant positive effect on ROA. While studies Hutagalung et al (2011), Eng (2013), Natalina *et al.* (2012), Akhtar and Sadaqat (2011), and Sudiyatno and Fatmawati (2013) showed that the CAR not significant effect on ROA.

The different results are the findings of Sinungan, Muchdarsyah (2000) which showed that GWM negative effect on profitability. In other words, the higher the percentage of GWM more number of idle funds in the form of current accounts with Bank Indonesia and the higher cost of funds of banks because of the amount of idle funds is a component that must be taken into account in determining the bank's cost of funds (Siamat, 2005). So this will have an effect on decreasing the profit earned by the bank, assuming the bank has complied with statutory liquidity (Setyapurnama, YudiSantaradan A.M. VianeyNorpratiwi. 2006). Haryati (2001), Werdaningtyas (2002), Usman (2003), and Merkusiwati (2007) which states that the LDR positive and significant impact on ROA. While Sudiyatno and Suroso (2010), Yuliani (2007), and Werdaningtyas (2002), shows that LDR not significant effect on profitability (ROA).

Hutagalung *et al.* (2011), Subandi and Ghozali (2013), Eng (2013), Ail *et al.* (2012), Joseph *et al.* (2012), Al Haq *et al.* (2012), Nawaz (2012) and Noman, Abu HanifaMd, PerfinSajeda, Chowdhury Mustafa Manir (2015), Elviani (2010), Mawardi (2005), and Usman (2003) found that the negative effect on the NPL ROA. The results of different studies found by Djumhana, Muhammad (2006), found that the positive

effect on the NPL ROA because more amount of revenue derived from modern banking activity compared with revenue contribution of traditional activities in total.

Hendra and Fahmi (2009) proved that a variable lending positive and significant impact on profitability (ROA). Hermawan, Soebagio (2005) stated that basically there is a primary function of bank lending is profitability. Profitability is, in order to obtain the results of the credit of the profits from the interest to be paid customers that will increase profits, so that credit is the most dominant asset amount. However, credit can not necessarily determine the rise / fall of profitability of a company, because the components that make up the profitability of not only the interest income generated only mortgage but there are other components such as management fees.

Many factors affect bank lending and its implications on profitability both from internal factors sourced from the bank or from external factors. Internal factors, especially regarding financial performance has been achieved by the company, and external factors sourced from industry and the environmental factors of the macroeconomic environment.

From the theoretical overview, the results of research and literature review above, can be developed frameworks as follows:
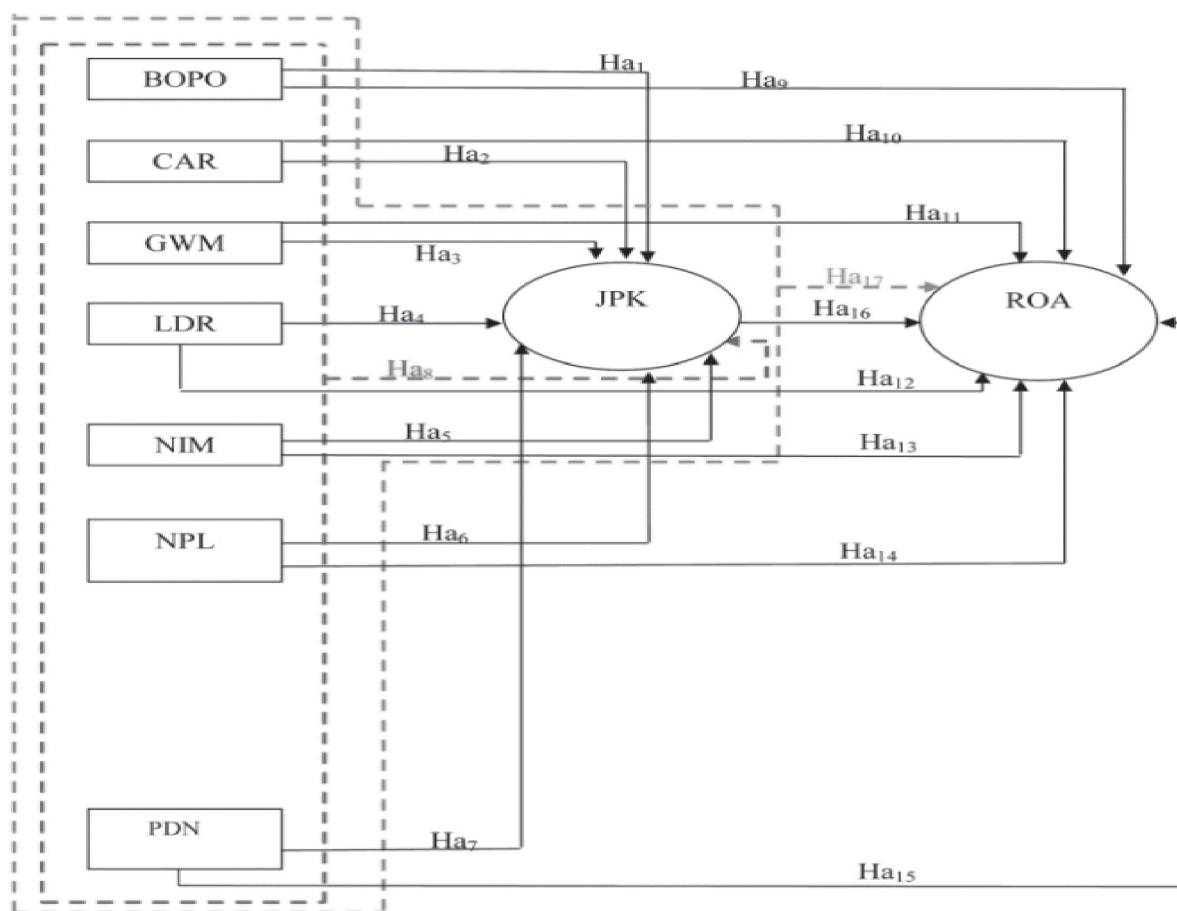
Source: Researchers

Figure 2: Model Proposed

RESEARCH METHODS

The data used in this study are secondary data from the period 2010-2014 sourced from publication of data on BI and BEI ie Balance Sheet and Income Statement. National banks in sampling with purposive sampling criteria are:

1. Commercial banks are listed on the Indonesia Stock Exchange still in operation during the observation period 2010- 2014 year.

2. Commercial banks that publish the complete financial reports for the year 2010-2014 on the Indonesia Stock Exchange website www.idx.go.id.

3. Commercial Bank has total assets of 20 largest for 2014.

Basedontheabovecriteria, thelistof National PrivateBanksthatmeetthecriteriaforpurposive sampling, are:

Table 2
Research samples

No	Bank Code	Bank
1	BMRI	Bank Mandiri (Persero), Tbk
2	BBRI	BankRakyat Indonesia (Persero), Tbk
3	BBCA	Bank Central Asia, Tbk
4	BBNI	BankNegara Indonesia (Persero), Tbk
5	BNGA	Bank CIMB Niaga, Tbk
6	BDNM	Bank Danamon Indonesia, Tbk
7	BNLI	Bank Permata, Tbk
8	PNBN	Pan Indonesia Bank, Tbk
9	BNII	Bank Internasional Indonesia, Tbk
10	BBTN	Bank Tabungan Negara (Persero), Tbk
11	NISP	Bank OCBC NISP, Tbk
12	BJBR	BPD Jawa Barat danBanten
13	BBKP	Bank Bukopin, Tbk
14	MEGA	Bank Mega, Tbk
15	BBMI	Bank Muamalat Indonesia, Tbk
16	BJTM	BPD JawaTimur
17	BAEK	Bank EkonomiRaharha, Tbk
18	MAYA	Bank MayapadaInternasional, Tbk
19	INPC	Bank ArthaGrahaInternasional, Tbk
20	BSIM	Bank Sinarmas, Tbk

Source: Stock Exchange of Indonesia and Bank Indonesia

The data used in this study secondary data are the financial statements of commercial banks the period 2010 - 2014 from the bank's annual report, published reports in the mass media and on the website

of Bank Indonesia (www.bi.go.id), the Indonesia Stock Exchange (www.idx .go.id), and the Central Bureau of Statistics (www.bps.go.id), as well as other data related to the research.Collecting data in this study conductedbythemethodofdocumentation.

Secondary data in this study were processed usings of tware Ms. Excel 2010 includes creating table stocreate a descriptive analysis and Eviews 9, to test the significance of linear regression analysis of panel data.

Analysis model used in this research is regression analysis model panel data which aims to determine the influence of internal factors, namely ROA, CAR, GWM, LDR, NIM, NPL, and PDN (independent variable) with JPK and ROA (the dependent variable).

Selection of Panel Data Estimation Model Engineering

Three test in determining the proper technique in the determination of panel data regression and schematic drawings can be shown as follows:
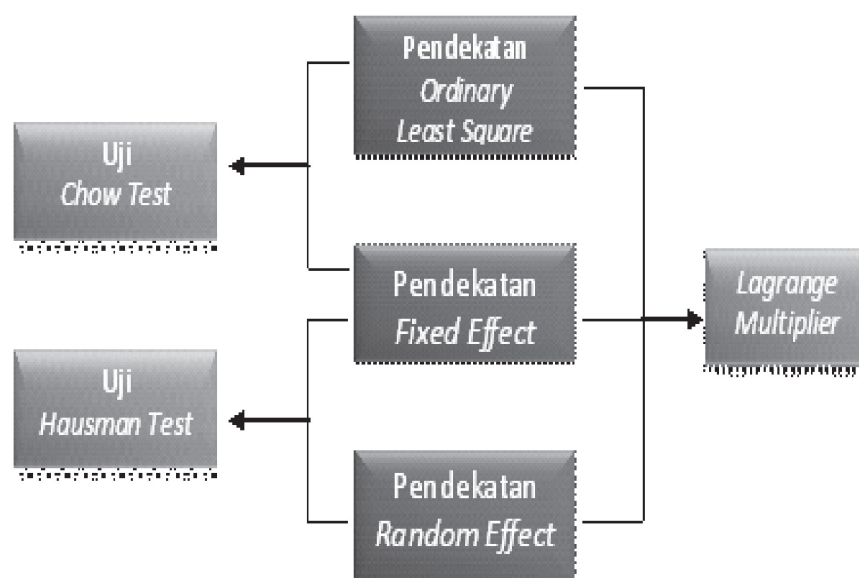

Figure 3: Determination Regression Model

Chow Test

Chow-test was used to select one of the models that will be used between ordinary least squares models or fixed effect models.

Hausman Test

Model selectionisbetterbetweenthefixedeffect model andrandomeffectbyHausman-test.

Lagrange Multiplier Test

Lag range Multiplier-test to findout which model is right be tween ordinary leasts quares models or random effect.

Hypothesis testing

In this study testing the hypothesis is: t test, F test and R^2 (coefficient of determination).

Panel Data Regression Model Estimation

Panel data regression model in this study is formulated as follows:

Model 1

$JPK_{it} = \alpha + \beta_1 BOPO_{it} + \beta_2 CAR_{it} + \beta_3 GWM_{it} + \beta_4 LDR_{it} + \beta_5 NIM_{it} + \beta_6 NPL_{it} + \beta_7 PDN_{it} + \varepsilon_{it}; i = 1,2,\ldots, N ; t = 1,2,\ldots T$

Model 2

$ROA_{it} = \alpha + \beta_1 BOPO_{it} + \beta_2 CAR_{it} + \beta_3 GWM_{it} + \beta_4 LDR_{it} + \beta_5 NIM_{it} + \beta_6 NPL_{it} + \beta_7 PDN_{it} + \beta_8 JPK_{it} + \varepsilon_{it}; i = 1,2,\ldots, N; t = 1, 2,\ldots T$

Keterangan:

JPK	=	Loans disbursed
ROA	=	*Return On Asset*
CAR	=	*Capital Adequacy Ratio*
NPL	=	*Non Performing Loan*
NIM	=	*Net Interest Margin*
BOPO	=	Operating Costs Operating Income
LDR	=	*Loan to Deposit Ratio*
PDN	=	Net Open Position
GWM	=	Statutory
ε	=	component error
β	=	*slope*
α	=	*intercept*
N	=	the number of observations
T	=	the amount of time
N x T	=	the number of data panels

RESULT AND DISSCUSSION

Analysis Results

Estimation and analysis of the factors affecting the banking JPK in Indonesia and the implications for profitability (ROA) of banks listed on the Stock Exchange in 2010-2014. The bank internal factors related to the assessment of the bank, consisting of ROA ratio, CAR, GWM, LDR, NIM, NPL and PDN.

Table 3
Description Statistics

	BOPO	CAR	GWM	LDR	UPK	NIM	NPL	PDN	ROA
Mean	0.798509	0.159261	0.076761	0.809292	10.76709	0.058897	0.011471	0.026231	0.022717
Median	0.812600	0.153500	0.080800	0.823400	10.72369	0.055900	0.008250	0.020250	0.019500
Maximum	1.007700	0.274900	0.109800	1.084200	13.05445	0.113000	0.041000	0.134200	0.055700
Minimum	0.593800	0.109300	0.050000	0.455400	8.529122	0.035500	0.000000	0.000300	0.000700
Std. Dev.	0.094777	0.030808	0.014526	0.123137	1.141338	0.016939	0.008803	0.024243	0.011198
Skewness	–0.401504	0.976049	–0.703123	–0.453824	0.088165	1.400428	0.955868	1.685702	0.796589
Kurtosis	2.589542	4.111424	2.776925	3.203842	2.088378	4.708421	3.397706	6.578936	3.374713
Jarque-Bera	3.388743	21.02478	8.447048	3.605735	3.592281	44.84793	15.88710	100.7298	11.16094
Probability	0.183715	0.000027	0.014647	0.164826	0.165938	0.000000	0.000355	0.000000	0.003771
Sum	79.85090	15.92613	7.676100	80.92920	1076.709	5.889663	1.147100	2.623100	2.271693
Sum Sq. Dev.	0.889284	0.093963	0.020889	1.501098	128.9625	0.028405	0.007673	0.058182	0.012414
Observations	100	100	100	100	100	100	100	100	100

Source: Data processed by eviews 9

Selection of Panel Data Regression Model Determinants of Total Lending Conclusion model

Pairwise testing results can be seen in Table 4, it was concluded that the fixed effect model was further used to estimate and analyze the factors that affect the bank's internal JPK from 20 banks as sample period 2010-2014.

Table 4
Conclusion Testing Regression ModelData Panel

No	Method	Testing	Result
1	Chow-Test	Common Effect vs Fixed Effect	Fixed Effect
2	LagrangeMultiplier-BP	Common Effect vs Random Effect	Random Effect
3	Hausman Test	Fixed Effect vs Random Effect	Fixed Effect

Source: Data processed by eviews 9

Analysis of Panel Data Regression Model Estimation

Fixed effect model white-heteroskedasticity which is applied to panel data regression model which eliminates problems with mengkonstankan residual heteroskedasticity, while problems autocorrelation is not required in the fixed effect model that can be ignored autocorrelation test (Nachrowi, 2006).

Estimation of Panel Data Regression Models Together

Conclusion t-test (Table 5), six of the seven independent variables used in this study significantly affect JPK. The Test-F, F-Stat shows the value of 120.8402 with a value prob. sig at 0.0000 is smaller than $\alpha = 0.05$, which means that H0 is rejected. This shows that all independent variables (ROA ratio, CAR, GWM, LDR, NIM, NPL and PDN) jointly affect JPK significantly with a 95 percent confidence level.

Table 5
Estimation of Factors Affecting Total Lending Fixed Effect Method White Cross-Sections
(No-Heteroscedasticity)

Dependent Variable: LJPK

Method: Panel Least Squares

Date: 09/07/16 Time: 12:44

Sample: 2010 2014

Periods included: 5

Cross-sections included: 20

Total panel (balanced) observations: 100

White cross-section standard errors & covariance (d.f. corrected)

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.38305	0.608749	17.05638	0.0000
BOPO	-1.314161	0.441397	-2.977276	0.0039
CAR	0.109944	0.694392	0.158331	0.8746
GWM	8.478470	2.013819	4.210144	0.0001
LDR	2.078128	0.566139	3.670705	0.0005
NIM	-14.92805	4.164754	-3.584378	0.0006
NPL	-7.588365	3.213723	-2.361238	0.0209
PDN	1.888064	0.891901	2.116899	0.0377
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.977293	Mean dependent var		10.76709
Adjusted R-squared	0.969205	S.D. dependent var		1.141338
S.E. of regression	0.200286	Akaike info criterion		-0.152847
Sum squared resid	2.928371	Schwarz criterion		0.550549
Log likelihood	34.64233	Hannan-Quinn criter.		0.131830
F-statistic	120.8402	Durbin-Watson stat		1.313580
Prob (F-statistic)	0.000000			

Testing goodness-of-fit measured by the coefficient of determination adjusted (R2 adjusted) yields a figure of 0.9692, which means that after considering the degree of freedom fixed effect model is used, then all independent variables used in this study may explain the changes that occur in the disbursement credit of 96.92 percent.

The model of multiple regression equation:

LJPK = 10.3831 - 1.3142*BOPO + 0.1099*CAR + 8.4785*GWM + 2.0781*LDR - 14.928*NIM - 7.5884*NPL + 1.888!*PDN + [CX=F]

Implications Return on Assets

Tabel 6
Conclusion Model

No	Method	Testing	Result
1	Chow-Test	Common Effect vs Fixed Effect	Fixed Effect
2	LagrangeMultiplier-BP	Common Effect vs Random Effect	Random Effect
3	Hausman Test	Fixed Effect vs Random Effect	Random Effect

Analysis of Panel Data Regression Model Estimation

Table 7
EstimationofFactorsAffecting ROA,

Methods Random Effect

Dependent Variable: ROA

Method: Panel EGLS (Cross-section random effects)

Date: 10/04/16 Time: 10:46

Sample: 2010 2014

Periods included: 5

Cross-sections included: 20

Total panel (balanced) observations: 100

Swamy and Arora estimator of component variances

White cross-section standard errors & covariance (d.f. corrected)

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.084183	0.008924	9.433739	0.0000
LJPK	0.000169	0.000333	0.508394	0.6124
BOPO	-0.084962	0.005762	-14.74440	0.0000
CAR	-0.027855	0.006365	-4.376133	0.0000
GWM	0.029595	0.016847	1.756727	0.0823
LDR	-0.005237	0.002071	-2.528689	0.0132
NIM	0.193744	0.041858	4.628646	0.0000
NPL	-0.073569	0.038580	-1.906939	0.0597
PDN	0.014795	0.010308	1.435401	0.1546

Effects Specification			
	S.D.		Rho
Cross-section random	0.002217		0.4676
Idiosyncratic random	0.002366		0.5324

Weighted Statistics			
R-squared	0.856403	Mean dependent var	0.009784
Adjusted R-squared	0.843779	S.D. dependent var	0.006175
S.E. of regression	0.002441	Sum squared resid	0.000542
F-statistic	67.83956	Durbin-Watson stat	1.362457
Prob (F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.914650	Mean dependent var	0.022717
Sum squared resid	0.001059	Durbin-Watson stat	0.697155

Source: Data processed by eviews 9

Estimation of Panel Data Regression Models Multiplier

Conclusion Table 5.12, t-test was that six of the eight independent variables used in this study affect the banking ROA significantly at $\alpha = 0.10$. While the F test such as, demonstrating the value of the F-Stat at 67.84 with a value prob. amounted to 0.0000 is smaller than $\alpha = 0.05$, which means that H0 is rejected, shows that all independent variables (JPK, ROA, CAR, GWM, LDR, NIM, NPL and PDN) jointly ROA significantly affect the level of confidence by 95 percent.

Test goodness-of-fit with R2 adjusted to produce a figure of 0.8438, which means that after considering the degrees of freedom random effects models were used, all independent variables used in this study may explain the change in ROA of 84.38 percent.

DISCUSSION

Determinants JPK

Influenceof BOPO Against JPK

The empirical evidence shows that the variable BOPO adversely affect the amount of bank lending and significant. These results indicate that the ratio of BOPO increasing the lead to banking JPK wane. ROA is calculated using the ratio between Operating Expenses to Operating Income or commonly abbreviated with BOPO in Indonesia (Siamat, 2005). ROA shows the degree of efficiency of a bank, so that the smaller the ratio is, the more efficiency. With the efficiency of the bank can maximize profit, which would certainly have an impact on the distribution of banking kreedit increasing.This study is consistent with results Yulhasnita (2013) argues that if banks in the troubled state bank operations will be disrupted, including the activities of the banking intermediation function.

Influence of CAR Against JPK

The empirical findings showed that the CAR variables affecting the banking JPK positive but not significant. This indicates that an increase or decrease in CAR during the study period will not affect lending. The greater the level of CAR, the higher the ability of bank capital to maintain the possibility of a risk of loss of their business, but in this case not necessarily can significantly affect the increase JPK on state banks.

The results are consistent with the findings of Yuliani (2007) also concluded rastio capital adequacy ratio (CAR) did not significantly influence the amount of lending to the banks.

In contrast to the findings Werdaningty as, Hesti (2002) who found that there is a negative and significant impact on lending CAR. Thus, the General Bank lending increased in line with the decrease in CAR. The results are consistent with the results of Tan Tatum Blaise Pua(2012) and Warjiyo (2006).

Results Wijayanto, Andi danSutarno(2010) showed the opposite result CAR positive and significant effect on the amount of lending. Where banks in lending policy refers also to the CAR level achieved the previous year.

Influence of GWM Against JPK

The empirical evidence shows that the variable GWM JPK affect positively and significantly. These results indicate that the policy of Bank Indonesia raised the reserve requirement can increase the capacity of banks to extend credit to refinance the loan recipients. In contrast to the findings Setiawati (2012) which states that the effect was not significant posed by GWM towards lending.

Influence of LDR Against JPK

The results of empirical research shows that LDR positive effect on the amount of bank lending significantly. The results of this study showed that the higher the LDR which indicates that the volume of bank lending increased. In line with the findings of Misra and Dahl (2010), which indicates that LDR positive effect on bank lending.

LDR is the ratio of the amount of credit funds is channeled to third party funds and bank capital. If banks are not distributing the funds the bank will lose the opportunity to make a profit. LDR value as an ideal indicator of bank efficiency is 85-110%. The results are consistent with results of previous studies conducted by Hasan (2006) and Roring (2013).

Influence of NIM Against JPK

The results showed that the variables affecting NIM JPK is negative and significant. The results of this study showed that the greater the NIM of a bank, then the bank's ability to extend credit will be less and less. NIM is a ratio that shows the net interest income on average earning assets owned by banks. Banking activities which contribute significantly to the income of the bank is lending. So that the ratio of Net Interest Margin (NIM) can also be used to look at the ability of banks to manage their productive assets in the form of loans to earn interest or profit. The higher NIM, higher loan interest set and cause its total outstanding loans will decrease.

This study is consistent with research Tan (2012) which states that the NIM negative effect on lending. This is because in Indonesia NIM is one of the main sources of income so that when the bank high NIM, it can be said credit interest will also be high. This led to high credit interest people will think twice about doing credit. And will cendurung save their money in the bank to get a high interest.

The difference with the findings Igan and Tamirisa (2007) and Prayudi (2011) which states NIM has a positive effect on lending. The greater the ratio NIM indicates that bank lending even greater.

Influence of NPL Against JPK

The empirical evidence shows that the NPL variables affecting the banking JPK is negative and significant. These results prove that the higher the ratio of NPLs memyebabkan amount of bank lending will decline. NPL is the ratio used to measure the number of troubled loans, including substandard loans, doubtful loans, or bad loans to total loans extended by the bank. The smaller the NPL the less the credit risk borne by the bank.

The results are consistent with research Yuda and Revelation (2010), and Mukhlis (2011) who concluded bawha NPL ratio and significant negative effect on bank lending. In line with the results of his research and findings Pratama (2010) and Meydianawathi (2007).

Differences with some of the findings of previous studies that Mahardian(2008), which proves that the NPL variables did not significantly affect the number of lending banks. While research Mintarti, Sri(2008) also proves that the NPL negative but insignificant effect on lending. NPL reflects the level of credit risk assumed by the bank. Due to the high NPLs will be more careful and selective in lending. The high NPL also force banks to provide greater reserve fund so that eventually eroded the bank's capital participated. Though the amount of capital greatly affects the amount of credit expansion. Therefore, the amount of NPL be one cause of the difficulty of banks to extend credit.

Influence of PDN Against JPK

Based on the empirical results showed that the variables Net Open Position JPK affect positively and significantly. These results indicate that the higher the PDN a bank, it will increase the bank's ability to increase JPK. One of the activities of banks in the operations is to conduct foreign exchange activities with the conditions set by Bank Indonesia. Foreign exchange activities involve risks that BI issued a policy related to the activities of foreign exchange transactions of banks, called net open position. PDN limit bank risk in foreign exchange transactions as a result of changes in exchange rates fluctuate. PDN bank is also used to limit speculative transactions and maintain resources and the use of foreign exchange funds in the bank.

Implications Return on Assets

Influence of BOPO Againts ROA

The results showed that the variables BOPO adversely affect the banking ROA and significant. This shows that with the decline BOPO the banking company indicates fewer companies issuing operating costs in generating profits. This condition also indicates that companies that generate big profits efficient (low ROA ratio) in conducting its operations, so that the revenue generated by these banks also rose. In addition the ratio BOPO also due to the high cost of funds raised and lower interest income from the investment of funds. So when BOPO the less it can be concluded that the financial performance of a company (banking) increased or improved.

In addition, if BOPO significant increase efficiency declines, the bank's ROA obtained will decrease. This is because the level of bank efficiency in running its operations affect the revenue or earnings generated by the bank. If the operations are conducted efficiently (in this case the value of ROA ratio is low), the

revenue generated by the bank will go up. In addition, the ratio BOPO also due to the high cost of funds raised and lower interest income from the investment of funds. So the greater the less ROA ROA. These findings are in line with Subandi and Ghozali (2013), Hutagalung (2011), Herawati, Vinola (2008),Puspitasari (2009), Yuliani (2007), and Mawardi (2005) which showed that BOPO significant negative effect on ROA. In contrast to the results of Merkusiwati, Ni Ketut Lely Aryani (2007) which shows BOPO positive effect on ROA. Research conducted Eng (2013) showed no effect on ROA ROA.

Influence of CAR Against ROA

Based on the empirical results showed that the CAR variable affecting the banking ROA is negative and significant. The results of this study showed that the greater the CAR of the bank ROA obtained will be smaller, because the greater the CAR, the higher the ability of bank capital to maintain the possibility of increasing the risk of loss in their business activities, so that the performance of the bank will also have a negative impact. In addition, the higher bank capital, banks can expand their business more safely. Their business expansion will ultimately affect the financial performance of the bank concerned.

The previous study were not consistent are the findings of Yuwono, Febry Amithya (2012) and Werdiningtyas (2002) which showed that the CAR significant positive effect on ROA. While studies Hutagalung *et al.* (2011), Eng (2013), Natalina *et al.* (2012), Akhtar and Sadaqat (2011), and Sudiyatno and Fatmawati (2013) showed that the CAR not significant effect on ROA.

Influence of GWM ratio Against ROA

Based on the empirical results showed that the variables Statutory influence the amount of bank lending positively and become significantat the 90 percent confidence level ($\alpha = 0.10$).

The different results are the findings of Sinungan, Muchdarsyah (2000) which showed that GWM negative effect on profitability. In other words, the higher the percentage of GWM more number of idle funds in the form of current accounts with Bank Indonesia and the higher cost of funds of banks because of the amount of idle funds is a component that must be taken into account in determining the bank's cost of funds (Siamat, 2005). So this will have an effect on decreasing the profit earned by the bank, assuming the bank has complied with statutory liquidity (Setyapurnama, YudiSantaradan A.M. VianeyNorpratiwi. 2006).

Influenceof LDR Againts ROA

Based on empirical findings show that the variable Loan to Deposit Ratio negatively affect the banking ROA significantly. The results of this study indicate that if the ability of banks to extend credit to deposit collected is high, the higher the credit provided by the bank and the possibility of bad loans also increased. The increase in bad loans is expected to lead to the bank's profit would decline. In other words, the increase in LDR will lower ROA, so the bank's financial performance will be worse (assuming the bank is not able to disburse loans effectively so that the amount of the loan will be even greater).

The results of this study differ from Haryati (2001), Werdaningtyas (2002), Usman (2003), and Merkusiwati (2007) which states that the LDR positive and significant impact on ROA. While Sudiyatno and Suroso (2010), Yuliani (2007), and Werdaningtyas (2002), shows that LDR not significant effect on profitability (ROA).

While the regulator (Bank Indonesia), is expected to always monitor the level of capital adequacy of banks (particularly banks listed on the Stock Exchange). With the high level of capital adequacy, the bank's losses in operation will be smaller, so that with a small loss, the profits will be higher. With higher profits, the financial performance of banks is increasing.

Influence of NIM ratio against ROA

Based on empirical evidence indicates that the NIM variables affecting the banking ROA positively and significantly. It shows the changes in interest rates and asset quality in the banking company can increase profits for the company. Bank has undertaken actions that cautious in giving credit to productive assets quality is maintained. With excellent credit quality may increase in net interest income which in turn affect the earnings of banks. Higher net interest income which will result in increased earnings before taxes so that ROA is greatly increased.

The results of this study also showed that the NIM which demonstrates the ability of bank management to manage productive assets to generate net interest income the greater it will increase interest income on earning assets managed by the bank, so the greater the NIM indicates more effective banks in the placement of the company's assets in the form of credit , so ROA of banks will be increased. Or in other words, which means the bank's financial performance improved and increased. The results are consistent with the results of research Usman (2003) and Mawardi (2005).

Influence of NPL ratio againts ROA

Based on empirical findings indicate that the NPL variables negatively affect banking ROA and significant at the 90 percent confidence level ($\alpha = 0.10$). NPL significant negative influence on ROA shows that despite the high NPL but did not have a serious impact on the decline in ROA. This means that during the study period, the bank intermediation function does not run properly because if the economic situation in normal conditions, then any increase in the NPL ratio will definitely be accompanied by a decline in ROA.

The increase in NPLs will affect the profitability of banks, because the higher NPL it will get worse credit quality banks that caused the greater the number of problem loans, and therefore the bank should bear the losses in its operations that affect the decline in earnings (ROA) obtained bank. NPLs were low indicating the bank's financial performance is getting better.

These findings are in contrast to the results of research Hutagalung et al (2011), Subandi and Ghozali (2013), Eng (2013), Ail *et al.* (2012), Joseph *et al.* (2012), Al Haq *et al.* (2012), Nawaz (2012) and Noman, Abu HanifaMd, PerfinSajeda, Chowdhury Mustafa Manir (2015), Elviani (2010), Mawardi (2005), and Usman (2003) found that the negative effect on the NPL ROA. The results of different studies found by Djumhana, Muhammad (2006), found that the positive effect on the NPL ROA because more amount of revenue derived from modern banking activity compared with revenue contribution of traditional activities in total.

Influenceof PDN ratio againts ROA

Based on the results showed that the variables affecting PDN ROA is positive but not significant. The results showed that no significant PDN balance due to foreign currency position exceeded the owned

capital and at the same time the movement of the exchange rate as opposed to the expected bank. Exchange rate movements that are difficult to predict (unpredictable) and the many factors that affect the movement of the exchange rate, both derived from the fundamental (eg interest rates, inflation, supply and demand of foreign currency loans), market sentiment (eg psychological condition of the foreign exchange market or the rumors) , and technical, and the source can be from within the country and abroad, making it difficult to predict exactly. The emergence obligations Net Open Position for the bank is very risky. This is not only due to conduct foreign exchange transactions without limit in time rate movements up and down sharply will result in the bank suffered huge losses, as well as the level of exchange rate fluctuations are difficult to predict, and also because there is uncertainty about the period of the source of income received due fluctuations in exchange rates are different every day.

Influence of Total disbursement Against ROA

Based on empirical findings show that the variable lending ROA affect positively but not significantly. The results of this study indicate that lending conducted by the bank had no impact on ROA, although there may be an increase in bank profits.

Hendra and Fahmi (2009) proved that a variable lending positive and significant impact on profitability (ROA). Hermawan, Soebagio(2005)stated that basically there is a primary function of bank lending is profitability. Profitability is, in order to obtain the results of the credit of the profits from the interest to be paid customers that will increase profits, so that credit is the most dominant asset amount. However, credit can not necessarily determine the rise / fall of profitability of a company, because the components that make up the profitability of not only the interest income generated only mortgage but there are other components such as management fees.

SUMMARY OF RESULTS

Table 8
Determinants of Credit Disburshment and Implications to the ROA

Variable Independent	*Model 1 (JPK)*			*Model 2 (ROA)*		
	Koefisien Regresi	*Prob*	*Sig/ Non Sig*	*Koefisien Regresi*	*Prob*	*Sig/ Non Sig*
BOPO	–1.314161	0.0039***	Sig	–0.084962	0.0000***	Sig
CAR	0.109944	0.8746	NS	–0.027855	0.0000***	Sig
GWM	8.478470	0.0001***	Sig	0.029595	0.0823*	Sig
LDR	2.078128	0.0005***	Sig	–0.005237	0.0132**	Sig
NIM	–14.92805	0.0006***	Sig	0.193744	0.0000***	Sig
NPL	–7.588365	0.0209**	Sig	–0.073569	0.0597*	Sig
PDN	1.888064	0.0377**	Sig	0.014795	0.1546	NS
JPK	–	–	–	0.000169	0.6124	NS

Catatan: *   Signifikan $\alpha = 10\%$
     **   Signifikan $\alpha = 5\%$
     ***   Signifikan $\alpha = 1\%$
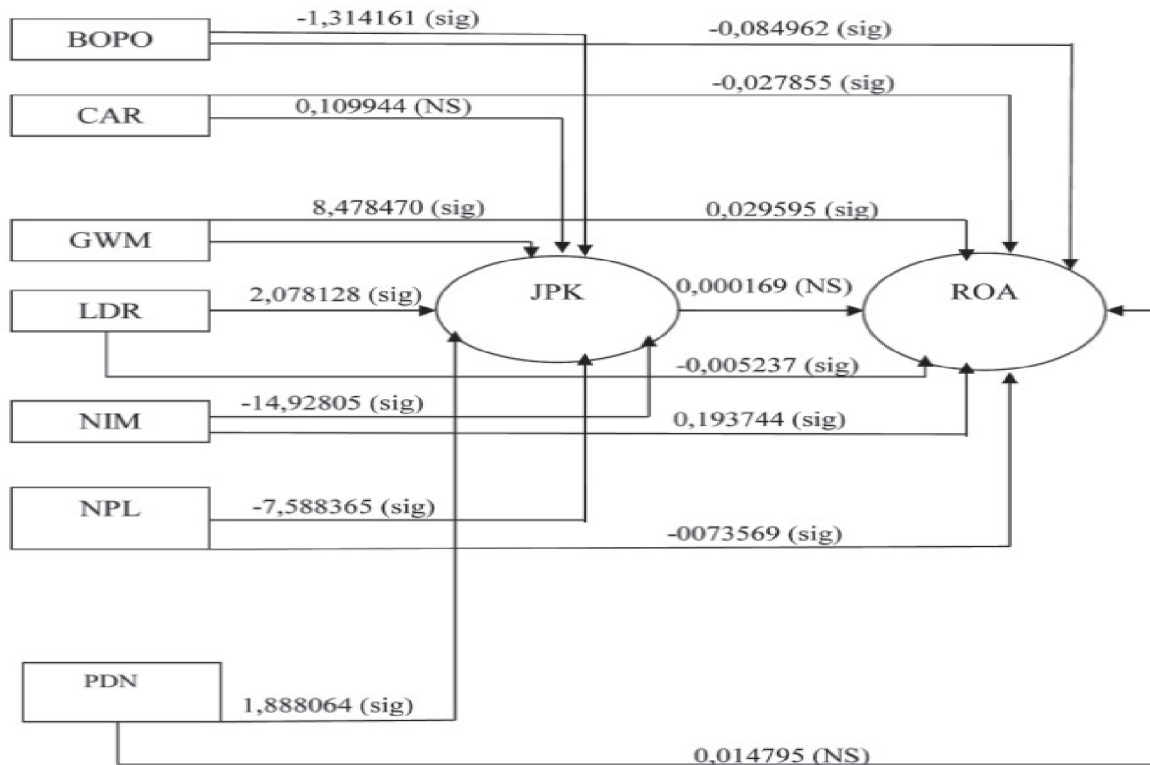
Source: Researchers

Figure 4: Summary of Results

From the table and the picture above, JPK variables on the dependent variable the first model did not significantly affect the ROA. This means that changes in the JPK does not affect the performance of bank profitability. Empirical findings that are inconsistent with the hypothesis of the study, explained with some facts and empirical evidence, among others:

(a) While profitability during that period, the tendency to fluctuate, which in 2010 amounted to 9.33% ROA banks rise became 11.98% in 2012, and then fell again to 11.85% in 2014.

(b) The quality of credit extended by the banking dominated consumer credit short-term nature. As for the growth of credit to productive activities, namely working capital and long-term nature of investment growth is lower than consumer credit. The difference between the pattern of bank lending consumer loans (short term) and the non-consumer credit (long-term) had little impact on the performance of the bank's profitability.

(c) The pattern of the spread between bank lending uneven, more than 50 percent controlled by the bank lending group BOOK 4 or banks have capital above Rp. 30 trillion. Sample bank that becomes the object of research is spread on three groups of banks, namely banks BUKU 2, 3, and 4.

(d) While profitability (ROA) among groups BUKU banks are not too much different. So the pattern of inter-bank lending unequal no impact on the banking ROA.

CONCLUSIONS

Internal variables bank used in this study related to the rating of the bank, which consists of ratios: Operating Expenses on Operating Income (ROA), Capital Adequacy Ratio (CAR), Statutory Reserves (GWM), Loan to Deposit Ratio (LDR), Net Interest Margin (NIM), Non Performing Loan (NPL), and the net open position (NOP). The sample used in this study is 20 banking industry listed in Indonesia Stock Exchange during the period 2010 to 2014.

1) Internal factors BOPO a significant negative effect on the JPK. The results are consistent with the hypothesis of the study.

2) Internal factors affecting the banking deposits CAR positive but not significant. The empirical findings of this study are not consistent with the hypothesis of the study.

3) GWM internal factors affecting the banking JPK positive and significant. The results are consistent with the hypothesis of the study.

4) Internal factors LDR positive effect on the banking JPK significantly. The results of this study are consistent with the hypothesis of the study.

5) NIM internal factors affecting the banking JPK negative and significant. The empirical evidence of this study are not consistent with the hypothesis of the study.

6) NPL internal factors affecting the banking JPK negative and significant. The empirical findings of this study are consistent with the hypothesis of the study.

7) Internal factors affecting the banking deposits AND positive and significant. The results are consistent with the hypothesis of the study.

8) The entire internal factors banks consisting of; ROA ratio, CAR, GWM, LDR, NIM, NPL and PDN jointly affect banking JPK significantly. The results of this study are consistent with the hypothesis of the study.

9) Based on testing goodness-of-fit is shown by the adjusted R2 of 0.9692 which means the variation change of rise and fall of the banking JPK can be explained by the variable ratio ROA, CAR, GWM, LDR, NIM, NPL and PDN after considering the degree of freedom of 96.92 percent. For the bank's internal factor or variable most dominant influence on the banking JPK NIM is variable, while the smallest effect is variable CAR.

10) BOPO internal factors negatively affect the banking ROA and significant. The results of this study are consistent with the hypothesis of the study.

11) Internal factors affecting JPK GWM positively and significantly on sig.level 10%. The results are consistent with the hypothesis of the study.

12) LDR internal factors negatively affect the banking ROA significantly. The results of this study are consistent with the hypothesis of the study.

13) NIM internal factors affecting the banking ROA positive and significant. Empirical evidence of this study are consistent with the hypothesis of the study.

14) NPL internal factors affecting the banking ROA is negative and significant at 10% sig.level. The empirical findings of this study are consistent with the hypothesis of the study.

15) Internal factors affecting ROA PDN positive but not significant. The results of this study are not in line with the research hypothesis which states that the variable PDN positive influence on ROA of banks listed on the Stock Exchange during the period 2010-2014.

16) Internal factors affecting ROA JPK positive but not significant. The results of this study do not correspond with the research hypothesis which states that the variable GWM positive effect on JPK bank listed on the Stock Exchange in 2010-2014.

17) All independent variables comprising; JPK, ROA, CAR, GWM, LDR, NIM, NPL and PDN jointly affect ROA significantly. For goodness-of-fit testing as measured by the coefficient terminated (R2 adjusted) yields a figure of 0.8438, which means that after considering the degrees of freedom random effects models were used, all the independent variables used in this study may explain the change in ROA amounted 84.38 per cent for bank internal factors of the most dominant influence on ROA NIM is variable, while the smallest effect is variable JPK.

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