
Foreign Bank Entry and Domestic Banks Profitability: The Role of Financial Freedom

Bank Asing dan Keuntungan Bank Tempatan: Fungsi Kebebasan Kewangan

Mohamad Sofuan Mohamad Saleh

Department of Accounting & Finance, Faculty of Management & Muamalah
Kolej Universiti Islam Antarabangsa Selangor (KUIS)
Bandar Seri Putra, 43000, Kajang, Selangor, Malaysia
msofuan@kuis.edu.my

Sarifah Ismail

Department of Accounting & Finance, Faculty of Management & Muamalah
Kolej Universiti Islam Antarabangsa Selangor (KUIS)
Bandar Seri Putra, 43000, Kajang, Selangor, Malaysia
sarifah@kuis.edu.my

Norfaizah Othman

Department of Economic & Management, Faculty of Management & Muamalah
Kolej Universiti Islam Antarabangsa Selangor (KUIS)
Bandar Seri Putra, 43000, Kajang, Selangor, Malaysia
norfaizah@kuis.edu.my

Noor Raudhiah Abu Bakar

Department of Accounting & Finance, Faculty of Management & Muamalah
Kolej Universiti Islam Antarabangsa Selangor (KUIS)
Bandar Seri Putra, 43000, Kajang, Selangor, Malaysia
raudhiah@kuis.edu.my

Keywords:

[Foreign Bank Entry; Domestic Banks; Financial Freedom; Bank Profitability]

ABSTRACT

This paper aims to determine the role of financial freedom in foreign bank entry and Malaysian domestic banks' profitability relationships over the period of 2001–2020. Return on Asset (RoA) on Malaysian domestic bank datasets is used in measuring bank profitability over the year of 2001-2020 periods. The finding showed that financial freedom does not significantly influence the foreign bank entry and domestic bank profitability relationship and suggests the need for the authority to persistently review the regulation or deregulation of the commencing regulatory perseverance that determines financial freedom. Precisely, the findings demonstrate the importance of the authority's constant re-evaluation of their degree of interference with the freedom of the domestic banking sector. Those are important

features to be implemented by the authority in the process of ascertaining the significant positive impacts of financial freedom on foreign banks entry and domestic banks' profitability relationships.

Kata Kunci:

[Bank Asing;
Bank Tempatan;
Kebebasan
Kewangan;
Keuntungan
Bank]

ABSTRAK

Kajian ini bertujuan untuk mengenal pasti fungsi kebebasan kewangan terhadap hubungan di antara bank asing dan keuntungan bank tempatan untuk tempoh tahun 2001–2020. Data Pulangan ke atas Aset bank-bank tempatan Malaysia digunakan untuk mengukur kadar keuntungan bank tempatan bagi tempoh kajian tersebut. Penemuan kajian ini menunjukkan bahawa kebebasan kewangan tidak memberi kesan yang signifikan dalam memengaruhi hubungan di antara bank asing dan keuntungan bank tempatan. Kajian ini mencadangkan agar pihak berautoriti untuk melihat dan mengkaji semula secara berterusan dalam proses untuk meningkatkan atau menurunkan tahap kebebasan kewangan di sektor perbankan tempatan. Ianya merupakan usaha yang penting dalam memastikan bahawa kebebasan kewangan adalah memberi impak positif kepada hubungan di antara bank asing dan keuntungan bank tempatan di Malaysia.

Received: Aug 2, 2022

Accepted: Nov 22, 2022

Online Published: Nov 30, 2022

INTRODUCTION

Following the 1998 economic and financial crisis, authorities in a number of affected countries were more persuaded to reform new rules and regulations on the liberalization of their banking and financial sectors (Allen et al., 2012). Banking and financial sector liberalization refers to the opening of domestic banking and financial sectors to foreign banks (Ang et al., 2015). The main objective of welcoming foreign banks entry via banking and financial sector liberalization is to initiate competitiveness among foreign and domestic banks. The increased competitiveness will then instigate efficiency in the domestic banks with the ultimate goal of increasing the domestic banks' profitability (Apanard et al., 2010). Subsequently, it is to establish domestic banks as the leading banking institutions in the region. It is critical for the growth and expansion of the domestic banking and financial sector in order to support the country's economic growth (James & Warwick, 2007).

Liberalization of the domestic banking sector serves as a significant determinant that inspires foreign banks to enter the domestic banking sector, which possesses banking and financial sector stability and higher expected returns (Ahmad, 2013). Consequently, the liberalization of the domestic banking and financial sectors has led to an intensified increase in the entrance of foreign banks into those domestic banking sectors (Ranciere et al., 2006). It is the internationalization or globalization of foreign banks as they establish and engage their banking and financial operations in other host countries (Uiboupin, 2005).

In facing the wake of rapid foreign bank entry, it reflected the substantial need for the domestic regulatory body to control the competitive challenges posed by foreign bank entry that might cause a negative impact on the domestic bank's profitability (Barbu & Capusneanu, 2011; Chortareas et al., 2013). It is because the domestic banking sector, with a high degree of financial freedom in the banking environment; a minimal government control over the financial freedom of foreign banks entry that is comprehensively outfitted with advanced banking technology spill over, could seriously increase the dominance of foreign banks entry in the domestic banking sector for a long period of time (Kouretas & Tsoumas, 2016). Consequently, it could have negative impacts on the domestic banks' profitability.

Thus, to minimize the possibility of foreign bank entry that could have a negative impact on the domestic banks' profitability, the government of the domestic banks should endlessly work to ensure the continuous and effective control of the financial freedom on the foreign bank's banking and financial business activities in the domestic banking sector. As a result, appropriate financial freedom control over foreign banks entry business activities is an important synergy in meeting the competitive challenges of foreign banks' entry while preserving domestic banks' sound profitability in facing foreign banks entry.

RELATED LITERATURES

Foreign Banks Entry and Domestic Banks Profitability

Foreign bank entry is typically great banks that have strong capitalized financial backing from their parent bank in order to support their financial resources and avoid any liquidity shocks during the financial crisis (Fiechter et al., 2011). Moreover, foreign banks also execute excellent management practices in their daily banking business activities and possess highly modern banking skills, the latest banking products and services innovations and advanced banking technology operations system (Hartwell & Michael 2015). Accordingly, foreign banks entry has led to the introduction of banking technology spillover that was previously unknown to domestic banks (Abel et al., 2017). Ideally, those advantages of foreign banks entry into the banking technology spillover sphere are beneficial to domestic banks since the management of domestic banks could learn and adopt the banking technology spillover in their banking operations (Sufian & Kamarudin, 2016). As such, foreign banks entry can push and initiate domestic banks to become more efficient in their banking business operations. Therefore, the domestic banks could reduce their overall operating overhead and minimize their non-performing loan losses, which in turn would lead to an increase in their profitability (Claessens & Van Horen, 2014).

However, the impacts of foreign banks entry on the profitability of domestic banks depend on how well developed the host country's economy is (Sanjeev, 2009). For instance, foreign banks entry has less of increasing or decreasing impact on the profitability of domestic banks in developed countries (Fiechter et al., 2011). As compared to foreign banks, domestic banks in developed countries are usually large, well-organized and having resilient asset structures and advanced banking technologies.

The large and stable domestic banks of developed countries react less to the foreign bank entry competition in terms of changes in net interest margin and overhead costs (Lehner & Schnitzer, 2008). It is because the huge and strong domestic banks of developed countries that have a higher asset share in the domestic banking sector are too big to react to the banking and financial market changes resulting from foreign banks entry. Moreover, foreign bank entry is less important for the large and strong domestic banks of developed countries as compared with the competition from other domestic banks of the same developed countries.

Nevertheless, foreign bank entry imposes negative impacts on domestic banks' profitability in less developed and developing countries (Yaseen et al., 2015). It is due to the inability of those domestic banks to innovate, imitate, and compete with the foreign banks' excellent management practices in their daily banking business activities, the execution of highly modern banking skills, the outstanding innovations of banking products, and the advanced banking technology and operations system (Pelletiera, 2017).

Hence, the strong and great standings of foreign banks entry have created a continuously unbalance competition with domestic banks of less developed and developing countries. It caused the domestic banks to continuously be left behind by foreign banks entry in terms of operational and technical efficiency (Ofori et al., 2018). As a result, the unbalanced competition caused by the presence of foreign banks entries has a continuous negative impact on the profitability of domestic banks (Diallo, 2016). Furthermore, the amount spent by domestic banks to acquire new advanced banking technology and competent staff in order to compete with foreign bank entry has initially resulted in a cost increase (Azmeah, 2018).

However, foreign banks entry also had positive impacts on the domestic banks' profitability in less developed and developing countries (Devarakonda & Munipalle, 2019). The entrance of foreign banks has motivated the domestic banks to become more dynamic in learning the advanced banking and financial technology spillover that comes along with foreign banks entries (Diallo, 2016). Consequently, the presence of foreign banks has increased the competitiveness of domestic banks (Yin, 2020). It consequently leads to lower overall operational overhead costs, resulting in higher income, which successively increases the profitability of domestic banks (AlNeimat & Warred, 2017). Thus, the domestic banks are able to retain their high profitability and sizeable banking market share (Acheampong, 2013). Hence, the presence of foreign banks in the domestic banking sector is not a detrimental to domestic banks but rather has positive impacts on their profitability (Lu & Mieno, 2018). As a result, domestic banks in less developed and developing countries must work hard in order to reap the benefits of foreign banks entry advanced banking technology spillover.

Theories of Foreign Banks Expand Abroad

The term foreign banks expand abroad refers to the internationalization of foreign banks. It is where the foreign banks are increasing their involvement in the banking and financial sectors abroad. The theoretical approaches that justify firms' expansion abroad are found in industrial organization theory (Dunning, 1988). Under industrial organization theory, foreign banks entry is practicing 'follow the customer' movement. The foreign banks international expansion is a defensive measure to preserve the banking relationship with its existing

business organizations' customers in their home countries that expand abroad. The foreign banks are unwilling to lose their existing customers in their home countries to their rivals abroad (Dunning, 1988).

Typically, foreign businesses organizations that expand abroad are unfamiliar with and do not fully comprehend the banking institutions of the host country's banking sector. In such a situation, selecting foreign banks that they are familiar with as their main banking institutions is a priority in performing their banking activities in the host country (William, 2002). The circumstances have created huge business opportunities that could generate solid profitability for foreign banks entering the host country. As such, under the industrial organization theory, foreign banks are motivated to internationalize by following their existing customers' expansion abroad (Dunning, 1988).

Moreover, the competitive advantage of foreign banks entry is that those holding specific banking services with operational management efficiencies are very interested in expanding their banking business activities internationally, especially to developing or less developed countries abroad (Agoraki et al., 2011). The foreign banks entry managerial efficiencies consist of efficiencies in resource allocation, technical arrangement, and strategy development (Mirzaei & Moore, 2014). The comparative advantages also arise from the foreign banks' competitive efficiency in loan-deposit spreads, information costs of capital bases, and risk bases (Jeon et al., 2010). Foreign banks that are more efficiently managed enjoy comparative advantages when they practice their management efficiently in the host country's banking and financial sector (León, 2016).

Additionally, foreign bank entries that are holding a huge amount of 'unused money' and facing limited firm growth opportunities in their home countries are the push factor that inspired the foreign banks to expand internationally toward greater firm growth in countries abroad (Ahmad, 2013). Hence, growth potential that is related to profitability is another important motivation for foreign banks expansion abroad (Mirzaei & Moore, 2014).

Furthermore, foreign bank entry expands internationally to take advantage of the externalities of sound economic development in countries abroad that have pursued liberalization and globalization. It is with the purpose of minimizing any negative impact of deterioration in revenues due to regulatory constraints, tight credit control, and high taxes in their home countries (Yan et al., 2018). The potential return that can be gained from a host country's banking and financial sector has inspired foreign banks to expand internationally. The other central reason for foreign banks entry and expansion abroad is to prevent their competitors from dominating the host country's banking sector abroad (Wang et al., 2014). Foreign banks can also earn high interest margins and non-interest income in foreign countries, particularly in developing countries, because they are frequently exempt from credit allocation regulation and other restrictions in the host countries (Ahmad, 2013).

The foreign banks entry expansions abroad are performed via the processes of setting up new branches, mergers, and acquisitions in the host country banking sector. It has led to the transfer of advanced banking systems and technology, excellent organizational management

skills and latest innovation, as well as the development of international marketing networks for the host country's domestic banking institutions (AlNeimat & Warred, 2017). Those advantages and benefits enable the host country's domestic banks to become more efficient, effective, and innovative in meeting the standards of their banking products, services, and business operations. In fact, banking products and services that meet the standards are essential to dominating the banking sector locally or globally. Market dominance is an important element in the process of achieving extensively high profitability for a bank. Domestic banks that competitive and profitable are essential for further strengthening the host country's banking sector stability that contributed significantly to the economic growth (Tan et al., 2017).

Financial Freedom, Foreign Banks Entry and Bank Profitability

Financial freedom, one of the ten components of the economic freedom index, is a measure of independence from government interference in the banking and financial sector (Miller et al., 1995). Financial freedom that captures the independence in banking system from government interfere, is related to the concept of regulation or deregulation; the addition or removal of regulatory barriers that control and supervise the domestic banks and foreign banks entry business activities at the domestic banking sector (Dages et al., 2000). Accordingly, financial freedom indicates the degree of government control on the domestic banks and foreign banks financial and banking activities in the domestic banking sector.

Domestic banking sector with low financial freedom is a situation in which the government has the most influence in the domestic banking and financial sectors (Barbu & Capusneanu, 2011). Under a low financial freedom banking environment, the domestic government authority, through the central bank supervision and regulations, strictly supervises and controls the banking and financial business activities in the domestic banking sector (Luo et al., 2016). The strict rules and regulations on financial freedom help to discipline domestic banking institutional business activities. The action helps domestic banks become more efficient (Kun et al., 2016). Furthermore, a low level of financial freedom and a higher level of government intervention in the domestic banking and financial sectors could prevent foreign banks from dominating the domestic banking sector, rendering domestic banks unaffected by foreign bank entry (Lin et al., 2016).

A domestic banking sector with a high financial freedom banking environment, on the other hand, is one with a low level of government interference in the domestic banking and financial sectors (Miller et al., 1995). In a high financial freedom banking environment, government authority is limited to enforcing contractual obligations and preventing fraud through central bank supervision and regulations, and credit is allocated on market terms where banks provide various types of financial services to individuals and businesses, and banks are free to extend credit, accept deposits, and conduct operations in foreign currencies (Sarpong-Kumankoma et al., 2018). As a result, financial freedom is linked to the interpretation of either low or high level of government interference and control over both domestic and foreign banks' financial banking business activities in the domestic banking and financial sector.

In less developed and developing countries with high financial freedom; low government control in the domestic banking sector, foreign banks have become relatively more efficient in their banking business activity practices when compared to domestic banks (Sarpong-Kumankoma et al., 2019). Consequently, the foreign banks entry has gained more impressive profitability in terms of earnings than the domestic banks. Instead, in their efforts to compete with the strong, firm, and great reputations of foreign banks, the domestic banks of those less developed and developing countries have faced an increase in their overhead operating expenses that subsequently decreased their return on assets and net interest margins (Ahmad & Mazlan, 2015). Domestic banks, for example, incur higher overhead costs to provide extensive training in order to have competent staff to work in the latest banking technology environment (Akinici et al., 2015).

In addition, under the high financial freedom of the domestic banking sector, foreign banks entry was provided with specific favorable market or regulatory conditions in the host country abroad. For example, the foreign banks entry is exempt from credit allocation regulations and some other restrictions of the domestic banking regulator, which are a net burden to domestic banks (Luo et al., 2016). It has made foreign banks' operations more successful and excellent in their banking business activities than domestic banks (Kun et al., 2016). As a result, some loosening of regulatory controls on foreign banks' financial freedom may result in domestic banks' unsound profitability in the long run.

In the long run, the unbalanced competition has caused the domestic banks' dominant roles in the high financial freedom domestic banking sector to be steadily replaced by foreign banks entry (Sufian & Kamarudin, 2016). It is because greater foreign bank entry is capable of providing the most efficient financial intermediation at the lowest cost for households and firms as well as for investors and entrepreneurs (Lin et al., 2016). As a result of the continuously unbalanced competition from foreign bank entry, domestic banks' profitability in less developed and developing countries with high financial freedom have been left behind by foreign bank entry.

In order to avoid and minimize the negative impact of foreign bank entry on domestic banks' profitability as a result of foreign bank entry dominance in the domestic banking sector, the host domestic bank government, particularly in developing and less developed countries, must intervene by instituting rules and regulations that control foreign bank entry financial freedom in the domestic banking sector (Kouretas & Tsoumas, 2016). Hence, to reap the maximum benefits of foreign bank entry and minimize its potential costs to domestic banks, banking authorities need to endlessly work on rebalancing the rules and regulations on the degree of financial freedom of the domestic banking sector. For instance, the timing of the domestic banking sector liberalization process, how the entrance of foreign banks should be allowed, and to what extent the appropriate incentives for foreign banks entry and financial freedom penetration should be provided in the domestic banking sector, In fact, rebalancing the regulatory requirements on the domestic banking sector's financial freedom is actually reflecting a regulatory control barrier to foreign bank entry activities in the domestic banking sector (Sarpong-Kumankoma et al., 2017). Its purpose is to ensure that domestic banks are not left far behind by foreign bank entry.

As such, based on the above discussion regarding the role of financial freedom on the relationship between foreign banks entry and Malaysian domestic banks' profitability, the following hypothesis is established;

Financial freedom is significantly influences the foreign banks entry and Malaysian domestic banks' profitability relationship.

DATA

This study employs balanced panel data from 27 foreign banks entering Malaysia¹ and 19 Malaysian domestic banks² over the period of 2001 to 2020³. The advantages of panel data are that they are more efficient in generating estimates because they are also known as longitudinal data because they have both time series and cross-sectional dimensions (Pesaran et al., 1999). In addition, researchers can address a broader range of issues and tackle more complex problems with panel data than would be possible with pure time series or pure cross-sectional data alone. Furthermore, panel data control for individual heterogeneity, contain more informative data (which broadens the scope of inference), and have a higher degree of freedom and less collinearity among the explanatory variables (Pesaran et al., 1999).

METHODOLOGY

The method of estimation employed in this study is static panel regression using a cross-section of static panel pooled ordinary least square (OLS) regression, a panel model with fixed effect and a panel model with random effect analysis. The analyses will be performed using econometric software, i.e., STATA.

OLS regression with fixed and random effect models is a systematic process that includes econometric models, theories, and hypotheses as well as the construction of mechanisms and various means for measurement (Noreen, 1998). Furthermore, OLS regression with fixed and random effect models involves investigational control and exploitation of inconsistencies, as well as the compilation and assessment of realistic data for research, and it demonstrates the fundamental relationship between data examination and statistical expression (Meloun & Militk, 2001). Subsequently, OLS regression with fixed and random effect models fits linearly separable datasets almost perfectly and is often used to find the value of a dependent variable (y) for a given value of the independent variable (x) by effectively modeling a linear relationship (of the form: $y = mx + c$) using the given dataset (Weaver & Wuensch, 2013).

Furthermore, under the OLS regression with fixed and random effect models, there is a straight-line relationship between the dependent and independent variables. It means that the

¹A total of twenty conventional foreign banks and seven Islamic foreign banks.

²A total of eight conventional domestic banks and eleven Islamic domestic banks.

³Please refer to Appendix 1 for details on the banks.

scores of one subject have nothing to do with the other (Wagner & Hong, 2016). Hence, it increases the level of linearity between the dependent variable and the independent variables. In a nutshell, OLS regression with fixed and random effect models entails statistically measuring and analyzing the collected data. Hence, it is also possible to learn from comparing findings for OLS regression with various pooled specifications; e.g., fixed effect versus random effect, and to test whether the coefficients based on, for instance, the cross-section relationships in the levels are the same as those based on cross-section relationships with changes in the variables (Maurice & Teresa, 2019).

In this study, the foreign bank entry indicator is proxied by the size of the foreign bank entry as represented by the foreign bank entry's asset share in a domestic banking sector; the increase or decrease in the foreign bank entry's asset share in a domestic banking sector. The changes in the ratio of the asset share of foreign banks entry to the total assets of banks in a domestic banking sector are used to measure foreign bank entry. The foreign banks entry refers to the asset share of the foreign banks entry divided by the total assets of banks in the domestic banking sector (Devarakonda & Munipalle, 2019; Yin, 2020). Hence, the foreign banks entry is measured as the change in the ratio of the asset share of foreign banks entry in Malaysia to the total assets of banks in Malaysia; the asset share of the foreign banks entry in Malaysia divided by the total assets of banks in Malaysia. Meanwhile, the profitability of domestic banks is measured by their return on assets (ROA). The ROA is measured by the total profitability as a percentage of total assets; $ROA = \text{Net Profit After Tax} / \text{Total Assets}$ (Azmeah, 2018; Yin, 2020).

The Malaysian financial freedom index, available from the Heritage Foundation's Index of Economic Freedom 2020⁴, serves as a proxy for the moderating variable of financial freedom. A scale of 0 to 100 percent is assigned to an economy's financial freedom. The Heritage Foundation calculates the financial freedom index scores of a country by looking at five broad areas; the extent of government regulation of banking and financial services, the degree of government intervention in banking and financial institutions through direct and indirect ownership, the extent of financial and capital market development, the government influence on the allocation of credit, and the openness to foreign bank competition (Miller et al., 1995).

An overall score on a scale of 0 to 100 percent is given to a country's financial freedom index, with an ideal score of 100 percent⁵. When the value of a country's financial freedom index is higher, the country's financial freedom is higher and the government's interference in the domestic banking sector is lower. On the other hand, when the value of a country's financial freedom index is lower; the country's financial freedom is lower, whereas the government's interferences in the domestic banking sector are higher (Miller et al., 1995).

⁴ The Heritage Foundation, Index of Economic Freedom - Financial Freedom Index (2020), is available at: www.heritage.org/index

⁵ Please refer to the Heritage Foundation, Index of Economic Freedom - Financial Freedom Index (2020).

Moreover, six control variables; annual growth rate of Gross Domestic Production (GDP) (Simiyu, 2015), annual inflation rate (John, 2019), annual deposit interest rate, annual lending interest rate (Altavilla et al., 2018), global financial crisis (Erfani & Vasigh, 2018) and bank size, are employed in all models of this study. The objective of including those control variables is to evade potential spuriousness, inaccuracy, deception, speciousness, or extreme illogical skewness in the research findings because those control variables have significant interactive influences on all of the research models in this study.

It indicates that, when the control variables are taken into account, they will enhance the internal validity of the research models concerning the effects of foreign banks entry on Malaysia domestic banks' profitability relationships. This helps to establish a more sound causal relationship between foreign banks entry and Malaysia domestic banks' profitability. Hence, those control variables in this study could substantially increase the reliability of the results and findings of this study. Hence, although those control variables are not the central interest of this study, nevertheless, they are paramount for properly understanding the relative relationship between foreign bank entry and Malaysian domestic banks' profitability more accurately.

Table 1: List of Variables and Measurement for the Econometric Models

Categories	Variables	Measurement / Formulation
Dependent variable.	Return On Asset (ROA).	ROA = Net Profit After Tax/Total Assets
Independent variable.	Foreign bank entry (FBE).	FBE = Size of the foreign banks entry. = (Asset share of foreign banks entry in Malaysia domestic banking sector)/(Total asset of banks in Malaysia domestic banking sector)
Moderating variable.	B. Financial freedom (FF).	FF = Malaysia financial freedom index.
Control variables.	1. Inflation rate (INF).	INF = Malaysia annual inflation rate.
	2. Deposit interest rate (DINT).	DINT = Malaysia annual deposit interest rate.
	3. Lending interest rate (LINT).	LINT = Malaysia annual lending interest rate.
	4. Growth rate of Gross Domestic Production (GDP)	GDP = Malaysia annual GDP growth rate.
	5. Global financial crisis (FINCRISIS)	FINCRISIS = Dummy. 0 = year with no FINCRISIS. 1 = year with FINCRISIS.
	6. Bank size (BS)	BS = Natural logarithm of the Malaysia domestic banks' total assets.

Static Panel Regression Model for the Influence of Financial Freedom on the Impact of Foreign Banks Entry on Malaysian Domestic Banks Profitability

The static panel regression model for the influence of financial freedom (FF) determinant as the interaction moderating variable on the impact of foreign banks entry on Malaysian domestic banks profitability for this study is as follow;

$$PROFIT_{i,t} = \alpha + \beta_1 FBE_{i,t-1} + \beta_2 FF_{i,t} + \beta_3 (FBE \times FF)_{i,t} + \beta' X_{i,t} + \eta_i + \varepsilon_{i,t}$$

PROFIT is the Malaysian domestic banks profitability dependent variable that measured by return on assets (ROA). FBE is representing foreign banks entry that measured by the foreign banks entry assets share to total asset of banks in Malaysia. *FF* is the financial freedom interaction moderating variable. The financial freedom interaction moderating variable *FF* is proxies by financial freedom index that obtains from the Heritage Foundation. (*FBE x FF*) is the interaction term of foreign banks entry and financial freedom moderating variable. *X* is a vector of control variables that affects domestic banks profitability which comprises of annual growth rate of GDP, annual inflation rate, annual deposit interest rate, annual lending interest rate, global financial crisis and bank size. η_i is the unobservable individual effect of a firm, $\varepsilon_{i,t}$ is an error term, *i* is a country index and *t* is time index. The empirical model of the equation is used to test hypotheses of this study that is as follow;

Financial freedom is significantly influences the relationship between foreign banks entry and Malaysian domestic banks' profitability.

DESCRIPTIVE STATISTICS

Table 2: Descriptive Statistics

Variables	Obs.	Mean	Std. Dev.	Min.	Max.
Foreign Banks Entry; FBE asset share.	342	0.214	0.021	0.179	0.249
Malaysia domestic banks; ROA.	342	0.008	0.006	0	0.057
Financial freedom index.	342	43.684	10.879	30	60
Annual GDP Growth rate.	342	5.317	1.555	-5.600	9.428
Annual inflation rate.	342	2.200	1.207	0.583	5.441
Annual deposit interest rate.	342	2.989	0.272	2.082	3.374
Annual Lending interest rate.	342	5.448	0.829	4.540	7.127
Global financial crisis	342	0.158	0.365	0	1
Bank size	342	6.628	2.659	0	8.707

Table 2 displays the number of observations, mean, standard deviation, minimum, and maximum values for each variable for a sample of 19 Malaysian domestic banks and 27 foreign banks over a 20-year period, from 2001 to 2020. Table 2 shows that Malaysian domestic banks' average return on assets (ROA) is 0.79 percent. The percentages explain that, on average, Malaysian domestic banks generate their ROA, which is equal to profit after tax divided by total assets, at a small fraction. The standard deviation is also small, which indicates a small variation in ROA among the Malaysian domestic banks. Besides that, the table also demonstrates a number of 21.38 percent in terms of foreign banks entry asset shares in the Malaysian domestic banking sector.

In other words, Malaysian domestic banks capture 78.62 percent of the asset shares of the domestic banking sector. It is consistent with the Malaysian banking authority's efforts to control foreign banks dominance in banking and financial business activities in Malaysia's domestic banking sector.

Subsequently, Table 2 also denotes that the financial freedom index of Malaysia's domestic banking and financial sector is on average 44 (mean 43.684), with a minimum value of 30 and a maximum of 60. The findings demonstrate that the financial freedom index of Malaysia's domestic banking and financial sector is continuously increasing over time. The findings explain that Malaysia's domestic banking and financial sector is heading towards more liberalization. It is because the higher the level of the financial freedom index, the more financial freedom is released to banking and financial institutions to perform financial and banking business activities in the domestic banking and financial sector. It is here that the banking authority turns out to be more minimal in controlling and interfering with the banking and financial institutions' business activities.

Thereafter, Table 2 also shows the mean of Malaysia's GDP growth rate, which is 5.3 (mean of 5.317), the minimum rate is -5.6, and the maximum rate is 9.4 (max. 9.428) percent, respectively. It depicts Malaysian economics as having experienced both extreme low and quiet high GDP growth. A positive GDP growth rate is typically expressed as positive economic growth. A negative GDP percentage rate is typically expressed as negative economic growth. In positive economic growth circumstances, it means the banks' situation is improving and they are likely to show higher earnings, which should increase their profitability and also their share prices. Negative economic growth, on the other hand, describes a bank's performance as a decline (contraction) in earnings. As such, the causal relationship between changes in the Malaysian banking and financial sector's development and its economic growth is expected to be sensitive to the country's stage of economic development.

As shown in Table 2, the mean of inflation rate is 2.200 percent, with a minimum rate of .583 percent and a maximum rate of 5.441 percent. As inflation increases, banks are affected by the high inflation rate that is affecting their profitability. Conversely, as inflation decreases, a lower inflation rate provides positive yields for bank profitability. Banks' profitability is thus significantly influenced by either increases or decreases of inflation rate.

Meanwhile, for the deposit interest rate that is displayed in Table 2, the average rate is 2.989 percent, the minimum rate is 2.082 percent, and the maximum rate is 3.374 percent. The average lending interest rate is 5.448 percent, the lowest lending interest rate is 4.540 percent, and the highest lending interest rate is 7.127 percent. A higher deposit interest rate on the depositors' fund is negatively affecting the bank's profitability. It is because the bank is obliged to disburse a higher amount of interest to their depositors. Nevertheless, a higher lending interest rate is good for the bank's profitability. It is where the bank is earning higher revenue from their loan borrowers.

In the deposit interest rate and lending interest rate relationship, where the deposit interest rate is greater than the lending interest rate, it will lower the net interest margin. As a result, the bank's net interest income will be lower. Inversely, a higher lending interest rate over the deposit interest rate will generate a higher net interest margin. The condition is a favour to the bank, as it will then yield higher net interest income.

Next, Table 2 presents the financial crisis in Malaysia from 2001 to 2020. The global financial crisis that occurred in 2007 had some of the worst consequences for the profitability of Malaysian banks and financial institutions. The negative consequences of the global financial crisis have had a negative influence on the banks' profitability. The financial crisis variable's Min. of 0 in Table 2 is a dummy value that represents years when there is no global financial crisis. Whereas the financial crisis variable's Max of 1 in Table 2 is a dummy value that represents years when there is a global financial crisis.

Finally, Table 2 describes the bank size of Malaysian domestic banks, where the mean is 6.628 with a minimum rate of 0 and a maximum rate of 8.707. There are good reasons why bank size is significantly related to a bank's profitability. For instance, by increasing bank size, it can increase bank profitability by allowing banks to realize their economic scales. Consequently, increasing bank size allows banks to spread fixed costs over a larger asset base, thereby reducing their average costs. Banks' profitability is thus significantly influenced by either increases or decreases in their size.

RESULT AND DISCUSSION

Table 3: Static Panel Regression Result of Financial Freedom, Foreign Banks Entry and Malaysia Domestic Banks Profitability

Variables	Pooled OLS	Random Effects Model
<u>Foreign bank entry x Financial freedom</u> (<i>FBE x FF</i>)	0.0001 (0.0002)	- - (0.0001)
<u>GDP growth rate</u>	0.0002 (0.0001)	- - (0.0001)
<u>Lending interest rate</u>	-0.0014*** (0.0005)	- - 0.0005

<u>Global financial crisis</u>	<u>0.0013***</u>	<u>-</u>	<u>-</u>	<u>0.0015***</u>
<u>-</u>	<u>(0.0006)</u>	<u>-</u>	<u>-</u>	<u>(0.0006)</u>
<u>Bank size</u>	<u>0.0006***</u>	<u>-</u>	<u>-</u>	<u>0.0004</u>
<u>-</u>	<u>(0.0002)</u>	<u>-</u>	<u>-</u>	<u>(0.0004)</u>
<u>Constant</u>	<u>0.0025</u>	<u>-</u>	<u>-</u>	<u>0.0044</u>
	<u>(0.0034)</u>			<u>(0.0034)</u>
<u>Prob(F-statistic)</u>	<u>0.0000</u>	<u>-</u>	<u>-</u>	<u>0.0000</u>
<u>R-squared</u>	<u>0.5968</u>			<u>0.5894</u>
<u>Hausman test</u>		<u>-</u>	<u>-</u>	<u>0.9738</u>
<u>Total observation</u>	<u>331</u>	<u>-</u>	<u>-</u>	<u>331</u>

Note: (1) Dependent variable; ROA

(2) *, **, *** statistically significant at 10%, 5% and 1% level.

For the interaction of foreign bank entry and financial freedom (*Foreign banks entry x Financial freedom*), Table 3 shows the result is positive but statistically insignificant. The result illustrates that foreign banks entry does not significantly influence the profitability of Malaysia domestic banks that have higher financial freedom. It suggests that greater financial freedom has little influence on foreign bank entry and the Malaysian domestic banks' profitability relationship. Thus, the finding does not support the hypothesis; Financial freedom is significantly influences the foreign banks entry and Malaysian domestic banks' profitability relationship.

The finding implies that the presence of foreign banks in a domestic banking sector with high financial freedom is not realizing the competition–banking profitability relationship between foreign banks and Malaysian domestic banks. The competition–banking profitability relationship is concerns with the impacts of competition on the profitability determinants, either return on assets or return on equity (Ozili, 2018). Hence, the finding suggests that the profitability of Malaysian domestic banks that operate in a high financial freedom environment along with the presence of foreign banks is not significantly impacted. The finding is consistent with Chi and Nhi (2020), who suggest that financial freedom and foreign bank entry are insignificantly correlated with banks' profitability.

As such, the finding of this study does not support previous studies such as Chortareas et al. (2013) and Sufian & Zulkhibri (2015), which suggest that the higher the degree of an economy's financial freedom combined with the presence of foreign banks, the greater the benefits for banks in terms of cost advantages and overall efficiency, which subsequently increase banks' profitability. For instance, high financial freedom and foreign bank entry is positively stimulate competition in lending diversification, which creates more credit demand that increases the bank's financial performance levels by decreasing cost and bank credit risk (Kun et al. 2016). This means that banks are more likely to engage in a more competitive environment in a banking sector with high financial freedom and the presence of foreign

banks. Hence, domestic banks are becoming more competitive among themselves and also with foreign banks entry (Sufian & Mohd Noor, 2011).

Because of the competitive banking sector's environment, domestic banks have been prompted and innovated to be more competent and efficient in their banking operations to ensure their future excellent going concern (Barbu & Capusneanu, 2011). Hence, the more competitive the environment, the greater the benefits for domestic banks in terms of cost advantages from the overall operational efficiencies. It's indicating that domestic banks with higher operational efficiencies are more overhead-efficient and have a higher possibility of decreasing their operational costs (Zamberi, 2012). As such, the entrance of foreign banks into a highly competitive financial freedom environment is associated with the rise of healthy competition, which in turn creates greater efficiency effects for domestic banks that subsequently reduce their costs and positively increase their profitability.

Moreover, the finding of this study is also not in line with the results of Yusgiantoro (2019), Asharf (2017), Santoso et al. (2019), and Santoso et al. (2021), who suggested that the presence of competition from foreign banks in countries with high scores of financial freedom indicates more ease and effectiveness of banking and financing opportunities in the economy. Indeed, greater financial freedom with the presence of foreign banks' entry-level competition provides more innovative opportunities for banks to expand their operations in order to achieve economies of scale in their banking and financial business operations (Asharf, 2017). Those are the fundamental circumstances contributing to the increase in bank profitability.

Furthermore, banks with greater market power that operates in countries with a higher degree of financial freedom and the presence of foreign banks exhibit better performance as they retain lower riskiness and higher loan growth (Santoso et al., 2021). It is because a higher degree of financial freedom in the banking and financial sector, even with the presence of foreign banks, is essential not only to enhance financial stability but also to boost financial intermediation and bank performance following an increase in the bank's market power and profitability.

CONCLUSION

The finding of this study indicates that, the entrance of foreign banks entry in a high financial freedom of Malaysia domestic banking sector is insignificantly influence the Malaysia domestic banks' profitability. The empirical finding seems to suggest the need for the authority to persistently review the regulation or deregulation of the commencing regulatory regime that determines the financial freedom of the domestic banking sector. Precisely, the findings demonstrate the importance of the government constantly re-evaluating its degree of interference with the freedom of domestic banks and foreign banks to conduct banking business activities in the domestic banking sector. These are critical features that the authority must implement in order to determine the significant positive effects of financial freedom on foreign bank entry and Malaysian bank profitability relationships.

As a result, in order to reap the greatest benefits from foreign bank entry banking technology spill over while minimizing the potential costs of negative impact on domestic banks, the banking authority must work endlessly to rebalance the rules and regulations governing the degree of financial freedom in the domestic banking sector. This does not mean too much government involvement in the banking and financial system, but it reflected the need for the domestic government regulatory body to strengthen and protect the local domestic banks through regulatory barriers to financial freedom.

In fact, rebalancing regulatory requirements on the financial freedom of the domestic banking sector reflects a regulatory control barrier to foreign bank entry business activities in the domestic banking sector. The result should then be a more shielded domestic banking institution with better fortification from foreign bank entry to ensure the domestic banks' sound profitability.

ACKNOWLEDGEMENT

Special thanks to the university and the parties involved, directly and indirectly, who have provided support and facilities in completing this study.

REFERENCES

- Abel, S., Khobai, H. & Le-Roux, P. (2017). Domestic or Foreign Banks? Who wields more Market Power? *International Journal of Economics and Financial Issue*, 7(2), 175-181.
- Acheampong, N.K. (2013). The effect of foreign bank entry on financial performance of domestic-owned banks in Ghana. *The International Journal of Business and Finance Research*, 7(3), 156-170.
- Agoraki, Maria-Eleni K., Manthos D.D. & Pasiouras, F. (2011). Regulations, competition and bank risk-taking in transition countries. *Journal of Financial Stability*, 7, 38-48.
- Ahmad, N. & Mazlan, N.F. (2015). Banking fragility sector index and determinants: a comparison between local-based and foreign-based commercial banks in Malaysia. *International Journal of Business and Administrative Studies*, 1(1), 5-17.
- Ahmad, S.Z. (2013). Foreign multinational banking in Malaysia: trends, motives and activities. *Asia-Pacific Journal of Business Administration*, 5(2), 167-182.
- Akinci, M., Akinci, G.Y. & Yilmaz, O. (2015). The Relationship Between Central Bank Independence, Financial Freedom, and Economic Growth: A Panel ARDL Bounds Testing Approach. *Central Bank Review*, 15(3), 1-14.
- Allen, F., Elena, C. & Douglas, G. (2012). Money, financial stability and efficiency. *Journal of Economic Theory*, 149, 100-127.
- AlNeimat, M.A. & Warred, T.M.M. (2017). Impact of the foreign banks entry on the accounting profits of the Jordanian commercial banks 1995-2015. *International Journal of Economics and Financial Issues*, 7(5), 78-85.
- Altavilla, C., Boucinha, M. & Peydró, J. (2018). Monetary policy and bank profitability in a low interest rate environment. *Economic Policy*, 33(96), 531-586.

- Ang, S.H., Benischke, M.H., & Doh, J.P. (2015). The interactions of institutions on foreign market entry mode. *Strategic Management Journal*, 36(10), 1536-1553.
- Apanard, P. A., Wanvimol, S. & Wihlborg, C. (2010). Financial liberalization and banking crises: A cross-country analysis. *International Review of Finance*, 10(2).
- Ashraf, B. N., (2017). Do trade and financial openness matter for financial development? Bank-level evidence from emerging market economies. *Research in International Business and Finance*, 44, 434- 458.
- Azmeh, C. (2018). Foreign bank entry and financial development: New evidence on the cherry picking and foreign bank's informational disadvantage phenomena in the MENA countries. *Journal of Cogent Economics & Finance*.
<https://www.tandfonline.com/loi/oaef20>
- Barbu, C.M. & Capusneanu, S. (2011). Financial system: Between Freedom of the markets and regulations. *International Journal of Academic Research*, 3(2).
- Chi, L.D. & Nhi, P.T.L. (2020). Economic Freedom on Bank Efficiency: Evidence from Vietnamese Commercial Banks. *International Journal of Business Marketing and Management*, 5(5), 01-11.
- Chortareas, G.E., Girardone, C. & Ventouri, A. (2013). Financial freedom and bank efficiency: Evidence from the European Union. *Journal of Banking & Finance*, 37(4), 1223-1231
- Claessens, S. & Van Horen, N. (2014). Foreign banks: Trends and Impact. *Journal of Money, Credit and Banking*, 46(1), 295-326.
- Dages, B.G., Goldberg, L. and Kinney, D. (2000). Foreign and domestic bank participation in emerging markets: Lessons from Mexico and Argentina. *Federal Reserve Bank of New York Economic Policy Review*, 6(3), 17-35.
- Devarakonda, S. & Munipalle, U. (2019). Impact of foreign bank entry on the domestic bank performance in India: A DEA approach. *Journal of Finance India © Indian Institute of Finance*, XXXIII(1), 85-104.
- Diallo, B. (2016). Foreign banks entry and banks competition in Africa: An inverted U-shaped relation. *The Journal of Developing areas*, 50(4).
- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19, 1-31.
- Erfani, G.R. & Vasigh, B. (2018). The Impact of the Global Financial Crisis on Profitability of the Banking Industry: A Comparative Analysis. *Economies*, 6(4), 66-79.
- Fiechter, J., Ötoker-Robe, I., Ilyina, A., Hsu, M., Santos, A. and Surti, J. (2011). Subsidiaries or branches: does one size fit all?" *Staff Discussion Note No. SDN/11/04*, International Monetary Fund, Washington, DC.
- Hartwell, C.A. & Michael, B. (2015). A helping hand: examining the effect of foreign banks on the business environment. *International Journal of Emerging Markets*, 10(4), 875-895.
- James, B.A. & Warwick, J.M. (2007). Financial liberalization, financial sector development and growth: Evidence from Malaysia. *Journal of Development Economics*, 84(1), 215-233.
- Jeon, B.N., Olivero, M.P. & Wu, J. (2010). Do foreign banks increase competition? Evidence from emerging Asian and Latin American banking markets. *Journal of Banking & Finance*, 12(5), 225-129.

- John, K. (2019). Inflation and financial sector development in Sub-Saharan African countries. *Journal of Economic Studies*, 46(4).
- Kouretas, G.P. and Tsoumas, C. (2016). Foreign bank presence and business regulations. *Journal of Financial Stability*, 24, 104-116.
- Kun, L.L., Doan, A.T. & Doong, S.C. (2016). Changes in ownership structure and bank efficiency in Asian developing countries: The role of financial freedom. *International Review of Economics & Finance*, 43, 19-34.
- Lehner, M., & Schnitzer, M. (2008). Entry of foreign banks and their impact on host countries. *Journal of Comparative Economics*, 36(3), 430-452.
- León, F. (2016). Does the expansion of regional cross-border banks affect competition in Africa? Indirect evidence, *Research in International Business and Finance*, 37, 66-77. Lin, et. al., 2016
- Lin, K.L., Doan, A.T. & Doong, S.C. (2016). Changes in ownership structure and bank efficiency in Asian developing countries: The role of financial freedom. *International Review of Economics & Finance*, 43, 19-34.
- Lu, W. & Mieno, F. (2018). Impact of Foreign Entry in Banking Sector: Case of Thailand during 1999 - 2014. *Japan-ASEAN Transdisciplinary Studies*, Working Paper Series, no.1.
- Luo, Y., Tanna, S., & Vita, D.G., (2016). Financial openness, risk and bank efficiency: Cross-country evidence, *Journal of Financial Stability*, 24, 132-148.
- Maurice, J.G. & Teresa D.H. (2019). OLS and IV estimation of regression models including endogenous interaction terms. *Econometric Review*, 38(7), 814-827.
- Meloun, M. & Militký, J. (2001). Detection of single influential points in OLS regression model building. *Analytica Chimica Acta*, 439(2), 169-191.
- Miller, T., Kim, A.B., Roberts, M., Riley, B., & Olson, R., (1995). The Index study of independent economic variable of Economic Freedom Index. *Published by Heritage Foundation and Dow Jones in partnership with the Wall Street Journal*. www.heritage.org
- Mirzaei, A. & Moore, T. (2014). What are the driving forces of bank competition across different income groups of countries? *Journal of International Financial Markets Institutions and Money*, 32, 38-71.
- Noreen, E. (1998). An Empirical Comparison of Probit and OLS Regression Hypothesis Tests. *Journal of Accounting Research*, 26(1), 119-133
- Ofori, S.D., Mensah, L., Akuma, J.K. & Doku, I. (2018). Banking efficiency in emerging economies: Does foreign banks entry matter in the Ghanaian context? *International Journal of Finance and Economic*, 24(3). Ozili, 2018
- Ozili P.K. (2018). Banking stability determinants in Africa. *International Journal of Managerial Finance*, 14.
- Pelletiera, A. (2017). Performance of foreign banks in developing countries Evidence from sub-Saharan African banking markets. *Journal of Banking and Finance*. 24(7), 65-80.
- Pesaran, M.H., Shin, Y., & Smith, R.P. (1999). Pooled Mean Group Estimation of Dynamic Heterogeneous Panels. *Journal of the American Statistical Association*, 94, 621-634.
- Ranciere, R., Tornell, A. & Westermann, F. (2006). Decomposing the effects of financial liberalization: Crises vs. growth. *Journal of Banking & Finance*, 30(12), 3331-3348.
- Sanjeev, G.M. (2009). Efficiency of Indian public sector banks: An application of Data

- Envelopment Analysis approach. *The ICAFI Journal of Applied Finance*, 15(11), 52-65.
- Santoso, W., Yusgiantoro, I., Soedarmono, W., & Prasetyantoko, A. (2019). The bright side of market power in Asian banking: Implications of bank capitalization and financial freedom. *Working Paper, Indonesia Financial Services Authority*.
- Santoso, W., Yusgiantoro, I., Soedarmono, W. & Prasetyantoko, A. (2021). The bright side of market power in Asian banking: Implications of bank capitalization and financial freedom. *Research in International Business and Finance*, 56.
- Sarpong-Kumankoma, E., Abor, J., Aboagye, Q. & Amidu, M. (2017). Freedom, competition and bank efficiency in Sub-Saharan Africa. *International Journal of Law and Management*, 59(6), 1359-1380.
- Sarpong-Kumankoma, E., Abor, J., Aboagye, Q. & Amidu, M. (2018). Freedom, competition and bank profitability in Sub-Saharan Africa. *Journal of Financial Regulation and Compliance*, 26(4), 462-481.
- Sarpong-Kumankoma, E., Abor, J., Quame, A., Aboagye, Q & Amidu, M. (2019). Financial freedom, market power and bank margins in sub-Saharan Africa. *Journal of Financial Regulation and Compliance*.
- Simiyu, C.N. (2015). Effect of macroeconomic variables on profitability of commercial banks listed in the Nairobi securities exchange. *International Journal of Economics, Commerce and Management*, III(4), 1-16.
- Sufian, F. & Mohd Noor, N.H.H. (2011). Financial sector liberalization, foreign banks entry and performance: Malaysia's initial post-liberalization experience. *IiBF Working Paper Series, IIUM*.
- Sufian & Kamarudin. (2016). The impact of globalization on the performance of Banks in South Africa. *Review of International Business and Strategy*, 26(4), 517-542.
- Sufian, F. & Zulhibri, M. (2015). The Nexus between Economic Freedom and Islamic Bank Profitability in the MENA Banking Sectors. *Global business Review*.
- Tan, Y., Floros, C. & Anchor, J. (2017). The profitability of Chinese banks: impacts of risk, competition and efficiency. *Review of Accounting and Finance*, 16(1), 86-105.
- Uiboupin, J. (2005). Effects of Foreign Banks Entry on Bank Performance in the CEE Countries. *Working Paper. No. 33-2004. University of Tartu, Faculty of Economics and Business Administration*. <http://hdl.handle.net/10419/166879>.
- Wagner, M. & Hong, S.H. (2016). Co-integrating polynomial regressions: Fully modified OLS estimation and inferences. *Econometric Theory*, 32(5), 1289-1315.
- Wang, S. L., Luo, Y., Lu, X., Sun, J., & Maksimov, V. (2014). Autonomy delegation to foreign subsidiaries: An enabling mechanism for emerging-market multinationals. *Journal of International Business Studies*, 45(2), 111-130.
- Weaver, B & Wuensch, K.L. (2013). SPSS and SAS programs for comparing Pearson correlations and OLS regression coefficients. *Behavior Research Methods*, 45, 880-895.
- William, B. (2002). The defensive expansion approach to multinational banking: evidence to data. *Journal of Finance Markets, Institutions and Instruments*, 13(2), 249-265.
- Yaseen, H., Omet, G. & Kahmash, F. (2015). On the Entry of Foreign Banks: The Jordanian Experience. *International Journal of Economics and Finance*, 7(7).

- Yan, Z., Zhu, C. J., Fan, D., & Kalfadellis, P. (2018). An institutional work view toward the internationalization of emerging market firms. *Journal of World Business*, 11(1).
- Yin, H. (2020). Foreign bank entry and bank competition: Cross-country heterogeneity. *Global Finance Journal*. <https://doi.org/10.1016/j.gfj.2020.100558>
- Yusgiantoro, I. (2019). Bank Capital, Liquidity Creation, Profitability, and Financial Stability: Evidence Across Countries. Otoritas Jasa Keuangan, WP/19/02.
- Zamperi, A.S. (2012). The internationalization of Malaysian based multinational banks: Journey towards globalization. *Asia-Pacific Journal of Business Administration*, 4(1), 58-81.

Appendix 1

(a) Foreign Conventional Banks in Malaysia; Year 2001 – Year 2020

No.	Banks
1	BNP Paribas Malaysia Berhad (since 2011).
2	Bangkok Bank Berhad (since 1959).
3	Bank of China (Malaysia) Berhad (Since 2001)
4	Bank of Tokyo-Mitsubishi UFJ (Malaysia) Berhad (MUFG Bank) (since 1959)
5	Citibank Berhad (since 1959)
6	Deutsche Bank (Malaysia) Berhad (Since 2005)
7	HSBC Bank Malaysia Berhad (since 1959).
8	Industrial and Comm. Bank of China (Malaysia) Berhad (Since Jan. 2010)
9	J.P. Morgan Chase Bank Berhad (Since 1964)
10	OCBC Bank (Malaysia) Berhad (since 1959).
11	Standard Chartered Bank Malaysia Berhad (since 1878).
12	The Bank of Nova Scotia Berhad (Since 1973)
13	The Royal Bank of Scotland Berhad (Since 2001 - Dec. 2016)
14	United Overseas Bank (Malaysia) Bhd. (Since 1935).
15	Bank of America (M) Berhad (Since 2011)
16	India International Bank (M) Berhad (Since 2012)
17	Mizuho Bank (M) Berhad (Since 2011)
18	National Bank of Abu Dhabi (M) Berhad (Since 2012 - June 2018)
19	Sumitomo Mitsui Banking Corporation (M) Berhad (Since 2015)
20	China Construction Bank (Malaysia) Bhd. (Since Oct. 2016)

(b) Foreign Islamic Banks in Malaysia; Year 2001 - Year 2020

No.	Banks
1	Al Rajhi Banking & Investment Corporation (Since 2006)
2	Alkhair International Islamic Bank Bhd (Previously known as Unicorn International Islamic bank) (Since 2007 - 2018)
3	Asian Finance Bank Berhad (Since 2005 - 2017) (Merged with MBSB Bank in year 2018)
4	Kuwait Finance House (Since 2005)
5	HSBC Amanah Malaysia Berhad (Since 2008)
6	OCBC Al-Amin Bank Berhad (Since 2008)
7	Standard Chartered Saadiq Berhad (Since 2008)

Source: BNM 2020 annual report

(c) Malaysia Domestic Conventional Banks; Year 2001 – Year 2020

No.	Banks
1.	Affin Bank Berhad (Since 2001)
2.	Alliance Bank Malaysia Berhad (Since 2001)
3.	AmBank (M) Berhad (Since 2001)
4.	CIMB Bank Berhad (Since 2001)
5.	Hong Leong Bank Berhad (Since 2001)
6.	Malayan Banking Berhad (Since 2001)
7.	Public Bank Berhad (Since 2001)
8.	RHB Bank Berhad (Since 2001)

(d) Malaysian Domestic Islamic Banks; Year 2001-2020

No.	Full fledge Malaysia domestic Islamic banks.
1	Bank Islam Malaysia Berhad (Since 1984)
2.	Bank Muamalah Malaysia Berhad (Since 1990)
3.	CIMB Islamic Bank Berhad (Since 2006)
4.	RHB Islamic Bank Berhad (Since 2005)
5.	Affin Islamic Bank Berhad (Since 2006)
6.	AmIslamic Bank Berhad (Since 2007)
7.	Hong Leong Islamic Bank Bhd (Since 2005)
8.	May Bank Islamic Berhad (Since 2008)
9.	Alliance Islamic bank Berhad (Since 2008)
10.	Public Islamic Bank Berhad (Since Nov. 2008)
11.	MBSB Bank (since 2013)

Source: BNM 2020 annual report