



# National Governance Differences and Foreign Bank Performance in Asian Countries: The Role of Bank Competition

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## Abstract

Previous studies pay a little attention to whether the differences in national governance quality between home and host country substantially affect foreign bank performance. Based on a bank panel data with 375 foreign banks in 47 Asian countries between 2004 and 2019, the impact of the host–home country difference in governance quality on foreign bank performance is empirically investigated by considering the degree of banking competition measured with the Boone index. Using a panel data model with multilevel mixed-effects, this paper finds that foreign banks in Asia present higher profits than domestic banks. Specifically, banks locating in a less competitive host nation show higher profitability, while host–home differences in aggregated quality of national governance also significantly reduce the foreign bank profitability in terms of individual indicator for voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. Finally, foreign banks could gauge their market power in a less competitive banking structure in the host country to mitigate the negative influence of national governance between host and home country on their financial performance.

**Keywords** Foreign Banks · National Governance · Host–Home Country Difference · Bank Profitability · Banking Competition · Boone Index

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## 1 Introduction

This paper provides new empirical evidence on how host–home differences in national governance affect foreign bank’s financial performance in Asian banking industry by addressing the role of bank competition. Foreign banks are generally recognized for prospective drivers of innovative techniques, management teams and know-how transmission from the host countries by encouraging a relative advantage on productivity (Chaffai, 2021). However, previous studies have confirmed that the distance in national institutions between home and host nations economically affect foreign banks’ financial performance in reaction to banking industry structure in a host country. Specifically, previous studies have indicated that foreign banks from home countries with cultural, economic and institutional distance to the host country experience challenges in accommodating to host macroeconomic conditions and exerting own competitive advantages in the local country (Cezar & Escobar, 2015; Dow & Karunaratna, 2006; Ghemawat, 2001; Martín Martín & Drogendijk, 2014). As Chen and Liao (2011) showed, banking market structure significantly affects foreign bank’s profits and implies that foreign banks could gauge their market power to compensate for cross-country differences and motivate them to perform better in the host country. Furthermore, Du et al. (2018) indicated that emerging countries with an institutional framework could be comparable to that of mature ones and the performance of foreign banks also reflects the level of economic development in the host country. Recently, Toh and Jia (2021) examined the impact of host–home nation differences in culture, economic performance and institutions on liquidity creation for domestic versus foreign banks in Malaysia and found that a bank’s market power should mitigate reverse influences from host–home country distance. Following this perspective, this paper empirically investigates whether host–home country differences in country governance present the critical influence of bank market power on profitability of foreign banks in comparison to domestic banks.

The presence of foreign banks significantly facilitates the banking sector in host country (Bruno & Hauswald, 2014; Buch & Goldberg, 2020; Jeon et al., 2011; Yin et al., 2020). According to Claessens et al. (2001), foreign banks could improve the quality of banking services in host countries, force domestic banks to follow them through the competition, and enhance the banking services infrastructure through stringent supervision and stronger legal requirements, as well as facilitate the country’s funding access to international banking markets. However, because foreign banks are heavily controlled by their home parent banks, they show less risk, particularly during the financial crisis, and are more likely to be subject to political pressures in host nations to make loans. Therefore, all these consequences should encourage the productiveness of banks and foster the opposition of the monetary markets in the host countries. However, the related literature asserts some different contrary views that foreign banks are viewed as a source of instability as a result from the possibility to withdraw from domestic markets more easily, in particular for higher instability due to vital political or financial crisis (Claessens & Van Horen, 2013; Chen et al., 2017). In addition, foreign banks generally acted as “follow-the-customer” for their clients in host customers, leaving the domestic banks to serve the others i.e., more riskier ones. These arguments influence the effectiveness of the banking sector as a whole.

Thus, based on the dominant effects, foreign banks could also operate better or worse in contrast to home banks (Claessens & Van Horen, 2013).

Regarding the bank profitability, empirical evidence shows that, in emerging markets, foreign banks are more profitable and more efficient than domestic banks (Bonin et al., 2005; Claessens et al., 2001; Demirgüç-Kunt & Huizinga, 2000). In contrast, other studies have shown that foreign banks are disadvantaged when compared to domestic banks in developed countries (Berger et al., 2000; Claessens et al., 2001; Peek et al., 1999; Sathye, 2001). Focusing on 129 countries over 1995–2013, Yin (2019) find that foreign banks show higher risk in host countries. However, previous empirical evidence of foreign bank performance has been mainly concentrated on examples of EU or US banks operating abroad. Studies of foreign banks operating in other countries include those by Williams (1996, 1998a, 1998b, 2003) for Australia; Minh To and Tripe (2002) for New Zealand; Ursacki and Vertinsky (1992) for Japan and Korea (Jeon & Miller, 2005); Gropp (2002) demonstrated that higher bank concentrations may have resulted in less competitive pricing by banks located in the EU during 1993–1999. In addition, Bikker and Haaf (2002) applied the Panzar–Rosse model to measure banking competition in 23 countries, providing support for the conventional view that bank concentration impairs competitiveness. Similarly, Beck et al. (2003) concluded that highly concentrated banking systems were less likely to suffer from crises. As shown by Maudos and Fernández de Guevara (2004), there was a statistically significant and positive correlation between bank concentration and bank interest margins during 1993–2000 for the European banking markets. Furthermore, Maudos and Fernández de Guevara (2004) used the Lerner index as a proxy of the degree of competition in banking markets. In a recent study by Athanasoglou et al. (2008), a GMM (Generalized Method of Moments) technique was applied to a panel of Greek banks during 1985–2001, indicating that bank concentration negatively affected bank profitability, but this effect was relatively insignificant. Based on the data for 148 countries over 1987–2015, Yin (2021) recently explores the influence of foreign bank entry on bank competition in the host countries, and indicates that although on average an increase in the number of foreign banks is related to more competition in the host country, competition raises in developed but declines in developing countries.

This paper contributes to the previous literature in several aspects. Most importantly, we address two banking literature viewpoints: (1) the impact of country governance on bank performance and (2) the heterogeneous impact of bank market power and host-home difference in national governance on the profitability for domestic banks and foreign banks. Our findings disclosure the comparative advantages of domestic banks versus foreign banks in the host country of Asia. We further expand the global banking literature by shedding light on the role of host-home country distance in national governance in the impact of bank competition on the profitability for foreign banks. The results draw attention to the importance of maintaining some degree of market power for foreign banks to maintain in the host country. In addition, while the literature on foreign banks' performance is extensive in the context of profitability and efficiency performance in host countries, very little is known for regarding the impact of host-home country distance in national governance on their financial performance, especially in Asia countries. By using hierarchical linear modeling, we are able to simultaneously model company-specific and bank-specific variables in a large bank-

and country-level dataset. However, the estimated hierarchical specifications are not only allowed for the clustered heterogeneity, but also modeled the potential cross-sectional dependence among banks, particularly for country-level data. The clustered standard errors derived from the estimated hierarchical specifications are close to the Driscoll and Kraay (1998) by controlling for cross-section dependency in non-hierarchical settings.

The remaining papers proceed as follows. Section 2 presents the data source and econometric models are discussed. The construction of the empirical specification shows the details of the estimations. The main results from the estimations are then discussed in Sect. 3, and followed by a summary of the empirical findings and conclusion in Sect. 4.

## 2 Data and Methodology

### 2.1 Data Sources

Different data sources are collected and used for our empirical analysis at 375 foreign banks from 47 Asian countries between 2004 and 2019. The bank-level data on the financial statement report is mainly collected from the database of BankFocus produced by the Bureau Van Dijk Corporation. The country-level data on macroeconomic variables in each country are obtained from World Development Indicators (WDI) by World Bank (WB). Specifically, country-level data on institution quality is collected from Worldwide Governance Indicators (WGI), which have been compiled and accessed by Kaufmann et al. (2008) in excess of 50 countries available at <https://info.worldbank.org/governance/wgi/>.

### 2.2 Measuring Bank Competition: Boone Index

Based on the theoretical explanation from Boone (2008) and the current empirical evidence from van Leuvensteijn et al. (2007), both estimates present the bank level, but then change to the aggregate level. To this end, we apply the Boone (2008) index from bank level data to capture the significance of the reallocation influence at the aggregate banking system within country level. For the empirical implementation, we characterize the Boone (2008) model for bank  $i$  as  $\pi_{i,t} = \alpha + \phi \ln(c_{i,t})$ , where  $\pi_{i,t}$  stands for the bank profits  $i$  at year  $t$ ,  $\phi$  is represented for the Boone (2008) index, while  $c_{i,t}$  means marginal costs. Due to the unobservability of marginal costs, this paper then follows the study of Boone et al. (2005) to utilize average costs. In particular, theoretical framework of Boone (2008) is applied to investigate how margins from loans and other earning assets change with the average costs of deposits and other borrowed funds, labor, and fixed assets (Koetter et al., 2012; Sealey & Lindley, 1977).

This paper applies the Boone (2008) index to model the linkage between profits and average cost according to the following reasons. An increment in costs decreases profits in all markets, but the same percentage rise in a more competitive market causes a larger decrease in profitabilities while inefficient banks are disciplined for

their bad management. This index reflects the characteristics by measuring the extent where differences in efficiency are in response to performance changes. It is concluded that the Boone index represents the decreasing in profitabilities as a result from cost inefficiencies. Because cost inefficiencies frequently show poor lending outcomes, the index shows explicitly reasonable for measuring banking contention as a component of bank efficiency. However, the Boone index is extensively and successfully applied for the empirical banking literature (Bolt & Humphrey, 2010, 2015a, 2015b; Duygun et al., 2015; Faia, et al., 2021; Glass et al., 2020).

Bank-specific effects are also included in our empirical model to control for the heterogeneity within banks. Moreover, empirical specification is crucial to allow for time-varying in the influence of competition on bank performance by exploring the transmission mechanism. Based on the specification of Schaeck and Cihák (2014), we estimate the Boone (2008) model as follows:

$$\pi_{i,t} = \alpha_i + \sum_{k=1}^T \phi_{k1} d_{k,t} \ln(c_{i,t}) + \sum_{k=1}^{T-1} \phi_{k2} d_{k,t} \ln(c_{i,t}) + u_{i,t} \quad (1)$$

where  $\pi_{i,t}$  are the profits of bank  $i$  at year  $t$  as a proportion of its total assets,  $T$  is the total number of years,  $d_{k,t}$  is a year dummy where  $d_{k,t} = 1$  if  $k = t$  and zero otherwise,  $c_{i,t}$  are average variable costs, and  $u_{i,t}$  is the error term. We then follow Boone's (2008) setting on the measure of bank competition by adopting the average costs of bank  $i$  as a ratio to its total income. The cost components are composed of the sum of interest and personnel expenses, administrative, and other operating expenses. Income includes commission and trading income, interest income, fees income, and other operating income. Banks with lower marginal costs ( $\phi < 0$ ) present better profitability. Thus, incremental competition enhances profits of more efficient banks in comparison to less efficient ones. The more profound the influence (i.e., the higher  $\phi$  the absolute value) is, the stronger the competition is. Hence, we expect that the more negative the Boone index, the higher the degree of bank competition is due to the stronger influence of reallocation forward the resources.

### 2.3 Multilevel Mixed-Effects Panel Data Model

Based the hierarchical structure of our panel data on banking sectors nested within among nations, we use a panel data model with multilevel mixed effects to estimate the joint effect of the country-level governance and bank competition on bank-level profits. Especially, we apply a two-level random effects where the period of bank is included as level 1 while the country governance and banking competition as level 2 nested among nations. The selection of our approach presents two crucial innovations. First, potential clustered heterogeneity linked to the disaggregated panel data is controlled by the model (Rabe-Hesketh & Skrondal, 2014). Further, the explanatory variables and error terms at each level of the panel data are incorporated in the model. Second, the multilevel model eliminates the possibility of aggregated bias in which a conclusion is incorrectly included at one level but not at another (Robinson, 2009). This issue is frequently associated with data aggregation, which masks diverse behaviors of

industries in the manufacturing process (Hox et al., 2010). As a result, we could lose crucial information underpinning economic linkages among sectors and also could decrease the statistical strength of the estimation, potentially leading to inaccurate results. Following the specification of Chen and Liao (2011), our empirical model is set up as follows:

*Bank-Level*

$$\Phi_{i,j,t} = \alpha_{0,j} + \alpha_1 \text{ForeignBank}_{i,j,t} + \sum_{q=1} \gamma_{q,j} \text{BankControls}_{i,j,t} + \tau_t + \varphi_j + \xi_{i,j,t} \quad (2)$$

where  $\Phi_{i,j,t}$  stands for bank profit after tax for bank  $i$  in country  $j$  in year  $t$ .  $\tau_t$  and  $\varphi_j$  denotes the time effect and country-specific effects, respectively.  $\xi_{i,j,t}$  represents the error term.

*Country-Level*

$$\begin{aligned} \alpha_{0,j} = & \beta_{0,0} + \beta_{0,1} \text{Competition}_{1,j} + \beta_{0,1} \text{Macroeconomics}_{1,j} \\ & + \beta_{0,1} \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| + \mu_{0,j} \end{aligned} \quad (3)$$

$$\begin{aligned} \alpha_{1,j} = & \beta_{1,0} + \beta_{1,1} \text{Competition}_{1,j} + \beta_{1,1} \text{Macroeconomics}_{1,j} \\ & + \beta_{1,1} \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| \mu_{1,j} \end{aligned} \quad (4)$$

$$\begin{aligned} \alpha_{0,j} = & \beta_{0,0} + \beta_{0,1} \text{Competition}_{1,j} + \beta_{0,1} \text{Macroeconomics}_{1,j} \\ & + \beta_{0,1} \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| \\ & + \beta_{0,1} \times \text{Competition}_{1,j} \times \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| + \mu_{0,j} \end{aligned} \quad (5)$$

$$\begin{aligned} \alpha_{1,j} = & \beta_{1,0} + \beta_{1,1} \text{Competition}_{1,j} + \beta_{1,1} \text{Macroeconomics}_{1,j} \\ & + \beta_{1,1} \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| \\ & + \beta_{1,1} \times \text{Competition}_{1,j} \times \left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right| + \mu_{1,j} \end{aligned} \quad (6)$$

where  $\text{Competition}_{1,j}$  denotes the degree of bank competition measured by Boone Index.  $\left| \text{Governance}_{1,j}^{\text{Host}} - \text{Governance}_{1,j}^{\text{Home}} \right|$  defines the absolute value on differences in national governances between home and host country with respect to overall scores, voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. We show the mean value of seven measures from 2004 to 2019 in Appendix A. Based on Kaufmann et al. (2008), the definition and explanation for the six indicators are described as follows: (1) Voice and Accountability (VA), which is defined as the extent to which citizens in a country are able to participate in selecting their government, as

well as freedom of expression, freedom of association, and free media; (2) Political Instability and Violence (PV), which is defined as perceptions of the likelihood that the government may be destabilized or overthrown by unconstitutional or violent means, including political violence and terrorism; (3) Government Effectiveness (GE), which is defined as the quality of public services, the quality of civil services and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of government commitment to such policies; (4) Regulatory Quality (RQ), which is defined as the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development; (5) Rule of Law (RL), which is defined as the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence; and (6) Control of Corruption (CC), which is defined as the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests.

The three measures of bank profitability are used alternatively for the dependent variables of NIM, ROA, and ROE. NIM is the net interest margin generated by the net interest income (= interest income – interest expense) divided by current assets. This ratio means that higher net interest margins show better profitability. ROA is defined as the net profit divided by total assets and stands the earning performance of the bank based on the total assets. ROE is calculated as the return on equity that is the net profit after tax divided by shareholder equity, and reflects the earning performance of the bank according to the share of the stakeholders. Our series of independent variables for the empirical analysis, we consider bank financial characteristics, foreign bank ownership, banking competition, macroeconomic variables in host country, and differences in national governances between home and host country.  $ForeignBank_{i,j,t}$  is the foreignership-specific variable and is a proxy of the dummy variable, which is equal to one for foreign-owned banks defined as foreign-owned if their shareholding is up to 50% or more; otherwise, 0 for domestic-owned banks. The list of 375 foreign banks included for empirical analysis in our dataset is shown in the Appendix B. With respect to control variables ( $BankControls_{i,j,t}$ ) for bank characteristics as internal determinants of performance, we include the following variables in the empirical specification:  $\ln(\text{Total Assets})$  = The natural logarithm of the total assets,  $\ln(\text{Liquidity})$  = Total Loans divided by customers and short-term funding,  $\ln(\text{Opportunity})$  = The ratio of liquid reserves/total assets,  $\text{Credit Risk}$  = The loan-loss provisions to loans ratio,  $\ln(\text{Cost})$  = The natural logarithm of total operation expenses,  $\ln(\text{Noninterest Revenues})$  = Non-interest revenues/total revenue,  $\ln(\text{Interest Payments})$  = Operating expenses minus non-Interest income to total assets, and  $\ln(\text{Other Operating Incomes})$  = Other operating income/total assets. In addition, three macroeconomic variables in host country also included with the growth rate of GDP per capita, inflation rate, and real interest rate.

### 3 Empirical Results

#### 3.1 Descriptive Statistics

We use a bank panel data including 375 foreign banks from 47 Asian countries during 2004–2019, Table 1 provides a summary statistics report of the variables used with respect to all banks (Panel A), domestic banks (Panel B), and foreign banks (Panel C). Mean value of all sample on Panel A presets an ROA of 0.714, ROE of 7.127, and NIM of 5.895. Regarding the macroeconomic performance, the mean inflation rate is 2.060 lower than real interest rate of 2.232. The mean value of Boone Index is  $-0.019$  which means the higher competitiveness in banking competition. We find the mean value of the difference in overall national governance aggregated by six measures is 0.606, implicating the better quality of country governance for foreign banks. Besides, as shown in Panel A and Panel B, we advocate clearly significant that foreign banks perform more profitable than domestic banks when considering the mean of the three measures, with an ROA of 1.198 (0.643), ROE of 9.738 (6.747), NIM of 3.673 (2.357), respectively. Compared to domestic banks, foreign banks exhibit a lower ratio of noninterest revenues and smaller total assets, but also have a higher ratio of liquidity, opportunity cost, credit risk, operating costs, interest payments, and other operating incomes.

#### 3.2 Are Foreign Banks Perform Better than Domestic Banks in Asia?

We apply the panel data model with multilevel mixed-effects to estimate Eqs. (2) to (6) since banks within a country might interact both correlated and corresponding. Based on the result of correlation coefficient matrix shown in Table 2, we find our bank profit measures (NIM, ROA, and ROE) present significant monotonic association with the number of bank financial characteristics, bank competition, macroeconomic environment, and the difference in national governance between host and home country.

In Table 3, we respectively use ROA, ROE, and NIM as the profitability variables by controlling for bank financial characteristics, bank competition (Boone Index), macroeconomic environment, and the difference in national governance between host and home country. Panel A of Table 3 indicates that foreign banks show a significantly positive correlation to higher ROA than domestic banks, which means that foreign banks demonstrate outstanding ROA in all 47 Asian countries in comparison to domestic banks. This finding is consistent with the international evidence of Chen and Liao (2011). It is worth noting that uncompetitive bank market structure across different countries impose a significant role on bank ROA, based on the perspective of the Boone Index, in particular there exists significant and positive relationship between bank ROA and the degree of competition in the banking industry. This finding implies that bank profitability tends to be likely to increase as the trend of the banking industry in a country shifts to a uncompetitive condition (monopoly or oligopoly), due to the barriers to market entry. Specifically, foreign banks with larger differences in national governance significantly decrease their ROA and this result also remains the robustness by controlling for the individual indicator of country governance with respect to voice



**Table 1** Descriptive Statistics of Variables

Variables	Observations	Mean	Standard Deviation	Quantile		
				10%	50%	90%
<b>Panel A. All Banks</b>						
<i>Bank level</i>						
ROA (Return On Assets)	34,320	0.714	0.964	0.070	0.370	1.900
ROE (Return on Equities)	34,320	7.127	8.233	1.140	5.420	17.270
NIM (Net Interest Margins)	34,071	5.895	90.441	0.990	1.730	5.140
Foreign Bank	34,320	0.127	0.333	0.000	0.000	1.000
Ln(Total Assets)	34,299	22.454	2.342	19.690	22.537	25.120
Ln(Liquidity)	33,763	4.088	0.613	3.648	4.157	4.479
Ln(Opportunity)	33,894	3.142	0.928	1.999	3.208	4.069
Credit Risk	34,320	2.382	4.510	0.070	1.410	4.800
Ln(Cost)	34,276	0.485	0.661	- 0.174	0.385	1.348
Ln(Noninterest Revenues)	34,290	29.700	1877.200	0.234	0.642	1.916
Ln(Interest Payments)	33,930	0.456	0.617	0.032	0.204	1.225
Ln(Other Operating Incomes)	34,258	0.847	1.686	0.055	0.453	1.856
<i>Country level</i>						
GDP per Capita	32,396	2.382	2.996	0.070	2.009	6.264
Inflation Rate	32,396	2.060	4.413	- 0.981	1.019	6.881
Real Interest Rate	34,320	2.232	3.778	- 0.517	1.642	5.807
Boone Index	34,320	- 0.019	0.442	- 0.074	- 0.006	0.016
Difference in Overall Governance	34,320	0.606	2.138	0.000	0.000	5.665
Difference in Voice and Accountability	34,320	0.104	0.410	0.000	0.000	0.836
Difference in Political Stability and Absence of Violence/Terrorism	34,320	0.084	0.343	0.000	0.000	0.682
Difference in Government Effectiveness	34,320	0.086	0.300	0.000	0.000	0.860
Difference in Regulatory Quality	34,320	0.104	0.406	0.000	0.000	0.975
Difference in Rule of Law	34,320	0.111	0.428	0.000	0.000	1.100

**Table 1** (continued)

Variables	Observations	Mean	Standard Deviation	Quantile		
				10%	50%	90%
Difference in Control of Corruption	34,320	0.118	0.456	0.000	0.000	1.107
<b>Panel B. Domestic Banks</b>						
ROA (Return On Assets)	29,960	0.643	0.920	0.070	0.310	1.760
ROE (Return on Equities)	29,960	6.747	8.131	1.150	4.960	16.720
NIM (Net Interest Margins)	29,729	2.357	1.923	0.960	1.620	6.260
Ln(Total Assets)	29,946	22.506	2.361	19.821	22.573	25.170
Ln(Liquidity)	29,457	4.073	0.616	3.643	4.138	4.458
Ln(Opportunity)	29,572	3.112	0.930	1.940	3.196	4.047
Credit Risk	29,960	2.274	4.277	0.130	1.390	4.600
Ln(Cost)	29,922	0.435	0.642	-0.186	0.336	1.270
Ln(Noninterest Revenues)	29,937	33.836	2063.970	0.244	0.640	1.839
Ln(Interest Payments)	29,616	0.430	0.626	0.030	0.155	1.218
Ln(Other Operating Incomes)	29,905	0.771	1.605	0.045	0.366	1.693
<b>Panel C. Foreign Banks</b>						
ROA (Return On Assets)	4,360	1.198	1.105	0.170	1.120	2.505
ROE (Return on Equities)	4,360	9.738	8.453	1.020	9.500	19.410
NIM (Net Interest Margins)	4,342	3.673	2.295	1.370	3.190	8.265
Ln(Total Assets)	4,353	22.099	2.176	19.271	22.237	24.701
Ln(Liquidity)	4,306	4.192	0.581	3.714	4.284	4.560
Ln(Opportunity)	4,322	3.350	0.890	2.393	3.301	4.282
Credit Risk	4,360	3.123	5.812	0.000	1.640	6.825
Ln(Cost)	4,354	0.829	0.684	-0.041	0.837	1.681
Ln(Noninterest Revenues)	4,353	1.255	4.963	0.161	0.651	2.465
Ln(Interest Payments)	4,314	0.638	0.512	0.149	0.521	1.265
Ln(Other Operating Incomes)	4,353	1.366	2.087	0.361	1.031	2.438

Table 2 Correlation coefficient matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ROA	1										
(2) ROE	0.7423*	1									
(3) NIM	0.1147*	-0.0044	1								
(4) Foreign Bank	0.1917*	0.1210*	-0.0088	1							
(5) Ln(Total Assets)	-0.1390*	0.0543*	0.0024	-0.0579*	1						
(6) Ln(Liquidity)	0.1790*	0.0917*	0.2272*	0.0648*	0.0203*	1					
(7) Ln(Opportunity)	0.0811*	-0.0388*	0.0465*	0.0855*	-0.2931*	-0.0429*	1				
(8) Credit Risk	0.0252*	-0.0120*	-0.0163*	0.0627*	-0.0905*	-0.0675*	0.1009*	1			
(9) Ln(Cost)	0.2565*	0.1528*	-0.0844*	0.1983*	-0.3019*	0.2569*	-0.0378*	0.2360*	1		
(10) Ln(Noninterest Revenues)	-0.0011	-0.0013	-0.0001	-0.0006	-0.0015	-0.0051	0.0009	0.0198*	0.0091	1	
(11) Ln(Interest Payments)	0.1182*	0.1845*	-0.0165*	0.1126*	-0.0481*	0.0657*	-0.1232*	0.0648*	0.2059*	0.0524*	1
(12) Ln(Other Operating Incomes)	0.3683*	0.2009*	-0.0019	0.1175*	-0.0985*	0.0703*	0.1557*	0.1347*	0.4784*	-0.0008	0.0582*
(13) GDP per Capita	0.2415*	0.3004*	-0.0103	0.1316*	-0.0590*	0.1034*	0.0004	-0.0219*	0.2514*	0.0006	0.3322*
(14) Inflation Rate	0.3343*	0.3314*	-0.0082	0.1516*	-0.1934*	0.0934*	0.0360*	0.1183*	0.3609*	-0.0024	0.3807*
(15) Real Interest Rate	0.1060*	0.0522*	-0.0045	0.1435*	-0.0765*	0.0579*	-0.0680*	0.1237*	0.2870*	0.0036	0.1831*
(16) Boone Index	-0.0181*	-0.0156*	0.0006	0.0017	0.0069	-0.0033	-0.0036	0.0054	-0.0118*	-0.0002	-0.0275*
(17) Difference in Voice and Accountability	0.1194*	0.0636*	-0.0064	0.6636*	-0.0416*	0.0220*	0.1156*	0.0306*	0.1021*	-0.0004	0.0451*
(18) Difference in Political Stability and Absence of Violence/Terrorism	0.1134*	0.0538*	-0.0054	0.6398*	-0.0429*	0.0294*	0.0650*	0.0824*	0.1346*	-0.0004	0.0659*
(19) Difference in Government Effectiveness	0.1526*	0.1177*	-0.0079	0.7481*	-0.0047	0.0326*	0.1008*	0.0263*	0.0683*	-0.0004	0.0496*

Table 2 (continued)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(20) Difference in Regulatory Quality	0.1250*	0.0586*	-0.006	0.6747*	-0.0556*	0.0228*	0.1028*	0.0589*	0.1247*	-0.0004	0.0587*
(21) Difference in Rule of Law	0.1321*	0.0614*	-0.0055	0.6774*	-0.0684*	0.0304*	0.0993*	0.0514*	0.1482*	-0.0004	0.0530*
(22) Difference in Control of Corruption	0.1267*	0.0633*	-0.0058	0.6781*	-0.0581*	0.0369*	0.0935*	0.0373*	0.1386*	-0.0004	0.0500*
(23) Difference in Overall Governance	0.1397*	0.0742*	-0.0067	0.7429*	-0.0518*	0.0318*	0.1060*	0.0522*	0.1336*	-0.0004	0.0586*
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
(1)											
(2)											
(3)											
(4)											
(5)											
(6)											
(7)											
(8)											
(9)											
(10)											
(11)											
(12)	1										
(13)	0.1115*	1									
(14)	0.2022*	0.2701*	1								

Table 2 (continued)

	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
(15)	0.1237*	0.1134*	-0.3347*	1								
(16)	0.0001	-0.0404*	-0.0306*	-0.0301*	1							
(17)	0.0739*	0.1281*	0.0842*	0.0702*	0.0037	1						
(18)	0.0736*	0.0822*	0.1077*	0.1018*	-0.0003	0.7188*	1					
(19)	0.0974*	0.0615*	0.0910*	0.0688*	0.0034	0.5920*	0.5483*	1				
(20)	0.0784*	0.1091*	0.0963*	0.0916*	0.0019	0.8633*	0.8411*	0.5946*	1			
(21)	0.0795*	0.1213*	0.1004*	0.0920*	0	0.8666*	0.8479*	0.5776*	0.9679*	1		
(22)	0.0737*	0.1171*	0.0944*	0.0875*	-0.0001	0.8484*	0.8501*	0.5909*	0.9525*	0.9748*	1	
(23)	0.0862*	0.1164*	0.1045*	0.0939*	0.0015	0.9082*	0.8856*	0.6961*	0.9704*	0.9748*	0.9709*	1

Significance at 5% levels are denoted by \*

**Table 3** The effects of national governance on bank financial performance

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
<b>Bank Level</b>							
Constant	1.795*** (8.067)	1.796*** (8.082)	1.812*** (8.225)	1.780*** (8.032)	1.786*** (8.000)	1.789*** (8.040)	1.795*** (8.030)
Foreign Bank	0.526*** (10.714)	0.552*** (10.661)	0.550*** (10.061)	0.555*** (10.342)	0.520*** (10.218)	0.519*** (10.500)	0.528*** (10.235)
Ln(Total Assets)	-0.075*** (-9.646)	-0.075*** (-9.680)	-0.077*** (-9.870)	-0.075*** (-9.698)	-0.075*** (-9.595)	-0.075*** (-9.611)	-0.075*** (-9.563)
Ln(Liquidity)	0.227*** (7.666)	0.226*** (7.613)	0.230*** (7.739)	0.227*** (7.569)	0.228*** (7.624)	0.228*** (7.698)	0.228*** (7.684)
Ln(Opportunity)	-0.106*** (-8.152)	-0.105*** (-8.108)	-0.103*** (-8.029)	-0.104*** (-8.001)	-0.106*** (-8.149)	-0.106*** (-8.138)	-0.106*** (-8.179)
Credit Risk	-0.031*** (-7.190)	-0.031*** (-7.130)	-0.031*** (-7.165)	-0.031*** (-6.964)	-0.031*** (-7.221)	-0.031*** (-7.191)	-0.031*** (-7.142)
Ln(Cost)	-0.626*** (-18.247)	-0.625*** (-18.309)	-0.625*** (-18.335)	-0.628*** (-18.334)	-0.624*** (-18.227)	-0.624*** (-18.217)	-0.628*** (-18.360)
Ln(Noninterest Revenues)	-0.000 (-0.232)	-0.000 (-0.241)	-0.000 (-0.259)	-0.000 (-0.270)	-0.000 (-0.241)	-0.000 (-0.234)	-0.000 (-0.243)

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Interest Payments)	- 0.238*** (- 5.095)	- 0.237*** (- 5.071)	- 0.238*** (- 5.012)	- 0.237*** (- 5.005)	- 0.237*** (- 5.082)	- 0.237*** (- 5.084)	- 0.239*** (- 5.066)
Ln(Other Operating Incomes)	0.300*** (6.996)	0.299*** (6.957)	0.299*** (6.898)	0.299*** (6.914)	0.300*** (6.974)	0.300*** (6.987)	0.299*** (6.961)
<b>Country Level</b>							
GDP per capita	0.018*** (7.999)	0.018*** (8.023)	0.018*** (7.877)	0.017*** (7.643)	0.018*** (7.880)	0.018*** (8.005)	0.018*** (7.941)
Inflation Rate	0.035*** (10.412)	0.035*** (10.405)	0.034*** (10.141)	0.034*** (10.160)	0.035*** (10.367)	0.035*** (10.384)	0.035*** (10.362)
Real Interest Rate	0.029*** (8.886)	0.029*** (8.889)	0.028*** (8.605)	0.029*** (8.669)	0.029*** (8.848)	0.029*** (8.853)	0.029*** (8.845)
Boone Index	2.019*** (20.028)	2.031*** (19.287)	2.037*** (19.763)	2.080*** (21.076)	2.039*** (19.460)	2.028*** (19.913)	2.040*** (20.058)
Difference in National Governance	- 2.941***	- 0.679***	- 0.270*	- 0.007	- 0.752***	- 1.039***	- 0.945***

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
	(- 10.968)	(- 3.728)	(- 1.751)	(- 0.052)	(- 3.310)	(- 4.096)	(- 5.218)
<b>Random effects</b>							
Constant	- 0.339***	- 0.337***	- 0.319***	- 0.335***	- 0.340***	- 0.341***	- 0.335***
	(- 8.023)	(- 7.829)	(- 7.431)	(- 7.532)	(- 7.872)	(- 7.970)	(- 7.776)
Residual	- 0.759***	- 0.763***	- 0.771***	- 0.770***	- 0.762***	- 0.760***	- 0.762***
	(- 29.609)	(- 29.841)	(- 29.969)	(- 29.535)	(- 29.592)	(- 29.509)	(- 29.509)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	31,718	31,718	31,718	31,718	31,718	31,718	31,718
Number of Bank	3,825	3,825	3,825	3,825	3,825	3,825	3,825
Log likelihood	- 27,066	- 27,026	- 26,957	- 26,974	- 27,042	- 27,058	- 27,045
$\chi^2$	910.1***	881.3***	877.2***	881.4***	874.9***	899.2***	875.1***



Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
<b>Bank Level</b>							
Constant	18.812*** (6.249)	18.060*** (12.148)	8.090*** (4.690)	7.952*** (4.624)	14.027*** (5.122)	11.736*** (7.735)	10.855*** (6.782)
Foreign Bank	3.372*** (5.204)	3.454*** (7.238)	3.389*** (6.487)	3.587*** (6.872)	3.254*** (5.051)	3.229*** (6.989)	3.466*** (7.011)
Ln(Total Assets)	- 0.704*** (- 6.304)	- 0.558*** (- 9.488)	- 0.267*** (- 3.991)	- 0.256*** (- 3.836)	- 0.549*** (- 5.508)	- 0.349*** (- 5.920)	- 0.350*** (- 5.606)
Ln(Liquidity)	2.239*** (6.209)	1.409*** (9.858)	2.072*** (11.991)	2.064*** (11.964)	2.253*** (6.515)	1.677*** (11.086)	1.972*** (12.509)
Ln(Opacity)	- 1.595*** (- 7.863)	- 1.268*** (- 14.085)	- 0.996*** (- 9.004)	- 0.992*** (- 9.020)	- 1.515*** (- 7.551)	- 1.076*** (- 11.115)	- 1.067*** (- 10.670)
Credit Risk	- 0.456***	- 0.392***	- 0.667***	- 0.671***	- 0.417***	- 0.472***	- 0.584***

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Cost)	(- 5.341) - 10.290***	(- 22.083) - 8.750***	(- 31.841) - 11.043***	(- 32.266) - 11.146***	(- 5.075) - 9.681***	(- 25.629) - 9.651***	(- 30.763) - 10.813***
Ln(Noninterest Revenues)	(- 12.975) 0.008*** (3.655)	(- 53.671) - 0.009***	(- 55.389) 0.009*** (14.305)	(- 56.122) 0.008*** (11.701)	(- 12.403) 0.008*** (3.464)	(- 55.553) 0.008*** (15.071)	(- 59.923) 0.009*** (15.810)
Ln(Interest Payments)	- 0.043 (- 0.874) 2.341*** (6.329)	0.010 (0.985) 2.091*** (41.985)	- 0.027** (- 2.343) 2.678*** (41.383)	- 0.023* (- 1.958) 2.634*** (40.641)	- 0.041 (- 0.827) 2.379*** (6.632)	- 0.031*** (- 3.022) 2.335*** (42.870)	- 0.035*** (- 3.339) 2.582*** (44.115)
<b>Country Level</b>							
GDP per capita	0.377*** (12.048)	0.317*** (15.481)	0.378*** (14.963)	0.367*** (14.627)	0.401*** (12.218)	0.360*** (16.378)	0.366*** (16.249)
Inflation Rate	0.508*** (10.465)	0.431*** (21.388)	0.550*** (22.535)	0.539*** (22.175)	0.585*** (11.595)	0.498*** (23.281)	0.489*** (22.259)

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Real Interest Rate	0.464*** (8.552)	0.348*** (15.277)	0.548*** (19.895)	0.536*** (19.569)	0.511*** (9.062)	0.428*** (17.742)	0.471*** (19.035)
Boone Index	5.300*** (31.164)	4.931*** (114.379)	4.432*** (58.990)	4.334*** (55.310)	5.469*** (37.950)	4.337*** (72.069)	4.182*** (61.128)
Difference in National Governance	- 12.256*** (- 7.574)	- 16.689*** (- 12.603)	- 10.470*** (- 8.860)	- 15.637*** (- 15.332)	- 13.545*** (- 6.553)	- 14.640*** (- 12.541)	- 17.977*** (- 15.034)
<b>Random effects</b>							
Constant	2.080*** (9.940)	2.002*** (69.779)	2.191*** (96.589)	2.207*** (103.784)	1.861*** (6.244)	2.067*** (98.834)	2.176*** (118.406)
Residual	2.241*** (55.204)	2.011*** (453.993)	2.236*** (509.427)	2.224*** (506.824)	2.314*** (50.072)	2.103*** (479.956)	2.116*** (484.202)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	31,718	31,718	31,718	31,718	31,718	31,718	31,718
Number of Bank	3,825	3,825	3,825	3,825	3,825	3,825	3,825

Table 3 (continued)

Panel B. Dependent Variable = ROE (Return on Equities)							
Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Log likelihood	- 101,622	- 101,621	- 101,609	- 101,616	- 101,621	- 101,622	- 101,652
$\chi^2$	895.8***	896.1***	888.4***	883.5***	894.2***	895.8***	6,127***
Panel C. Dependent Variable = NIM (Net Interest Margins)							
Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
<b>Bank Level</b>							
Constant	5.573*** (10.612)	5.629*** (10.853)	5.566*** (10.717)	5.381*** (10.649)	5.581*** (10.643)	5.575*** (10.714)	5.615*** (10.698)
Foreign Bank	0.777*** (7.136)	0.832*** (7.835)	0.743*** (7.017)	0.747*** (6.853)	0.800*** (7.579)	0.649*** (6.666)	0.766*** (7.516)
Ln(Total Assets)	- 0.176*** (- 9.342)	- 0.178*** (- 9.660)	- 0.176*** (- 9.512)	- 0.167*** (- 9.535)	- 0.175*** (- 9.373)	- 0.176*** (- 9.476)	- 0.178*** (- 9.480)

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Liquidity)	0.098 (1.155)	0.095 (1.125)	0.098 (1.148)	0.099 (1.148)	0.089 (1.047)	0.097 (1.149)	0.101 (1.186)
Ln(Opportunity)	-0.015 (-0.723)	-0.015 (-0.704)	-0.013 (-0.618)	-0.013 (-0.614)	-0.014 (-0.662)	-0.015 (-0.694)	-0.016 (-0.760)
Credit Risk	-0.015** (-1.974)	-0.015* (-1.927)	-0.016** (-2.080)	-0.014* (-1.700)	-0.015* (-1.945)	-0.015** (-2.000)	-0.015* (-1.886)
Ln(Cost)	1.316*** (23.196)	1.317*** (23.232)	1.318*** (23.237)	1.300*** (23.304)	1.320*** (23.290)	1.315*** (23.222)	1.313*** (23.254)
Ln(Noninterest Revenues)	0.000 (0.071)	0.000 (0.077)	0.000 (0.082)	0.000 (0.045)	0.000 (0.080)	0.000 (0.084)	0.000 (0.088)
Ln(Interest Payments)	-0.428*** (-5.396)	-0.428*** (-5.398)	-0.423*** (-5.345)	-0.426*** (-5.301)	-0.430*** (-5.431)	-0.428*** (-5.407)	-0.427*** (-5.383)
Ln(Other Operating Incomes)	-0.216*** (-4.728)	-0.214*** (-4.734)	-0.215*** (-4.699)	-0.215*** (-4.792)	-0.216*** (-4.741)	-0.216*** (-4.756)	-0.216*** (-4.737)
<b>Country Level</b>							

Table 3 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
GDP per capita	0.015*** (4.866)	0.015*** (5.067)	0.015*** (5.058)	0.014*** (4.609)	0.015*** (4.824)	0.015*** (4.818)	0.015*** (4.812)
Inflation Rate	0.049*** (9.500)	0.048*** (9.504)	0.048*** (9.472)	0.048*** (9.400)	0.049*** (9.491)	0.049*** (9.527)	0.049*** (9.516)
Real Interest Rate	0.044*** (7.276)	0.044*** (7.295)	0.044*** (7.278)	0.044*** (7.213)	0.044*** (7.253)	0.044*** (7.280)	0.044*** (7.305)
Boone Index	3.187*** (9.832)	3.212*** (9.582)	3.208*** (9.909)	3.289*** (8.769)	3.202*** (9.706)	3.203*** (9.593)	3.212*** (9.661)
Difference in National Governance	-0.369*** (-7.386)	-0.373*** (-7.433)	-0.376*** (-7.415)	-0.393*** (-7.688)	-0.373*** (-7.431)	-0.371*** (-7.427)	-0.373*** (-7.450)
<b>Random effects</b>							
Constant	0.489*** (5.245)	0.493*** (5.373)	0.490*** (5.340)	0.490*** (5.448)	0.504*** (5.534)	0.495*** (5.365)	0.497*** (5.438)
Residual	0.213* (4.111)	0.240*** (5.111)	0.257*** (5.111)	0.318* (4.111)	0.252*** (5.111)	0.253*** (5.111)	0.246*** (5.111)

Table 3 (continued)

Independent Variables	National Governance Indicator							
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	
Year Fixed Effects	(1.652)	(2.158)	(2.385)	(1.822)	(2.321)	(2.240)	(2.203)	
Observations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Number of Bank	31,718	31,718	31,718	31,718	31,718	31,718	31,718	
Log likelihood	3,825	3,825	3,825	3,825	3,825	3,825	3,825	
$\chi^2$	-41,496	-41,456	-41,432	-41,142	-41,467	-41,465	-41,443	
	1,080***	1,132***	1,098***	1,255***	1,121***	1,116***	1,113***	

The heteroscedasticity robust standard errors are clustered at the bank level and *t*-statistics are shown in parentheses. Statistical significance at the 10%, 5% and 1% levels are denoted by \*, \*\* and \*\*\*, respectively

and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption.

Regarding the bank's financial characteristics, we confirm that banks with better liquidity and other operating incomes significantly foster bank's ROA, while lower ROA of bank is related to the higher level of total assets, opportunity cost, credit risk, operating cost and interest payments. Finally, banks located in a country with higher level of GDP per capita, inflation rate, and real interest rate significantly perform better ROA. According to Panel B and Panel C in Table 3, we find the similar results of ROE and NIM in comparison to ROA, and confirm that foreign bank consistently and strongly boost higher profits than domestic bank, especially in uncompetitive host country.

### **3.3 Does Bank Competition Amplify or Mitigate the Impact of Differences in National Governance between Host and Home Country on Foreign Bank Profitability?**

We then investigate the joint effects of the bank competition and differences in national governance on foreign bank profits and the results are shown in Table 4. In Panel A of Table 4, we find that the bank competition has positive effect on bank ROA while differences in national governance shows negative effect foreign bank ROA. We next explore the interaction of Boone Index and differences in national governance between host and home country (Boone IndexDifference in National Governance) on foreign bank profits. We find that the coefficient of Boone IndexDifference in national governance shows positive and statistically significant, implicating that foreign banks with uncompetitive banking structure in host country could significantly mitigate the negative effect of national governance between host and home country on the ROA of foreign bank by generating the market power in host country for foreign banks. Based on the Panel B in Table 4, we further verify that the results of ROE and NIM are robust to the ROA. This evidence suggest that foreign banks could generate their market power in uncompetitive banking structure to reduce the adverse influence of national governance between host and home country on their profitability.

## **4 Conclusions**

There is limited published literature on the substantial influence of banking market structure, and the national governance quality between countries on bank profitability, particular in focusing on domestic banks versus foreign banks. Hence, in this paper, we used both bank- and country-level data from the banking sectors of 47 Asian countries during 2004–2019. We find that national governance mechanisms have an overall impact on bank performance. Assessing the effects of country-level governance quality and bank competition for bank-specific variations in bank profitability has direct implications in the context of international study. Furthermore, we specifically investigated the joint influences of bank competition and differences in national governance between the host and home country on foreign bank's profitability.



**Table 4** The joint effects of bank competition and national governance on bank financial performance

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
<b>Bank Level</b>							
Constant	1.796*** (7.992)	1.811*** (8.109)	1.845*** (8.368)	1.776*** (7.989)	1.797*** (7.995)	1.778*** (7.928)	1.820*** (8.048)
Foreign Bank	0.521*** (10.690)	0.546*** (10.780)	0.536*** (10.465)	0.596*** (11.376)	0.509*** (10.232)	0.508*** (10.325)	0.532*** (10.609)
Ln(Total Assets)	-0.075*** (-9.485)	-0.076*** (-9.674)	-0.078*** (-9.964)	-0.074*** (-9.611)	-0.075*** (-9.523)	-0.075*** (-9.394)	-0.076*** (-9.479)
Ln(Liquidity)	0.226*** (7.658)	0.225*** (7.603)	0.227*** (7.688)	0.226*** (7.564)	0.225*** (7.557)	0.226*** (7.709)	0.225*** (7.648)
Ln(Opportunity)	-0.106*** (-8.141)	-0.106*** (-8.110)	-0.103*** (-8.024)	-0.104*** (-7.986)	-0.106*** (-8.148)	-0.105*** (-8.127)	-0.106*** (-8.171)
Credit Risk	-0.031*** (-7.283)	-0.031*** (-7.193)	-0.031*** (-7.200)	-0.031*** (-7.128)	-0.031*** (-7.355)	-0.031*** (-7.251)	-0.031*** (-7.195)
Ln(Cost)	-0.629*** (-18.347)	-0.628*** (-18.462)	-0.626*** (-18.394)	-0.632*** (-18.483)	-0.627*** (-18.336)	-0.627*** (-18.314)	-0.631*** (-18.532)
Ln(Noninterest Revenues)	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Interest Payments)	(- 0.287) - 0.243***	(- 0.297) - 0.242***	(- 0.289) - 0.241***	(- 0.322) - 0.242***	(- 0.296) - 0.242***	(- 0.286) - 0.241***	(- 0.298) - 0.244***
Ln(Other Operating Incomes)	(- 5.081) 0.300***	(- 5.066) 0.298***	(- 5.018) 0.299***	(- 4.993) 0.299***	(- 5.084) 0.300***	(- 5.074) 0.300***	(- 5.061) 0.299***
	(6.978)	(6.940)	(6.888)	(6.900)	(6.957)	(6.969)	(6.931)
<b>Country Level</b>							
GDP per capita	0.018*** (7.872)	0.018*** (7.836)	0.018*** (7.751)	0.017*** (7.442)	0.018*** (7.655)	0.018*** (7.868)	0.018*** (7.726)
Inflation Rate	0.035*** (10.389)	0.035*** (10.411)	0.034*** (10.161)	0.034*** (10.185)	0.035*** (10.359)	0.035*** (10.383)	0.035*** (10.347)
Real Interest Rate	0.029*** (8.908)	0.029*** (8.924)	0.028*** (8.629)	0.029*** (8.706)	0.029*** (8.840)	0.029*** (8.859)	0.029*** (8.876)
Boome Index	1.992*** (18.661)	1.979*** (17.727)	1.971*** (18.065)	2.024*** (19.240)	1.985*** (18.170)	1.985*** (18.401)	2.007*** (18.454)
Difference in National Governance	- 2.369*** (- 18.484)	- 0.444*** (- 4.149)	- 0.223* (- 1.858)	0.177** (2.100)	- 0.432*** (- 3.563)	- 0.598*** (- 4.468)	- 0.607*** (- 6.445)

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Boome Index *	0.485*** (2.804)	0.573*** (3.622)	0.155 (1.460)	0.311*** (3.134)	0.428*** (2.919)	0.425*** (3.029)	0.372*** (3.219)
Difference in National Governance	-0.510*** (-3.930)	-0.531*** (-4.932)	-0.650*** (-7.304)	-0.660*** (-7.209)	-0.627*** (-4.838)	-0.531*** (-3.917)	-0.701*** (-7.124)
Residual	-0.760*** (-29.629)	-0.765*** (-29.961)	-0.771*** (-30.067)	-0.772*** (-29.756)	-0.764*** (-29.759)	-0.761*** (-29.571)	-0.765*** (-29.655)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	31,718	31,718	31,718	31,718	31,718	31,718	31,718
Number of Bank	3,825	3,825	3,825	3,825	3,825	3,825	3,825
Log likelihood	-27,040	-26,979	-26,907	-26,917	-26,995	-27,029	-26,996
$\chi^2$	891.6***	884.0***	873.7***	917.9***	864.3***	878.4***	870.7***

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
<b>Bank Level</b>							
Constant	11.857*** (7.038)	11.860*** (7.060)	12.163*** (7.288)	11.753*** (7.029)	11.900*** (7.063)	11.859*** (7.055)	11.941*** (7.103)
Foreign Bank	2.690*** (7.547)	2.842*** (7.871)	2.627*** (7.355)	3.347*** (8.987)	2.707*** (7.494)	2.688*** (7.567)	2.643*** (7.452)
Ln(Total Assets)	- 0.272*** (- 4.313)	- 0.274*** (- 4.362)	- 0.286*** (- 4.572)	- 0.276*** (- 4.419)	- 0.274*** (- 4.348)	- 0.272*** (- 4.322)	- 0.276*** (- 4.386)
Ln(Liquidity)	1.212*** (6.382)	1.213*** (6.374)	1.212*** (6.389)	1.249*** (6.527)	1.216*** (6.383)	1.211*** (6.377)	1.213*** (6.412)
Ln(Opportunity)	- 1.025*** (- 10.092)	- 1.023*** (- 10.076)	- 1.016*** (- 10.108)	- 1.023*** (- 10.156)	- 1.030*** (- 10.165)	- 1.030*** (- 10.167)	- 1.025*** (- 10.111)
Credit Risk	- 0.251*** (- 6.912)	- 0.249*** (- 6.881)	- 0.254*** (- 6.906)	- 0.253*** (- 6.856)	- 0.251*** (- 6.911)	- 0.251*** (- 6.894)	- 0.249*** (- 6.876)
Ln(Cost)	- 6.841***	- 6.848***	- 6.827***	- 6.876***	- 6.828***	- 6.833***	- 6.832***

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Noninterest Revenues)	(- 21.252) 0.003 (0.391)	(- 21.276) 0.003 (0.395)	(- 21.269) 0.003 (0.397)	(- 21.385) 0.003 (0.377)	(- 21.231) 0.003 (0.397)	(- 21.317) 0.003 (0.398)	(- 21.339) 0.003 (0.395)
Ln(Interest Payments)	- 2.056*** (- 5.714)	- 2.039*** (- 5.699)	- 2.047*** (- 5.679)	- 2.038*** (- 5.653)	- 2.055*** (- 5.721)	- 2.052*** (- 5.721)	- 2.056*** (- 5.716)
Ln(Other Operating Incomes)	2.402*** (8.763)	2.401*** (8.735)	2.404*** (8.743)	2.406*** (8.724)	2.403*** (8.756)	2.403*** (8.776)	2.400*** (8.749)
<b>Country Level</b>							

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
GDP per capita	0.242*** (11.248)	0.242*** (11.228)	0.240*** (11.154)	0.239*** (11.125)	0.240*** (11.127)	0.243*** (11.306)	0.241*** (11.218)
Inflation Rate	0.423*** (12.592)	0.426*** (12.610)	0.421*** (12.562)	0.425*** (12.566)	0.424*** (12.579)	0.425*** (12.607)	0.424*** (12.601)
Real Interest Rate	0.346*** (11.000)	0.350*** (11.046)	0.344*** (10.961)	0.351*** (11.064)	0.346*** (10.954)	0.348*** (11.005)	0.347*** (11.010)
Boone Index	3.978*** (23.197)	3.980*** (22.840)	3.978*** (23.511)	4.012*** (25.317)	3.975*** (23.061)	3.969*** (23.213)	3.963*** (22.909)
Difference in National Governance	-0.276* (-1.656)	1.414*** (9.328)	1.433*** (12.571)	2.022*** (16.709)	1.407*** (8.310)	1.171*** (8.752)	1.360*** (10.979)
Boone Index * Difference in National Governance	1.836*** (52.225)	1.825*** (51.956)	1.839*** (53.599)	1.823*** (52.266)	1.833*** (53.320)	1.829*** (52.205)	1.835*** (53.342)
<b>Random effects</b>							
Constant	-0.887*** (-7.845)	-0.746*** (-6.400)	-0.926*** (-8.661)	-0.800*** (-7.867)	-0.901*** (-7.906)	-0.885*** (-7.888)	-1.015*** (-10.254)
Residual	1.621*** (97.271)	1.621*** (97.313)	1.619*** (96.970)	1.619*** (96.147)	1.621*** (96.998)	1.622*** (97.380)	1.621*** (97.161)

Table 4 (continued)

Panel B. Dependent Variable = ROE (Return on Equities)											
Independent Variables		National Governance Indicator									
		Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption			
		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects											
Observations		31,718	31,718	31,718	31,718	31,718	31,718	31,718	31,718	31,718	31,718
Number of Bank		3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825
Log likelihood		-101,595	-101,592	-101,564	-101,580	-101,589	-101,589	-101,589	-101,600	-101,587	-101,587
$\chi^2$		873.3***	881.0***	878.4***	901.5***	868.3***	868.3***	868.3***	879.6***	873.1***	873.1***
Panel C. Dependent Variable = NIM (Net Interest Margins)											
Independent Variables		National Governance Indicator									
		Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption			
<b>Bank Level</b>											
Constant		5.573*** (10.612)	5.629*** (10.853)	5.566*** (10.717)	5.381*** (10.649)	5.581*** (10.643)	5.575*** (10.714)	5.615*** (10.698)			
Foreign Bank		0.777*** (7.136)	0.832*** (7.835)	0.743*** (7.017)	0.747*** (6.853)	0.800*** (7.579)	0.649*** (6.666)	0.766*** (7.516)			
Ln(Total Assets)		-0.176*** (-9.342)	-0.178*** (-9.660)	-0.176*** (-9.512)	-0.167*** (-9.535)	-0.175*** (-9.373)	-0.176*** (-9.476)	-0.178*** (-9.480)			
Ln(Liquidity)		0.098	0.095	0.098	0.099	0.089	0.097	0.101			

Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Ln(Opportunity)	(1.155) -0.015 (-0.723)	(1.125) -0.015 (-0.704)	(1.148) -0.013 (-0.618)	(1.148) -0.013 (-0.614)	(1.047) -0.014 (-0.662)	(1.149) -0.015 (-0.694)	(1.186) -0.016 (-0.760)
Credit Risk	-0.015** (-1.974)	-0.015* (-1.927)	-0.016** (-2.080)	-0.014* (-1.700)	-0.015* (-1.945)	-0.015** (-2.000)	-0.015* (-1.886)
Ln(Cost)	1.316*** (23.196)	1.317*** (23.232)	1.318*** (23.237)	1.300*** (23.304)	1.320*** (23.290)	1.315*** (23.222)	1.313*** (23.254)
Ln(Noninterest Revenues)	0.000 (0.071)	0.000 (0.077)	0.000 (0.082)	0.000 (0.045)	0.000 (0.080)	0.000 (0.084)	0.000 (0.088)
Ln(Interest Payments)	-0.428*** (-5.396)	-0.428*** (-5.398)	-0.423*** (-5.345)	-0.426*** (-5.301)	-0.430*** (-5.431)	-0.428*** (-5.407)	-0.427*** (-5.383)
Ln(Other Operating Incomes)	-0.216*** (-4.728)	-0.214*** (-4.734)	-0.215*** (-4.699)	-0.215*** (-4.792)	-0.216*** (-4.741)	-0.216*** (-4.756)	-0.216*** (-4.737)
<b>Country Level</b>							
GDP per capita	0.015*** (4.866)	0.015*** (5.067)	0.015*** (5.058)	0.014*** (4.609)	0.015*** (4.824)	0.015*** (4.818)	0.015*** (4.812)



Table 4 (continued)

Independent Variables	National Governance Indicator						
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Inflation Rate	0.049*** (9.500)	0.048*** (9.504)	0.048*** (9.472)	0.048*** (9.400)	0.049*** (9.491)	0.049*** (9.527)	0.049*** (9.516)
Real Interest Rate	0.044*** (7.276)	0.044*** (7.295)	0.044*** (7.278)	0.044*** (7.213)	0.044*** (7.253)	0.044*** (7.280)	0.044*** (7.305)
Boone Index	3.187*** (9.832)	3.212*** (9.582)	3.208*** (9.909)	3.289*** (8.769)	3.202*** (9.706)	3.203*** (9.593)	3.212*** (9.661)
Difference in National Governance	-1.561*** (-6.289)	0.264 (1.090)	0.304** (1.976)	0.996*** (8.400)	0.323 (1.488)	0.323** (2.463)	0.148 (1.136)
Boone Index*Difference in National Governance	0.489*** (5.245)	0.493*** (5.373)	0.490*** (5.340)	0.490*** (5.448)	0.504*** (5.534)	0.495*** (5.365)	0.497*** (5.438)
<b>Random effects</b>							
Constant	0.213* (1.652)	0.240** (2.158)	0.257** (2.385)	0.318* (1.822)	0.252** (2.321)	0.253** (2.240)	0.246** (2.203)
Residual	-0.369***	-0.373***	-0.376***	-0.393***	-0.373***	-0.371***	-0.373***

Table 4 (continued)

Independent Variables	National Governance Indicator							
	Overall	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	
Year Fixed Effects	(- 7.386)	(- 7.433)	(- 7.415)	(- 7.688)	(- 7.431)	(- 7.427)	(- 7.450)	
Observations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Number of Bank	31,718	31,718	31,718	31,718	31,718	31,718	31,718	
Log likelihood	3,825	3,825	3,825	3,825	3,825	3,825	3,825	
$\chi^2$	- 41,496	- 41,456	- 41,432	- 41,142	- 41,467	- 41,465	- 41,443	
	1,080***	1,132***	1,098***	1,255***	1,121***	1,116***	1,113***	

The heteroscedasticity robust standard errors are clustered at the bank level and  $t$ -statistics are shown in parentheses. Statistical significance at the 10%, 5% and 1% levels are denoted by \*, \*\* and \*\*\*, respectively

Moreover, our empirical results reveal that foreign banks exhibit better profitability than domestic banks in Asia, while differences in the banking market structure in different countries plays a significant role in bank profitability. Banks in more uncompetitive markets promote higher profitability, while cross-country differences in macroeconomic condition also significant enhance bank profits. Specifically, our findings indicate that foreign bank with larger differences in national governance between host and home country significantly decrease their profits and this also remains the robustness in terms of individual indicator with respect to voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. Finally, foreign banks could seize their market power in uncompetitive banking structure in host country to moderate the disadvantageous influence of national governance between host and home country on their financial performance.

## **Appendix A: National Governance Index over 2004–2019**

Country	Overall Governance	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Afghanistan	- 9.6899	- 1.2207	- 2.4710	- 1.3992	- 1.4543	- 1.6918	- 1.4527
Armenia	- 1.6156	- 0.5623	- 0.1728	- 0.1488	0.2256	- 0.3626	- 0.5946
Azerbaijan	- 4.8774	- 1.2980	- 0.7163	- 0.5828	- 0.4323	- 0.7886	- 1.0595
Bahrain	0.2939	- 1.0507	- 0.4731	0.4463	0.6717	0.4626	0.2370
Bangladesh	- 5.3469	- 0.4860	- 1.2927	- 0.7503	- 0.9150	- 0.8210	- 1.0819
Bhutan	1.5573	- 0.5126	0.9221	0.4366	- 0.6722	0.3278	1.0555
Brunei Darussala	3.3553	- 0.7947	1.1852	0.9190	0.9482	0.5470	0.5506
Cambodia	- 4.8004	- 0.9868	- 0.2719	- 0.8207	- 0.4602	- 1.0981	- 1.1627
China	- 3.0267	- 1.5954	- 0.4551	0.1461	- 0.2523	- 0.4485	- 0.4215
Democratic Peopl	- 9.2268	- 2.2030	- 0.1830	- 1.7721	- 2.2985	- 1.3999	- 1.3703
Georgia	- 0.3289	- 0.0271	- 0.6982	0.1646	0.3769	- 0.2147	0.0697
Hong Kong, SAR	8.4061	0.4585	0.9357	1.7455	1.9597	1.5633	1.7433
India	- 1.4027	0.4166	- 1.1133	- 0.0221	- 0.3331	0.0319	- 0.3827
Indonesia	- 2.8377	- 0.0159	- 1.0095	- 0.2119	- 0.3389	- 0.5888	- 0.6728
Iraq	- 9.2730	- 1.2371	- 2.3528	- 1.4017	- 1.3393	- 1.6041	- 1.3580
Islamic Republic	- 5.8857	- 1.4108	- 1.0798	- 0.4741	- 1.4294	- 0.8375	- 0.6542
Israel	3.7909	0.6773	- 1.1721	1.2591	1.1351	0.9687	0.9227
Japan	7.4676	1.0162	1.0293	1.4960	1.1415	1.3747	1.4098
Jordan	- 0.3140	- 0.6922	- 0.3975	0.1112	0.1761	0.3106	0.1778
Kazakhstan	- 3.2923	- 1.1393	0.1385	- 0.3807	- 0.2716	- 0.7317	- 0.9076
Kuwait	0.4602	- 0.5348	0.2451	0.0247	0.1283	0.3994	0.1975
Kyrgyzstan	- 4.8495	- 0.7470	- 0.8180	- 0.7295	- 0.3738	- 1.0541	- 1.1272

Country	Overall Governance	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Lao People's Dem	- 5.6089	- 1.6899	- 0.0396	- 0.7909	- 1.0334	- 0.9608	- 1.0944
Lebanon	- 3.9185	- 0.4357	- 1.4092	- 0.3829	- 0.2159	- 0.6281	- 0.8467
Macao, SAR	4.9229	0.1532	0.9286	1.1866	1.3244	0.7610	0.5691
Malaysia	2.1488	- 0.3812	0.2103	1.0481	0.5931	0.4760	0.2025
Maldives	- 1.3775	- 0.6142	0.3295	- 0.1388	- 0.0923	- 0.3160	- 0.5460
Mongolia	- 0.3924	0.2346	0.7276	- 0.4027	- 0.2363	- 0.2228	- 0.4928
Myanmar/Burma	- 8.5477	- 1.6946	- 1.1358	- 1.3639	- 1.7345	- 1.3889	- 1.2300
Nepal	- 4.7621	- 0.5456	- 1.3733	- 0.8238	- 0.6606	- 0.6680	- 0.6908
Oman	1.4730	- 0.9950	0.7856	0.3029	0.5072	0.4718	0.4005
Pakistan	- 6.1302	- 0.8891	- 2.2288	- 0.6232	- 0.6561	- 0.8194	- 0.9137
Philippines	- 2.4047	0.0390	- 1.3083	- 0.0046	- 0.0885	- 0.4487	- 0.5936
Qatar	2.8368	- 0.9471	1.0114	0.6988	0.4888	0.7020	0.8829
Republic of Korea	4.5771	0.7104	0.3547	1.0821	0.9186	0.9998	0.5116
Saudi Arabia	- 1.9827	- 1.7195	- 0.3626	- 0.0357	0.0377	0.0902	0.0072
Singapore	9.1452	- 0.1045	1.2747	2.1681	1.9589	1.6714	2.1765
Sri Lanka	- 1.6684	- 0.3048	- 0.8247	- 0.1556	- 0.1316	0.0340	- 0.2856
Syrian Arab Repu	- 7.9380	- 1.7746	- 1.4181	- 1.1433	- 1.3362	- 1.0771	- 1.1886
Taiwan	5.7169	0.8817	0.7584	1.1609	1.1490	1.0029	0.7640
Tajikistan	- 6.9716	- 1.4313	- 1.0130	- 1.0410	- 1.0700	- 1.2032	- 1.2130
Thailand	- 1.0848	- 0.4551	- 0.8304	0.3099	0.2366	- 0.0063	- 0.3395
Turkmenistan	- 8.2134	- 2.0935	0.1025	- 1.3269	- 2.0003	- 1.4697	- 1.4256
United Arab Emir	3.3167	- 0.9203	0.8245	1.0646	0.7605	0.5696	1.0179
Uzbekistan	- 7.5597	- 1.9208	- 0.8672	- 0.8416	- 1.5125	- 1.2581	- 1.1596

Country	Overall Governance	Voice and Accountability	Political Stability and Absence of Violence/Terrorism	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Vietnam	- 2.9200	- 1.4222	0.2254	- 0.2083	- 0.5606	- 0.3829	- 0.5714
Yemen	- 8.1555	- 1.3050	- 2.1418	- 1.2540	- 0.9338	- 1.3162	- 1.2047
<b>Total</b>	<b>2.3351</b>	<b>0.1217</b>	<b>0.1417</b>	<b>0.6743</b>	<b>0.4731</b>	<b>0.4864</b>	<b>0.4379</b>

## Appendix B: The List of Foreign Bank

Bank Name	Host Country	Bank Name	Host Country
MERIABANK CJSC	Armenia	AL-TAIF ISLAMIC BANK FOR INVESTMENT & FINANCE	Iraq
ARMSWISSBANK CJSC	Armenia	BANK OF BAGHDAD	Iraq
BANK MELLAT YEREVAN	Armenia	COMMERCIAL BANK OF IRAQ SA	Iraq
BYBLOS BANK ARMENIA CJSC	Armenia	INTERNATIONAL ISLAMIC BANK	Iraq
CONVERSE BANK CORPORATION CSJC	Armenia	NATIONAL BANK OF IRAQ	Iraq
EVOCABANK CLOSED JOINT-STOCK COMPANY	Armenia	NORTH BANK	Iraq
HSBC BANK ARMENIA CJSC	Armenia	SUMER COMMERCIAL BANK PSC	Iraq
RENESA CJSC	Armenia	UNION BANK OF IRAQ	Iraq
VTB BANK (ARMENIA)	Armenia	CITIGROUP JAPAN HOLDINGS CORP	Japan
AFB BANK OJSC	Azerbaijan	SBI HOLDINGS, INC	Japan
BANK MELLI IRAN BAKU BRANCH	Azerbaijan	SHINHAN BANK JAPAN	Japan
DEMIRBANK OPEN JOINT STOCK COMPANY	Azerbaijan	TOKYO STAR BANK LTD.	Japan
INVESTMENT COMMERCIAL BANK NIKOIL OJSC	Azerbaijan	ARAB BANKING CORPORATION (JORDAN)	Jordan
OJSC VTB BANK (AZERBAIJAN)	Azerbaijan	BANK AL ETIHAD	Jordan
PREMIUM BANK	Azerbaijan	HOUSING BANK FOR TRADE & FINANCE (THE)	Jordan
XALQ BANK OJSC	Azerbaijan	JORDAN KUWAIT BANK	Jordan
YAPIKREDI BANK AZERBAIJAN	Azerbaijan	SOCIETE GENERALE DE BANQUE-JORDANIE	Jordan
ZIRAAT BANK AZERBAYCAN	Azerbaijan	CJSC CITIBANK KAZAKHSTAN - KAS	Kazakhstan
ALUBAF ARAB INTERNATIONAL BANK	Bahrain	HOME CREDIT AND FINANCE BANK JSC	Kazakhstan

Bank Name	Host Country	Bank Name	Host Country
ARAB BANKING CORPORATION BSC	Bahrain	INDUSTRIAL AND COMMERCIAL BANK OF CHINA (ALMATY) JOINT STOCK COMPANY	Kazakhstan
BAHRAIN ARAB INTERNATIONAL BANK (EC)	Bahrain	JSC ALTYN BANK	Kazakhstan
FUTURE BANK B.S.C.	Bahrain	JSC SB ALFA BANK	Kazakhstan
GULF INTERNATIONAL BANK BSC	Bahrain	JSC SB BANK OF CHINA IN KAZAKHSTAN	Kazakhstan
INTERNATIONAL BANKING CORPORATION BSC	Bahrain	KZI BANK - KAZHAKSTAN - ZIRAAT INTERNATIONAL BANK	Kazakhstan
INVESTCORP HOLDINGS B.S.C.	Bahrain	NATIONAL BANK OF PAKISTAN	Kazakhstan
UNITED GULF HOLDING COMPANY	Bahrain	SHINHAN BANK KAZAKHSTAN JSC	Kazakhstan
BANGLADESH COMMERCE BANK LTD	Bangladesh	SUBSIDIARY BANK 'SBERBANK OF RUSSIA' JOINT STOCK COMPANY	Kazakhstan
BANK ASIA LIMITED	Bangladesh	SUBSIDIARY JSC BANK VTB (KAZAKHSTAN)	Kazakhstan
JAMUNA BANK LTD	Bangladesh	ARAB INVESTMENT AND EXPORT CREDIT GUARANTEE CORPORATION	Kuwait
MIDLAND BANK LIMITED	Bangladesh	HSBC BANK MIDDLE EAST LIMITED - KUWAIT	Kuwait
MODHUMOTI BANK LIMITED	Bangladesh	BTA BANK CJSC	Kyrgyzstan
MUTUAL TRUST BANK	Bangladesh	CJSC FINCA BANK	Kyrgyzstan
NRB BANK LIMITED	Bangladesh	DEMIR KYRGYZ INTERNATIONAL BANK - DKIB	Kyrgyzstan
NRB COMMERCIAL BANK LIMITED	Bangladesh	HALYK BANK KYRGYZSTAN	Kyrgyzstan
NRB GLOBAL BANK LIMITED	Bangladesh	KYRGYZ INVESTMENT AND CREDIT BANK	Kyrgyzstan
PADMA BANK LIMITED	Bangladesh	KYRGYZKOMMERTSBANK" OJSC	Kyrgyzstan
DRUK PNB BANK LTD	Bhutan	OPTIMA BANK OJSC	Kyrgyzstan
ACLEDA BANK PLC	Cambodia	ACLEDA BANK LAO LTD	Lao People's Democratic Republic



Bank Name	Host Country	Bank Name	Host Country
ADVANCED BANK OF ASIA LIMITED	Cambodia	ANZ BANK (LAO) LIMITED	Lao People's Democratic Republic
BRED BANK (CAMBODIA) PLC	Cambodia	BANQUE FRANCO-LAO LTD	Lao People's Democratic Republic
CAMBODIAN COMMERCIAL BANK LIMITED	Cambodia	CANADIA BANK LAO LTD	Lao People's Democratic Republic
CAMBODIAN PUBLIC BANK LIMITED	Cambodia	INDOCHINA BANK	Lao People's Democratic Republic
CATHAY UNITED BANK (CAMBODIA) CORPORATION LTD	Cambodia	LAO CHINA BANK CO LTD	Lao People's Democratic Republic
CIMB BANK PLC	Cambodia	LAO-VIET JOINT VENTURE BANK	Lao People's Democratic Republic
HONG LEONG BANK (CAMBODIA) PLC	Cambodia	SAIGON THUONG TIN LAO BANK LIMITED	Lao People's Democratic Republic
JTRUST ROYAL BANK LTD.	Cambodia	BANK AUDI SAL	Lebanon
KOOKMIN BANK CAMBODIA PLC	Cambodia	BANK SADERAT IRAN	Lebanon
MAYBANK (CAMBODIA) PLC	Cambodia	BANQUE MISR LIBAN	Lebanon
PHILLIP BANK PLC	Cambodia	BLOM BANK S.A.L.	Lebanon
PHNOM PENH COMMERCIAL BANK	Cambodia	BYBLOS BANK S.A.L.	Lebanon
RHB BANK (CAMBODIA) PLC	Cambodia	EMIRATES LEBANON BANK SAL	Lebanon
SACOMBANK (CAMBODIA) PLC	Cambodia	NATIONAL BANK OF KUWAIT (LEBANON) SAL	Lebanon
SATHAPANA BANK PLC.	Cambodia	NORTH AFRICA COMMERCIAL BANK SAL	Lebanon
SBI LY HOUR BANK PLC	Cambodia	SAUDI NATIONAL COMMERCIAL BANK	Lebanon
UNION COMMERCIAL BANK PLC	Cambodia	SYRIAN LEBANESE COMMERCIAL BANK SAL	Lebanon
ALLIED COMMERCIAL BANK	China	BANCO COMERCIAL DE MACAU SA	Macao, SAR
BANGKOK BANK (CHINA) CO LTD	China	BANCO NACIONAL ULTRAMARINO	Macao, SAR

Bank Name	Host Country	Bank Name	Host Country
BANK OF EAST ASIA (CHINA) LTD	China	BANCO TAI FUNG	Macao, SAR
BANK OF MONTREAL (CHINA) CO LTD	China	INDUSTRIAL AND COMMERCIAL BANK OF CHINA (MACAU) LIMITED	Macao, SAR
BANK SINOPAC (CHINA) LTD	China	OCBC WING HANG BANK LIMITED (MACAU)	Macao, SAR
BNP PARIBAS (CHINA)	China	WELL LINK BANK	Macao, SAR
CHINA BOHAI BANK	China	AMMB HOLDINGS BERHAD	Malaysia
CHINA CITIC BANK CORPORATION LIMITED	China	BANGKOK BANK BERHAD	Malaysia
CHONGQING LIANGPING ANZ RURAL BANK COMPANY LIMITED	China	BANK OF AMERICA MALAYSIA BERHAD	Malaysia
CITIBANK (CHINA) CO LTD	China	BANK OF CHINA (MALAYSIA) BERHAD	Malaysia
CITIC BANK INTERNATIONAL (CHINA) LIMITED	China	BANK OF NOVA SCOTIA BERHAD	Malaysia
CREDIT AGRICOLE CIB (CHINA)	China	BNP PARIBAS MALAYSIA BERHAD	Malaysia
DBS BANK (CHINA) LIMITED	China	CHINA CONSTRUCTION BANK (MALAYSIA) BERHAD	Malaysia
EAST WEST BANK (CHINA) LIMITED	China	CITIBANK BERHAD	Malaysia
FUBON BANK (CHINA) CO., LTD	China	CITIBANK MALAYSIA (L) LTD	Malaysia
HANG SENG BANK (CHINA) LIMITED	China	HSBC BANK MALAYSIA BERHAD	Malaysia
HSBC BANK (CHINA) CO LTD	China	INDUSTRIAL AND COMMERCIAL BANK OF CHINA (MALAYSIA) BERHAD	Malaysia
INDUSTRIAL BANK OF KOREA (CHINA) LIMITED	China	JP MORGAN CHASE BANK BERHAD	Malaysia
JP MORGAN CHASE BANK (CHINA) CO LTD	China	MIZUHO BANK (MALAYSIA) BERHAD	Malaysia
KASIKORNBANK (CHINA) COMPANY LIMITED	China	MUFG BANK (MALAYSIA)	Malaysia
METROPOLITAN BANK (CHINA) LTD	China	NATIONAL BANK OF ABU DHABI MALAYSIA BERHAD	Malaysia

Bank Name	Host Country	Bank Name	Host Country
MIZUHO BANK (CHINA) LTD	China	OCBC BANK (MALAYSIA) BERHAD	Malaysia
MORGAN STANLEY BANK INTERNATIONAL (CHINA) LIMITED	China	ROYAL BANK OF SCOTLAND BERHAD (THE)	Malaysia
MUFG BANK (CHINA), LTD	China	STANDARD CHARTERED BANK MALAYSIA BERHAD	Malaysia
OCBC WING HANG BANK (CHINA) LTD	China	UNITED OVERSEAS BANK (MALAYSIA) BHD.	Malaysia
SPD SILICON VALLEY BANK	China	COMMERCIAL BANK OF MALDIVES	Maldives
STANDARD CHARTERED BANK (CHINA) LTD	China	THE MAURITIUS COMMERCIAL BANK (MALDIVES) PRIVATE LIMITED	Maldives
SUMITOMO MITSUI BANKING CORPORATION (CHINA) LIMITED	China	CAPITRON BANK	Mongolia
UNITED OVERSEAS BANK (CHINA) LIMITED	China	KHAN BANK LLC	Mongolia
WOORI BANK (CHINA) LTD	China	TRADE & DEVELOPMENT BANK OF MONGOLIA	Mongolia
ZHONGSHAN RURAL COMMERCIAL BANK COMPANY LIMITED	China	AYEYARWADY BANK LIMITED	Myanmar/Burma
BASISBANK JSC	Georgia	KANBAWZA BANK LTD	Myanmar/Burma
CAPITAL BANK JSC	Georgia	MYANMA APEX BANK LTD	Myanmar/Burma
JSC BANK OF GEORGIA	Georgia	UNITED AMARA BANK LTD	Myanmar/Burma
JSC BGEO GROUP	Georgia	HIMALAYAN BANK LIMITED	Nepal
JSC HALYK BANK GEORGIA	Georgia	JYOTI BIKAS BANK LTD	Nepal
JSC INTERNATIONAL BANK OF AZERBAIJAN - GEORGIA	Georgia	MACHHAPUCHCHHRE BANK LTD	Nepal
JSC ISBANK GEORGIA	Georgia	NEPAL BANGLADESH BANK LIMITED	Nepal
JSC PRIVATBANK	Georgia	NEPAL SBI BANK LTD	Nepal
JSC PROCREDIT BANK, GEORGIA	Georgia	NIC ASIA BANK LTD	Nepal
JSC TBC BANK	Georgia	NMB BANK LTD	Nepal
JSC TERABANK	Georgia	STANDARD CHARTERED BANK NEPAL LIMITED	Nepal

Bank Name	Host Country	Bank Name	Host Country
JSC VTB BANK (GEORGIA)	Georgia	HSBC BANK OMAN SAOG	Oman
LIBERTY BANK JSC	Georgia	FAYSAL BANK LTD	Pakistan
PROGRESS BANK JSC	Georgia	HABIB BANK LIMITED	Pakistan
ABC INTERNATIONAL HOLDINGS LIMITED	Hong Kong, SAR	HABIB METROPOLITAN BANK LIMITED	Pakistan
ALLIED BANKING CORPORATION (HONG KONG) LIMITED	Hong Kong, SAR	KHUSHHALI MICROFINANCE BANK	Pakistan
BANK OF CHINA (HONG KONG) LIMITED	Hong Kong, SAR	SAMBA BANK LIMITED	Pakistan
BANK OF EAST ASIA LTD	Hong Kong, SAR	STANDARD CHARTERED BANK (PAKISTAN)	Pakistan
BOC HONG KONG (HOLDINGS) LTD	Hong Kong, SAR	SUMMIT BANK LIMITED	Pakistan
BOC INTERNATIONAL HOLDINGS LTD	Hong Kong, SAR	UNITED BANK LIMITED	Pakistan
CCB INTERNATIONAL (HOLDINGS) LIMITED	Hong Kong, SAR	CTBC BANK (PHILIPPINES) CORP	Philippines
CHINA CINDA (HK) HOLDINGS COMPANY LIMITED	Hong Kong, SAR	EXPORT & INDUSTRY BANK INC	Philippines
CHINA CONSTRUCTION BANK (ASIA) CORPORATION LIMITED	Hong Kong, SAR	HSBC SAVINGS BANK (PHILIPPINES), INC	Philippines
CHINA DEVELOPMENT BANK INTERNATIONAL HOLDINGS LIMITED	Hong Kong, SAR	MAYBANK PHILIPPINES INC	Philippines
CITIBANK (HONG KONG) LIMITED	Hong Kong, SAR	SECURITY BANK CORPORATION	Philippines
CITIC INTERNATIONAL FINANCIAL HOLDINGS LIMITED	Hong Kong, SAR	YUANTA SAVINGS BANK PHILIPPINES, INC	Philippines

Bank Name	Host Country	Bank Name	Host Country
CITICORP INTERNATIONAL LTD.	Hong Kong, SAR	BANK AUDI LLC	Qatar
CMB WING LUNG BANK LIMITED	Hong Kong, SAR	DOHA BANK	Qatar
CMBC INTERNATIONAL HOLDINGS	Hong Kong, SAR	QATAR NATIONAL BANK (Q.P.S.C.)	Qatar
CREDIT SUISSE (HONG KONG) LIMITED	Hong Kong, SAR	ASAN SAVINGS BANK CO.,LTD	Republic of Korea
CTB AUSTRALIA LTD.	Hong Kong, SAR	BULIM SAVINGS BANK CO.,LTD	Republic of Korea
DAH SING FINANCIAL HOLDINGS LTD	Hong Kong, SAR	CHEONGJU SAVINGS BANK CO.,LTD	Republic of Korea
DBS BANK (HONG KONG) LIMITED	Hong Kong, SAR	CHOEUN SAVING BANK	Republic of Korea
DELTA ASIA CREDIT LIMITED	Hong Kong, SAR	CITIBANK KOREA INC.	Republic of Korea
EVERCHINA INTERNATIONAL HOLDINGS CO. LIMITED	Hong Kong, SAR	DONGYANG SAVINGS BANK CO.,LTD	Republic of Korea
FUBON BANK (HONG KONG) LIMITED	Hong Kong, SAR	DREAM MUTUAL SAVINGS BANK CO.,LTD	Republic of Korea
GUOTAI JUNAN INTERNATIONAL HOLDINGS LIMITED	Hong Kong, SAR	JINJU SAVINGS BANK CO.,LTD	Republic of Korea
HANG SENG BANK LTD.	Hong Kong, SAR	JT CHINAE SAVINGS BANK CO.,LTD	Republic of Korea
HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED (THE)	Hong Kong, SAR	KUEMHWAMUTUAL SAVINGS BANK CO.,LTD	Republic of Korea
ICBC INTERNATIONAL HOLDINGS LIMITED	Hong Kong, SAR	MINKOOK SAVINGS BANK CO.,LTD	Republic of Korea
INDUSTRIAL AND COMMERCIAL BANK OF CHINA (ASIA) LIMITED - ICBC (ASIA)	Hong Kong, SAR	RAON SAVINGS BANK CO., LTD	Republic of Korea
JP MORGAN HOLDINGS (HONG KONG) LTD	Hong Kong, SAR	S&T SAVINGS BANK	Republic of Korea

Bank Name	Host Country	Bank Name	Host Country
JP MORGAN SECURITIES (ASIA PACIFIC) LIMITED	Hong Kong, SAR	STANDARD CHARTERED BANK KOREA LIMITED	Republic of Korea
KOOKMIN BANK HONG KONG LIMITED	Hong Kong, SAR	YUANTA SAVINGS BANK KOREA CO.,LTD	Republic of Korea
NANYANG COMMERCIAL BANK LTD	Hong Kong, SAR	ARAB NATIONAL BANK PUBLIC JOINT STOCK COMPANY	Saudi Arabia
OCBC WING HANG BANK LIMITED	Hong Kong, SAR	SAUDI BRITISH BANK JSC (THE)	Saudi Arabia
PUBLIC BANK (HONG KONG) LIMITED	Hong Kong, SAR	CITIBANK SINGAPORE LIMITED	Singapore
SCOTIABANK (HONG KONG) LIMITED	Hong Kong, SAR	CITICORP INVESTMENT BANK (SINGAPORE) LIMITED	Singapore
SHANGHAI COMMERCIAL BANK LTD	Hong Kong, SAR	HSBC BANK (SINGAPORE) LIMITED	Singapore
SPDB INTERNATIONAL HOLDINGS LIMITED	Hong Kong, SAR	LGT BANK (SINGAPORE) LTD	Singapore
STANDARD CHARTERED BANK (HONG KONG) LIMITED	Hong Kong, SAR	MAYBANK SINGAPORE LIMITED	Singapore
XIAMEN INTERNATIONAL INVESTMENT LTD	Hong Kong, SAR	MORGAN STANLEY ASIA (SINGAPORE)	Singapore
AXIS BANK LIMITED	India	NET PACIFIC FINANCIAL HOLDINGS LTD	Singapore
BHARAT CO-OPERATIVE BANK (MUMBAI) LTD	India	ROYAL BANK OF CANADA (ASIA) LTD RBC	Singapore
DBS BANK INDIA LIMITED	India	STANDARD CHARTERED BANK (SINGAPORE) LIMITED	Singapore
DBS BANK LIMITED,INDIA	India	TORONTO DOMINION (SOUTH EAST ASIA) LIMITED	Singapore
DHANLAXMI BANK LTD	India	WESTPAC SINGAPORE LIMITED	Singapore
HDFC BANK LTD	India	AMANA BANK PLC	Sri Lanka
KALUPUR COMMERCIAL CO-OP BANK LTD	India	ASIA ASSET FINANCE PLC	Sri Lanka

Bank Name	Host Country	Bank Name	Host Country
KOTAK MAHINDRA BANK LIMITED	India	UNION BANK OF COLOMBO PLC	Sri Lanka
NKGSB CO-OP BANK LTD	India	ARAB BANK SYRIA SA	Syrian Arab Republic
PUNJAB & MAHARASHTRA CO-OPERATIVE BANK LTD	India	BANK AUDI SYRIA (CLOSED SHAREHOLDING COMPANY)	Syrian Arab Republic
SVC CO-OPERATIVE BANK LIMITED	India	BYBLOS BANK SYRIA S.A.	Syrian Arab Republic
THANE JANATA SAHAKARI BANK LTD	India	FRANSABANK-SYRIA S.A.	Syrian Arab Republic
BANK BNP PARIBAS INDONESIA PT	Indonesia	QATAR NATIONAL BANK - SYRIA SA	Syrian Arab Republic
BANK CHINA CONSTRUCTION BANK INDONESIA TBK., PT	Indonesia	CITIBANK TAIWAN LIMITED	Taiwan
BANK COMMONWEALTH	Indonesia	DBS BANK (TAIWAN)	Taiwan
BANK DANAMON INDONESIA TBK	Indonesia	ENTIE COMMERCIAL BANK PUBLIC COMPANY	Taiwan
BANK DBS INDONESIA	Indonesia	HSBC BANK (TAIWAN) LIMITED	Taiwan
BANK JASA JAKARTA, PT	Indonesia	HWATAI BANK	Taiwan
BANK KESEJAHTERAAN EKONOMI	Indonesia	JIH SUN FINANCIAL HOLDING CO., LTD	Taiwan
BANK NEGARA INDONESIA (PERSERO) TBK, PT	Indonesia	MEGA FINANCIAL HOLDING COMPANY	Taiwan
BANK OCBC NISP TBK	Indonesia	STANDARD CHARTERED BANK (TAIWAN) LIMITED	Taiwan
BANK PERMATA TBK	Indonesia	TAIWAN BUSINESS BANK,LTD	Taiwan
BANK QNB INDONESIA TBK., PT	Indonesia	CJSC HALYK BANK TAJIKISTAN	Tajikistan
BANK SBI INDONESIA PT	Indonesia	ANZ BANK (THAI) PUBLIC COMPANY LIMITED	Thailand
PT BANK ANZ INDONESIA	Indonesia	BANK OF AYUDHYA PUBLIC COMPANY LTD.	Thailand
PT BANK BTPN TBK	Indonesia	BANK OF CHINA (THAI) PLC	Thailand
PT BANK BUKOPIN	Indonesia	CIMB THAI BANK PUBLIC COMPANY LIMITED	Thailand

Bank Name	Host Country	Bank Name	Host Country
PT BANK CIMB NIAGA TBK	Indonesia	INDUSTRIAL AND COMMERCIAL BANK OF CHINA (THAI) PUBLIC COMPANY LIMITED	Thailand
PT BANK CTBC INDONESIA	Indonesia	KASIKORNBANK PUBLIC COMPANY LIMITED	Thailand
PT BANK HSBC INDONESIA	Indonesia	TMB BANK PUBLIC COMPANY LIMITED	Thailand
PT BANK IBK INDONESIA TBK	Indonesia	UNITED OVERSEAS BANK (THAI) PCL	Thailand
PT BANK ICBC INDONESIA	Indonesia	ARAB BANK FOR INVESTMENT & FOREIGNTRADE	United Arab Emirates
PT BANK JTRUST INDONESIA TBK	Indonesia	BANK OF CHINA MIDDLE EAST (DUBAI) LIMITED	United Arab Emirates
PT BANK KEB HANA	Indonesia	CREDIT EUROPE BANK (DUBAI) LTD	United Arab Emirates
PT BANK MAYAPADA INTERNASIONAL TBK	Indonesia	HSBC BANK MIDDLE EAST LIMITED	United Arab Emirates
PT BANK MAYBANK INDONESIA TBK	Indonesia	JSCB "TENGE BANK	Uzbekistan
PT BANK MAYORA	Indonesia	KDB BANK UZBEKISTAN	Uzbekistan
PT BANK MIZUHO INDONESIA	Indonesia	OPEN JOINT-STOCK COMMERCIAL BANK 'ALQABANK'	Uzbekistan
PT BANK OF INDIA INDONESIA TBK	Indonesia	ZIRAAT BANK UZBEKISTAN	Uzbekistan
PT BANK OKE INDONESIA TBK	Indonesia	ANZ BANK (VIETNAM) LIMITED	Vietnam
PT BANK RESONA PERDANIA	Indonesia	CIMB BANK (VIETNAM) LIMITED	Vietnam
PT BANK SAHABAT SAMPOERNA	Indonesia	HONG LEONG BANK VIETNAM LIMITED	Vietnam
PT BANK UOB INDONESIA	Indonesia	HSBC BANK (VIETNAM) LTD	Vietnam
PT BANK WOORI SAUDARA INDONESIA 1906 TBK	Indonesia	PUBLIC BANK VIETNAM LIMITED	Vietnam
PT HIMALAYA ENERGI PERKASA TBK	Indonesia	SHINHAN BANK VIETNAM	Vietnam
PT MERRILL LYNCH INDONESIA	Indonesia	STANDARD CHARTERED BANK (VIETNAM) LTD	Vietnam
SHINHAN BANK INDONESIA	Indonesia	WOORI BANK VIETNAM LIMITED	Vietnam



Bank Name	Host Country	Bank Name	Host Country
MEGA INTERNATIONAL COMMERCIAL BANK PCL	Thailand		
S 11 GROUP	Thailand		
STANDARD CHARTERED BANK (THAI) PUBLIC COMPANY LIMITED	Thailand		
SUMITOMO MITSUI TRUST BANK (THAI) PUBLIC COMPANY LIMITED	Thailand		
THAI ORIX LEASING COMPANY LIMITED	Thailand		

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