INFLUENCE OF GOVERNANCE ON THE RELATIONSHIP BETWEEN FOREIGN BANKS' PENETRATION AND BANKING STABILITY

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ABSTRACT

Globalization that has started decades ago is one of the main factors of the influx of foreign banks. The presence of foreign banks in a host country can have many effects on its banking sectors. One of them is it could increase competition and force domestic bank to take additional risk which could lead to instability of the sector. On the other hand, foreign bank penetration can also be a source of stability. It can enhance financial stability by offering valuable diversification in services or absorbing shocks. Nonetheless, it is said that the impact of foreign banks' penetration could be influenced by the presence of governance in the host country. This study aims to examine the impact of governance on the foreign bank penetration-stability relationship. We focus our analysis on 54 developing countries during the period 1998 to 2016. The results from a two-step system GMM support the market risk hypothesis that the penetration of foreign banks decreases the stability of the host banking sector. However, the presence of governance in the country may reduce the negative stability impact of the foreign banks' penetration.

Contribution/Originality: This study contributes to the existing literature as the first study that examines the moderating role of governance on the impact of foreign banks' penetration on banking stability.

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1. INTRODUCTION

After experiencing several financial crises over the last few decades, developing economies have to make crucial decisions to stabilize and boost the efficiency of their banking industries, including by promoting the liberalization of their banking sectors. In the early 2000s, many developing countries lifted their restrictions on foreign bank entry (Claessens & Van Horen, 2014). With such entry unimpeded, the role of foreign banks has increased in domestic financial sectors in terms of deposits, as well as loans and profits. Since then, the foreign banks have already obtained about 20 percent of the overall market share in OECD countries and nearly 50 percent of the overall market share in the developing countries (World Bank, cited in Claessens and Van Horen (2014)). There have also been significant changes in the ownership structure in the banking sectors from domestic to foreign ownership due to the rapid

growth of foreign banks. This shift in the banking ownership structure has led to growing concerns about banking stability. Although the penetration of foreign banks is generally regarded as favourable, there are growing disputes regarding the costs and benefits of foreign bank penetration.

Stability is a function and reflection of risk. Financial stability requires a stable, sound, and healthy financial system to facilitate the economic process, support the efficient allocation of resources, manage the risks, and promote public confidence in the banking system. The risk-taking behaviour of domestic banks is the most critical reason for the economic and financial instability during a financial crisis (Laeven & Levine, 2009). Some studies pointed out that this risk-taking behaviour alters when they are faced with competition from foreign banks. Foreign banks trigger the likelihood of banking failure as domestic banks are forced to take additional risks to survive the increased competition (Vives, 2010; Wu, Chen, Jeon, & Wang, 2017). Domestic banking failures have a contagious effect on incumbent banks and lead to instability in the overall domestic banking sector (Song, 2004). Furthermore, the resulting instability is also associated with a higher willingness of domestic banks to extend credit, whereas newly entered foreign banks face issues of moral hazards in risk-shifting and adverse selection in funding risky projects.

On the other hand, foreign bank penetration can also be a source of stability. According to Demirgüç-Kunt, Levine, and Min (1998), foreign bank penetration may increase financial and economic stability in the long run. They can enhance financial stability by offering valuable diversification in services or absorbing shocks via getting credit support from parent banks (Al-Hussaini, 2018; Claessens & Van Horen, 2014; De Haas & Van Lelyveld, 2010; Kouretas & Tsoumas, 2016). Due to pressure from various elements in the institutional framework, firms and organizations attempt to adapt their strategies and operations with their particular environmental conditions (Gammeltoft, Filatotchev, & Hobdari, 2012). The institutional theory also highlights the importance of examining different aspects of social structures and key parts of social behaviour, such as rules, norms, schemes, and routines (Scott, 2004). Institutional factors build the legitimacy of an organization. All organizations should accept the rules and believe in the systems that exist in their particular environment.

One of the location advantages for foreign bank investors is the institutional and regulation quality of host countries. Banking globalization forces markets to increase international business activities through institutional and regulatory improvements (Mishkin, 2007). Host countries' governments improve their financial, legal and regulatory infrastructure to reduce the operational risk and increase the presence of foreign bank participation. The supervisory duties of the government are to create an environment that empowers financial firms with more opportunities in a well-functioning market. These factors affect economic performance by reducing transaction and transformation costs, and increasing investors' ability to overcome the usual imperfections in the financial information market (Bevan, Estrin, & Meyer, 2004). They create business practices and incentives that influence the strategies of corporations (Mahoney & Chi, 2001) as well as the nature of competition and the knowledge acquisition process (Meyer & Sinani, 2009). They can assist in safeguarding financial stability and reducing certain risks in the loan market by providing the necessary information to prevent moral hazards and adverse selection.

All governments have prudential supervision on banking sectors for two reasons. First, it is to ensure the safety and soundness of the financial system, and secondly, to ensure that financial service firms meet basic fiduciary responsibilities (Kane, Holmes, & O'Grady, 2007). Acemoglu (2008) proved that the rate of success of an economy is significantly associated with the quality of government and its supervision. The role of government in regulating the financial and banking sector is important to guarantee the transparency and integrity, as well as disclosure of assets, liabilities and risks. However, efficiency will be hindered when the banking and financial regulation and supervision increases beyond the assurances level of transparency, integrity, and honesty (Miller & Kim, 2013).

The interactions between foreign bank penetration and institutional or regulation quality remain crucial, particularly in developing countries that have incomplete governance and institutional framework (Bevan et al., 2004). This is especially relevant for developing markets where there is market failure in the credit market (Hainz, 2011). Foreign banks may affect the stability of the host country in the absence of a strong institutional and regulatory framework and a lack of other intermediaries. The difference in the level of institutional and governance quality of host countries may explain why the effect of foreign banks varies in developing banking sectors. Developing countries open up their doors to foreign banks to diversify their banking products, restructure their markets and increase the range of financial services. An adverse effect may be the erosion in the charter value of domestic banks that induces them to take more risk. The previous global financial crisis showed that the risk-taking behaviour of banks can affect financial and economic stability to an extremely influential degree (Berger, El Ghoul, Guedhami, & Roman, 2013; Laeven & Levine, 2009). The penetration of foreign banks can destabilize the host banking sector by spreading shocks from their home countries, threatening local banks with fierce competition and reducing access to financial sources through cherry-picking behaviour.

Two contrasting views of the diversification hypothesis and the market risk hypothesis state that foreign bank penetration can either positively or negatively influence banking stability. The diversification hypothesis suggests that foreign banks may face a lower risk because of the portfolio risk diversification and access to global capital. On the other hand, the market risk hypothesis indicates that international banks will have higher risks due to market-specific factors (Berger et al., 2013). Foreign bank penetration may increase the occurrence of banking crises, limit the liability charter and the franchise value of domestic banks, force domestic banks to take additional risk, and increase the likelihood of domestic bank failures (Cull & Soledad, 2010; Wu et al., 2017) while a strong institutional environment and adequate regulation may mitigate these conditions (Vives, 2010). The effect of foreign bank operation on the stability of the host banking sector in developing countries depends on their abilities to manage regulatory and institutional framework.

This study aims to examine the moderating role of governance on the impact of foreign banks' penetration on banking stability. It investigates which circumstances foreign banks contribute most to domestic financial sector stability, and whether the penetration of foreign banks is riskier with a weak governance. Although several studies on the relationship between foreign banks' penetration and banking stability have been carried out, to the best of our knowledge, there is no prior study examine the influence of governance on the relationships.

2. DATA AND METHODOLOGY

We assess the role played by the governance in moderating the impact of foreign bank penetration on stability by using two-step Generalized Method of Moments.

There are two main hypotheses that are related to foreign banks' penetration and banking stability. First, the market risk hypothesis whereby foreign bank penetration increases bank's risk due to market-specific factors in foreign markets. Second, the diversification hypothesis whereby foreign bank penetration allows banks to reduce risk through diversification of their operations. The effect of foreign banks on financial stability is ambiguous. As the potential instability of the banking sector will be originated from cross-country variation in foreign banks' operation, it is important to consider the cross-country heterogeneity.

We run this equation for the overall sample. The baseline equation is specified as Equation 1:

$$Bank\ risk = f(foreign\ bank\ penetration, Bank\ control\ variables,$$
$$Macroeconomic\ and\ Country\ specific\ factors)\ (1)$$

Previous researchers employed a traditional estimator, such as fixed effect and OLS to run the foreign bank penetration-stability equation. However, this study adopts a Generalized Method of Moments (GMM) as the dynamic model. According to Hall (2005) GMM is efficient because it accounts for heteroscedasticity and does not require distributional assumptions on the error terms. Berger et al. (2013) showed that even a developed banking industry is subject to impediments that yield various forms of persistence in bank-level rents, such as the interrelationship between bank risk-taking and impediments to market structure factors. Laeven and Majnoni (2003) argued that the potential impact of stock variables on flow variables is better approximated using a dynamic formulation. The dynamic model also controls for potential endogeneity problems between market structure factors and risk (Agoraki, 2009; Fu, Lin, & Molyneux, 2014). The governance is represented by two proxies, which are Law and Corruption. Thus, the equation in two models that can be presented as Equation 2 and 3 below:

$$Stability_{jt} = \alpha + \beta\ Stability_{jt-1} + \theta\ \text{Foreign bank penetration} + \gamma\ (Foreign\ bank\ penetration_{jt} \times \text{Law}_{jt}) + \omega\ \text{Law}_{jt} + \delta GDP\ per\ capita_{jt} + \partial X_{jt} + \varepsilon_{jt}(2)$$

where *Law* denotes the index of *rule of law*, while *j* and *t* refer to country and time, respectively. In the second model, we substitute *rule of law* with *control of corruption* as follows:

$$Stability_{jt} = \alpha + \beta\ Stability_{jt-1} + \theta foreign\ bank\ penetration_{jt} + \gamma\ (foreign\ bank\ penetration_{jt} \times \text{CC}_{jt}) + \omega\ \text{CC}_{jt} + \delta GDP\ per\ capita_{jt} + \partial X_{jt} + \varepsilon_{jt}(3)$$

where *CC* denotes the index of *control of corruption*. Table 1 shows description of the data used in the estimation.

Table-1. Description of Data.

Variable	Measurement	Source of data
Stability	Z-score as bank's solvency risk at country level	World Bank (2020)
Alternative variable for stability	Non-performing loan ratio (NPL)	World Bank (2020)
Foreign bank penetration	Share of foreign banks asset/ Total banking assets (*FS*) Or Number of foreign banks/ Total Number of banks (*FN*)	World Bank (2020)
Rule of law	Rule of law index (Law)	World Bank (2020)
Control of corruption	Control of corruption index (CC)	World Bank (2020)
Liquidity	The ratio of a bank's liquid assets to total assets (LIQ)	World Bank (2020)
Capitalization	The ratio of equity capital to total assets (CAP)	World Bank (2020)
Profitability	Average return on bank assets (ROA)	World Bank (2020)

2.1. Data

This study uses a panel dataset that comprises 54 developing countries. The main variable is not available for the period over the year 2013, therefore, the panel covers the period 1998-2013 in four-year spans: 1998-2001, 2002-2005, 2006-2009, 2010-2-13 and 2014-2016 with no overlapping data.

There are numerous definitions of financial stability. Most define financial stability as the absence of system-wide episodes in which the financial system fails to function (crises). It also refers to the resilience of financial systems to stress. This study has employed a common measure of stability as Z-score index that is obtained from the Global Financial Development Database at country level. Z-score is a measure of health in the banking system (Demirgüç-

Kunt & Huizinga, 2010; Laeven & Levine, 2009). This index explicitly compares buffers (capitalization and returns) with risk (volatility of returns) to measure a bank's solvency risk, employed as an inverse proxy for probability of bank failure. From a statistical point of view, the Z-score indicates the critical threshold of standard deviations that a ROA realization has to drop below its expected value before equity is exhausted and the bank becomes insolvent (Uhde & Heimeshoff, 2009). A higher (lower) Z-score implies a lower (higher) probability of insolvency risk. This index is based on accounting and auditing data that include profitability, leverage, and return volatility and its measurement is shown as Equation 4:

$$Z_{it} = \frac{ROA_{it} + \left(\frac{E}{A}\right)_{it}}{\sigma(ROA)_{it}} \tag{4}$$

where ROA shows profitability; E/A is the equity to asset ratio as a proxy for leverage and shows capital environment; σ(ROA) denotes the standard deviation of return on assets as a proxy for return volatility. This equation indicates that a higher level of profitability and capitalization will increase the Z-index, but a higher standard deviation of return on assets will reduce this index. Hence, a higher Z-score implies a reduction in overall bank risk probability and an increase in the level of financial stability. This study applies logarithmic transformation following previous studies to smooth out higher values since it is highly skewed (Beck, De Jonghe, & Schepens, 2013; Berger, Klapper, & Turk-Ariss, 2009; Turk Ariss, 2010).

This study also employs the non-performing loan ratio to measure financial stability. The loan quality (asset quality of banks) plays an important role in assessing a bank's financial health (Park, 2012). A higher ratio means lower financial stability, and vice versa. This variable shows the ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio). This variable is obtained from the Global Financial Development Database at country level.

The governance indicator is provided by the World Bank summarizing the views on the quality of governance provided by a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. The governance index shows that the capacity of the government to effectively formulate and implement sound policies. This study employs the two governance indexes, namely rule of law (*Law*) and control of corruption (*CC*). Rule of law captures the agents' confidence in and abide by the rules of society, while control of corruption refers to perceptions of exercising public power for private gain.

Liquidity, capitalization, profitability are bank-specific characteristics used in this study to control for unobserved heterogeneities in financial constraints and to show the banks' balance sheet strength in the financial sector (Jeon, Olivero, & Wu, 2011; Schaeck & Cihák, 2010). All the bank control variables are on average. Bank liquidity is measured by the ratio of a bank's liquid assets to total assets (LIQ), where highly liquid banks encounter less risk because they have excess reserves to cover losses in the case of a crisis (Wagner, 2010). We measure capitalization by using the ratio of equity capital to total assets (CAP) as most banks keep capital to buffer the default risk (Soedarmono, Machrouh, & Tarazi, 2013). Profitability is measured by using average returns on bank assets (ROA), where a higher level of profitability will increase the Z-index.

3. RESULTS AND DISCUSSION

We run the models for the whole sample to capture the influence of governance on the impact of foreign bank penetration on host banking sector stability for a 54-country sample for the period 1998 to 2016. The consistency of the GMM estimator depends on two specification tests. Firstly, the Sargan test checks the validity of instruments for over-identifying restrictions. Next, the autocorrelation test checks for no serial correlation in the error terms (Arellano & Bond, 1991). The results are presented in Table 2. The log Z-score is a measure of the health of the banking system. A high log Z-Score implies a high level of financial stability (Demirgüç-Kunt & Huizinga, 2010; Laeven & Levine, 2009). The alternative measure used to examine risk-taking behaviour is the ratio of the non-performing loans over total loan (NPL).

Table-2. The estimation results of two-step system GMM.

(Using rule of law and FS)

	Log Z-score			NPL		
	Coef.	**S.e.**	**P-value**	**Coef.**	**S.e.**	**P-value**
Lagged dependent variable $_{t-1}$	0.75	0.02	0.00***	0.67	0.02	0.00***
Rule of Law	0.01	0.66	0.98	0.89	0.73	0.22
FS	–0.01	0.00	0.09*	0.01	0.00	0.02**
(FS × Rule of Law)	0.02	0.00	0.00***	–0.02	0.01	0.02**
ROA	0.44	0.07	0.00***	–0.86	0.09	0.00***
LR	0.05	0.00	0.00***	–0.01	0.01	0.02**
CAP	0.12	0.05	0.01**	0.08	0.05	0.08
GDP per capita	0.00	0.00	0.00***	0.00	0.00	0.00***
Arellano-Bond Test for AR (2) (p-value)	0.40			0.35		
Sargan Test (p-value)	0.19			0.15		

Notes: S.e = robust standard error. This table shows two columns with different proxy of stability (Z-score and non-performing loan (NPL)). FS = Foreign bank penetration in terms of asset. Rule of Law = Governance. ROA = return on asset (ROA). LR = banks' liquid asset to total asset ratio. CAP = equity capital to total asset ratio. The macroeconomic variable is GDP per capita. P-value is significant as follows: * 10% Significance level; ** 5% Significance level; and *** 1% Significance level.

The impact of foreign bank penetration on financial stability can be described by two hypotheses; the diversification hypothesis and the market risk hypothesis. The diversification hypothesis states that foreign banks have a positive impact by improving the supply and the quality of financial services, human capital, the overall supervisory environment, local competencies through training and knowledge transfer, and the access to international financial markets (Lensink & Hermes, 2004). The market risk hypothesis explains that foreign banks increase the likelihood of banking instability due to host country characteristics and environment.

Column 1 reports the results from regressing log Z-score by including the foreign bank penetration in terms of assets and rule of law. The results show that foreign bank penetration in terms of asset (*FS*) has a negatively significant relationships with banking stability (*Z-Score*) which means that the presence of foreign banks could lower the stability of the host banking sector. This finding is consistent with Berger et al. (2013) where foreign bank penetration in terms of asset is significantly associated with greater bank risk-taking behavior. Meanwhile, the results shows that governance (*rule of law*) has no impact on banking stability. To resolve the multi-collinearity problem, the interaction term is orthogonalized using the two-step procedure: First, the interaction term is regressed on *FS* and *rule of law*. Second, the residuals from the first step are used to represent the interaction term (Burrill, 2007). The results show that the coefficient of the interaction term (*FS x rule of law*) is positive and significant which mean that the presence of good governance will reduce the negative impact of the foreign banks on banking stability. These findings support the market risk hypothesis that infers foreign bank penetration to increase the fragility of the host banking sector in the presence of poor quality of law. According to Claessens (2003) government enforcement is weak in developing countries and most banks face profit volatility that encourages risk-taking behavior, which leads to moral hazard and adverse selection problems. The estimated coefficients of other variables, namely *capitalization*, *liquidity*, *profitability* and **GDP per capita**, are found to be positive and significant, consistent with theoretical predictions. Banks hold more equity capital to absorb unexpected losses resulting from their loan portfolio risk. Similarly, banks hold more excess reserves to reduce the risk of bankruptcy. The Z-score also increases with a higher level of profitability, while GDP per capita as a proxy for economic development is associated with less bank fragility.In Column 2 of Table 2, we examine whether our main results are sensitive to alternative measures of banking stability. We analyze the ratio of non-performing loan over total loan (*NPL*) as a proxy for the banking stability. A higher value of *NPL* indicates a lesser banking stability or riskier loan portfolio. In countries where risk control is more effective and considered as an essential component of bank strategy, loan loss provisions are used to hedge future exposures to credit risk. Our results show that foreign bank penetration has a positive impact on credit risk, or in other words, the foreign bank lower the banking stability. Meanwhile the negative coefficient value of the interaction terms (*FS x Rule of Law*) suggests that the presence of good governance may reduce the negative impact of foreign banks' penetration on banking stability. It suggests that foreign banks will increase the level of NPL with inefficient and unhealthy governance and supervision. Foreign banks pursue cherry-picking practices and leave opaque and non-transparent customers for domestic banks (Gormley, 2007) as well as increasing the crowding-out effect among domestic banks (Song, 2004). Foreign banks charge a higher net interest margin than domestic banks, which leads them to be less competitive in the market (Jeon et al., 2011). The instability is also associated with the willingness of domestic banks to offer credit extension, which increases the volume of non-performing loans. The results support the market risk hypothesis. Foreign entry is associated with an increase in non-performing loans and greater bank instability. With weak governance and supervision, it may lead to higher credit risk-taking and defaults.

3.1. Robustness Test

To test the robustness of the findings, we repeat the similar estimation but replace the indicator of foreign banks' penetration in term of asset (*FS*) with foreign banks' penetration in term of number (*FN*). The results are shown in Table 3. For the discussion, we only focus on the impact of *rule of law, FN* and its interaction. The results suggest that *FN* and *rule of law* are insignificant and have no direct effect on *Z-score of banking stability.* However, the coefficient of interaction term (*FNxRule of Law*) is negative and significant which is similar to the results in Table 2.

Table-3. The estimation results of two-step system GMM.

(Using rule of law and FN)

	Log Z-score		
	Coef.	**S.e.**	**P-value**
Lagged dependent variable $_{t-1}$	0.60	0.02	0.00***
Rule of Law	-0.47	0.76	0.53
FN	-0.00	0.02	0.88
(FN × Rule of Law)	0.07	0.02	0.00***
ROA	0.41	0.07	0.00***
LR	0.05	0.00	0.00***
CAP	0.18	0.07	0.01**
GDP per capita	0.00	0.00	0.00***
Arellano-Bond Test for AR (2) (p-value)	0.47		
Sargan Test (p-value)	0.20		

Notes: S.e = robust standard error. Z-score = Stability. FN = Foreign bank penetration in terms of number. Rule of Law = Governance. ROA = return on asset (ROA). LR = banks' liquid asset to total asset ratio. CAP = equity capital to total asset ratio. The macroeconomic variable is GDP per capita. P-value is significant as follows: * 10% Significance level; ** 5% Significance level; and *** 1% Significance level.

Table 4 reports results of another two robustness test. First from regressing Z-score by including *control of corruption* (*CC*) as a proxy for governance and the *foreign bank penetration in terms of assets* (*FS*) as a proxy for foreign banks' penetration. Second from regressing Z-score by including *control of corruption* (*CC*) as a proxy for governance and the *foreign bank penetration in terms of assets* (*FN*) as a proxy for foreign banks' penetration. We estimate a linear interaction model using an interaction term for foreign bank penetration, and control of corruption (*FSxCC* and *FNxCC*). Bank's *control of corruption* refers to perceptions of exercising public power for private gain (Kaufmann, Kraay, & Mastruzzi, 2008). The higher the index of *CC* means the higher perception of corruption in the country.

Both models show that the foreign banks' penetration do not have a significant impact on banking stability but they suggest that high perception of corruption which indicate lack of governance may reduce banking stability. Banks' stability falls with the severity of corruption and banks' engagement in riskier activities leads to higher vulnerability as banks involve in more risk-taking behavior (Chen, Feng, & Wang, 2018; Nurhidayat & Rokhim, 2018).

Table-4. The estimation results of two-step system GMM.

(Using control of corruption and FS / FN)

	Log Z-score					
	Coef.	**S.e.**	**P-value**	**Coef.**	**S.e.**	**P-value**
Lagged dependent variable $_{t-1}$	0.57	0.02	0.0***	0.60	0.02	0.00***
CC	-3.01	0.71	0.00***	-2.48	0.88	0.00***
FS	-0.00	0.00	0.52	-	-	-
FN	-	-	-	-0.01	0.02	0.57
(FS × CC)	-0.01	0.00	0.00***	-	-	-
(FN x CC)	-	-	-	-0.04	0.02	0.03**
ROA	0.46	0.07	0.00***	0.44	0.07	0.00***
LIQ	0.05	0.01	0.00***	0.05	0.00	0.00***
CAP	0.09	0.05	0.00***	0.18	0.06	0.01**
GDP per capita	0.00	0.00	0.00***	0.00	0.00	0.00***
Arellano-Bond Test for AR (2) (p-value)	0.45			0.42		
Sargan Test (p-value)	0.15			0.12		

Notes: S.e = robust standard error. Z-score = Stability. FN = Foreign bank penetration in terms of number. FS = Foreign bank penetration in terms of asset. Control of Corruption = Governance. ROA = return on asset (ROA). LR = banks' liquid asset to total asset ratio. CAP = equity capital to total asset ratio. The macroeconomic variable is GDP per capita. P-value is significant as follows: * 10% Significance level; ** 5% Significance level; and *** 1% Significance level.

These findings support that *foreign banks' penetration* does not directly *banking stability* and its impact depends on the level of *governance* of the host country. The results suggest that the penetration of foreign banks is harmful to corrupt economies because they tend to pursue rent-seeking behavior and adopt cherry-picking practices. Corrupt economies encourage banks to engage in riskier activities as the government bails them out in insolvency (Afonso, Santos, & Traina, 2014).

4. CONCLUSION

This article addresses the impact of governance on the foreign bank penetration-banling stability nexus. We employ the *rule of law* and *control of corruption* as proxies for governance. Evidence shows that foreign bank penetration can lead to the financial instability by increasing risk-taking behaviour in a host country that has an unhealthy financial system, a highly corrupted market and a poor level of rule of law. Foreign bank penetration is also positively associated with bank fragility, while negatively related to rule of law. Most banks in developing countries face volatility in profits, which encourages risk-taking behaviour that leads to higher credit risk-taking and increased defaults.

Our findings also show that the bank risk-taking behaviour increases with a higher level of corruption. Stability in host countries requires improvement in control of corruption as they open to foreign capital. Rent-seeking behaviour, cherry-picking practices, higher risk-taking, and engaging in riskier activities are common problems in corrupted countries (Afonso et al., 2014). Corruption reduces the probability of repaying loans on time and increases non-performing loan ratio, therefore increasing banking instability in host countries. This study supports the market risk hypothesis that states foreign bank penetration increases bank fragility in host countries. Our results are also consistent with Berger et al. (2013) that indicates a significant association between foreign bank penetration and their risk-taking behaviour.

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