Impact Foreign Ownership on Efficiency of Private Bank in Indonesia

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ABSTRACT

This study aims to (1) Know the description of foreign ownership in private national bank and non-foreign exchange, (2) Determine the impact of foreign ownership on the efficiency of the national private banking and non-foreign exchange and (3) Find out if there are differences in the impact of the percentage of foreign ownership of bank on the efficiency of the national private groups and non-foreign exchange.

Samples are bank in the group of Foreign Exchange National Private Bank (BUSND) and the National Private Bank Non-Foreign Exchange (BUSNND). The number of bank which became the object of research are as many as 54 bank from the year 2001-2013, with a total observation is 702. The number of observations included in the data processing is 648. This is due to the use of variable BOPO the previous year, so the data BOPO one year before starting 2002. Research variables used are BOPO, the share of foreign ownership, the size of the bank, and the group dummy variables. The equation used is OLS research using panel data.

The results of this study prove (1) Foreign ownership has a positive influence on inefficiencies for particular group of BUSND and BUSNND. (2) The bigger the bank's assets, the bank tends to be more efficient than ever before. (3) There is no difference in the impact of foreign ownership on bank efficiency levels among the BUSND and BUSNN group..

The results of this study have implications for the policy to restrict foreign ownership in national bank. Revision of the Banking Act are being processed in the Commission XI, one of which is to limit foreign ownership in national bank. The results of this study can be considered in the revision of the Banking Law, foreign ownership in particular point because of increased foreign ownership tends to decrease the efficiency of the banking system.

Keywords: Foreign ownership, the bank's assets, BUSND, BUSNND and the Banking Law.

1. INTRODUCTION

Since banking regulations on foreign ownership issued by Bank Indonesia through Act 29 of 1999, foreign investors have been allowed to own national banks up to 99% of ownership, has become a trigger mastered by foreign banking industry. This condition would not be healthy and have an impact on the development of the national banking system.

The regulation of foreign ownership in Indonesian banksis considered less strict compared to other countries. China have 30% foreign ownership in their banking sector (ttp://www.ibpa.co.id/News/). According to the research Hawes and Chiu (2007, in Rusdi, November 2014 (http://kinerjabank.com/kepemilikan-asing-di-perbankan-indonesia/).Foreign ownership in Chinese bank from 2005 untill 2006 has reached 19.9%. Foreign ownership with a portion of this is the ownership of HSBC Bank of Communication. Likewise, Saudi Arabia have 40% maximum limit for foreign ownership in their banking sector. In Malaysia, for example, Bank Negara Malaysia (BNM) limits collective ownership up to 30%. Compositions: a single foreign company a maximum of 20%, while foreign individuals up to 10%. Thailand and the Philippines also implemented similar policies. In Thailand, foreigners can own shares of the bank up to 100%. But, in 10 years the investor must divest its stake to the remaining 49%. In the Philippines, foreigners are also allowed to hold shares up to 100%, but after seven years of age should be lowered to 40% (http://fokus. kontan.co.id/news/menanti-pagar-pembatas-asing-di-industri-perbankan).

How foreign ownership in national bank in Indonesia since the crisis up to now? Data on foreign ownership is currently at the bank: (a) Bank CIMB Niaga, 97% owned by CIMB Malaysia, (b) the Bank, 67% owned by Temasek of Singapore, (c) Bank BII, 80% owned by Malaysia's Maybank, (d) Bank OCBC NISP, 81.1% owned by OCBC Singapore and (e) Bank UOB Buana, 98.9% owned by UOB Singapore (DER 2014).

The entry of foreign investors into the Indonesia banking Industry can not be separated from the impact of the global crisis 1997-1998. During crisis, majority of capital injection to banking sector were from foreign investors, while local investors were afraid to invest their capital neglecting the fact that Bank Indonesia has offered them to be shareholder.

Does the increase in the percentage of foreign ownership actually contribute to the national banking system, especially in improving the efficiency and financial performance of bank and vice versa?

The results of previous research linking the portion of foreign ownership of financial performance of bank has been carried out by Bonin, Hasan, and Watchel (2003) found evidence of a significant relationship exists foreign ownership of bank performance in the transition countries of the Soviet Union. Research addressing foreign ownership no effect on bank performance is done by Rahman and Reza (2015) in Malaysia during 2000-2011. Another study conducted by the wider Swai and Mbogela (2014) in Tanzania during 2000-2009 period results have not significantly influenced the ownership structure of the bank' performance.

Foreign ownership in national bank have an influence on the efficiency of the national banking system. Research conducted by Berger, Hasan, and Zhou (2008), shows that the Big Four bank in China showed lower levels of efficiency compared with the foreign bank. Low level of Foreign ownership in China major bank can improve the efficiency of bankas well as their financial performance.. These results is similar to study conducted by Laurenceson and Qin (2008) which prove that foreign ownership of bank in China

have an influence on the efficiency, significantly to the cost. Mardanugraha (2005) concluded that in during 1993-2003, the joint venture bank (foreign and national ownership) are more efficient than localowned bank in Indonesia. The different results on Beck's research and Hesse (2006) on banking in Uganda-year period from 1999 to 2005 show that the increase in foreign ownership of bank do not raise everal efficiency in the country. DeYoung and Nolle (1996) showed that foreign bank branches in the USA period 1985-1990 have less-efficient profit compared a local bank owned by a citizen of USA. This is because foreign owned bank use more expensive input than the local owned bank. This evidence suggests that foreign-owned bank are less likely to improve and maintain local customer than local owned bank due to expensive cost of funds. Results of research DeYoung and Nolle (1996) together with the results of research conducted by Sans, Theng and Boon (2011) in Malaysia, which shows foreign bank are less efficient than local bank.

Based on the above, it is necessary to do research to prove the impact of the percentage of foreign ownership on the efficiency of national private bank of the foreign exchange and no foreign exchange. The study was conducted in this group because of foreign ownership of its greatest variation in this bank group. For state-owned bank, joint venture bank, foreign bank and regional development bank lacked variation high share of foreign ownership. For example, regional development bank majorly owned by local government, while foreign ownership in the bank "*persero*" are relatively nothing.

This study looks only at the annual data period from 2001-2013. This is due to the availability of existing data and the time constraint.

Based on the above, the problems of this research are: (1) What is the image of foreign ownership in the national private bank of the foreign exchange and no foreign exchange? (2) Wahts is the impact of foreign ownership percentage change on the efficiency of the national private bank of the foreign exchange and no foreign exchange with the control variable size of the bank? (3) Is there any differences in the percentage of foreign influence on the national private bank of the foreign exchange and no foreign exchange to the efficiency of the bank?

2. LITERATURE REVIEW

2.1. Efficiency Bank

Banking efficiency is measured by calculating the difference between the cost of banking with minimum cost that should be issued by the bank to produce the same output (Mardanugraha, 2005). The minimum fee is obtained from the estimated minimum cost of banking functions. Bank efficiency can be divided into two: technical efficiency and allocative efficiency (Farel, 1957). Pindyck (1995) divides the efficiency in terms of economic efficiency into two technical efficiency and price efficiency. Allocative efficiency is the efficiency of the economy related to the efficiency of the price-related cost function. Economic efficiency is achieved in the event of technical efficiency and the efficiency of the price (or allocative efficiency).

There are several methods of measuring the efficiency of banking, namely; (1). Traditional Approach, which uses Index Number or ratios, such as return on assets/ROA, Capital Adequacy Ratio/CAR, Profitability Ratio, and the ratio of operating expenses to operating income (BOPO). (2) Frontier Approach: based on the optimal behavior of the company in order to maximize output or minimize costs, as a way to achieve the goal of economic unit (Hartono, 2009). Frontier Approach consists of: (a) Deterministic Approach (Non-Parametric Approach), this approach uses TEKHNICAL Mathematic Programming, or

popular with Data Envelopment Analysis/DEA. (b) Stochastic Approach: This approach is classified as a parametric approach using econometric frontier.

In this study, the ratio used for bank efficiency measurement is BOPO ratio. There are several reasons why BOPO ratio is used: first, the ratio is widely used by the banking industry and institutions banking authority (FSA) in assessing the efficiency of the bank. Second, the ratio is provided in the annual financial statements of the Bank. Third, determination of the ratio is much simpler. Weaknesses in using BOPO ratio is this ratio illustrates the level of efficiency of bank individually, without considering the average costs and revenues of the other bank.

2.2. Foreign Ownership Structure Influence on Bank Efficiency

In recent years, the relationship between ownership and performance in the industrial non-banking industry has been developed in the literature (Altunbas, Evans; and Molyneux, 2001). The performance of the banking industry seen from the level of efficiency achieved by the bank. There are two messages from the literature review: its ownership is very important and the study of the theory helps to look at the issues in the context of the framework principal-agent theory and public choice theory.

In the Agency Theory which was first disclosed by Jensen and Meckling (1976), the owner has submitted all of the management of economic resources to the manager. Company performance, though did not cause problem of any agency, is dependen upon not to the owner or manager of corporate ownership structure (Jensen and Meckling, 1976). Empirical results show inconsistencies with agency theory, in which the company's performance can be affected by the ownership structure of the company. Efficiency are included in company's performance. Here are presented some empirical results regarding the relationship between ownership structure and bank efficiency.

The ownership structure of different bank will provide different levels of efficiency of each bank (Awdeh and El Moussawi, 2009, in Shaher et. all, 2011). The research result on bank in the State of Lebanon in 1996-2005 showed that the majority of foreign-owned bank have greater improvement in efficiency levels compared with the majority of local owned bank. In other words, local owned bank have a weaker performance than foreign-owned bank.

Research on foreign ownership and bank efficiency is also done by Rajput and Monika (2011) in India. From 32 foreign bank surveyed in India during 2005-2010, there is an increase in the efficiency of foreign bank. The ease and opportunities given by the central bank authorities to foreign bank led to growing expansion of foreign bank. Foor years after the space given in April 2009 by India's central bank, there is a rapid growth in the performance of foreign bank. These results are consistent with research conducted by Berger, Hasan and Zhou (2008) on the structure of foreign ownership of major bank in China. The results showed that the efficiency of foreign owned bank are better than the state owned bank. The same thing also happened in Indonesia in1993- 2003, which were investigated by Mardanugraha (2005) and were carried out by Abidin (2007) for period 2002-2005. The same study conducted by Bonin, Hasa and Wactel (2003) in former countries Yugoslavia and the Soviet Union were addressed foreign owned bank more efficient than the state and private owned bank.

The results of different studies going on in Uganda's foreign owned bank show that foreign ownership of bank in the country can not improve banking efficiency (Beck and Hesse, 2006). Furthermore, Beck

and Hesse found that the increase in foreign ownership of bank in Uganda was not able to increase the spread or margin of bank in the country so that the performance of foreignowned bank do not increase. The results of the research in Uganda are similar to the results of research on foreign bank in the USA for different reasons which shows the level of efficiency of foreignowned bank in the USA lower than those of bank owned by local residents (DeYoung and Nolle, 1996).Foreign bank in the United States was not able to get cheaper funds for their input. The more expensive inputs let to decreasing financial performance of foreign bank, or no better than local owned bank.

Studies on the effect of government ownership on bank efficiency conducted by Altunbas, Evans; and Molyneux (2001) on 1,195 private commercial bank, 2858 public saving bank and 3486 mutual Co-operative observations in Germany. The result showed that the bank owned by the private sector is more efficient than the government-owned bank. Further research is also inconsistent with the Agency Theory where the performance of the company is not determined by the ownership structure, but depends on the company manager (Hadad, 2005). Results of research Hadad (2005) show no link between structure of ownership in Indonesian bank with the bank's performance. In this condition, the Agency Theory can be applied.

Based on the results of the study of theory and previous research results, the hypothesis are:

Ha1: Foreign ownership Affects the Bank Efficiency.

2.3. The Influence of Size Bank to Bank Efficiency

McAllister and McManus (1993 in Iannotta, et. all, 2006) revealed that the major bank have an opportunity to diversify risk thus major bank have lower cost of funds compared to small bank. Large bank tend to earn higher net interest income compared to smaller bank. This fact a is associated with high economies of scale in large bank compared to small bank, as cheaper funds are more easily obtained in the money market. In addition, the level of market and the public confidence to entrust their funds in large bank is higher than small bank. Despite cost of funds is smaller for large bank than small bank, more people tend to save their money in the big bank. Thus, the economies of scale or size in banking are positively correlated with efficiency.

In terms of credit management, large bank tend to have lower levels of efficiency than smaller bank. There is no big different between large credit management cost and small loan management costs (Ramli, 2005).largebankhave more credit amount than the small bank. Thus, the efficient level of large bank tends to be higher compared to smaller bank.

According to economic theory, the relationship between input and output changes described in increasing returns to scale, decreasing returns to scale and constant returns to scale (Pindyck and Rubinfield, 1995). Large bank with increasing returns to scale have higher levels of efficiency than smaller bank. In contrast, large bank with decreasing returns to scale have lower level of efficiency than smaller bank. In conditions of constant return to scale, large bank and small bank the same level of inefficiency.

With the theory study and the previous study, the research hypothesis proposed are:

Ha2: Bank size affects the Bank efficiency.

2.4. Difference in The Influence on Bank Efficiency

The size of the group of non-foreign exchange national private bank are lower than the group foreign exchange national private bank (Darmanugraha, 2005). In advance, first, the capital and asset requirement are higher in foreign exchange national private bank than non-foreign echange national private bank (Hadad, 2003). Second, the operational activities of foreign exchange national private bank are wider than non-foreign exchange national private bank. Thus, the research hypothesis related to differences in the efficiency of two private bank group are:

Ha3: There are differences in the effect of foreign ownership on the efficiency of the BUSND and BUSNND Group

3. METHODOLOGY

This research use samples offoreign-exchange and non-foreign exchange national private bank derived from the commercial bank population. The sample used in this research are all existing bank in the group of non-foreign exchange and foreign-exchange national private sector during 2001 to 2013.The number of commercial bank in Indonesia that conducted in this the study (13 years) is 914 observations (Table 1).

The amount of bank presented in the table were bank with complete set of financial statements during the study period. So that, bank mergers, the conventional bank that has been converted into Islamic bank and bank were were revoked license was not included in this study. The data used is balance panel data. Number of foreign exchange national private banksgroup have complete financial statements are 25 bank. Number of non-foreign exchange national private banks group which have complete financial statements are 29 bank, the total are 54 bank. The number of observations is 702 observation studied (= 54 bank × 13 years).

Table 1
Number of Sample Research
2001-2013

Years	Commercial Bank		Number of Sample
	BUSNND	*BUSND*	
2001	38	42	80
2002	36	40	76
2003	36	40	76
2004	35	38	73
2005	34	37	71
2006	35	36	71
2007	35	36	71
2008	35	33	68
2009	34	31	65
2010	36	31	67
2011	36	30	66
2012	35	30	65
2013	35	30	65

Source: Data of Indonesia Banking Statistics(Bank Indonesia)

The data used in this study were derived from the annual financial statements of bank in Indonesia Bank Directory in January 2001 to December 2013. The data in the financial statements are required to determine the share of foreign ownership, the efficiency of the bank, and the size of the bank.

The data were taken from the Indonesian banking directory the period 2001 - 2013 grouped by: (1) Foreign Exchange National Private Bank (BUSND) and (2) Non Foreign Exchange National Private Bank (BUSNND).

Definitions of variables used in this study are briefly presented in Table 2.

Equation study are as follows:

$$BOPO_{it} = \alpha_0 + POWNFR_{it} + LNASSET_{it} + DBank_{it} + \varepsilon_{it}$$

In the panel data, it is important to distinguish whether the panel data regression model is fitted using a common effect model (CEM), fixed effect model (FEM) or random effects model (REM). It required a Chow test and Housman test on panel data regression equation (Gujarati, 2003). Several classic test are: (1) Residual normality test by Kolmogorov-smirnof, (2) Multicollinearity test, (3) Autocorrelation test and (4) Heteroscedasticity test.

Table 2
Definition and Variable Operational Research

No	Variable	Definition	Indicator	Scale
1	Bank Efficiency	The ratio of operating expenses to operating income (BOPO)	= operating expense/operating income	Ratio
2	Foreign Ownership	The percentage of foreign ownership of the total outstanding shares of the bank (POWNFR)	= (number of foreign shares)/total outstanding shareof the bank x 100%	Ratio
3	Bank Size	Total Bank assets at the reporting date (LNASSET)	= natural logarithm of total asset	Ratio
4	Dummy Bank group	Two groups of foreign exchange private bank and non-foreign exchange private bank (DBank)	Dummy is 1 when entering the national private bank and foreign exchange dummy is zero when in the group of non-foreign national private bank	

Source: Adapted own

Hypothesis testing will be done using the t test (partial test). Analysis of the explanatory power of the independent variables explains the variation of the dependent variable is done by looking at the amount of adjusted R^2 models. The significance level of t test is in the alpha 1 %, 5% or 10%.

4. RESULT AND DISCUSSION

4.1. Overview Research Sample

The research sample consisted of 54 bank from 2001 to 2013 or a 13-year period, so that the total observation is 702. The number of observations included in the data processing is 648 for their variable POWNFR one year before being used so that the data POWNFR one year before being begins 2002. The number

of bank surveyed are from two groups of bank are national private bank foreign exchange as 25 bank and national private bank non foreign exchange as 29 bank. This is done because both groups have a share of foreign ownership is quite high compared to state-owned bank and regional development bank. While foreign bank and joint venture bank are not included in the sample because of foreign ownership, especially foreign bank are stagnant and the average close to 100%.

From Table 3, the average efficiency of the bank by using BOPO is 87.67%. On average over the last 12 years, private bank foreign exchange and non-foreign exchange is not efficient. This is because the average BOPO is still above the average BOPO of bank in ASEAN. From the research data, the most efficient bank by BOPO is a group of private bank- foreign exchange, namely PT Alfindo Sejahtera Bank with numbers BOPO 0.4082, while most inefficient is private bank-non-foreign exchange, namely PT Bank Sri Partha with BOPO equals to 1.9070.

Table 3
The Statistic Descriptive Research (2011-2013)

	BOPO	POWNFR	TASSET	LNASSET	DSTATUS	RESID
Mean	0.876729	0.186960	16927388	14.63834	0.495370	1.22E-18
Median	0.873600	0.000000	1693092.	14.34207	0.000000	–0.003519
Maximum	1.907000	0.990000	4.88E+08	20.00685	1.000000	0.637363
Minimum	0.408200	0.000000	19443.00	9.875242	0.000000	–0.569227
Std. Dev.	0.147045	0.323639	46439459	2.008170	0.500365	0.101607
Skewness	1.817139	1.418435	5.595881	0.441181	0.018519	1.141574
Kurtosis	12.43637	3.406273	43.28595	2.491382	1.000343	12.45823
Sum	568.1207	121.1500	1.10E+10	9485.647	321.0000	6.45E-16
Sum Sq. Dev.	13.98953	67.76803	1.40E+18	2609.187	161.9861	6.679625
Observations	648	648	648	648	648	648
Cross sections	54	54	54	54	54	54

Resource: Result of Statitstic Proces

The average percentage of foreign ownership in national private bank foreign exchange and nonforeign exchange was 18.7%. The portion of foreign ownership is those of national private bank, namely PT Bank Buana Indonesia with foreign ownership at 99%.While the lowest portion of foreign ownership is 0% contained at several bank in the two groups of bank (BUSND and BUSNND).

Bank with the largest assets are those of a foreign exchange national private commercial bank are Bank Central Asia with total assets of Rp 488.5 trillion in 2013, while bank with the lowest asset are those of a non foreign exchange national private commercial bank are PT Bank Alfindo Sejahtera with total assets of Rp19,4 billion.

Bank status is a dummy variable for the bank group, equals one for BUSND or zero for BUSNND bank group. The amount of the first group of bank (BUSND) are 25 bank and the second group (BUSNND) are 29 bank. Thus obtained the average value of this vaiable of dummy is 0.4954. The result is closer to zero than to one because the number of bank that have zero dummy value are greater than the bank with a dummy value of 1.

4.2. Portion Foreign Ownership in Private Bank Foreign Exchange and Non-Foreign Exchange 2001-2013 Overview

The average share of foreign ownership per year in the group BUSND and BUSNDD increased during 2001 to 2013 (see Figure 1). It is not separated from improvement of the Indonesian economy during that period and the regulation of foreign ownership in commercial bank in Indonesia are not as strict when compared with other countries in ASEAN. Foreign ownership in BUSND and BUSNND in 2013 have reached 28.57%. This portion is well above the average share of foreign ownership in the State Malaysia, which have 30% maximum limit of foreign ownership as well as China. China's foreign ownership proportion in 2006 has reached 19.9%
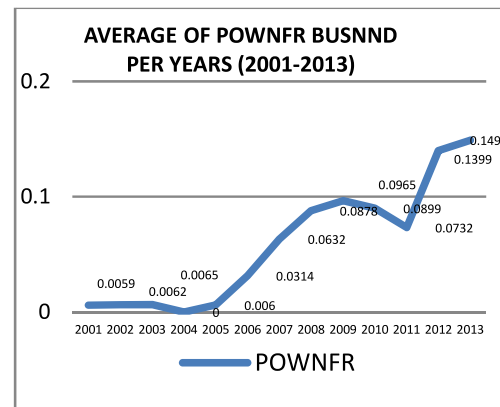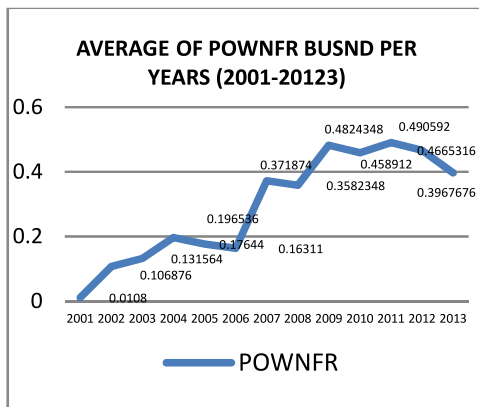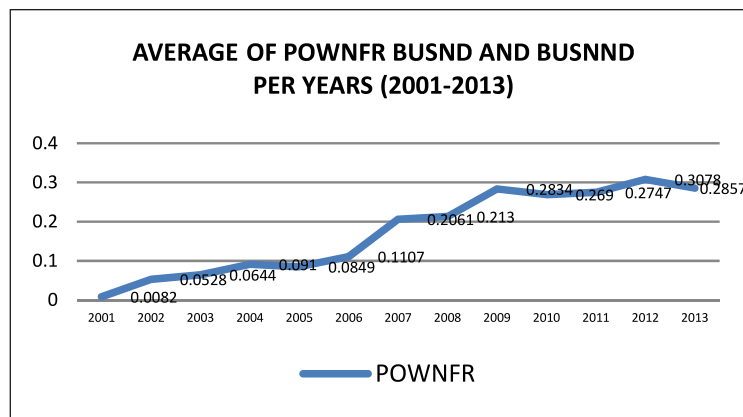

Figure 1: Overview Portion Foreign Ownership in Banking BUSND group and BUSNND In Indonesia (2001 - 2013)

4.3. Bank Efficiency in Private Bank Foreign Exchange and Non-Foreign Exchange 2001-2013 Overview

How the conditions of banking efficiency of BUSNDand BUSNND group? By using BOPO as of banking efficiency measurement, in Figure 2 shows that the BOPO ratio of bank in the two groups on average per year showed a tendency to decrease. In other words, the level of banking efficiency have a positive trend. Both aggregated and separated data of the two groups have equal result. BUSNND group on average appear to have better levels of efficiency compared to BUSND. However, individual bank level, the increasing trend of efficiency level have not been proven.
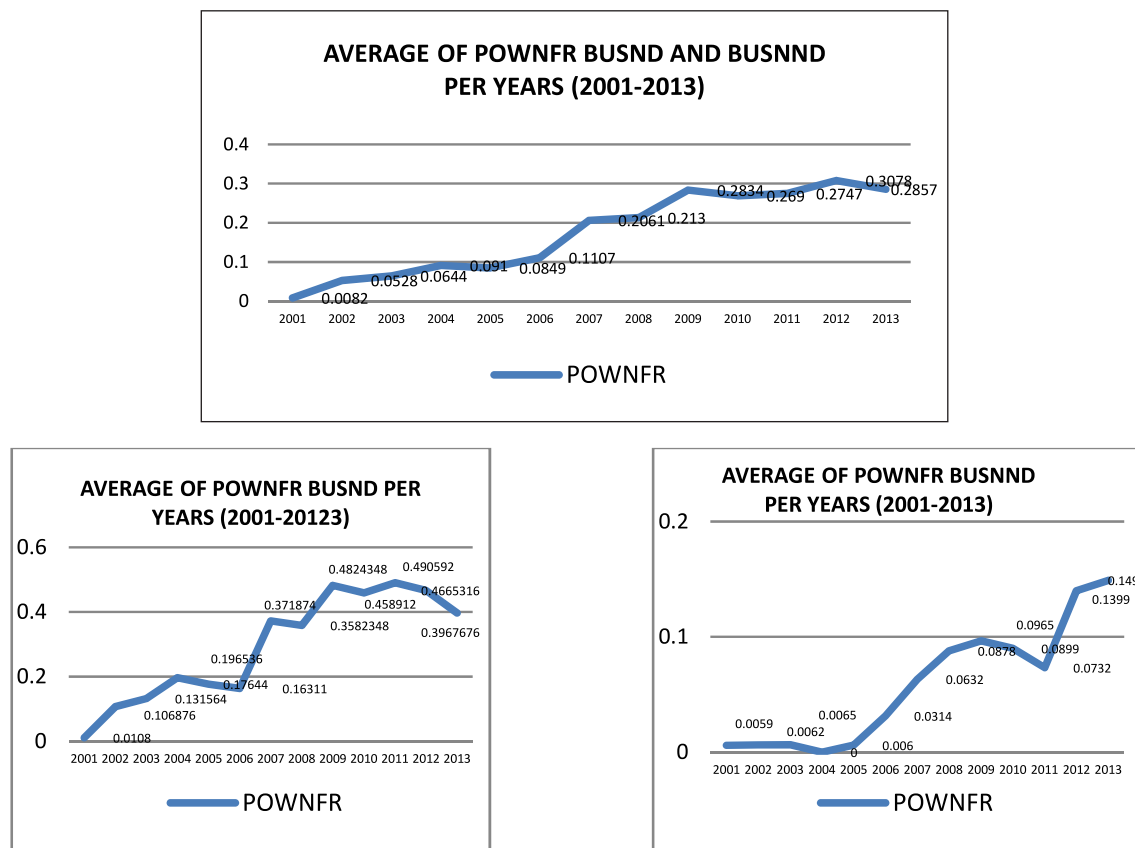
AVERAGE OF POWNFR BUSND AND BUSNND PER YEARS (2001-2013)

AVERAGE OF POWNFR BUSND PER YEARS (2001-20123)

AVERAGE OF POWNFR BUSNND PER YEARS (2001-2013)

Figure 2: Picture of Efficiency in Banking BUSND and BUSNND Groups in Indonesia (2001 - 2013)

4.4. Results of Regression Equation

Regression results with Fixed Effect Model using OLS equations using panel data after the Chow test and Housman test can be seen in Table 4.

OLS regression results using fixed effect panel data (see the output results attached) shows the portion of the effect of foreign ownership or a significant positive BOPO significantly reduce the level of bank efficiency. The higher share of foreign ownership, the more inefficient BUSNND and BUSND group. The size of the bank in both groups negatively affect the BOPO, the bigger the bank, the more efficient the bank. Effect of foreign ownership on bank efficiency is not significantly different between groups BUSND and BUSNND. This is evident from the significance of the group dummy variable which is not significant at alpha 5%. Explanatory ability of independent variables in explaining the variation of changes BOPO or the adjusted R-Squarenya is 59.66% (Table 4).

Assuming a central limit theorem where research number of 648 exceed 30 observational data, the residual normality test is not required in this study (Wooldrige, 2005). It is assumed that the data is 648, the data are normally distributed.

Multicollinearity symptoms can be seen by using the correlation between the independent variables. In Table 5 present correlation between variables, which still far below the 0.8. Therefore, there is no Multicollinearity symptoms on the regression results above.

Table 4
Regression Equation Result with *Fixed Efect Balance Data panel*
Dependent Variable BOPO
Method: Pooled Least Squares
White cross-section standard errors & covariance (no d.f. correction)

Variable	*Coefficient St.Error*	*t-statistic Prob.*	*Description*
C	0.774852	5.685818***)	
	0.136278	0.0000	
BOPO(–1)	0.400277	7.400352***)	Sign positif
	0.054089	0.0000	
POWNFR	0.060855	2.483538***)	Sign positif
	0.024503	0.0133	
LNASSET	–0.019012	–2.166225***)	Sign negatif
	0.008777	0.0307	
DSTATUS	0.033437	1.319275	No sign
	0.025345	0.1876	
R Square	0.632097		
Adjusted R Square	0.596554		
F statistic	17.78395		
Prob (F-statistic)	0.000000***)		
Durbin-watson Stat	1.957036		
Cross-sections included:	54		
Total pool (balanced) observations:	648		

Source: Processed by the statistical program
Additional Information: *Significanton alpha 10%, **Significanton alpha 5% and ***Significanton alpha 1%

Table 5
Correlation Between The Variable Research

	BOPO	*POWNFR*	*TASSET*	*LNASSET*	*DSATUS*
BOPO	1	–	–	–	–
POWNFR	0.05487	1	–	–	–
TASSET	–0.22643	0.3201	1	–	–
LNASSET	–0.22456	0.4411	0.63691	1	–
DSATUS	–0.14760	0.33228	0.32127	0.63578	1

Source: Processed by the statistical program

Test symptoms autocorrelation using Durbin Watson (DW) test. Based on Table 4 above, the statistic numbers of DW is 1.957036, no symptoms of autocorrelation in the regression results above.

Heteroscedasticity test was not done in this research because white cross section standard errors and covariance panel data equation regression are being used. By using the white cross section, heteroscedasticity on standard error and covariance happened in the regression equation above can be avoided (Woodrige, 2005).

Based on the regression results in Table 4 above, the Ha1 hypothesis is unacceptable at a positive level of significance at alpha equals 0.0133. The coefficient parameters of POWNFR was 0.061. This means

that with a change of one unit of foreign ownership will increase BOPO level by 0.061 or reduce the level of BUNND and BUND efficiency. Ha2 hypothesis can be accepted with a significance level of negative at alpha equal to 0.0307 and the parameters of the variable LNSIZE was –2.166. This means that when LNSIZE increased by one unit will decrease BOPO level of 2,166 or will raise the level of BUSND bank efficiency amounted to 2,166. Ha3 unacceptable hypothesis means that the influence of foreign ownership on bank efficiency is no difference compared between the two groups of bank.

4.5. Analysis of Portion Foreign Ownership Effect on Bank Efficiency

The results of this study prove empirically that the portion of foreign ownership have a significant positive influence on the inefficiency of bank BUSND and BUSNND. The results of the study support the results of research conducted by Beck and Hesse (2006) and DeYoung and Nolle (1996) that foreign ownership was not able to improve the efficiency of the bank. Foreign Bank in the USA are less efficient than the local bank (DeYoung and Nolle 1996). This is because foreign bank have more expensive input value compared to local bank. Foreign bank are not able to increase and maintenance customers in the country, so the cost of funding more expensive. This condition also occurs in Indonesia. Indonesia's banks with are higher level of foreign ownership was not able to increase its efficiency. This is because the government and the national bank customers prefer to do transactions with local owned bank. The same thing happens to the results of research Sans, Theng and Boon (2011) in Malaysia, suggest that bankwith increased foreign ownership is less efficient than the local owned bank.

The results of this study differ from the results Berger, Hasan and Zhou (2008), Mardanugraha (2006), Laurenceson and Qin (2008). Awdeh and El Moussawi (2009) in Shaher at all (2011), Rajput and Monica (2011), Mardanugraha (2005) and Abidin (2007). Study Results from Berger, Hasan and Zhou (2008), proved that the increase in the portion of minority interest of foreign ownership in the China raise the level of efficiency of the bank. Foreign bank in China have a higher level of efficiency than the state owned bank included in the Big Four Bank. Mardanugraha (2005) proved during the study period from 1993 to 2003 that the joint venture bank (foreign and national ownership) are more efficient than the national bank. Differences in Mardanugraha research results with the results of research conducted empirically are due to the time and the study sample differences. Mardanugraha research time in 1993 to 2003, while this study is 2001 to 2013. The study period of 1993 and 2003 is in the condition before and after the financial crisis of 1998, which at that time nearly all national bank performance decreased because of the problem loan.

Associated with agency theory, the results of this study show that the performance / efficiency of bank are still affected by foreign ownership. Foreign owners still intervene in the bank's operations. Management of the bank as an agent are not free in the management of the bank. Agency Theory does not apply to exchange foreign national private bank and non-foreign national private bank.

4.6. Analysis of Bank Size Effect on Bank Efficiency

This study proves the size of the negative impact on the bank's ROA ratio or a positive impact on the efficiency of the bank. Large bank tend to be more efficient than the smaller bank. This is because large bank have the opportunity to diversify the products, extensive network, and a high level of public confidence to be able to get cheaper funds (third party funds as saving, and deposit) compared to small bank. This argument according to McAllister and McManus (1993 in Ionnata et.all 20116).In terms of credit management, large

bank have a large credit volume with a fewer number of debtors, so the cost of credit management are not much different from the management of small credit (Ramli, 2005). This also shows that BUNSD and BUSNND group have increasing to scale condition. Increasing volume of banking operations could still improve acceleration results. In connection input and output, increasing to scale conditions showed that the rate of change of the input twice to raise output more than double that efficiency has increased higher (Pindyck and Rubinfield, 1995).

5.7. Difference Analysis of Foreign Ownership Portion Effect on the Bank Efficiency to the Group of National Private Bank of Foreign Exchange and Non Foreign Exchange

This study proves that there is no difference on impact of the bank efficiency to foreign ownership of bank in the two groups of bankthat were examined during 2001-2013. That is, the negative impact of foreign ownership on the efficiency of the bank does not distinguish in BUSND and BUSNND group. Thus the impact of foreign ownership on bank efficiency for both groups are the same or not significantly different.

The increase in foreign ownership in the banking studied during the period from 2001 till 2013 (13 years old) has increased quite as high as originally 0.82% in 2001 rose to 28.57%. This increase would also result in decreasing the efficiency of the two groups of bank in general.

5.8. Managerial Implications Research

The negative impact of foreign ownership on the efficiency of BUSNND and BUSND group has negative implications. The authorities should take into consideration the policy to restrict foreign ownership in banking in Indonesia. Foreign ownership is constantly increasing since 2001 to 2013 provides a potential decline in the performance of bank here at home. Restrictions on foreign ownership has been debated in the revision of the Banking Law Commission XI DPRI RI. These empirical results prove that the foreign ownership restrictions should be limited to neighboring countries such as Malaysia, Thailand, Philippines, China, India and other countries. Restrictions on 40% foreign ownership is desirable in some quarters in the revision of the Banking Act are still a strong proposal (www.sinarharapan.com/news/read/150612075/-ownership of foreign-bank-in-so-debate).

The research proves large bank tend to be more efficient than small bank. These results have implications for the banking authority to institute a policy of mergers of smaller bank into big bank are ready to compete with ASEAN countries in dealing with AEC (Asean Economic Community) in 2020. If the merger is not done, then when the AEC is applied to the banking sector in 2020.Bank in Indonesia will find it difficult to compete. This is because the other ASEAN countries have fewer bank yet greater asset than the Indonesia's bank.

5.9. Conclusions, Limitations and Suggestions

The research proves (1) The greater the portion of foreign ownership, the more inefficient the bank. (2) Increasing in the bank's assets will increase than ever before. (3) There is no difference in the impact of portion of foreign ownership on the efficiency of the bank between BUSND and BUSNND group.

The implication of the study is the need for the policy to restrict foreign ownership in national bank.

Revision of the Banking Act are being processed in the Commission XI, one of which is to limit portion of foreign ownership in national bank. The results of this study can be considered in the revision of the Banking Law, particularly in foreign ownership because of increased foreign ownership tends to reduce the efficiency of banking in Indonesia.

Measure of efficiency used is BOPO which incidentally derived from accounting data bank. Different recognition and measurement of the accounting practices used in each bank caused BOPO figures are not comparable from one bank to another. There is need to measure efficiency with a stochastic approach. This measurement approach capable to produceequal size efficiency among bank.

This study examined only two independent variables, in the next study are expectedhave more independent variables. Other independent variables that can be considered are the risk of banking, capital, macroeconomic indicators.

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