Etikonomi
Volume 17 (2), 2018: 213 - 222
P-ISSN: 1412-8969; E-ISSN: 2461-0771

Foreign Banks' Presence and Domestic Bank Performance: Evidence from Indonesia

Aina Mardiya[1], Irwan Trinugroho[2]

Abstract. *We examine the impact of foreign presence on domestic banks' performance by studying conventional commercial banks in Indonesia. We use monthly financial information of 97 commercial banks from 2003 through 2013 resulting in 8,600 observations. We use a panel data regression (Panel Least Square method) to test our hypotheses. Our results show that overall, foreign presence decreases the performance of domestic banks. Going deeper, we find that foreign presence reduces state-owned banks' profitability as well as private domestic banks' profitability. However, there is no significant effect of foreign presence on the performance of regional development banks. Little evidence found on the effect of foreign presence on overhead cost.*

Keywords: *foreign banks, domestic banks, performance, state-owned banks, regional development banks.*

Abstrak. *Penelitian ini menguji dampak dari kehadiran bank asing terhadap kinerja bank domestik dengan mempelajari bank-bank komersial di Indonesia. Kami menggunakan informasi keuangan bulanan dari 97 bank komersial selama periode 2003-2013 yang menghasilkan 8.600 pengamatan. Kami menggunakan regresi data panel (metode Panel Least Square) untuk menguji hipotesis. Hasil penelitian menunjukkan bahwa secara keseluruhan, kehadiran bank asing menurunkan kinerja bank domestik. Lebih lanjut, kami menemukan bahwa kehadiran bank asing mengurangi profitabilitas bank-bank yang dimiliki negara serta profitabilitas bank domestik swasta. Namun, tidak ada pengaruh yang signifikan dari kehadiran bank asing terhadap kinerja bank pembangunan daerah. Terdapat bukti kecil yang ditemukan terhadap pengaruh kehadiran bank asing terhadap biaya operasional.*

Kata kunci: *bank asing, bank domestic, kinerja, bank milik pemerintah, bank pembangunan daerah.*

How to Cite:

Mardiya, A., & Trinugroho, I. (2018). Foreign Bank's Presence and Domestic Bank Performance: Evidence from Indonesia. *Etikonomi: Jurnal Ekonomi*. Vol. 17 (2): 213 – 222. doi: http//dx.doi.org/10.15408/etk.v17i2.7769.

Received: March 5, 2018; Revised: May 5, 2018; Accepted: May 15, 2018
[1,2] Universitas Sebelas Maret. Jl. Ir. Sutami, No. 36A, Kentingan, Surakarta 57126, Indonesia
E-mail: [1]aina.mardiya@gmail.com, [2]irwan.trinugroho@gmail.com
DOI: htttp://dx.doi.org/10.15408/etk.v17i2.7769

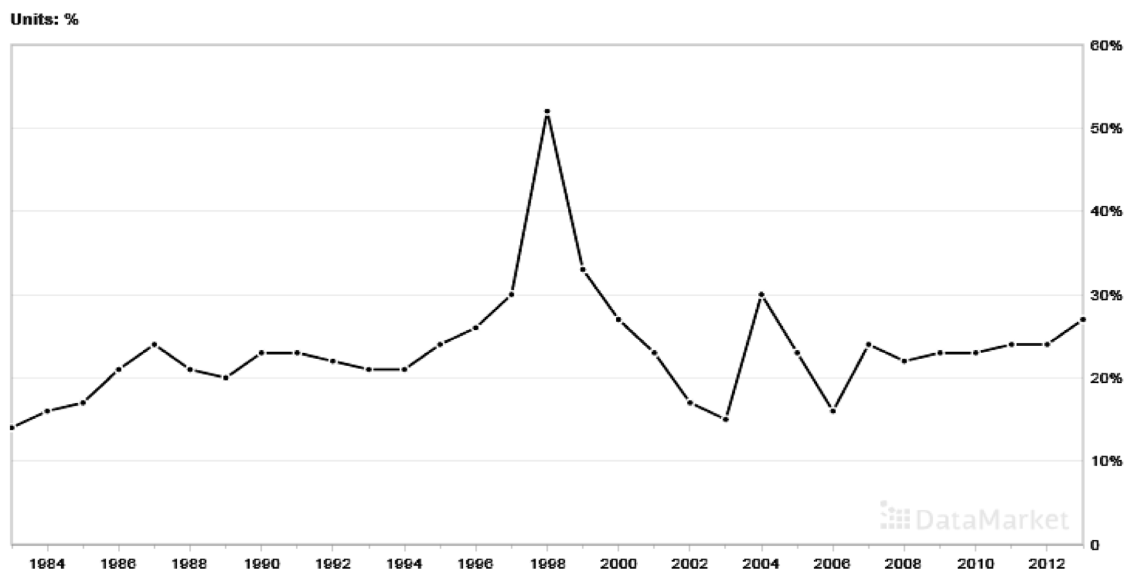
Introduction

The form of foreign participation in the Indonesian banking industry has evolved in the last 40 years. The first entry was around 1970 in which a foreign bank opened branches in Indonesia. Further, banking reform in October 1988 allowed foreign banks to establish joint venture banks, a partnership model with the domestic bank. The foreign banks could purchase shares of local banks in the stock market (Mulyaningsih et al., 2015).

Following 1998's financial crisis, many foreign banks entered Indonesian banking industry through acquisitions of insolvent banks. The domestic partner in joint-venture banks could not be able to recapitalize their equity, therefore banking regulator increases the percentage of foreign ownership from 85% to 99% (Havrylchyk and Jurzyt, 2011), which created more incentive for foreign banks to enter the market at lower cost by acquiring distressed bank (Hryckiewicz and Kowalewski, 2010). Eventually, among the 16 joint venture banks, foreign banks' participation increased substantially up to 99% (Mulyaningsih et al., 2015).

Figure 1 shows the percentages of foreign banks' market share in Indonesia from 1984 to 2012. The market share grows consistently around 15% 30%. However, in the 1998 crisis period, the growth is exceptionally high as explained earlier due to there was a substantial acquisition of foreign banks to domestic banks.

Figure 1. Percentage of Foreign Banks' assets in Indonesia



Source: Federal Reserve Bank of St. Louis (citing: World Bank)

The motivation of foreign banks' penetration in Indonesia varied across country origin and type of banks. Japanese banks' motivation is usually to follow up on the foreign direct investment (FDI) flow. In the early penetration period, they went after their customer. As time goes by, those banks broadened their customer base into a local firm. Some other foreign banks such as JP Morgan and Deutsche Bank enter the Indonesian banking to advance global

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DOI: htttp://dx.doi.org/10.15408/etk.v17i2.7769

financial services. Another motivation is due to an offered opportunity to enter a market with low cost by saving bailed out banks (Hryckiewicz and Kowalewski, 2010).

Some studies have examined the effects of foreign banks' presence on domestic banks. Dopico and Wilcox (2001) find that foreign banks offer the possibility to increase the bank capital, technology, and human competencies in the banking system of the host country. Those findings are in line with another study which finds that foreign banks can provide global financial services, advanced marketing and management skills, and better governance and organization structure (Manlagñit, 2011; Mulyaningsih et al., 2015).

The beneficial view of foreign banks' penetration has evidenced by Wu et al. (2010) in which they find that foreign banks with more information could give knowledge channel to the host country particularly emerging economies. Foreign banks also provide more stable lending than domestic banks in a crisis period. Foreign banks are not easily disturbed by the business cycle in the host country because they have diversified international assets.

Meanwhile, Jeon et al. (2011) find that foreign banks are more efficient and less risky than domestic banks. It is possible because foreign banks are likely to lower overhead cost and charge lower interest margins to maintain market share (Peria and Mody, 2004). The indirect effect of foreign bank entry is improving cost efficiency of domestic banks in the host country because foreign banks typically bring new and better skills, advanced management techniques and technology, that positively affect to the domestic banking industry. The higher-level competition has led domestic banks' managers to exit their comfort zone and had to provide more significant efforts to achieve cost efficiency. The positive implication is also that foreign banks could bring competitive pressure, which then encourages the domestic bank to perform better.

On the other hand, Okuda and Runsomboon (2006) disagree regarding competition between foreign banks and domestic banks. They argue that foreign banks and domestic banks share difference specialty and have a different strong point. Foreign bank has advantages in the human and physical aspects. They keep highly skilled employees and invest in advanced technology, tend to control their credit exposure, focus on lending to large firms with advanced screening and monitoring approaches. At the same time, domestic banks are focused on taking deposits and increasing in channeling loans. Domestic banks have superiority in customer information due to better social and cultural knowledge. A retail customer is more likely to choose a domestic bank than a foreign bank for their local transaction because domestic banks have many branches, mostly in all areas, so they can easily reach by the customer.

Claessens et al. (2001) argue that foreign banks do not see information disadvantage as the weakness because credit allocation or other restriction do not burden foreign banks. Consequently, those banks can achieve lower interest margins; lower overhead costs, and higher profitability. It is confirmed by Trinugroho et al. (2014) that in the context of Indonesian banking that foreign banks have lower net interest margins compared to state-owned banks and private domestic banks.

Table 1. Some Indicators of Bank Performance (in Million Rupiah)

Bank	EBT				OVERHEAD COST			
	2004	2007	2010	2013	2004	2007	2010	2013
State-Owned Bank	7.43	8.25	12.09	20.52	3.38	4.68	10.02	14.03
Foreign Bank	5.08	6.79	7.68	11.20	2.31	4.03	21.48	19.23
Regional Development Bank	1.34	2.23	3.96	5.06	0.70	1.10	2.67	3.86
Private Domestic Bank	1.40	1.90	2.79	3.90	0.59	1.02	2.25	3.40

Table 1 shows the performance of Indonesian banks in 2004, 2007, 2010 and 2013, respectively. After the 2008 global financial crisis, profitability (earnings before tax/ EBT) of state-owned banks increased about 46% however its overhead cost also enlarges until hitting 114%. Similarly, with 13% EBT growth, foreign banks spend more than 400% on overhead cost. At the same time, the EBT's growth of Regional Development Bank and Private Domestic Bank increases above 40%. However, their overhead cost also boosts up significantly. In 2013, the overhead cost of the state-owned bank, regional development bank, and private domestic bank increased around 40% in line with the rise of their EBTs growth. However, foreign banks have a different case, even though their EBT increases they could lower their overhead cost. This fact indicates that foreign banks have improved their efficiency.

Therefore, this is interesting to re-examine the effect of foreign banks' presence in Indonesian banking sector particularly concerning the performance of domestic banks because domestic banks have some important roles in the economy such as providing financing for SMEs. Furthermore, the Financial Services Authority has established a plan to strengthen the Indonesian Financial sector by consolidating some banks in 15 years' time span. Indonesia is also an emerging economy country that potentially appeals to foreign investors and is facing free trade area policy.

Method

In this paper, we investigate the impact of foreign banks' presence on domestic banks' performance. Therefore, we collect the information of bank performance, total assets, overhead cost, equity, loans, and customer funding on a monthly basis. The final sample is including 97 commercial banks from 2003 to 2013. The domestic banks divided into state-owned banks, regional development banks, and private domestic banks.

We use a panel data regression (Panel Least Square method) to test our hypotheses. Following Manlagñit (2011), our study uses two proxies to measure domestic banks' performance that is 1) the ratio of earnings before tax to total assets, and 2) the ratio of overhead cost to total assets. Our explanatory variable is the foreign banks' presence, which is measured by the ratio of foreign banks' assets to total banks' assets. This study also takes into account some control variables as in the study of Manlagñit (2011). First, we include equity that is the difference between assets and liabilities. Equity is used to measure the asset quality of the banks; in which well-capitalized banks could be considered to reflect high-

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DOI: http://dx.doi.org/10.15408/etk.v17i2.7769

quality management. It hypothesized that there is a positive relationship between equity and banks performance. Second, the customer-funding ratio is taken into account as it is one of a cheaper funding source for banks. Okun (2012) finds that customer funding has a positive relationship with bank performance. Third, we account loan ratio in which banks with higher ratios of loans could have lower profitability since loans are more costly to produce than investment securities. Fourth, market share is used to control size effect. Higher total asset allows banks to provide various financial products to gain profit. Banks with more considerable assets also tend to be benefitted from economies of scale.

Result and Discussion

Wu et al. (2010) and Xu (2011) classify a bank as the foreign bank if at least 50 percent of the equity ownership owned by foreign individuals, firms (including banks) or international organizations. Foreign banks could enter host country by opening branch or establish representative office and subsidiaries (direct investment or capital market investment).

Table 2. Descriptive Statistics of Variables

	Obs.	Mean	Max.	Min.	Std. Dev.
Profitability	8600	0.026	0.254	-0.483	0.031
Cost	8622	0.024	0.330	0.0008	0.020
Foreign Presence	8712	0.298	0.322	0.263	0.011
Equity	8623	0.129	1.143	-0.017	0.114
Customer Funding	8623	0.785	1.220	0	0.123
Loans to total assets	8615	0.538	0.910	0	0.164
Market Share	8623	0.011	0.264	1.15E-05	0.031

Table 2 shows the descriptive statistic of variables, while Table 3 exhibits the correlation matrix. Regression results presented in Table 4 and Table 5. As presented in Table 3, the foreign presence that is measured by the ratio of foreign bank assets to total assets negatively correlated with the profitability of banks. The magnitude of the correlation between the foreign presence and overhead cost, however, is not significant.

Table 3. Correlation Matrix

	Profitability	Cost	Foreign presence	Equity	Customer Funding	Loan	Market share
Profitability	1						
Cost	-0.022	1					
Foreign presence	-0.018	0.041	1				
Equity	-0.162	0.231	-0.005	1			
Customer Funding	0.076	-0.193	0.009	-0.778	1		
Loan	0.037	0.097	0.242	-0.214	0.170	1	
Market share	0.065	-0.076	-0.008	-0.134	0.017	-0.129	1

Table 4 shows the effect of foreign presence on domestic banks' performance. Furthermore, the regression test in Table 5 exhibits whether the effect of foreign presence differs across ownership types. As exhibited in Table 4, foreign share, as a measure of foreign banks' presence, has a negative effect on domestic banks' profitability. However, no significant effect found for the overhead costs of domestic banks. It confirms some previous studies in which foreign banks' presence affects competition in the host country's banking industry (Peria and Mody, 2004; Mulyaningsih et al., 2015). Although foreign banks could not be able to penetrate in all areas in Indonesia especially in the remote (Trinugroho et al., 2015), their presence significantly affects the banking competition by lowering the profitability of domestic banks. However, the insignificant effect of foreign presence on overhead cost could consider that banking efficiency is not necessarily improved when the share of foreign banks increase.

Table 4. Regression Results (Baseline)

	Profit	Cost
Foreign Share	-0.055**	0.016
	(-1.963)	(0.928)
Equity to Total Assets	-0.067***	0.039***
	(-14.145)	(13.187)
Customer Funding	-0.029***	-0.007***
	(-6.936)	(-2.592)
Loan to Total Assets	0.002	0.017***
	(1.294)	(13.421)
Market Share	0.034***	-0.016**
	(3.304)	(-2.403)

*, **, *** Indicate significance at the 10%, 5%, and 1% levels.

Table 5 presents the regression results on the effect of foreign banks' presence on domestic banks' performance by dividing domestic banks into different types based on ownership. Foreign presence does have a significant adverse effect on the profitability of state-owned banks and private domestic banks. However, foreign presence does not significantly affect the performance of regional development banks. Regional development banks mainly operated in their provinces; therefore, in many cases, they do not directly compete with foreign banks. Subsequently, regional development banks have higher market power than other banks due to their captive markets (Trinugroho et al., 2018). Regarding the effect of foreign presence on overhead cost, the effect only pronounced for state-owned banks meaning that those banks significantly reduce overhead costs to be more competitive following the penetration of foreign banks.

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DOI: htttp://dx.doi.org/10.15408/etk.v17i2.7769

Table 5. Regression Results by Dividing Domestic Banks into different types

	State-owned Bank		Regional Development Bank		Private Domestic Bank	
	Profit	Cost	Profit	Cost	Profit	Cost
Foreign Share	-0.343***	-0.119**	0.045	-0.027	-0.1542***	-0.036
	(-4.463)	(-2.289)	(1.234)	(-1.161)	(-4.299)	(-1.373)
Equity to Total Assets	0.246***	0.030	0.262***	-0.001	-0.029***	0.062***
	(6.322)	(1.153)	(19.044)	(-0.153)	(-5.521)	(14.091)
Customer Funding	0.115***	0.064***	-0.012*	-0.025***	-0.032***	0.010**
	(6.939)	(5.685)	(-1.842)	(-5.998)	(-5.566)	(2.544)
Loan to Total Assets	0.076***	0.045***	0.038***	0.030***	0.027***	0.018***
	(9.119)	(7.957)	(11.614)	(14.201)	(9.626)	(8.897)
Market Share	0.068***	-0.016	-0.482***	-0.298***	0.215***	-0.012
	(3.616)	(-1.267)	(-3.654)	(-3.551)	(9.978)	(-0.774)

*, **, *** indicate significance at the 10%, 5%, and 1% levels.

We do two robustness checks to ensure that our results are robust. The result of the robustness checks presented in Table 6. First, we employ fixed effect regression to replace the pooled regression in the basic model. Second, we exclude the year of 2008 that is affected by the global financial crisis. Concerning the variable of interest, the results remain unchanged.

Table 6. Robustness Check Using Fixed Effect and Excluding Year of 2008

	Fixed Effect		Excluding 2008	
	Profit	Cost	Profit	Cost
Foreign Share	-0.125***	-0.026*	-0.160***	-0.014
	(-5.773)	(-1.762)	(-5.398)	(-0.748)
Equity to Total Assets	-0.011**	0.050***	-0.081***	0.048***
	(-2.256)	(14.991)	(-16.163)	(14.830)
Customer Funding	0.011***	-0.009***	-0.033***	-0.007**
	(2.662)	(-3.383)	(-7.401)	(-2.369)
Loan to Total Assets	0.027919***	0.028***	0.004**	0.018***
	(11.521)	(17.000)	(1.984)	(13.143)
Market Share	-0.113***	-0.009	0.032***	-0.013*
	(-2.579)	(-0.286)	(2.918)	(-1.871)

*, **, *** indicate significance at the 10%, 5%, and 1% levels.

Chen and Liao (2011) find that domestic banks tend to be less profitable than foreign banks when the parents of foreign banks have a high level of profitability. In term of financial support of parent bank, Detragiache and Gupta (2006) study the impact of foreign banks in the Malaysian market in the 1998 Asian crises. They use four indicators to detect whether their parent financially supports the foreign banks. The four indicators are profitability, capitalization, non-performing loan, and liquidity. The result shows that in the crisis period, profitability is the

only one indicator that is significant. It means the outstanding performance of foreign banks during the crisis period does not have a relationship with their parents' performance.

By using data of 1273 banks in 35 emerging economies from 1996 to 2008, Wu et al. (2010) find that foreign banks' penetration has a positive effect in increasing economic growth through efficient capital and labor allocation. Another possible direct effect is that foreign banks give a better example to domestic banks particularly in identifying potential borrowers and employ a more sophisticated system to monitor loans. Zhu (2007) explains that the benefits of competition may be limited because multinational banks keep picking good borrowers.

Some papers reveal that foreign banks tend to compete better than domestic banks. Even though foreign banks have higher tax payment, they also have customer base internationally with diversified products that will bring them to have higher interest margins and profitability (Claessens et al., 2001; Ghosh, 2016). The foreign currency could also give foreign banks cheaper capital funding and enhance credit access (Clarke et al., 2006; Havrylchyk and Jurzyt, 2011; Giannetti and Ongena, 2012). Foreign banks could not only mitigate the exchange rate risk, but they could also have a chance to get benefit from the possible currency depreciation of the host country (Rashid, 2005).

Havrylchyk and Jurzyt (2011) examine banks in 11 Central and Eastern Europe countries that have the most significant foreign penetration from 1993 until 2005 with difference-in-difference technique. After controlling for the potential selection bias, they compare the foreign acquired banks and the Greenfield banks. The result shows that foreign acquired banks' market share and profit is lower before acquisition and start to increase after the acquisition, even though the improvement level is still below the Greenfield banks. Rokhim and Susanto (2013) find those foreign banks' presence forces domestic banks to improve their efficiency. Domestic banks start to improve their investment in human resource in term of better recruitment and development, to achieve a better quality of human resources. Parinduri and Riyanto (2012) have also revealed similar results by using combined difference-in-difference approach to examine the impact of the strategic sale of restructured banks in Indonesia. They find that the return on asset and net interest margin of foreign acquired banks significantly increase, while the ratio of non-performing loans decreases significantly. They argue that this is due to the advanced banking practices brought by foreign investors, the lowering of political intervention, and the improving of bank governance.

The foreign acquisition also provides foreign banks with more space to compete. Before the banking recapitalization in Indonesia, foreign banks only target small niche markets. However, after recapitalization, foreign banks could acquire domestic private banks that already have a large customer base like other domestic banks (Rokhim and Susanto, 2013). Trinugroho et al. (2015) studying 33 provinces in Indonesia over 2004-2010 find that there is a disparity in accessing banks' financial product across regions due to a geographical area, different local governance, unbalanced infrastructure improvement, and economic growth inequality. Due to those factors, foreign banks do not penetrate many areas because foreign banks tend to operate in promising and profitable areas with adequate infrastructure.

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DOI: htttp://dx.doi.org/10.15408/etk.v17i2.7769

Conclusion

We investigate whether foreign banks' presence has a substantial effect on the performance of Indonesian domestic banks. Furthermore, we also examine the different impact on domestic banks across ownership types. We use data from 97 commercial banks from 2003 through 2013. To ensure the consistency of our results, we do robustness check excluding the global financial crisis period (2008) and test the model using different estimation method. Our results show that foreign presence significantly decreases the domestic banks' performance. Going deeper, by dividing the ownership type of domestic banks, foreign presence has more effects on the performance of state-owned banks and private domestic banks.

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