

Impact of foreign capital entry in the Indonesian banking sector

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Miki HAMADA*

March 2013

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Keywords: Banking, Foreign bank entry, SMEs

JEL classification: G21, G34, O53

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After the Asian financial crisis of 1997/98, the Indonesian banking sector experienced significant changes. Ownership structure of banking sector is substantially-changed. Currently, ownership of major commercial banks is dominated by foreign capital through acquisition. This paper examines whether foreign ownership changes a bank's lending behavior and performance. Foreign banks tend to lend mainly to large firms; this paper examines whether the credit to small and medium-sized enterprises (SMEs) is affected by foreign capital entry into the Indonesian banking sector. Empirical results show that banks owned by foreign capital tend to decrease SME credit.

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1. Introduction

The entry of foreign banks into the banking sector of developing countries has increased in the past decade. Gopalan and Rajan (2009) explained foreign bank penetration in Asia thus: "The relatively low penetration of foreign banks into Asia is consistent with the fact that while Asian economies have been deregulating their banking systems, they have approached this process more cautiously than their counterparts in Eastern Europe or Latin America." However, this is not the case for the Indonesian banking sector. Foreign capital entry into the Indonesian banking sector is fully liberalized; as a result, most major commercial banks in the Indonesian banking sector are owned by foreign capital through the acquisition of Indonesian local private banks.

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Before the Asian crisis, there were two types of foreign ownership in the Indonesian banking sector: joint venture banks (hereafter, joint banks) and foreign banks. The entry of foreign capital had been allowed to enter into the Indonesian banking sector was permitted via both in the forms of joint banks and foreign banks. A joint bank is held by a foreign bank and local capital. A foreign bank is a full-fledged subsidiary of a foreign bank, with 100% ownership by the foreign bank.

Joint banks and foreign banks have operated in the Indonesian market since the second comprehensive financial reform in 1988. These foreign ownership banks provide wholesale banking services to both their home countries' companies and to international companies; thus, joint and foreign banks' financial services were separated from the local banking businesses, which dealt with both wholesale and retail banking in the local market. With the acquisition of local private banks by foreign capital, there is a new type of foreign ownership—local private banks owned by foreign capital.

This study investigates the effects of presence of foreign capital in local banks on their behavior and performance. Previous empirical studies have explained that foreign banks tend to lend mainly to large firms and the government rather than to smaller businesses due to information cost (Detragiache et al., 2008). The current study focuses on SME credit. Increasing SMEs' access to finance is important for economic development. The Indonesian government and the central bank, Bank Indonesia, have continually adopted various policies to enhance SMEs' accessibility to finance. It is important to consider whether foreign capital entry will affect lending to SMEs. This study examines this question, along with the effects on profitability.

The rest of paper is organized as follows: Section 2 presents a literature review. Section 3 contains a brief overview of the Indonesian banking sector. Section 4 examines liberalization of foreign capital investment in the banking sector. Section 5 describes recent foreign capital entry. Section 6 examines the effects of foreign capital entry by qualitative analysis of individual banks' financial data in 2001–2009. Section 7 presents conclusions.

2. Literature Review

Many studies have discussed the advantages of foreign banks entering developing countries' banking sectors. Foreign bank participation brings advanced techniques to the banking business and enhances good governance. Berger et al. (2005) examined the effects of changes in banks' corporate governance on bank performance after changes in

bank ownership structures during the 1990s and early 2000s. They stated that these changes substantially altered the governance of the world's banking organizations.

Dmiruguc-Kunt and Huisnga (1999) explain that foreign ownership is associated with higher net interest margins and profits in developing countries.

Clarke et al. (2006) investigated whether higher foreign bank participation improves the access to external financing for firms in 35 developing and transition economies. Their results showed that all enterprises, including small and medium-sized ones, in countries having higher levels of foreign bank presence reported facing lower financing obstacles.

3. Indonesian Banking Sector

The Indonesian banking sector comprises two types of banks: commercial banks and people's credit banks (BPR: bank perkreditan rakyat). The former has the main banking functions in the Indonesian banking sector, while the latter are small-sized banks, providing limited services and regarded as secondary banks.

The commercial banking sector comprises five types of banks, categorized by ownership: state-owned banks, regional development banks, private banks which comprise private foreign-exchange banks (forex banks) and private non-foreign-exchange banks (non-forex banks), joint banks, and foreign banks. State-owned banks' more than 60% of their total shares are held by the Indonesian government. Regional development banks are held by regional governments. Private banks were originally fully owned by local capital. Joint banks are held by domestic capital and a foreign bank. Foreign banks are fully owned by a foreign bank.

Traditionally, foreign and joint banks provided wholesale banking; thus, foreign capital ownership was differentiated from the domestic retail banking market. However, recent foreign capital entry into the Indonesian banking sector changed the original banking structure. Currently, the domestic retail banking market has become a mixed market, comprising domestically owned and foreign-owned banks.

There are 120 commercial banks in Indonesia's banking sector: 4 state-owned banks, 26 regional development banks, 36 forex banks, 30 non-forex banks, 14 joint banks, and 10 foreign banks, as of the end of 2012. As of June 2012, there were 25 private banks owned by foreign capital.

State-owned banks account for 40% of the total earning assets of all commercial banks, followed by forex banks (37%), foreign banks (8%), regional development banks

(8%), joint banks (5%), and non-forex banks (2%).

4. Liberalization of Foreign Capital Ownership of Financial Institutions

Foreign capital entry was liberalized in 1988. In October 1988, the government announced a banking-sector reform policy package—Paket 27 Oktober 1988 (PAKTO)—as the second financial reform after the first financial reform, which had been in 1983. PAKTO enabled the entry of domestic and foreign banks into the Indonesian banking sector. Since 1968, the establishment of new private banks had been restricted. PAKTO allowed both domestic and foreign banks to establish new private banks on the precondition that the new bank had a minimum paid-up capital of Rp10 billion.

The entry of new foreign banks was conditional; newly admitted banks could enter the market only via a partnership with a domestic private bank, and they were to extend credit to the export-credit equivalent of 50% of the total outstanding credit.

Indonesian Banking Law No.7/1992 stipulated that foreigners/foreign entities be allowed to own up to 49% of local banks via stock holding. Indonesian Banking Law No.10/1998, an amendment to law No.7/1992, stipulated that foreigners/foreign entities be allowed to purchase a local bank's stock directly and/or via the stock exchange.

Presidential Regulation No. 29/1999 permitted foreign entities to hold up to 99% ownership of local capital banks. It regulates foreign investor ownership as follows:

- (1) Of the total shares, a maximum of 99% share ownership of banks is permitted by foreign investors and/or foreign institutions via direct placement or the Stock Exchange.
- (2) The purchase of shares by foreign investors or foreign institutions through the Stock Exchange can reach 100% of the total shares listed on the Stock Exchange.
- (3) Banks can list their shares on the Stock Exchange up to a maximum of 99% of the total shares.
- (4) At least 1% of banks' shares not listed on the Stock Exchange must be owned by an Indonesian citizen or by an Indonesian company.

This drastic change in ownership policy on foreign capital brought about a substantial change in the Indonesian banking sector. The impact of this change is examined in Section 6.

5. Foreign Capital Entry into the Banking Sector

Currently, foreign capital and foreign banks are permitted to participate in the banking sector; as a result, the local banking sector is dominated by foreign-owned banks. Banking restructuring after the Asian crisis nationalized 13 private banks, which were put under the Indonesian Bank Restructuring Agency (IBRA). Public capital was injected into 27 ailing private banks under the bank recapitalization program. Therefore, most major banks were temporarily nationalized. The government planned to divest its shares of nationalized banks within five years after the capital injection.

Before the crisis, major private Indonesian banks were owned by conglomerates that dominated the Indonesian corporate sector. The crisis affected this corporate sector, too. It was heavily damaged and lacked the ability to buy back the banking shares that had been transferred to IBRA. Meanwhile, foreign capital, including sovereign-wealth funds such as Tamasek in Singapore and Kazanah Investment in Malaysia, were interested in entering into the Indonesian banking sector. As of June 2012, the 15 largest banks comprise four state-owned banks, eight forex banks owned by foreign capital, one forex bank owned by local capital and two foreign banks. Assets of these top 15 banks account for 71% of the total assets of all commercial banks (Table 1). Besides the top banks, medium-sized banks also have been acquired by foreign capital. Foreign banks begin operations in the Indonesian market by acquiring Indonesian small and medium-sized commercial banks, including non-forex banks. For example, Tokyo-Mitsubishi-UFJ, a Japanese bank, and a consumer finance company, ACOM, jointly acquired a medium-sized Indonesian bank, Bank Nusantara Parahyangan, in August 2006, aiming to enter the consumer finance market in Indonesia. In December 2006, Industrial and Commercial Bank of China (ICBC) acquired a 90% ownership in Bank Halim Indonesia. The largest Indian commercial bank, State Bank of India (SBI), acquired Bank IndoMonex in December 2006, and Bank of India (BoI) bought Bank Swadesi (currently Bank India of Indonesia) in June 2007. Banks in the Middle East also have shown interest in Indonesian banks. Kuwait's Boubyan Bank bought a 20% share in Bank Muamalat, an Indonesian Islamic bank, and Bahrain's AlBaraka Islamic Bank was approved to enter into the Indonesian banking sector in 2011[†]. Thirteen more private banks were acquired by foreign capital (see Table 1).

[†] The acquisition is not implemented as of March 2013.

Table 1 Foreign Ownership among Indonesia's Top 15 Banks

| | Name | Ownership | Type * | Assets (Bil.IDR) | |
|---|------------------------------------|---|--------|------------------|--------|
| 1 | Bank Mandiri | State-owned Bank | S | 506,553 | 13.02% |
| 2 | Bank Rakyat Indonesia (BRI) | State-owned Bank | S | 461,135 | 11.85% |
| 3 | Bank Central Asia (BCA)** | Farindo Investments => Djarum group (47.15%) | Fx | 408,579 | 10.50% |
| 4 | Bank Negara Indonesia (BNI) | State-owned Bank | S | 306,878 | 7.89% |
| 5 | Bank CIMB - Niaga | CIMB Group Sdn Bhd, Malaysia (96.92%) | Fx | 179,425 | 4.61% |
| 6 | Bank Danamon Indonesia | Asia Financial Pte. Ltd (67.37%) | Fx | 152,393 | 3.92% |
| 7 | Bank Panin | ANZ Bank Group (39%) | Fx | 128,036 | 3.29% |
| 8 | Bank Permata | Standard Chartered Bank (44.505%) | Fx | 110,579 | 2.84% |
| 9 | Bank Internasional Indonesia (BII) | Maybank, Malaysia (97.4%) | Fx | 102,052 | 2.62% |
| 10 | Bank Tabungan Negara (BTN) | State-owned Bank | S | 95,512 | 2.45% |
| 11 | Bank OCBC-NISP | OCBC (75%) | Fx | 68,962 | 1.77% |
| 12 | Hong Kong Shanghai Bank | UK | F | 62,159 | 1.60% |
| 13 | Citibank | USA | F | 61,895 | 1.59% |
| 14 | Bank UOB Indonesia | UOB, Singapore (99%) | Fx | 58,827 | 1.51% |
| 15 | Bank Bukopin | Domestic (Koperasi Bulog) | P | 58,168 | 1.49% |
| Total of Top 15 banks | | | | | 70.96% |
| Other banks acquired by foreign capital | | | | | |
| | Bank BTPN | TPG Nusantara S.a.r.l, US (57.87%) | NFx | 52,006 | 1.34% |
| | Lippo Bank | Santubong Investments BV, Malaysia (87.03%) | Fx | 39,059 | 1.00% |
| | Bank Muamalat | Islamic Development Bank, Saudi Arabia (3.274%), Boubyan Bank Kuwait (19.03%) | Fx | 32,689 | 0.84% |
| | Bank Ekonomi | HSBC Asia Pacific Holdings, UK (98.94%) | Fx | 23,690 | 0.61% |
| | Bank ICB Indonesia | ICBC, China (97.5%) | Fx | 22,363 | 0.57% |
| | Bank Nesantara Parahyangan | Acom, Co., Ltd. Japan (60.3%), Tokyo-Mitsubishi Bank, Japan (15.2%) | Fx | 7,743 | 0.20% |
| | Bank Mestika Daharma | Mestika Benua Mas, Malaysia (99.95%) | Fx | 6,955 | 0.18% |
| | Bank ICB Bumiputra | ICB Financial Group, Swiss (69.9%) | Fx | 6,840 | 0.18% |
| | Bank Haga | Rabobank, Netherlands | Fx->J | 4,505 | 0.12% |
| | Bank QNB Kesawan | Qatar National Bank (69.59%) | Fx | 4,214 | 0.11% |
| | Hana Bank | Hana Bank, Korea (75.1%) | Fx | 4,205 | 0.11% |
| | Bank of India Indonesia *** | Bank of India (76%) | Fx | 2,359 | 0.06% |
| | Bank SBI Indonesia | State Bank of India (76%) | Fx | 2,197 | 0.06% |
| | Bank Arta Niaga Kencana | Bank Commonwealth, Australia (83.01%) | Fx->J | 1,429 | 0.04% |
| | Bank Hagakita | Rabobank, Netherlands | Fx->J | 1,375 | 0.04% |
| | Bank Andara | Marcy Corps, US (26.15%), IFC (17.87%) | NFx | 907 | 0.02% |
| | Bank Akita | Barclays Bank, UK (99%) | NFx | 268 | 0.01% |
| | Abglomas International Bank | Wishart Investment Inc., Virgin Island (90%) | Fx | 156 | 0.00% |
| Total | | | | | 76.4% |

* S = State bank, Fx = Forex bank, NFx=Non forex bank, J = Joint Bank, F=Foreign bank. Shadowed area indicates foreign ownership.

** Djarum Group, Indonesia's biggest conglomerate, acquired 50.24% of PT Bank Central Asia (BCA) shares from Farindo Investments in December 2010.

Source: EKOFIN and Infobank, *Infobank Outlook 2013*, and Bank Indonesia, Laporan Keuangan Publikasi Bank

*** Formerly Bank Swadesi.

6. Impact of Foreign Capital Entry on the Indonesian Banking Sector

This section empirically examines the impact of foreign capital entry on banking performance and credit to SMEs.

6.1 Empirical examination

Previous studies show positive effects of foreign capital entry on bank performance because of competition in the domestic banking sector and efficiency in management. Dmiruguc-Kunt and Huisnga (1999) explain that foreign ownership is associated with higher net interest margins and profits in developing countries. However, our main focus is changes in lending behavior, especially to SMEs.

We first reviewed bank performance, focusing on forex banks and foreign entry banks, because the effects of foreign capital entry must be compared with forex banks, not with joint or foreign banks.

Our dataset comprised 94 banks: 4 state-owned banks, 33 forex banks, 31 non-forex banks, 16 joint banks, and 10 foreign banks, which were in a database of Indonesian Banking Indicators in EKOFIN. During the period examined, 2001 to 2009, there was a gradual increase in the number of foreign capital entry banks. In 2001, one bank was a foreign capital entry bank; in 2009, there were 18[‡], including four non-forex banks.

Tables 2a-e show some financial indicators by bank type. Return on assets (ROA), a profitability indicator, varies from -3.3% to 6.5% in a decade (Table 2a). Forex banks' ROA has consistently been less than 2%. The level of foreign capital entry banks is similar to forex banks. Joint and foreign banks show relatively higher profitability. The net interest margin (NIM) of forex banks and foreign entry banks is about 6%, which is lower than that of state and non-forex banks and higher than joint banks and foreign banks (Table 2b). In terms of cost effectiveness, the operational expense ratios (OER) (ratio of operational expense to operational income) of forex banks and foreign entry bank are higher, exceeding 100% in 2008–2009. Joint and foreign banks show better efficiency (Table 2c). Performance of joint and foreign banks is relatively better than local capital banks, such as state owned banks, forex and non-forex banks.. Thus, we infer that foreign capital entry to Indonesian banks would improve bank performance.

State and non-forex banks are the primary credit providers to SMEs (Table 2e). Forex banks provide 10% of the total credit to SMEs. Interestingly, foreign capital entry banks gradually decreased credit to SMEs from 16.3% in 2001 to 7.4% in 2009. In 2001 foreign capital entry bank provided more credit to SMEs than forex banks. The marginal

[‡] The number had increased to 23 as of June 2012.

figures of joint and foreign banks appear to be due to different business models than local banks.

Table 2a ROA

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------|------|------|------|-------|------|------|------|-------|-------|
| State | 1.3% | 1.8% | 2.1% | 3.3% | 2.2% | 2.3% | 2.4% | 2.4% | 2.5% |
| Forex | 1.3% | 1.4% | 1.6% | -3.3% | 1.7% | 1.9% | 1.6% | -1.2% | -1.3% |
| Non-forex | 2.2% | 1.4% | 1.6% | 0.8% | 1.0% | 1.2% | 1.8% | 1.6% | 1.5% |
| Joint | 6.5% | 2.2% | 3.3% | 3.4% | 4.7% | 4.0% | 3.6% | 3.4% | 3.5% |
| Foreign | 2.3% | 3.5% | 3.3% | 4.3% | 2.5% | 4.1% | 3.7% | 3.7% | 3.7% |
| Foreign Capital Entry | 4.0% | 1.9% | 2.0% | 2.9% | 2.0% | 2.1% | 1.9% | 1.0% | -0.8% |

Table 2b NIM

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------|------|------|------|------|------|------|------|------|------|
| State | 3.6% | 4.2% | 5.2% | 6.9% | 6.7% | 6.5% | 6.6% | 6.8% | 6.2% |
| Forex | 6.0% | 4.7% | 5.3% | 6.4% | 5.7% | 5.8% | 5.8% | 5.5% | 5.6% |
| Non-forex | 6.9% | 6.3% | 7.2% | 8.7% | 7.6% | 7.0% | 6.8% | 6.7% | 6.8% |
| Joint | 6.3% | 5.3% | 4.7% | 4.5% | 5.5% | 5.8% | 5.2% | 5.0% | 5.1% |
| Foreign | 3.1% | 3.0% | 3.2% | 3.5% | 4.3% | 5.2% | 5.1% | 4.8% | 4.2% |
| Foreign Capital Entry | 5.8% | 4.5% | 4.7% | 6.3% | 5.6% | 6.2% | 6.0% | 6.1% | 5.6% |

Table 2c Operational Expense Ratio

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------|-------|-------|-------|--------|-------|-------|-------|--------|--------|
| State | 92.4% | 88.6% | 86.4% | 74.6% | 84.1% | 84.2% | 81.1% | 80.7% | 80.3% |
| Forex | 91.7% | 95.8% | 88.8% | 87.5% | 87.8% | 87.6% | 85.7% | 142.7% | 147.1% |
| Non-forex | 92.6% | 95.2% | 92.4% | 103.3% | 98.3% | 97.0% | 97.3% | 94.3% | 90.9% |
| Joint | 91.7% | 88.2% | 73.6% | 93.3% | 74.0% | 68.4% | 67.7% | 68.8% | 65.6% |
| Foreign | 89.5% | 72.0% | 91.3% | 61.1% | 73.6% | 63.7% | 65.8% | 65.5% | 56.5% |
| Foreign Capital Entry | 88.0% | 88.0% | 86.2% | 73.2% | 83.1% | 84.1% | 83.8% | 93.7% | 112.1% |

Table 2e SMEs' Credit/Total Credit

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| State | 30.1% | 29.0% | 26.8% | 25.9% | 24.4% | 25.5% | 25.8% | 24.6% | 25.0% |
| Forex | 15.5% | 14.3% | 14.7% | 11.3% | 10.0% | 11.9% | 10.9% | 10.6% | 10.3% |
| Non-forex | 32.8% | 26.1% | 22.7% | 22.4% | 23.5% | 21.3% | 20.2% | 17.4% | 17.0% |
| Joint | 0.0% | 0.0% | 0.0% | 0.3% | 0.4% | 0.4% | 1.4% | 2.6% | 3.2% |
| Foreign | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 0.0% |
| Foreign Capital Entry | 16.3% | 10.7% | 8.9% | 9.3% | 7.7% | 8.4% | 6.9% | 7.9% | 7.4% |

6.2 The empirical model

The impact of foreign capital entry on the performance and behavior of banks is examined by pooled OLS using 69 private banks' annual financial data (2001–2009). We estimate the following equation:

$$Y_{it} = \alpha_0 + \beta_{it}X_{it-1} + \gamma_{it}Entry_Dummy_t + \delta_t IV_{it-1} + \varepsilon_{it}, \quad (1)$$

where Y represents the dependent variables of bank performance and operation, ROA, NIM and OER. X is a vector of basic characteristics of individual banks. IV represents instrument variables.

The variable of primary interest is the *Entry Dummy*; it takes the value of 1 when the bank is acquired by foreign capital, 0 otherwise.

The dependent variables are ROA, NIM, and OER. ROA is net revenues divided by total book assets, which measures a bank's comprehensive performance. NIM is a measure of the return on a bank's investments relative to its interest expenses, calculated by the difference between total interest income and total interest expense divided by total earning assets. OER represents a measure of what it costs to operate a piece of property compared to the income that the property brings in.

The remaining independent variables are used to control for other factors that may affect the level of bank performance. ASSET is the natural log of book value of total assets. Since larger banks can diversify their credit portfolios, they are exposed to less risk and higher revenue. Therefore, the coefficient of ASSET is expected to be positive. CREDIT is the ratio of total credits to total assets. CREDIT is used to control for the effect of the bank's activity mix on bank performance. A positive coefficient of CREDIT would indicate that banks with high interest-bearing assets are profitable. EQUITY is the ratio of total equity to total assets in book value. Since a bank's performance is positively associated with its financial condition, the coefficient of EQUITY is expected to be positive. NPL is amount of non-performing loans per total loans; high NPL negatively affects profit and positively affects expense. ADMIN is the ratio of administration expense to total assets.

Regarding the impact of SEM credit, to address the endogeneity problem the following equation is estimated by fixed-effect model.

$$Y_{it} = \alpha_0 + \beta_{it}Y_{it-2} + \gamma_{it}X_{it-1} + \delta_t Entry_Dummy_t + \theta_{it} IV_{it-1} + \varepsilon_{it} \quad (2)$$

where Y represents the dependent variables of SMEs' credit ratio. To address endogeneity, the equation includes a 2-lagged dependent variable as an explanatory variable. The other independent variables are the same as in equation (1).

6.3 Results

Table 3 shows the regression results on bank performance. Our primary interest is *Entry_Dummy* (1 is a foreign capital entry bank). The coefficient of *Entry_Dummy* is negative and statistically significant at 10 % level for ROA. For NIM, it is negative and significant too, for OER it is positive but insignificant.

Table 3 Impact on Performance

| | ROA | | NIM | | OER | |
|-----------------|-------------------|-----|-------------------|-----|-------------------|-----|
| lag_ASSET | -0.012 (0.021) | | -0.027 (0.008) | *** | -0.044 (0.142) | |
| lag_CREDIT | 0.024 (0.019) | | 0.056 (0.005) | *** | -0.032 (0.123) | |
| lag_EQUITY | 0.092 (0.017) | *** | 0.065 (0.011) | *** | -0.385 (0.162) | ** |
| lag_NPL | -0.038 (0.032) | | -0.019 (0.012) | | 0.706 (0.461) | |
| lag_ADMIN | -0.759 (0.69) | | 0.647 (0.362) | * | 27.123 (7.066) | *** |
| lag_CREDITF | -0.003 (0.025) | | -0.045 (0.011) | *** | -0.581 (0.238) | ** |
| IV_Asset_sq | 0.000 (0.001) | | 0.001 (0) | *** | 0.001 (0.004) | |
| IV_CREDITF_sq | 0.063 (0.019) | *** | 0.001 (0.006) | | 0.484 (0.108) | *** |
| Entry_Dummy | -0.010 (0.006) | * | -0.008 (0.002) | *** | 0.014 (0.057) | |
| Number of obs = | 833 | | | | | |
| Prob > F = | 0 | | 0 | | 0 | |
| R-squared = | 0.093 | | 0.2511 | | 0.122 | |
| Root MSE = | 0.06757 | | 0.03033 | | 0.61079 | |

Note: Standard error in parenthesis.

* p<0.05, ** p<0.01, *** p<0.001.

The results indicates that foreign capital entry affects bank performance negatively, however, performance of forex banks besides foreign capital entry banks basically do not show good performance. Therefore it is needed another comparative examination of forex banks and foreign capital entry banks in the next step.

The effect of foreign capital entry banks (*Entry_Dummy*) on credit to SMEs is showed in Table 4. The coefficient of *Entry_Dummy* is negative and significant at 0% level. It indicates that foreign capital entry into local banks decrease credit to SMEs.

Table 4 Result of Impact on SME Credit

| SME Credit Ratio | | |
|------------------|---------|-----|
| lag_ASSET | -0.364 | *** |
| | (0.049) | |
| lag_CREDIT | 0.156 | *** |
| | (0.029) | |
| lag_EQUITY | -0.050 | |
| | (0.102) | |
| lag_NPL | -0.017 | |
| | (0.031) | |
| lag_ADMIN | -2.109 | |
| | (1.424) | |
| lag_CREDITF | -0.305 | *** |
| | (0.04) | |
| IV_Asset_sq | 0.012 | *** |
| | (0.002) | |
| IV_CREDITF_sq | 0.049 | * |
| | (0.025) | |
| Entry_Dummy | -0.047 | *** |
| | (0.013) | |
| Number of obs = | 833 | |
| Prob > F = | 0 | |
| R-squared = | 0.2839 | |

Note: Standard error in parenthesis.

* p<0.05, ** p<0.01, *** p<0.001

7. Conclusion

Many studies have investigated the effects of foreign bank entry into developing countries. The Indonesian banking market is fully liberalized and is dominated by foreign bank ownership. This study investigated the impact of foreign ownership on Indonesian banks' performance and lending behavior. Regression analysis shows that foreign capital entry into local banks has not positive impact on bank performance as measured by ROA and NIM. The coefficient of OER indicates that foreign capital entry has an insignificant effect on operational efficiency. However, a more notable result is that foreign capital entry negatively affects SMEs' credit.

The Indonesian banking sector is relatively small in terms of the size of its real economy. Thus, the Indonesian government has made several attempts to increase bank credit to the real sector, especially to increase SMEs' access to credit essential for economic development. This study raises concerns about the penetration of foreign capital into banking sectors in the Indonesian banking sector.

References

- Berge, A.N., Clarke, G.R.G., Cull, R. Klapper, L. and Udell, G.F.(2005) "Corporate Governance and Bank Performance: A Joint Analysis of the Static, Selection, and Dynamic Effects of Domestic, Foreign, and State Ownership," World Bank Policy Research Working Paper 3632, June 2005, World Bank.
- Clarke, G.R.G., R. Cull, M. S. M. Pería(2006) "Foreign bank participation and access to credit across firms in developing countries," *Journal of Comparative Economics* Vol. 34, pp.774–795.
- Claessens, S., A. Demirgüç-Kunt, H. Huizinga (2001) "How does foreign entry affect domestic banking markets?" *Journal of Banking & Finance*, Vol.25, pp.891-911.
- Detragiache, E., T. Tressel and Gupta Poonam, (2008) "Foreign Banks in Poor Countries: Theory and Evidence," *Journal of Finance*, Vol., LXIII, No.5, pp.2124-2160.
- Gopalan, S. and R. S. Rajan, (2009) "Financial Sector De-regulation in Emerging Asia: Focus on Foreign Bank Entry," ISAS Working Paper, No.76.