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Factors Affecting Assets Growth of Banks Owned by Foreign Shareholders in Indonesia

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Abstract:
The aim of this research is to assess the dominant determinant that enable foreign owned banks to increase their assets in Indonesia and to confirm whether "follow the customers hypothesis" is also applicable in motivating foreign owned banks to do business in Indonesia to support investment and trade activities of the companies originated from foreign countries. Using the panel data of 28 foreign owned commercial banks in Indonesia between 2006-2015 obtained from Indonesian Banking Directory, Indonesian Banking Statistics databases, foreign country central bank websites, a least square dummy variable (LSDV) regression model was applied to examine the effect of Bilateral Trade, Foreign Direct Investment (FDI), Interest Rate Differences, Domestic Deposits, Parent banks Return on Assets (ROA) and Length of Time presence of the foreign owned banks in Indonesia on Assets or Size of Foreign Owned Banks. The main findings is that the decisions by foreign owned banks to operate and to expand its business in Indonesia is predominantly affected by the increase in realization of projects funded by Foreign Direct Investment from counterpart countries, third parties fund or domestic deposit denominated in foreign currencies, profitability of the parent banks in home country and longtime presence in Indonesia to enable parent bank and their branches or subsidiaries gain better operating experience, better general managerial expertise and better knowledge of local environment. Bilateral Trade and Interest Rate Differences between home and host country has no impacts at all on Assets of Foreign Owned Banks. "Follow the customer hypothesis" is applicable in Indonesia only in terms of FDIs but not applicable in terms of bilateral trade. .It is suggested foreign owned banks/foreign acquired banks to consider empowering its trade financing scheme which will increase assets or size of the foreign owned banks.

Keywords: *Foreign Bank Assets, Bilateral Trade, FDI, Domestic Deposit, ROA*

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I. INTRODUCTION

Since government of Indonesia allow 99% foreign ownership in local banks,t here is progressive increase in foreign owned banks in terms of assets growth and number of offices operated in various big cities in Indonesia. As the amount of assets and number of offices of foreign owned banks is increasing, there is a phenomena that increase in assets of foreign owned banks tend to follow the trend of Foreign Direct Investment (FDI) as well as bilateral trade transactions between the foreign countries and Indonesia. In 2015 there were totally 28 foreign owned banks including banks acquired by foreign shareholding in which foreign shareholdings in the acquired banks is more than 76%. High investment amount and large volume of bilateral trade transactions between the foreign countries and Indonesia is in its turn followed by the increase in foreign owned banks assets.

Table below shows the foreign owned banks assets growth in line with the FDI and Export Import growth during the year 2006-2015.

Table I.1. Foreign Owned Banks Assets, FDI, Export-Import 2006-2015

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bank Assets (USD mio.)	24.446	28.321	351.805	32.128	41.412	49.578	53.741	55.840	57.145	55.738
Export (USD mio.)	100.799	114.101	137.020	116.510	157.779	203.497	190.020	182.552	175.980	150.366
Import (USD mio.)	61.066	74.473	129.197	96.829	135.663	177.436	191.690	186.629	178.179	142.695
FDI (USD mio.)	5.977	10.341	14.871	10.815	16.215	19.475	24.565	28.618	28.530	29.276

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Percentage of Foreign Owned Bank Assets	13.02	13.43	15.23	13.42	12.37	12.31	12.19	13.74	12.66	12.83

Source: Indonesian Economics and Finance Statistics (SEKI) 2006-2015

During the decade, assets of foreign owned banks has grown by 228% whereas foreign trade transactions grown by 181% and Foreign Direct Investment grown by 489.8%. From this percentages figures, we found that foreign investment growth in Indonesia has grew significantly exceeding the growth in foreign trade. The high economic growth with the average of almost 6% annually during the decade is certainly contributing the significant growth in foreign investment. Understanding the impacts of foreign investment, bilateral trade with other countries, and other factors on assets of foreign owned banks is certainly very crucial in policy making for banking industry, financial sector and economy of the country. Table below shows us the value of Foreign Direct Investment and Bilateral Trade based on countries of origin in 2016.

Table I.2. Foreign Owned Banks based on countries of origin in 2015

COUNTRY	ASSETS OF FOREIGN OWNED BANKS IN INDONESIA (USD Million)	FOREIGN DIRECT INVESTMENT IN INDONESIA (USDMillion)	BILLATERAL TRADE (EXPORT &IMPORT) (USD Million)
Singapore	24.530	5.901	30.655
Japan	19.739	2.877	31.285
China	6.018	322	44.497
Netherlands	950	1.308	4.227
USA	6.988	893	23.834
UK	11.323	503	2.346
Malaysia	28.412	214	16.162
South Korea	4.465	1.213	16.092
Australia	3.625	205	8.518
France	1.324	132	2.310
German	1.854	57	6.136
India	609	57	14.377
Qatar	1.769	0.0	778
Taiwan	863	108	8.719
Thailand	1.796	47	13.590

Source: Indonesian Economic and Finance Statistics (SEKI) & Indonesian Directory of Banking 2015

As can be seen from the above table, countries with higher bilateral trade and investment amount such as Singapore, Malaysia, Japan and China tend to be followed by the operating of banks originated form these countries which assets is relatively higher than those from other countries.

The expansion of large corporation in Japan, Korea, Singapore internationally to other countries including Indonesia is supported by study made by Dana in 1999 mentioning that "Internationalization was generally limited to large corporation, while owner –managers and small scale entrepreneurs tended to be local. Relaxation of regulations opened up opportunity for entrepreneur and their firms. Entrepreneur in small domestic markets may find it necessary to expand internationally in order to benefit from scale economies*"* (Dana, 1999).Small domestic market in this regard are Japan, Korea, Singapore, etc propel the companies to expand their business worldwide including Indonesia.

Many companies in the U.S. and Japan in order to enter their markets, they join with companies from China, India, Malaysia, Thailand and other Asian countries. The research study also concludes that networking affected internationalization of the business; that networking is very important in the

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improvement of operational efficiency of international business.(Dana, Ramdani, 2015).

One of the popular concept of internationalization is 'Uppsala model' developed in 1977 (Coviello and McAuley, 1999 in Bayfield, Dana, Stewart, 2009). Under this concept, firms begin an internationalisation process by moving through a sequence of events, starting from a situation of having no regular international trade-based activity (Sadler and Chetty, 2000 in Bayfield, Dana, Stewart, 2009). Firms then begin to internationalize by making use of intermediaries, and finally by utilizing subsidiaries or sales representatives that are wholly or part owned by the firm itself. As firms move through these outlined stages, the overall value and quantity of international trading within each firm rises.

Whether the phenomena in line with follow the customer hypothesis as occurred in other countries is deemed to be further study in this research. Other questions to be raised are, first, whether increase assets of foreign owned banks is caused by the increase in foreign direct investment and increase in bilateral trade between those foreign countries and Indonesia? Second, whether the higher the differences of interest rate between those foreign countries with Indonesia tends to increase assets of the foreign owned banks in Indonesia? Third, whether the higher return on assets (ROA) of the shareholders of the foreign owned banks resulting in higher assets of foreign owned banks in the host countries. Fourth, whether higher third parties fund of all commercial banks will decrease assets of foreign owned banks as increase in third parties funds of domestic banks will reduce market shares of the foreign owned banks and fifth, whether the longer the foreign owned bank present in Indonesia, the higher the growth of assets of the foreign banks.

In this paper we assess the foreign owned banks or foreign acquired banks in which its foreign shareholdings is more than 75% in terms of its assets, operations and other performance by country of origin. We examine hypothesis concerning the determinants of foreign owned banks activity by sources country. We do not examine specific reasons of individual banks for penetrating Indonesian market nor we explore the kind of the banks activities and products. Additional research is required to examine the specific factors that motivate foreign shareholders to increase its assets which need to be taken up in future research. In this paper, we will develop a formal model of the determinants of the asset values of foreign owned banks based on country of origin of investing banks. The model is tested using recently available data from the central bank of Indonesia. As most of the growth of foreign owned banks including acquisition local banks by foreign investors has occurred in the recent years during the past decade after the issuance of the government regulation permitting of 99% foreign shareholdings, and, therefore, explaining the facts during the decade will explain much of the total phenomenon.

Based on the background abovementioned the purpose of this research is to confirm the dominant determinant that motivate foreign owned banks to increase their assets in Indonesia and to confirm whether "follow the customers hypothesis" is also applicable in motivating foreign owned banks to do business in Indonesia to support investment and trade activities of the companies originated from the said foreign countries. Brimme and Dahl (1975) conclude that banks follow their customers to enable them services the business of their customers fully. The reasons of why we need to perform this research is mentioned below.

First, so far no studies has been executed to study factors that motivates foreign owned banks to expand their business in Indonesia. Foreign owned banks have competitive advantageous in terms of worldwide network in doing export-import transactions henceforth the increase of bilateral trade between the foreign countries and Indonesia motivates the foreign owned banks to expand their business in Indonesia but whether the bilateral trade is the dominant determinant need to be further study. To the best of our knowledge, there is no published study on study of factors that motivates the shareholders of foreign owned banks to expand their business in Indonesia.

Second, previous studies tend to utilize the summation of export and import as proxy to test the impact of bilateral trade on increase in foreign owned bank assets, whereas it is known that only part of the bilateral trade export-import transactions is utilizing their home banks in Indonesia. Therefore we need to add other reliable variables that have significant impacts on increasing or decreasing

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foreign owned banks assets.

For the purpose of bridging the abovementioned research gap, this research is required to determine the dominant determinant that propel foreign owned banks to increase its assets in Indonesia by utilizing more accurate exogenous variables.

Accordingly, the findings from our research should contribute in at least three ways. First, we assess applicability of the "follow the customers hypothesis" in explaining how foreign direct investment and bilateral trade affect the values of assets of foreign owned banks. Second, we examine whether the profitability of the parent banks of the foreign owned banks has profound impacts on value of assets of the foreign owned bank in Indonesia. Third, findings of this research can be used as input or tools for policy makers prior issuing the license for the newly open foreign owned banks offices or increase of its branch offices by considering the economics advantageous for the country's banking industry as well as economy of the nation.

Henceforth, the paper is structured as follows: the first section of this paper is an introduction to introduce reader on the extent of foreign owned bank assets growth in line with the growth of foreign direct investment and foreign trade based on country of origin. The second section present the academic literature review of various research on determinant of assets growth of foreign owned banks in other regions as well as reviewing existing hypothesis and leads to develop the formal model forthe research. The third sections discuss the data and variables used to test the model. The fourth section contains the empirical results of testing the model. The final section draws conclusion and implications for the Indonesian banking system.

II. THEORY, LITERATURE REVIEW

Based on Hymer (1976) investment portfolio theory, foreign portfolio investors is attracted by high interest rate as due to reducing of borrowing costs. Foreign portfolio investors will invest until the interest rate is equal at any places in the world. Therefore, foreign portfolio investors are more affected by the prevailing interest rate in the host country and not due to rate of return applied in that host countries. Nevertheless, the risks, uncertainty and volatility are to be considered.

Agarwal (1997) concluded that low return in home countries and high inflationary rate motivates investors to invest in higher return and lower inflationary countries.

Ghura and Goodwin (2010) concluded that interest rate in developing countries tend to be higher than developed countries so attracting investors due to lowering costs of borrowings.

Goldberg and Saunders (1981) found interest differentials between US and foreign deposits and loans to be one of the most important factors determining foreign bank presence and growth in the US. Whereas To (2002) found that interest differentials between 3- month Treasury Bills rate in New Zealand and in the home country has no impacts on increase/decrease of assets of foreign owned banks in NZ.

Theoritical approach of international banking develop hypothesis on banks motivation to open overseas offices. Grubel and Gray (1981) correlate international banking theory with non financial multinational corporations. Bank opens branch offices at comparative advantageous places. Studies show that banks follow their customers overseas in order to fully servicing customers business needs.(Brimmer & Dahl (1975), Gray (1981), Ball dan Tschoegl (1982), and Yannopoulos (1983). Other interpretation of follow the customers hypothesis is that banks have competitive advantageous of having superior information than that of local banks as the long term relationship has been established with its parents companies. (Nigh, Cho, and Krishnan (1986), Tschoegl (1987) and Goldberg and Johnson (1990). A number of studies have suggested that foreign banks are drawn to locations by attractive local banking conditions (Fieleke, 1977, Terrell, 1979; Goldberg and Saunders, 1981b). Finally, the regulatory environment has been suggested as an important factor in determining the degree and type offoreign bank activity (Brimmer and Dahl, 1975; Kelly, 1977; Goldberg and Saunders, 1980, 1981a, 1981b; Nigh et al., 1986;Tschoegl, 1987).Speaking of regulatory environment, Indonesia has relaxed restrictions on foreign direct investment, allowing a foreign entrepreneur 100% ownership of a firm in the industrial and services sectors and approved entrepreneurs may be entitled to exemption from import duties and to postponement of Value Added Tax (VAT), in addition to unrestricted international

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movement of funds. (Dana, 1999). The relaxation of restriction lure entrepreneurs overseas to invest in Indonesia which followed by their banking counterparts to finance their business in Indonesia. The degree and type of the bank activities is adjusted based on the needs of business activities of their customers investing in Indonesia. For instance the Japanese Banks provides investment financing for building the factory/ plant and working capital for production process of their customers.

Previous studies studying the growth of banks assets in certain country is done by Nigh et al.(1986) which study the opening of foreign banks owned by US in 30 countries from 1976-1982 by using time series-cross section and model is tested using 3 exogenous variables. It was found that the US owned foreign bank assets has positive correlation with Foreign Direct Investment (FDI) and openess of the host countries on opening of foreign owned banks. But, there is no correlation with local banks market shares measured by manufacturing products of each countries. However, Williams (1996, 1998) found limited evidence for a link between FDI and foreign bank in Australia.

Kastrati, Dana & Ramdani, 2016 mentioned that Transnational Corporations have better conditions in obtaining banking or other capital credits, at a lower cost than the purely domestic firm. According to Madura (1989, pp.11–1 in Kastrati et al, 2016), the reason for this is due to the large opportunities set of funding sources around the world from which they can chose. Therefore this conditions support FDI to other countries. According to Rappaport (2000) in Kastrati. et al., 2016), FDI may improve the productivity not only of the firms receiving investments, but also of all firms of the host countries as a consequence of technological spillovers.

There is a widespread belief among researchers and policymakers that FDI boosts growth for host countries through different channels. They increase the capital stock and employment; stimulate technological change through the adoption of foreign technology and know-how and technological spillovers, which can happen via licensing agreements, imitation, employee training, and the introduction of new processes, and products by foreign firms. As it eases the transfer of technology, FDI is expected to increase and improve the existing stock of knowledge in the recipient economy through labour training, skill acquisition and diffusion. It contributes to introduce new management practices and a more efficient organization of the production process. (Kastrati et al, 2016)

Other research done by Goldberg (1990) was studying the growth of US foreign owned bank assets in 22 countries. Model was tested using more exogenous variables ranging from economics variables such as FDI (Foreign Direct Investment), Foreign Trade (Export or Import divided by GNP), Third Parties Funds and Foreign Exchange, demographic variables such population, and GDP/capita and regulation variables such as score of 5 if regulation is not strict and score of 1 if regulation is inhibited or very strict. A positive coefficient is expected on these variables. The higher population is proxy of more business opportunities for foreign owned banks reflected by opportunity to open more sub branch offices at various locations. Goldberg research found that all coefficients in model were positive and significant except exchange rate, so that exchange rate has no impact on assets growth of foreign owned banks.

Third Parties Funds or domestic deposits which measure the degree of local or domestic banking activities is significant but with negative sign meaning that the increase in third parties fund of all commercial banks in that country tends to decrease the foreign owned banks assets or less opportunity for foreign owned banks to penetrate local market due to higher local banks market shares and activity in which would most likely be serviced by other domestic and other foreign owned banks as well. Meaning also that local banks is more competitive to collect third parties funds and reduce foreign owned banks opportunity to collect third parties funds.

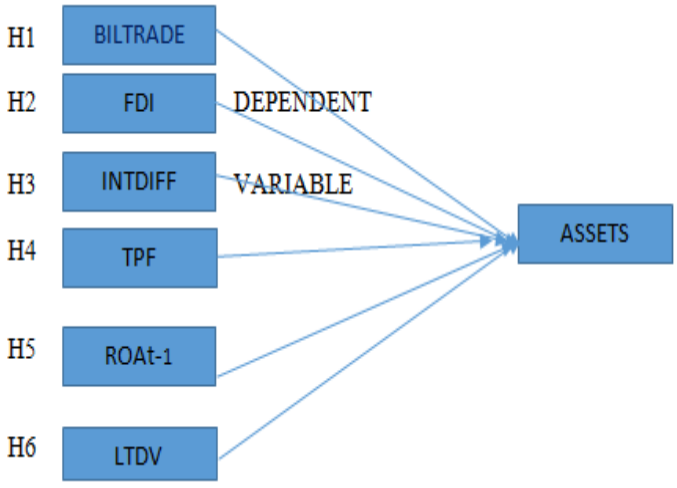
Study by Minh, To and Tripe (2002) on 15 commercial banks in New Zealand between 1991-2000 found that foreign bank assets have positive co-relation with length of time. The longer the foreign owned bank presence in New Zealand the higher assets of that foreign owned banks. So, this variable reflect the parent bank bank's operating experience and its knowledge of the host countries. Study by Williams (1998) also found that foreign owned bank assets positively correlated with the

length of time of that banks had been operating in Australia.

Not many studies have presented how the foreign subsidiaries perform in relation to their parent banks, which may be important in understanding why banks expand abroad even though they may underperform in the host markets in comparison to domestic banks. Using the parent banks as a benchmark in measuring the performance of the foreign bank subsidiaries allows not only to investigates its profitability but takes into account the short coming of the existing studies.

Study by Minh, To and Tripe (2002) on 15 commercial banks in New Zealand between 1991-2000 also found that foreign bank assets have positive correlation with ROA of parent banks. ROA may reflecting the opportunity cost for banks when making decisions on allocating resources of different markets. As the ROA of parent banks is higher than ROA in host market, there is possibility to allocate more resources to host market so that the assets of the foreign owned banks in host countries will also increased. Study by Williams (1997) found that the parents return on assets correlated negatively with its subsidiary's size in Australia, but no its profits. The framework of this research is as below,

Figures II.1Framework of Research



Based on the previous studies, the following hypothesis are developed.

H1: The greater foreign direct investment from foreign country, the greater the assets of banks originated from that foreign country in Indonesia.

H2: The greater bilateral trade amount of foreign country, the greater the assets of banks originated from that foreign country in Indonesia.

H3: The greater the difference of interest rate between foreign country and Indonesia, the greater the assets of banks originated from that country in Indonesia.

H4: The increase in the third parties fund or domestic deposit will decrease the market share of foreign owned banks which in its turn decrease the assets of foreign owned banks.

H5: The higher the Return of Assets of the parent banks of foreign shareholders, the greater the assets of banks originated from that foreign country in Indonesia.

H6: The foreign owned bank presence in Indonesia since 1968 tend to have higher assets than foreign owned banks presence in Indonesia after 1997.

III. DATA AND METHODOLOGY

The study took the form of an experimental research design that attempts to establish cause-effect relationships among the variables. It was quantitative in nature and based on secondary data. The data to be used in this research is sourced from Indonesian Banking Statistics (www.ojk.go.id) year 2006 till 2015 on 28 foreign owned bank including foreign acquired local banks from 15 countries. Total sample is 280 observations. The sample is different from previous study made by Rivai (2019) that using only local banks acquired by foreign shareholders and excluding the foreign banks. Other data such as Foreign Direct Investment and bilateral trade data is sourced from Indonesian Economics and Finance Statistics (SEKI) 2006-2015 (www.bi.go.id) and interest rate is sourced from foreign country central banks websites, Parent Banks ROAs from various foreign banks websites, and Third Parties Fund is sourced from Indonesian Banking Statistics (www.ojk.go.id). Data collected was analyzed using Microsoft Excel and EViews 8.0.

3.1 THE PRESENTATION OF THE SAMPLE

We followed the majority of previous research in using ASSETS as the proxy foreign owned bank assets for our dependent variable. BILTRADE as the proxy of bilateral trade between foreign country and Indonesia is the independent variable along with FDI or Foreign Direct Investment of foreign

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countries, Net differences between interest rate issued by central banks of each foreign countries BI Rate (Indonesian central bank rate), TPF or Third Parties Fund or Domestic deposits measure the degree of local banking activity. A highly active banking sector may lead to fewer opportunities available for foreign owned banks, since large levels of domestic deposits would most likely be serviced by other domestic and foreign banks as well. Thus a negative coefficient is hypothesized for third parties fund or the domestic deposits, ROA or Return of Interest Rate of parent banks of foreign shareholders in home country, and LTDV or Length of Time Dummy Variable which is length of time of the foreign owned bank present in Indonesia. Value of 1 for long term establishment foreign bank or foreign owned banks presence in Indonesia since 1968, and value of 0 for the new Entrant (since 1997) or foreign owned banks presence in Indonesia after year 1997.

3.2. THE MODEL

In this section, we introduce the methodology adopted for the empirical analysis. The objective is to estimate a relationship of each independent variables abovementioned by steps below

Step 1

We set up simple equation or model that shows correlation of each independent variables to dependent variable individually excluding other independent variables.

$Yt = \alpha + \beta Xt + €$
…….(1)

Yt = ASSETS of foreign owned Banks.

Xt = BILTRADE, FDI, INTDIFF, TPF, ROA, LTDV

Step 2

We set up the equation or Least Square Dummy Variable (LSDV) model that shows correlation of all independent variables and dependent variable jointly.

$\ln ASSETit = \beta o + \beta 1 BILTRADEit + \beta 2 FDIit + \beta 3 INTDIFFit + \beta 4 TPFit + \beta 5 ROAit + \beta 6 LTDVit + \varepsilon$
…….(2)

Step 3

We modified the ROAit variable used by Minh, To and Tripe (2002) in their previous study by inclusion of a lagged exogeneous variable, particularly, one-year lagged Return on Assets (ROAt-1) variable and exclude ROAit. As we know that the parent bank business plan to expand overseas business, or to increase equity or to increase lending facilities of their overseas branches is usually took 1 year after the profit is realized and partially distributed to the shareholders. So, we provide 1 year time for the parent banks to observe their overseas branch performances. ROA is also added in the model as based on the study made by *Wen & Chan*, 2016 conclude that the higher profitability will enable to have a better capacity to allocate its resources more efficiently. So the equation become below (Rivai, 2019)

$\ln ASSETit = \beta o + \beta 1 BILTRADEit + \beta 2 FDIit + \beta 3 INTDIFFit + \beta 4 TPFit + \beta 5 ROAit\text{-}1 + \beta 6 LTDVit + \varepsilon$(3)

ASSETit is amount of foreign owned banks assets in Rupiah.

BITRADEit is bilateral trade amount between foreign country and Indonesia

FDIit is the Foreign Direct Investment of foreign country in Indonesia.

TPFit is third parties fund all commercial banks.

INTDIFFit is the difference of interest rate between foreign country and Indonesia.

ROAit is ROA of parent bank i on previous 1 year.

LTDVit is a Dummy Variable of length of time the foreign owned bank present in Indonesia.

Value of 1 for long term establishment (since 1968) foreign bank and value of 0 for the new Entrant (since 1997) foreign owned banks.

Exchange rates is not utilized in this study as the variable is not significant in previous study by Grosse (1991) and also study by Williams (1996) in excluding it from considerations. First, use of annual data would generate considerable difficulties in specifying an appropriate exchange rate. Activities in the swaps market and hedging banks will reduce the impact of any exchange rate factors.

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Thus, although it is possible that the exchange rate may affect several variables, especially the parent size, we have omitted it from this study. We also not include the linguistic similarities variable as based on study by Boisso and Ferrantino (1997), linguistic similarity had no identifiable effect on the volume of trade between pairs of countries. That is, a higher probability that an exporter from one country would encounter an importer in a second country who spoke the same language had no significant effect on the volume of trade between the two countries. Based on table 2 it shows that without language similarities between Indonesia and Japan, USA and China the bilateral trade volume are among the highest and higher than that of Malaysia which have very close linguistic similarities with Indonesia.

We also not include Distance which is measure based on distance between both countries capital. Country risks also excluded. Based on study by Grosse(1991), there is significant relationship between Distance and Country Risks on Assets of Foreign Owned Banks, the longer the distance the more difficult to obtain information and communications with banks and parent company in country of origin therefore discourage banks to increase its assets and add more branch offices. The greater the country risks of home country of the foreign owned banks , the more attracted the foreign owned banks to expand their business in lower country risk host country. But, when Japan was excluded from the data and re-running the regressionsonly on the remaining countries yielded results that differed from original specification. The distance variable became insignificant in the assets equation.

The country risk variable was also insignificantin both Grosse equations. All other independent variables remained significantat the 0.01 level. The only major change was that the explanatory power ofthe regressions dropped as low as 0.65 when Japan was eliminated. Considering this facts, we did not include Distance and Country Risks as independent variable in our study as in current high –tech banking international networking, distance is no longer creating a hindrance or burden in doing international banking transactions, whereas country risks of all 15 home countries of the foreign owned banks operated in Indonesia is low/stable and lower than country risks of Indonesia. So, not relevance to be included in our research model.

IV. EMPIRICAL RESULTS AND ANALYSIS

4.1 DESCRIPTIVE STATISTICS

	ASSET	BILTRADE	FDI	TPF	INTDIFF	ROA
Mean	29267142	19755.92	1145.843	2659623.	5.030429	0.902629
Median	14534494	16431.50	509.0000	2338824.	5.500000	0.855000
Maximum	2.33E+08	53151.00	16162.00	4413056.	9.650000	12.12000
Minimum	351616.0	1674.000	2.000000	1287102.	-4.000000	-3.810000
Std. Dev.	39395648	14809.55	1727.873	1062696.	2.494779	1.268115
Probability	0.000000	0.000003	0.000000	0.000002	0.000000	0.000000
Sum	8.19E+09	5531658.	320836.0	7.45E+08	1408.520	252.7360
Sum Sq. Dev.	4.33E+17	6.12E+10	8.33E+08	3.15E+14	1736.475	448.6644
Observations	280	280	280	280	280	280

Source: Calculated based on data from Indonesian Banking Statistics 206-2015

Some notable findings from this statisticsare, on average, Indonesian banks in our sample recorded a net interest difference value of 5.03 percent, with a maximum value of 9.65 percent and minimum value of minus -4.0 percent. This is far above the average commercial lending rates of banks in most of the foreign countries. Therefore interest rate wise it is reasonable for shareholders of foreign owned banks to expand business operation in Indonesia. That was also the case for Return on Assets of parent banks in home countries of the foreign owned bankswhere the 0.90 percent average that we found are higher enough for parent bank of foreign shareholders to also expand business in Indonesia.

The regression results is summarized in table below

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Table. IV.2. Factors affecting Assets Growth of Foreign Owned Banks (ASSETS)

INDEPENDENT VARIABLE	COEFFICIENT	T-STATISTIC	PROBABILITY (ρ)
BILTRADE	0.098325 (0.079239)	(-1.240867)	0.2157
FDI	0.316373*** (0.051388)	6.1566522	0.0000
INTDIFF	0.026507 (0.031372)	0.844914	0.3989
TPF	1.068790 *** (0.175851)	6.077798	0.0000
ROAt-1	0.161223*** (0.055582)	2.900631	0.0040
LTVD	0.340152 ** (0.143321)	2.373354	0.0183
C	-0.767628 (2.573652)	-0.274951	0.7836
R2	0.365942	Hannan-Quinn criterion	3.065985
Adjusted R2	0.352007	Akaike info criterion	3.029537
F Statistic	26.26004	Schwarz criterion	3.120406
Probability(Fstat.)	0.00000	Durbin-Watson Stat.	0.392537

***Significant at 1% ** Significant at 5% *Significant at 10%

( ) is standard error of the coefficient value

Table IV.3below show the estimated correlation matrix of all variables.The results show that no multicollinearity existed among the five independent variables. If such problem existed, the numbers under intersection of each of the independent variables would be more than 0.8000 (Gujarati, 2006). For example the number under the intersection between Asset (row) and Asset(Column) was 0.160444 (indicating the absence of multicollinearity).

IV.3 ESTIMATED CORRELATION MATRIX

		ASSET	BILTRADE	FDI	TPF	INTDIFF	ROA
ASSET		1.000000	0.160444	0.375132	0.357000	0.122838	0.010205
BILTRADE		0.160444	1.000000	0.469176	0.211351	0.076179	0.227154
FDI		0.375132	0.469176	1.000000	0.295451	0.268538	0.042469
TPF		0.357000	0.211351	0.295451	1.000000	-0.040322	-0.129077
INTDIFF		0.122838	0.076179	0.268538	-0.040322	1.000000	0.012357
ROA		0.010205	0.227154	0.042469	-0.129077	0.012357	1.000000

In this study, we assume linearity of the model and test the hypotheses usingleast square dummy variable (LSDV) linear regression. As we are utilizing cross section or panel data no autocorrelation test required as autocorrelation occurred in time series data.

4.2 INTERPRETATION AND DISCUSSION

In order to discuss the results, previous empirical and theoretical evidences were referred to. The results are discussed in line with the study objectives.

4.2.1.BILATERAL TRADE

Regression analysis results revealed Bilateral Trade does not have significant relationship with Assets of Foreign Owned Bank (β-value = 0.098325, p = 0.2157). This regression result contradict with our earlier hypothesis as well as previous studies by Grosse(1991) concluding that there is a positive significant relationship between Bilateral Trade and Assets of Foreign Owned Bank but confirm previous study byMinh, To and Tripe (2002) concluding that bilateral trade has no significant impacts on value of assets of the foreign owned banks in New Zealand. This can be explained by several reasons. First,

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during the past decade there is a shifting in nature of trade finance transactions. Aftermath of the banking crises in 1998, banks in Indonesia tends to reduce import and export credit/financing for their client to reduce credit risks and non performing loan. Therefore contribution to bank's assets is decreasing. Trade transactions is executed based on collection or remittance only without financing/credit extended which has no significant contribution for increasing of bank's assets.

Second, there is a decrease in overall foreign trade transactions especially since 2011 as a result of the fall and stagnant world commodities prices ranging from crude palm oil (CPO), coal and other commodities which is Indonesia's main export goods and depreciation of local currency which slow down import from overseas resulting export decrease from USD 192 billion in 2012 to USD 143 billion in 2015 and Import decrease from USD 203.436 billion in 2011 to USD 150 billion in 2015.Third, not all export-import/bilateral trade of each foreign countries with Indonesia is completely utilizing the services of each foreign countries banks in Indonesia. For instance, the amount of export and import transactions of all Indian banks in Indonesia in 2015 is less than USD 100 million while bilateral trade (combined export and import) between India and Indonesia in 2015 is US14.4 billion. Only US, Japan, Korea and UK are using their banks intensively to support their export-import transactions. Therefore follow the customer hypothesis in terms of bilateral trade is not fully applicable.

4.2.2 FOREIGN DIRECT INVESTMENT

Regression analysis results revealed positive and significant relationship between Foreign Direct Investment and Assets of Foreign Banks(β-value = 0.3164, p = 0.0000). These regression results are also the same as our earlier hypothesis as well as previous study by Grosse (1991), concluding that the increase in Foreign Direct Investment will increase Assets of Foreign Owned Banks. Follow the customer hypothesis in terms of Foreign Direct Investment is fully applicable as main portions of customers of the foreign owned banks are subsidiaries or affiliates of companies established in their home countries. Other factors affecting the increase in assets of foreign owned banks is the significant increase of FDI during 2007-2008 and during 2011-2012 following the upgrade of Indonesia's Sovereign Debt to investment grade country which rating was increased from BB+ to BBB- by Fitch Rating Agencywhich followed by influx of direct foreign investment. Continuous improvement in economy and business prospects along with domestic factors such as condusive economics fundamental, high investment rate of return and investors appreciation expectations are the main factors attracting the FDI. Follow the customer hypothesis in terms of Foreign Direct Investment is fully applicable in this course of time.

4.2.3. INTEREST DIFFERENCES

Regression analysis results revealed no significant relationship between net interest difference and Assets of foreign owned Banks(β-value = 0.002651, p = 0.3989). Based on this results, it shows that the net differences between interest rate in foreign countries and Indonesia has no significant impacts on increasing the assets of foreign owned Banks. This regression result contradict with our earlier hypothesis as well as previous studies by Grosse(1991), Agarwal (1997) and, Ghura and Goodwin (2010)concluding that there is a positive significant relationship between net interest rate differences and Assets of Foreign Owned Bank. But, the result is confirming the study made by To(2002) concluding that interest differentials between 3- month Treasury Bills rate in New Zealand and in the home country has no impacts on increase/decrease of assets of foreign owned banks in NZ. This results can be explained by several reasons. First, interest rate is no longer the dominant factor attracting foreign shareholders to expand its banking operations in Indonesia as the central bank rate has been gradually decreasing to propel higher investment growth. Foreign investors were more attracted with potentially high domestic market shares, better investment regulation, improvement of sovereign debt rating and high country economics growth.

4.2.4 THIRD PARTIES FUNDS(DOMESTIC DEPOSITS)

Regression analysis results revealed positive and quite significant relationship between third parties funs and Assets of Foreign Owned Banks (β-value = 1.06879, p = 0.0000). These regression results is contradict with our earlier hypothesis and earlier study byGoldberg (1990)concluding that the

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increase in Third Parties Fund will decrease Assets of Foreign Owned Banks as mentioned earlier that increase in third parties fund or domestic deposits will reduce foreign owned banks market shares and opportunity to collect deposits as sourced of fund for extending credit which will increase assets of the banks. This can be explained by understanding that foreign owned banks or banks acquired by foreign shareholders in Indonesia have competitive advantageous in providing better interest rate, exchange rates and services for foreign exchange deposits vis-à-vis to local banks as foreign owned banks has strong and better international banking networks. Henceforth increase in domestic deposits in Indonesia will not reduce foreign owned banks market shares and opportunity to collect deposits as hypothesized and happened in previous study, as people intent to place foreign exchange deposit tend to be serviced by foreign owned banks instead of local or domestic banks. The prolong depreciation and fluctuated local currency against USD during the decade is also motivates people to place their foreign exchange deposit in foreign owned banks. Thus, higher opportunity of collecting foreign exchange deposits will be used as source of fund for extending more credit which in its turn increase assets of foreign owned banks.

4.2.5ONE YEAR LAGGED RETURN OF ASSETS

Regression analysis results revealed positive and significant relationship between previous year Return on Assets of foreign shareholders parent banks in home countries and Assets of the Foreign Owned Banks operated in Indonesia (β-value = 0.161223, p = 0.0040) . These regression results are also the same as our earlier hypothesis concluding that the increase in previous year Return of Assets of Parent Banks in home country of Foreign Shareholders will increase Assets of Foreign Owned Banks. This results is similar with study by Minh, To and Tripe (2002) on New Zealand commercial banks in which the study was utilizing ROA instead of ROAt-1.

4.2.6. LENGTH OF TIME

Regression analysis results utilizing Dummy Variable to represent the duration of foreign owned banks presence in Indonesia shows positive and significant relationship between length of time presence of foreign owned banks and foreign owned bank asset (β-value = 0.340152, p = 0.0183. These regression results are also the same as our earlier hypothesis and confirm previous study byMinh, To and Tripe (2002) and Williams (2003) concluding that foreign bank assets have positive co-relation with length of time. The longer the foreign owned bank presence in New Zealand and Australia the higher assets of that foreign owned banks. So, this variable reflect the parent bank bank's operating experience and its knowledge of the host countries. In this research the longer presence of foreign owned banks in Indonesia which mostly start business operation since 1968 has significant impact on increase in the assets of foreign owned banks vis-a-vis foreign owned banks operated after year 1997.We may conclude that assets growth of banks acquired by foreign shareholders which started operating after issuance of Government Regulation in 1999 is relatively lower than assets growth of foreign owned banks started incorporated or presence in Indonesia three decades before year 1997. Henceforth, rapid growth of foreign owned bank assets during 2007-2015 is mostly contributed by foreign banks established and presence in Indonesia since 1968.

V. CONCLUSION AND SUGGESTION

This study is the first to examine the determinants of the value of assets of foreign owned banks including foreign acquired local banks in Indonesia. The aim of this research is to determine the dominant determinants that motivate foreign owned banks to increase their assets in Indonesia by disregarding the factor of specific parent banks motives of each individual banks. It is also intended to ensure whether the results is in confirm with the "follow the customer hypothesis" and concurred previous studies.

In particular the main findings of our studies is that Foreign Direct Investment, Third Parties Fund, Return of Assets of Parent Banks and long time presence in Indonesia are the dominant determinant affecting assets or size of the foreign owned banks. This results suggests that follow the customer hypothesis is applicable in Indonesia only in terms of FDIs but not applicable in terms of bilateral trade. Findings of our study contradict previous studies in terms of bilateral trade, domestic deposits and net interest rate differentials.

This suggests that the decisions by foreign owned

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banks to operate and to expand its business in Indonesia is predominantly affected by the increase in realization of projects financed by Foreign Direct Investment from counterpart countries, higher third parties fund or domestic deposit denominated in foreign currencies, higher profitability of the parent banks in home country and long time presence in Indonesia to enable longer parent bank's operating experience, better general managerial expertise and better knowledge of local environment.

Other findings is that bilateral trade and net interest rate differences between home countries of foreign owned banks and Indonesia appear no matter or has no impact on Assets of Foreign Owned Banks.

Our recommendation to decision makers in banking industry is that foreign owned banks should consider increasing the trade financing scheme such as extending credit facilities for import and export transactions for customers having trade transactions with its home country counterparts which will increase assets or size of the foreign owned banks as based on our findings bilateral trade has insignificant impact on its foreign banks assets.

Like any research, this study has some limitations. We do not include variables representing specific parents banks vision or strategic objectives to expand business in Indonesia. We also do not include macroeconomic factors such as current account surplus of each foreign countries which certainly motivates banks and also corporates to expand business in the host country. We could also extend the study by breaking up the Foreign Direct Investment based on type of economic sector to determine the dominant economic sector affecting the increase of foreign owned bank assets. This study also relatively short (10 years) period, under condition of relatively stable economy and high economic growth of Indonesia as one of the emerging market. A study covering longer time period with a wide range of economic conditions might result in new insights.

Lastly, this study has looked only at foreign banks and foreign acquired local banks which foreign shareholding of 75% and above, for future research it is suggested to include banks which foreign shareholding less than 76% but foreign shareholders is still the controlling shareholders of the banks so all strategic decisions of the banks is within authority of the foreign shareholders.

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ATTACHMENT 1

Dependent Variable: LOG(ASSET)				
Method: Panel Least Squares				
Date: 10/05/17 Time: 16:20				
Sample: 2006 2015				
Periods included: 10				
Cross-sections included: 28				
Total panel (balanced) observations: 280				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(BILTRADE)	-0.098325	0.079239	-1.240867	0.2157
LOG(FDI)	0.316373	0.051388	6.156552	0.0000
INTDIFF	0.026507	0.031372	0.844914	0.3989
LOG(TPF)	1.068790	0.175851	6.077798	0.0000
ROAT_1	0.161223	0.055582	2.900631	0.0040
LTDV	0.340152	0.143321	2.373354	0.0183
C	-0.707628	2.573652	-0.274951	0.7836
R-squared	0.365942	Mean dependent var		16.40944
Adjusted R-squared	0.352007	S.D. dependent var		1.350435
S.E. of regression	1.087073	Akaike info criterion		3.029537
Sum squared resid	322.6116	Schwarz criterion		3.120406
Log likelihood	-417.1351	Hannan-Quinn criter.		3.065985
F-statistic	26.26004	Durbin-Watson stat		0.392537
Prob(F-statistic)	0.000000			

ESTIMATED CORRELATION MATRIX

	ASSET	BILTRADE	FDI	TPF	INTDIFF	ROA
ASSET	1.000000	0.160444	0.375132	0.357000	0.122838	0.010205
BILTRADE	0.160444	1.000000	0.469176	0.211351	0.076179	0.227154
FDI	0.375132	0.469176	1.000000	0.295451	0.268538	0.042469
TPF	0.357000	0.211351	0.295451	1.000000	-0.040322	-0.129077
INTDIFF	0.122838	0.076179	0.268538	-0.040322	1.000000	0.012357
ROA	0.010205	0.227154	0.042469	-0.129077	0.012357	1.000000

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DESCRIPTIVE STATISTICS

	ASSET	BILTRADE	FDI	TPF	INTDIFF	ROA
Mean	29267142	19755.92	1145.843	2659623.	5.030429	0.902629
Median	14534494	16431.50	509.0000	2338824.	5.500000	0.855000
Maximum	2.33E+08	53151.00	16162.00	4413056.	9.650000	12.12000
Minimum	351616.0	1674.000	2.000000	1287102.	-4.000000	-3.810000
Std. Dev.	39395648	14809.55	1727.873	1062696.	2.494779	1.268115
Skewness	2.726249	0.680694	3.477331	0.368226	-0.895758	4.081239
Kurtosis	12.09623	2.412415	23.43733	1.681367	3.944232	30.90048
Jarque-Bera	1312.164	25.65070	5437.271	26.61350	47.84624	9859.066
Probability	0.000000	0.000003	0.000000	0.000002	0.000000	0.000000
Sum	8.19E+09	5531658.	320836.0	7.45E+08	1408.520	252.7360
Sum Sq. Dev.	4.33E+17	6.12E+10	8.33E+08	3.15E+14	1736.475	448.6644
Observations	280	280	280	280	280	280