



## Possible Impact from Foreign Bank Presence to the Performance of Local Commercial Banks in Vietnam

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### ABSTRACT

Research on the impact of the presence of foreign banks on the domestic banking industry in particular is a popular topic for policy implications. The paper examines whether the presence of foreign banks improves the performance of domestic commercial banks in Vietnam. On the sample of 26 domestic commercial banks and 9 fully foreign-owned banks in Vietnam in the period 2009-2018, the research result shows that the presence of foreign banks reduces the profitability of domestic commercial banks, whereas does not have any impact on their operating costs, showing that the combination of spillover effects and competition effects has not caused a positive impact on Vietnamese banking industry. This result leads to policy implications that competition and the introduction of substitute products should be promoted, in order to make good use of the benefits of the entry of foreign banks.

**Keywords:** Foreign Bank Presence, Bank Performance, Spillover Effect, Competition Effect

**JEL classifications:** G21, G34

### 1. INTRODUCTION

Research on banking performance always attract attention of policymakers and researchers because of its important role for economic growth and development (Nguyen et al., 2016). In the context of globalization, barriers to FDI inflows to the economy in general and the banking industry in particular in developing and emerging economies are gradually being removed.

The most studied issue is the impact of FDI in the banking industry on the performance of domestic commercial banks. Girma et al. (2001) suggest that FDI can help increase total output, employment and exports; but also associate with the higher productivity, and higher wages in the economy. Lehner and Schnitzer (2008) argued that the entry of foreign banks has two effects: the spillover effect by increasing investment in research and development (R&D) and reducing operational costs; whereas the competition effect reduces incentives for R&D, reduces the investment on screening, and reduces the quality of a bank's loan portfolio.

Tran (2019)<sup>1</sup> pointed out 7 factors that construct the competitive competence of commercial banks in Vietnam: (1) Management competence, (2) Marketing competence, (3) Financial power, (4) Innovation competence for products/services, (5) Customer care competence; (6) Risk management and (7) Adaptation to change in business environment.

Hoang (2014) revealed 6 factors that impact to business performance of commercial banks in Vietnam: (1) Management competence, (2) Marketing competence, (3) Financial power, (4) Innovation competence for products/services, (5) Customer care competence; (6) Risk management.

The operation of foreign banks in poor countries focused on large firms (both domestic and international) and the government rather than small and medium enterprises (SMEs),

<sup>1</sup> <http://www.tapchitaichinh.vn/ngan-hang/tac-dong-cua-cac-thanh-phan-nang-luc-canh-tranh-den-ket-qua-hoat-dong-cua-ngan-hang-thuong-mai-310789.html>

thus producing two results: (1) the greater the market share of the foreign banks, the lower the credit to the private sector; (2) loan portfolio of domestic banks is more risky than of the foreign banks (Detragiache et al., 2008). However, the empirical evidence on the sample of many countries and one country gave mixed results, some showed that under competition pressure, the efficiency of domestic banks increased, a others show that the presence of foreign banks has little impact on domestic banks (Manlagñit, 2011).

Vietnam is a typical transitional economy, but it opened the banking industry to FDI later than other countries. After Vietnam joined the WTO in 2007, the government has gradually removed the barriers to FDI in the banking sector, typically allowed establishment of fully foreign-owned banks on normal treatment basis from 2009, beside the subsidiaries and branches existing before, that led to an increase in the presence of foreign banks. This article was conducted to measure the impact of the presence of foreign banks to the performance of the domestic commercial banks in the country, in order to test the combination of competitive effect and spillovers effect in Vietnam. The remain parts of this paper include literature review, data and methodology, discussion of research results and conclusions.

## 2. LITERATURE REVIEW

### 2.1. Spillover Effect and Competition Effect

The presence of MNCs increases the performance of domestic enterprises through spillover effect (Girma et al., 2001). Claessens et al. (2001) explain the spillover effect that the foreign banks transfer management, technology to domestic banks, improve the quality of human resources, lead to higher labor productivity and consequently higher wages. Consumers benefit by lower prices and the government can collect higher taxes. The spillover effect of management, technology, human resource and capital from the central bank helps domestic commercial banks increase efficiency and reduce operating costs.

Levin (2001) argues that foreign bank entry into the domestic banking system can improve banking services through both direct and indirect channels. Foreign banks directly introduce new technology and products to the domestic market, thereby creating a spillover effect; but through indirectly channel they promote competition, thereby affecting profits and operating costs of domestic commercial banks. The presence of foreign banks increases competition in two forms: capital related to assets competition and competition through market activities for enterprises in general and banks in particular (Blomström, 1986; Cho, 1990). The presence of foreign banks reduces the oligopolistic advantages of large commercial banks in the country through changes in the competitive structure of the banking industry. Competitive strengths can reduce operating efficiency and increase the operating costs of domestic commercial banks (Berger and Hannan, 1998; Claessens et al., 2001).

Thus, the presence of foreign banks provides both spillover and competition effects, thereby affecting the performance of domestic commercial banks. Depending on which effects dominates, the

overall impact on the domestic banking industry will be positive or negative.

### 2.2. Empirical Evidence

There have been many studies on the influence of the presence of foreign banks on the performance of domestic commercial banks in developed and developing countries. Most research results show that the presence of foreign banks increases the competitiveness and efficiency of the domestic banking system. Specifically, a number of studies show that the presence of central banks creates higher competition pressure, thereby increasing the effectiveness of domestic commercial banks in the long run (Claessens et al., 2001; Claessens and Laeven, 2003). In addition, other studies show that the presence of foreign banks has the effect of reducing the performance of domestic banks in poor countries, for instance, Detragiache et al. (2008) show that foreign banks focus on providing banking services to MNCs, large domestic enterprises and the government, thereby pushing domestic commercial banks into the higher risky loan portfolio.

The remarkable point in these studies is that the presence of foreign banks increases competition and performance of domestic banks in developing countries higher than in developed countries. Specifically, studies show that the presence of foreign banks in developing countries increases the efficiency of domestic commercial banks rather than in developed countries (Claessens et al., 2001). This result can be explained that in developed countries, banking regulation and supervision have been improved and the liberalization of the banking industry has been taking place for a long time. Banks in developed countries not only compete with foreign banks but also with other large non-bank credit institutions. In contrast, in developing countries, liberalization of the banking sector began only in the mid-1990s (Manlagñit, 2011).

Molyneux et al. (2013) investigated the foreign banks' entry into domestic market in five developing countries in Southeast Asia, and shows evidence of market entry motivation of foreign banks mainly due to profit seeking, rather than following their customers through FDI and bilateral trade. Earlier, Cho (1990), with research in Indonesia, showed that the presence of foreign banks could help improve economic efficiency through increased competition. Unite and Sullivan (2003) from the Philippines market also showed that an increase in foreign banks' presence will force domestic commercial banks to increase efficiency in offsetting the increased risk. Manlagñit (2011) demonstrates the superiority of the competitive effect in the Philippines market in the period of 1990-2006, reducing both the profitability and overhead costs of domestic commercial banks. Al-Neimat and Warred (2017) examined whether the presence of foreign banks affecting the accounting profitability of the Jordanian bank and found a positive relationship between foreign bank numbers and accounting profitability of domestic banks during the period (1995-2015).

Most recently, Muhammad and Siddiqui (2011) compared the profitability of foreign banks and domestic banks in Pakistan between 2004 and 2010 and came to the conclusion that foreign banks have better performance and are less affected by

macroeconomic conditions of the country, compared with domestic commercial banks. In contrast, Muda et al. (2013) compared the operations of Islamic banks in Malaysia in 2007-2010, that showed that the performance of domestic banks is better than foreign banks, but is influenced by negatively affected by the global financial crisis, while foreign banks do not. Abel et al. (2017) found that domestic banks gain higher market power than foreign banks under monopolistic competition conditions in Zimbabwe. Additionally Saif-Alyousfi et al. (2017) provide evidence of higher profitability of domestic banks compared to foreign banks in Saudi Arabia.

### 3. DATA AND METHODOLOGY

#### 3.1. Hypotheses and Research Models

The first 5 foreign fully-owned banks was formed in Vietnam in the year of 2009. Since then, to the end of the year 2018, the number of foreign banks has increased to 9 banks. In the same period, the number of Vietnamese domestic commercial banks has declined from 42 to 35, and the number of joint venture banks has declined from 5 to 2, due to process of banking system restructuring started in Vietnam from 2011, led by the State Bank of Vietnam (SBV - the Central Bank of Vietnam).

Our hypothesis was raised based on arguments about the competitive effects and spillover effects on the banking market in Vietnam, with data shown in Table 1. Although the number of foreign banks have increased (from 9.62% in 2009 up to 19.57% in 2018), but the market share of foreign banks tends to decline (from the top of 18.36% at the end of 2013 to the rate of 14.25% at the end of 2018). This data shows that the presence of foreign banks in Vietnam through the market share tends to decrease, weakening the spillover effect. On the other hand, the concentration of the banking industry, measured by the proportion of assets of the five largest commercial banks in Vietnam, was stable in the period 2015-2018, at proximately 56% (after decline period from 2009 to 2013); giving to evidence of the domination of state-owned banks, and showing that the competitive effect from the presence of foreign banks is not occur. The weakening of the spillover effect combined with the absence of the competition effect is expected to cause a negative impact on the performance of domestic commercial banks.

The research model followed Manlagñit (2011) in general form:

$$Y_{it} = \alpha + \beta_{FS_t} + \gamma X_{it} + \varepsilon_{it} \quad (1)$$

Where  $Y_{it}$  is the performance of commercial banks in the country  $i$  at year  $t$ ;  $FS_t$  represents the presence of foreign banks in year  $t$ ;  $X_{it}$  is a set of control variables including the characteristics of the bank (equity ratio, loan ratio, deposit ratio, loan loss provision, market share) and industry concentration.

#### 3.2. Variable Description

We use two proxies to measure the performance of commercial banks. The first one is profitability, measured as before-tax profit scaled by total assets. This proxy includes all sources of profit, like interest income and non-interest income. The second proxy

is overhead costs, measured as ratio of overhead costs (including non-interest expenses, such as personnel expenses, fees and services expenses, equipment expenses and other non-interest expenses) to total assets. These proxies are widely used in literature (Claessens et al., 2001; Unite and Sullivan, 2003; Manlagñit, 2011, etc.).

The foreign bank entry in pervious researches is measured by number of foreign banks scaled by total number of banks, and market share of foreign banks. These proxy are used by Claessens et al. (2001), Detragiache et al. (2008), Molyneux et al. (2013), Unite and Sullivan (2003), among others.

A set of bank variables is used for controlling the model. They are equity ratio, customer funding, loan – to – total assets, loan loss provision, bank market share. Following Claessens et al. (2001), we use equity and customer funding. Equity ratio, which is measured by ratio of equity to total assets, can be an appropriate proxy for bank risk attitude (Mester, 1996) and an indicator of lower probability of insolvency (Demirguc-Kunt et al., 2013). Customer funding includes demand deposits, saving deposits, and term deposits. This is low interest cost funding compared with interbank loans or central bank funding, so it is the largest source of capital of a bank. Loan – to – total assets reflects loan portfolio, which can raise the interest income for the bank, and at the same time can put the bank into risky position with insolvency and non performing loans, depend on the quality of bank management. This variable was used by Detragiache et al. (2008), Manlagñit (2011). Loan loss provision is a measure of a bank's credit quality (Dietrich and Wanzenried, 2011). The bank market share reflects economies of scale and scope in domestic banking industry (Manlagñit, 2011).

The last control variable is used to indicate the market structure through the ratio of assets of five largest commercial banks to total assets of all banks, including foreign banks. This measurement is followed Bourke (1989), Molyneux and Thornton (1992), Manlagñit (2011), etc.

A brief description of the variables discussed above is shown in Table 2 below.

#### 3.3. Data

Research data is taken from the audited annual financial statements, including 26 domestic commercial banks and 9 foreign banks from the list of SBV, in which data from 9 foreing banks is used for calculation of independent variables; data from 26 domestic commercial banks is used for dependent variables and bank variables. Data is collected from 2009 to 2018, since the establishment of the first foreign fully-owned banks in Vietnam, from annual reports of SBV and individual balance sheets and income statements of domestic commercial banks.

Research data consists of 260 observations, forming the balanced panel data.

#### 3.4. Estimation Methods

Based on Hausman test, a fixed effects regression (FEM) is more suitable than random effects model (REM). But the fixed effect

**Table 1: The number and market share of foreign banks in Vietnam over the period of 2009-2018**

Symbol	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FNU (%)	9.62	9.62	9.62	10.42	10.64	10.64	11.63	13.95	19.57	19.57
FSH (%)	16.49	13.68	13.17	15.16	18.36	15.99	15.75	15.16	12.97	14.25
CON (%)	59.85	54.21	52.77	52.48	50.91	52.15	56.20	56.06	56.33	55.99

Source: SBV annual report. FNU: Number of foreign banks to total number of banks, FSH: Foreign bank share, measured by foreign bank assets to total assets, CON: Concentration, measured by the market share of five largest banks to total market

**Table 2: Description of variables in the model**

No.	Variables	Symbol	Description
<b>Dependent variables</b>			
1	Profitability	PRO	Ratio of before-tax profits to total assets
2	Overhead costs	OC	Ratio of overhead expenses to total assets
<b>Independent variables</b>			
3	Foreign number	FNU	Ratio of number of foreign banks to total number of banks
4	Foreign share	FSH	Ratio of foreign banks assets to total assets
<b>Bank variables</b>			
5	Equity ratio	EQU	Ratio of equity to total assets
6	Loan-to-total assets	LOA	Ratio of outstanding loans to total assets
7	Customer funding	DEP	Ratio of deposits to total assets
8	Loan loss provision	LLP	Ratio of loan loss provision to total loan
9	Market share	MSH	Ratio of total assets of the bank to total assets of the commercial banking system
10	Concentration	CON	Ratio of assets of the five largest banks to the total assets of the commercial banking system

**Table 3: Descriptive statistics of variables**

Symbol	Obs.	Mean	Max.	Min.	Standard deviation
PRO	260	0.0104	0.0518	0.0002	0.0076
OC	260	0.0159	0.0352	0.0022	0.0054
FNU	260	0.1253	0.1957	0.0962	0.0373
FSH	260	0.1510	0.1836	0.1297	0.0158
EQU	260	0.0994	0.3324	0.0323	0.0472
LOA	260	0.5293	0.8084	0.1448	0.1267
DEP	260	0.6164	0.8922	0.2508	0.1268
LLP	260	0.0131	0.0338	0.0001	0.0052
MSH	260	0.0363	0.1662	0.0019	0.0425
CON	260	0.5469	0.5985	0.5091	0.0255

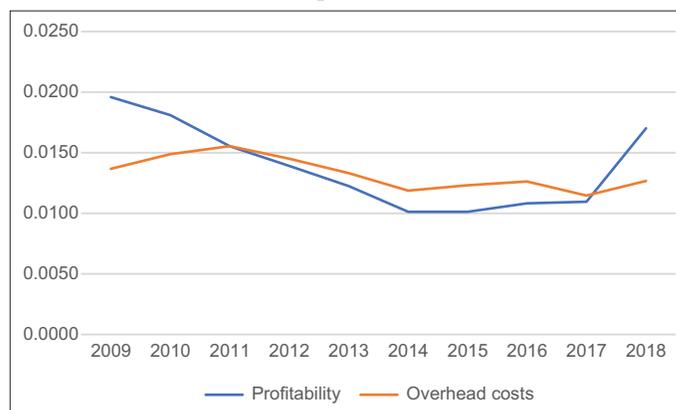
Source: Data and author's calculations. PRO: Profitability, OC: Overhead costs, FNU: Foreign bank number, FSH: Foreign bank share, EQU: Equity to total assets, LOA: Loan to total assets, DEP: Customer fundings, LLP: Loan loss provision, MSH: Bank market share, CON: Concentration

model has both heteroskedasticity and autocorrelation, with the results of the White test and the Breusch–Godfrey serial correlation LM test, respectively. A feasible general regression estimates (FGLS) is suggested to solve this problem.

#### 4. RESEARCH RESULTS

The data in Table 3 shows that mean of profitability of domestic banks is at 1.04%, while mean of their overhead costs is at 1.59%. Profitability has a downtrend from 2009 to 2014, before taking a break upward from 2015. Overhead costs has little change over time (Figure 1).

Mean of equity ratio is at 9.94%, due to capital adequacy requirement for banks in Vietnam (min of CAR is at 9%). Customer fundings have a proportion above 60% of liabilities of a banks, so that they can cover amount of loan portfolio, which accounts for around 53% of total assets.

**Figure 1: The mean of profitability and overhead costs of domestic banks over period 2009-2018**

The market share of five largest banks in Vietnam (in which four state-controlled commercial banks) is above a half of total market, making a signal of an oligopolistic market.

Table 4 below presents the results of the Pooled OLS, FEM and FGLS regressions for the two dependent variables.

The data processing results show that the presence of foreign banks, especially through market share, reduces the profitability of domestic commercial banks, consistent with the research hypothesis of the authors. On the other hand, the foreign bank entry into the domestic market tends to increase operating costs, but it is not clear because the positive regression coefficients do not reach statistical significance. This result is consistent with empirical evidence of Manlagñit (2011) in Philippine banking industry, and in line with the arguments of Detragiache et al. (2008); but does not support the evidence previously provided by Cho (1990) or Unite and Sullivan (2003). The main reason of the results, in the view of the authors, is due to the market

**Table 4: The influence of foreign bank presence on the performance of domestic commercial banks**

Symbol	Profitability			Overhead costs		
	OLS	FEM	FGLS	OLS	FEM	FGLS
Foreign bank presence						
FNU	-0.0392***	-0.0278**	-0.0052	0.0121	0.0143**	0.0067
FSH	-0.1002***	-0.0592**	-0.0382**	0.0127	0.0221	0.0052
Bank variables						
EQU	0.0610***	0.0590***	0.0534***	0.0280***	0.0237***	0.0253***
LOA	0.0136***	0.0287***	0.0084*	0.0160***	0.0185***	0.0127***
DEP	-0.0136***	-0.0312***	-0.0124***	0.0038	0.0000	0.0079***
LLP	0.1033	0.0154	-0.0419	0.1747***	0.2136***	0.1429***
MSH	0.0388***	0.1420***	0.0285***	-0.0263***	-0.0445	-0.0290***
CON	0.0417**	0.0245*	0.0224**	-0.0446***	-0.0439***	-0.0390***
Obs.	260	260	260	260	260	260
Adj R-squared	0.2933	0.4581		0.3001	0.3803	

Source: Data and author's calculations. PRO: Profitability, OC: Overhead costs, FNU: Foreign bank number, FSH: Foreign bank share, EQU: Equity to total assets, LOA: Loan to total assets, DEP: Customer fundings, LLP: Loan loss provision, MSH: Bank market share, CON: Concentration. \*, \*\*, and \*\*\* statistically significant at the 1%, 5%, and 10% levels, respectively

power of the largest banks in the market. These banks control the interest rates for both deposits and loans, through which control the interest margin and non-interest incomes, i.e., before tax profit of other banks. Besides, the largest banks can make use economies of scope and scale, so that the smaller banks can not rationalize their overhead costs to maximize profitability, unless cutting risk management and monitoring costs. In turn, the lower overhead costs banks have, the higher risk position they put themselves into. This result supports our hypothesis that the competitive effect from the presence of foreign banks does not occur in Vietnam.

Regarding other bank-specific variables, equity to total assets, loan to total assets, customer fundings, loan loss provision do affect bank performance. Specifically, all of them have positive relationship with overhead costs. For loan, loan loss provision and customer fundings, the results can be easily explained, due to administrative costs and monitoring costs, especially for SME and individual customers. In contrast, the relationship between equity and overhead costs does not support the literature that well-capitalized bank is a signal of high reputation, which allows it to attract cheaper sources of funds and to better control overhead costs, as cited by Manlagñit (2011). This result evokes ideas to further investigate on the composition and quality of equity of banks in Vietnam to meet the capital requirement.

Equity ratio and loan have positive relationship with profitability, while customer fundings gave negative impact to the dependent variable. The first result on equity impact supports the literature on advantage of well-capitalized bank mentioned above. The result on loan impact shows that traditional lending activities remain the largest source of income to banks in Vietnam.

The negative relationship between customer fundings and profitability does not support the hypothesis of cheap source of these kinds of fundings. The result shows that except for large banks that can access cheaper fundings from the state budget and large enterprises, smaller banks can only access smaller businesses and individuals customer base, mainly in term deposit sources, which have high interest expenses.

## 5. CONCLUSION

In order to test the hypothesis of the combination of spillover effect and competition effect from the presence of foreign banks in Vietnam, the authors have developed a regression equation on the relationship between the presence of foreign banks and the performance of host commercial banks in the period of 2009-2018 on the data of 26 domestic commercial banks. The research period marked the process of liberalization of the banking industry in Vietnam, by allowing the establishment of a foreign fully-own bank from 2009.

The research results show that the presence of foreign banks in Vietnam does not help to improve the performance of domestic commercial banks, shown on profitability and overhead costs, at least in short-run perspective. We come to the conclusion that the spillover effect is weakened, while the competition effect has not been effective; since the competitiveness of Vietnam's banking industry has not improved.

The results of this study lead to the following policy suggestions:

Firstly, it is necessary for the State Bank of Vietnam to design policies to promote stronger competition in the banking industry through privatization of state-controlled banks, thereby promoting the spillover and competition effects from the presence of the foreign banks.

Secondly, the policy makers need to work out the legal framework for substitute products, especially these products based on fintech technologies, to enter the market; thereby gradually reducing the high concentration level of banking industry.

The limitation of this study is that it only considers the presence of foreign banks in the perspective of direct investment (FDI), ignoring indirect investment through foreign partial acquisition of domestic banks. In addition, market-based measurement of performance has not been used in this study since there are few listed commercial banks listed. They are the suggestions for future research directions.

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