
4. Consequences of China's Opening to Foreign Banks

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Introduction

China's government has recently implemented additional reforms to relax the regulatory environment for foreign banks. Specifically, State Council Order No. 657, signed by Premier Li Keqiang, announced a decision to revise the Regulations of the People's Republic of China on the Administration of Foreign-Funded Banks, effective from 1 January 2015. Implications of the revised regulations include removal of the requirement that a minimum of RMB100 million operating capital be transferred unconditionally from the overseas parent bank to the newly opened Chinese branch. In addition, in terms of the conditions attached to the right to carry out RMB-denominated activity, foreign banks are now eligible to apply to undertake local currency business after operating in China for one year—down from the previous three years. The requirement for two consecutive years of profit will be scrapped as well.

The opening-up of the Chinese banking sector dates back to 1980, when the first international branch of a foreign bank, from Japan, was established in Beijing. World Trade Organization (WTO) accession in late 2001 instigated a 'great leap forward', with China agreeing to undertake a series of financial liberalisation policies.

Among the points of agreement was that, on accession, earlier geographic and client restrictions on foreign currency business as applied to foreign financial institutions would be removed. For local currency business, geographic restrictions would be phased out within five years of accession. Any existing non-prudential measures restricting the ownership, operation and juridical form of foreign financial institutions (including internal branching and licences) were to be eliminated by the end of 2006. Subsectors including insurance, securities and investment fund management were also opened up, in a limited fashion, to foreign financial service providers.

Those commitments and associated incentives saw a range of seemingly panicked responses from Chinese financial market participants. Before accession to the WTO, there was a pervasive lack of confidence in Chinese financial markets, owing especially to a weak banking sector. During the Asian Financial

Crisis of the late 1990s, the ratio of non-performing loans (NPLs) of Chinese banks reached as high as 30–40 per cent. Although a series of reforms was implemented, including cleaning up NPLs and public capital injections, banks' corporate governance capacity remained low.

In this environment, commentators had two major concerns about foreign banks entering China's financial market. The first was that foreign banks possessed advantages over domestic banks, including greater product variety, broader international networks and more advanced risk-management skills. It was not implausible to think that domestic banks would be crowded out of the market, or even collapse once foreign banks enjoyed 'national treatment'. In addition, unlike domestic banks, foreign banks in China were under the control of their parent corporations, which some feared could ultimately become a source of financial instability for China.

Amid these fears, Bonin and Huang (2001) conducted research on the Chinese financial market, which suggested that these fears were unlikely to materialise in most cases. In particular, their research suggested that foreign banks should not be considered a destabilisation risk, mainly because establishing the branch of a foreign bank was no different from foreign direct investment (FDI) in other sectors. Both, for example, aim for long-term returns and not short-term profits—a contrast with speculative capital movement. Moreover, financial stability in China would be a point of common interest. Furthermore, the operations of foreign bank branches would be subject to the supervision of Chinese authorities. As for the competitiveness of the domestic banking system, this was less a concern than the possibility that foreign banks would encounter various policy restrictions, including of the scale of foreign ownership of major domestic banks.

Almost 15 years later, foreign banks have not contributed to financial risk and neither has their market share advanced greatly. In fact, the contrary is true, as Bonin and Huang (2001) expected. Foreign banks have found it very difficult to operate in the domestic Chinese market. Despite newly adopted opening-up policies—especially after China's accession to the WTO—little material improvement has been made in banking sector liberalisation. In some areas, we can even observe retrogression.

Total assets of foreign banks have expanded dramatically since 2003 (Figure 4.1). In the decade to 2013, the average annual rate of growth of foreign bank total assets was 19.9 per cent. Closer investigation shows that the relative size of foreign banks in China is negligible—less than 2 per cent of total banking assets in 2013. And that asset share has been declining in the past five years. Indeed, by 2013, the total asset share of foreign bank assets in total banking assets was just 1.5 per cent. This level is only slightly higher than the level of 10 years ago.

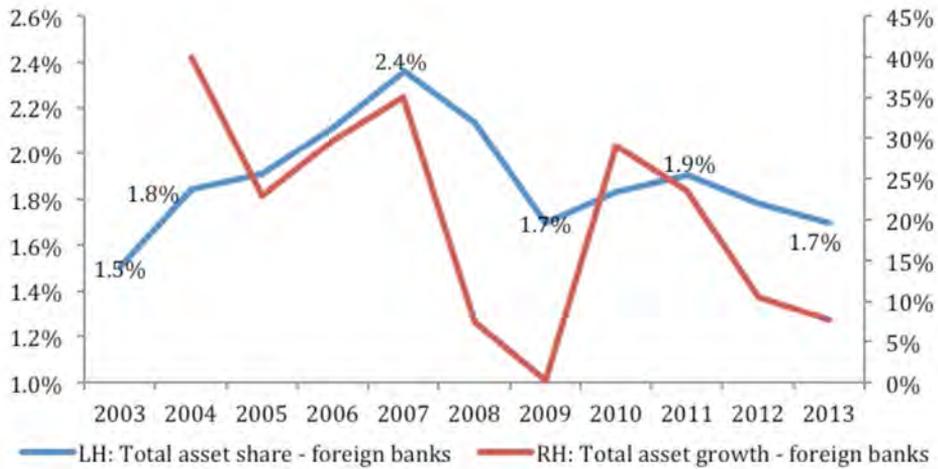


Figure 4.1 Development of foreign banks in China

Sources: CEIC China Premium Database; and authors' estimations.

Despite the fact the nightmare of a foreign bank invasion did not come to pass, discussions in China about banking sector liberalisation remain heated, and concerns persist. In this context, this chapter explores the impacts of banking sector liberalisation: what will and should happen in the future? To explore possible liberalisation scenarios, we first investigate the background of banking sector opening-up and related literature in the second and third sections. In the following two sections, we then explore two specific aspects of foreign bank entry—one for the domestic banking sector and another for domestic enterprises—so as to facilitate understanding of banking sector liberalisation, before concluding.

Foreign banks: Theory and reality

Foreign banks affect the local environment both directly and indirectly, and influence domestic economies and financial markets by interacting with domestic enterprises, including domestic banks. Direct impacts include lending, interbank trading and the influence of foreign investment considerations on local decision-making. As in the case of FDI more generally, foreign banks can also generate indirect spillovers through channels such as demonstration, personnel training and competition. Considering the small relative size of foreign banking in China, any interaction effects with local firms must be analysed carefully, as is the case for our study in section four.

In contrast with firms in other sectors, domestic banks, and in particular state-owned banks (SOBs), have more bargaining power when dealing with foreign competitors, because of the less competitive banking market. To that end, despite revisions to regulations to allow foreign banks national treatment, invisible barriers to China's banking sector mean that foreign banks are disadvantaged. For example, language and cultural barriers in reality often force foreign banks to focus on elite clients—the 'cream-skimming' effect. Another example is that when a foreign bank applies for a new business licence, they often find a domestic bank will be granted that licence.

In the early years of the century, foreign strategic investment played an important role in listings of state banks. Recently, however, most such investors have sold down those investments. There is a variety of explanations for this visible exit of foreign investors from China's banking sector. Financial difficulty in the aftermath of the 2008 global financial crisis (GFC) pressed some foreign banks to sell overseas assets. Declining returns on investments and rising risks for Chinese banks also drove foreign exits. Further, since foreign banks are only permitted to own minority shares in established domestic banks, they often find themselves unable to materially affect the decision-making process of that bank. Moreover, since all listed banks operate as SOBs, the board must include at least one official representative of the ruling Communist Party.

For China, a well-acknowledged benefit of banking sector liberalisation is that it could force domestic financial reforms. Despite that potential, and the scale of reforms already undertaken, China's financial sector remains relatively impenetrable, according to a financial liberalisation index designed by Abiad et al. (2008). For the index of 'financial institution entry barriers', China scores 35, against an average for middle-income countries of 85 and 100 for high-income countries (Figure 4.2).

Analysis of a more recent dataset reveals a similar result. According to The Heritage Foundation's '2015 Index of Economic Freedom', China's financial freedom index ranking is far behind that of other emerging markets, let alone high-income countries. Surprisingly, the index ranking for China fell in 2001 and the gap has widened since then.

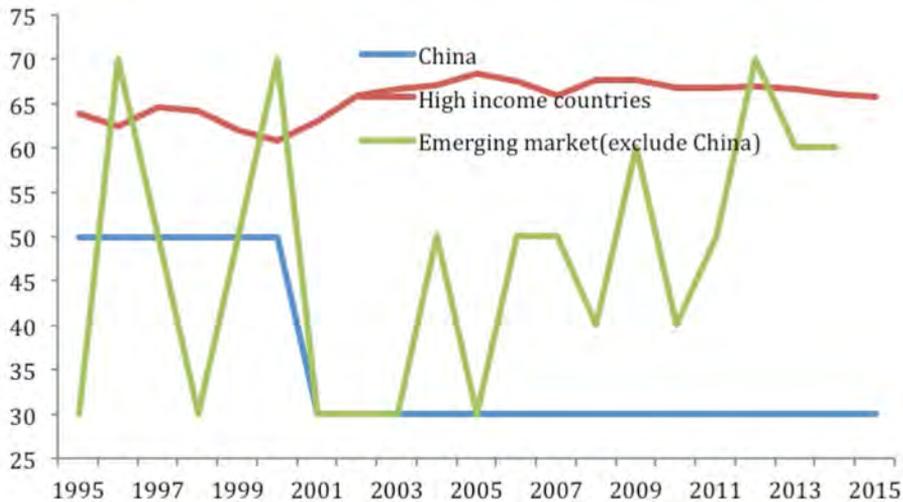


Figure 4.2 Financial freedom index, 2005

Note: The classifications of high-income countries and emerging markets are according to the World Bank and International Monetary Fund, respectively.

Source: Miller et al. (2015); and authors' estimation.

These data suggest that, despite China's progress in opening up its banking sector, little progress has been made in levelling the playing field for foreign banks. To understand the cause of this, it is important to further analyse what theory says about what should happen and compare this with the literature for the case of China.

Survey of the literature

The research question of this chapter is related to at least three branches of the literature. The first examines the spillover effects of foreign direct investment (FDI) (for example, Caves 1974; Dunning 1980, 1983; Hymer 1960). Blomström and Kokko (1998) found that in order to overcome disadvantages of operating overseas, such as cultural and language barriers, multinational corporations must possess some firm-specific advantages, including superior production technologies and advanced management skills. They argued that operation of such multinational corporations can generate productivity spillovers for the local industry through channels such as demonstration, personnel training and competition.

Some studies applied this spillover argument to the financial sector. For instance, Levine (1996) suggested two possible channels by which FDI can positively affect the domestic banking sector: the first is by directly bringing new and better skills, management techniques, training procedures, technology and products

to the domestic market; and the second is through indirectly stimulating competition in domestic financial markets, which, in turn, puts pressure on profit and overhead expenses and enhances domestic banking efficiency.

The second branch of the literature concerns foreign bank entry as a special case of FDI, which can influence domestic firms through both direct and indirect channels. Foreign banks may directly provide services to local firms, and they may also indirectly affect firms by changing the domestic banking sector. The latter includes increasing competition in the banking sector and improving local banks' operating efficiency.

Some empirical studies focus on the interest rate spread, cost base and competition in the banking sector. By analysing bank-level data from 80 countries, Claessens et al. (2001) found that foreign bank entry narrowed interest rate spread and lowered management costs of local banks. Several other studies arrived at very similar conclusions: Unite and Sullivan (2003) for the Philippine case; Clarke et al. (1999) for the Argentine case; and Barajas et al. (2000) for the Colombian case. In the meantime, Petersen and Rajan (1995) argued that banking development is critical for alleviating financing constraints. Shen et al. (2009) pointed out that competition among banks is important for private firms obtaining loans.

Several papers dealt with the direct effect of foreign bank entry on firms. Some confirmed the cream-skimming effect, where foreign banks compete mainly with domestic banks for profitable and wealthy clients. Giannetti and Ongena (2009) found that foreign bank entry was beneficial for capital allocation in Eastern Europe, particularly for younger and larger firms. Sarma and Prashad (2013) provide evidence of the cream-skimming effect in India, arguing that foreign banks actually reduced the possibility of smaller firms obtaining bank loans.

The third branch of the literature analyses foreign bank entry in the People's Republic of China (PRC) as a critical component of financial liberalisation. Leung and Chan (2006) found that local banks actually improved efficiency in response to foreign bank entry. Berger et al. (2009) concluded that foreign capital significantly helped four big SOBs improve efficiency. Xu (2011) confirmed the positive effect of the existence of foreign banks on domestic bank competition and efficiency. And Mao et al. (2010) estimated the quadratic relationship between credit provided by foreign banks and total credit in the PRC.

China's banking sector liberalisation: Financial market effects

The Chinese banking sector has undergone significant changes in recent decades, especially since joining the WTO at the end of 2001. The China Banking Regulatory Commission (CBRC) once outlined four important principles for opening up the Chinese banking sector: 1) meeting the ongoing needs of domestic economic development; 2) improving competitiveness of the Chinese banking sector; 3) honouring commitments made to the WTO and creating an environment for fair competition between Chinese and foreign banks; and 4) maintaining financial stability (CBRC 2006).

Foreign banks were first allowed to open representative offices in China in 1979 and to set up branches in special economic zones (SEZs) from 1982. This geographical restriction was relaxed in 1994, after which foreign banks were allowed to operate in 23 cities after being selectively granted a licence to do so by central authorities. Foreign banks granted that licence were, however, limited in the scope of business they were allowed to conduct—to foreign currency loans and deposits for foreign-invested firms and foreign individuals in China. Four years later, in 1998, the People's Bank of China (PBC) granted eight foreign banks the right to use local currency funding; but even those foreign banks remained prohibited from conducting any consumer banking transactions in RMB with mainland residents for the duration of the 1990s.

China's joining of the WTO in late 2001 marked the beginning of a new set of rules concerning the operation of foreign banks in China. From 2002, foreign banks were allowed to conduct business with Chinese residents and enterprises in foreign currency. In addition, local currency services were also allowed in designated cities. By 2006, five years after China joined the WTO, geographic and customer restrictions on RMB businesses of foreign banks were lifted comprehensively, in accordance with the WTO accession commitments. The government also then encouraged foreign banks to incorporate locally, and those that were granted that licence did enjoy national treatment in terms of registered capital, branch opening rights, required operating capital and regulatory standards.

In 2006, most foreign banks granted national treatment banking terms in China were from Asia (Figure 4.3). Specifically, 186 foreign banks from 41 countries and regions had opened 242 representative offices in China. Of that total, the 56 per cent from Asia included 99 from Hong Kong, 19 from Japan and 17 from Singapore. From Europe, the top two countries are the United Kingdom (21) and France (15). From the United States, the number is 26.

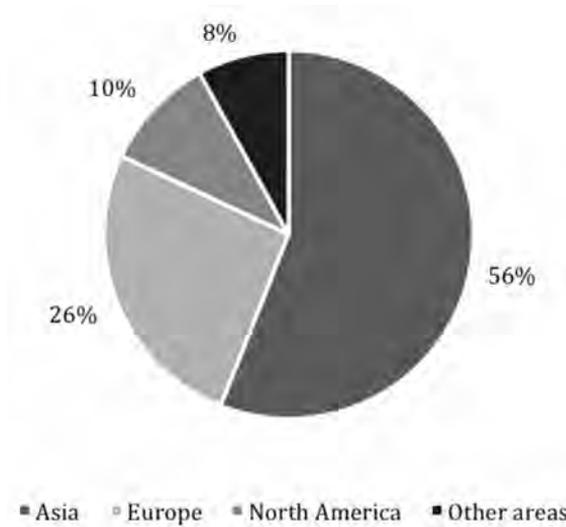


Figure 4.3 Distribution of host countries of foreign banks in 2006

Source: CBRC (2006).

In response to this gradual opening of the financial sector after China's WTO accession, the number of locally incorporated foreign banks with a presence in China increased significantly—from a low base. In parallel, the number of cities where locally incorporated foreign banks were present also increased rapidly. From the outbreak of the GFC in 2008 to the end of 2011, more than 40 foreign banks made additional capital (or working capital) replenishment equivalent to RMB27.1 billion in their Chinese operations (CBRC 2011), which shows strong confidence in the Chinese banking market.

By the end of 2013, banks from 51 countries and regions had established 42 locally incorporated entities, 92 foreign bank branches and 187 representative offices in China (CBRC 2013). Of the above listings, 36 locally incorporated foreign banks and 57 foreign bank branches were also approved to conduct RMB business. Six locally incorporated foreign banks—Bank of Tokyo-Mitsubishi, Mizuho Corporate Bank, Bank of East Asia, Development Bank of Singapore, Standard Chartered Bank and HSBC—had even been granted permission to issue RMB-denominated bonds, and the Bank of East Asia, Citibank, Nanyang Commercial Bank and Standard Chartered Bank obtained approval in 2014 to issue credit cards. Geographically, locally incorporated foreign banks had a presence in 69 cities and 27 provinces.

The response of foreign banks to the incremental liberalisation of China's banking sector after its WTO accession in 2001 can be understood by inspection of four trends: 1) the rise in the number of foreign banks operating in China; 2) the one-off transition of foreign banks in China from net providers of capital

to non-financial institutions and residents to net receivers of capital, in 2010; 3) source funding coming from the host country and thus the limited role of the interbank market to financial banks; and 4) under government policy and for risk-management purposes, foreign banks were mostly engaged in low-risk banking activities.

On the first point, the number of foreign bank operating entities in China rose from 192 in 2003 to 419 in 2013 (Figure 4.4). The total China-based assets of those foreign banks almost doubled every four years, rising to RMB2.563 trillion in 2013 (Figure 4.5). Despite that increase in total assets, the foreign share in total banking assets in China remained low. Specifically, that share climbed between 2003 and 2007, but has fallen since the GFC—from 2.4 per cent in 2007 to 1.7 per cent in 2013.

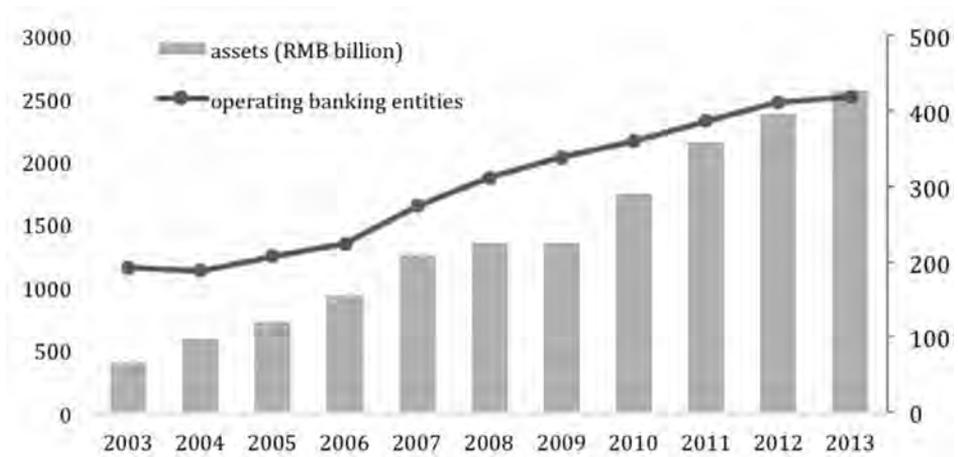


Figure 4.4 Development of foreign banks in China

Note: Operating banking entities include head offices, branches and subsidiaries of locally incorporated foreign banks and foreign bank branches.

Source: CBRC (2013).

The transition of foreign banks from net providers of capital to non-financial institutions and residents in China to net receivers of capital is demonstrated in Figure 4.5, where the net asset indicates the assets to non-financial institutions and residents less the liability to them, and foreign liability indicates the foreign liabilities of foreign banks (national level for both). Before 2010, foreign banks extended more loans than deposits collected. The situation that arose in 2010 has since reverted to the norm, possibly because RMB business with local residents was largely constrained by government regulation in the early years and the main business of foreign banks was foreign currency loans for enterprises.

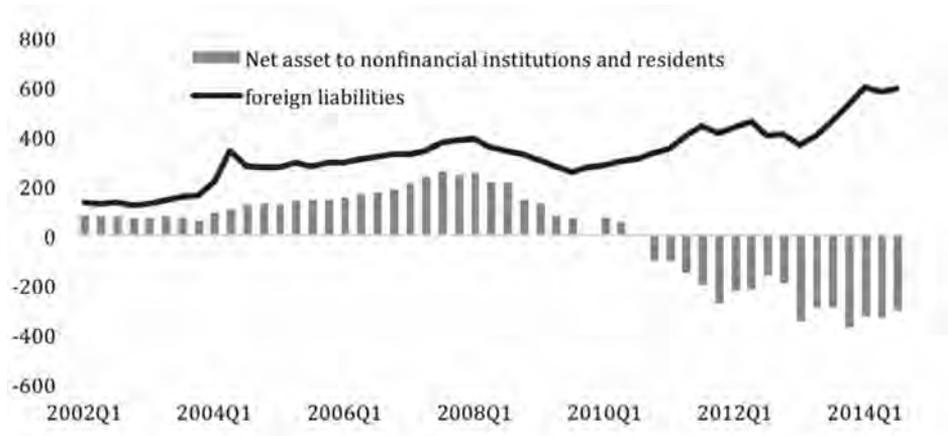


Figure 4.5 Foreign banks turning into net takers of capital

Source: CEIC.

On the third point, the main source of funding for locally incorporated foreign banks in China has come from their headquarters and subsidiaries in other host countries, and the role played in the local interbank market by foreign banks has been limited. Technically the government has made the local funding market available to foreign banks since 1998, but the conditions of that access, such as constrained lending amounts and limited loan period horizons, have limited the freedom of access to local funding pools that such banks can utilise.

The final point characterising foreign bank activity in China since it joined the WTO is that foreign banks have tended to engage in operations that are characterised by relatively low risk. For example, the share of foreign bank exposure to China's NPL portfolio is estimated to be below 1 per cent, and is consistently lower than the average ratio of the whole commercial banking system in China (Figure 4.6). Researchers have pointed out that, apart from traditional banking business, such as following existing customers in trade and investment, the main focus of foreign banks was on the niche markets and fee-based banking business where their comparative advantages lay (Xu 2011), and where they have also enjoyed consistent regulatory permission to operate.

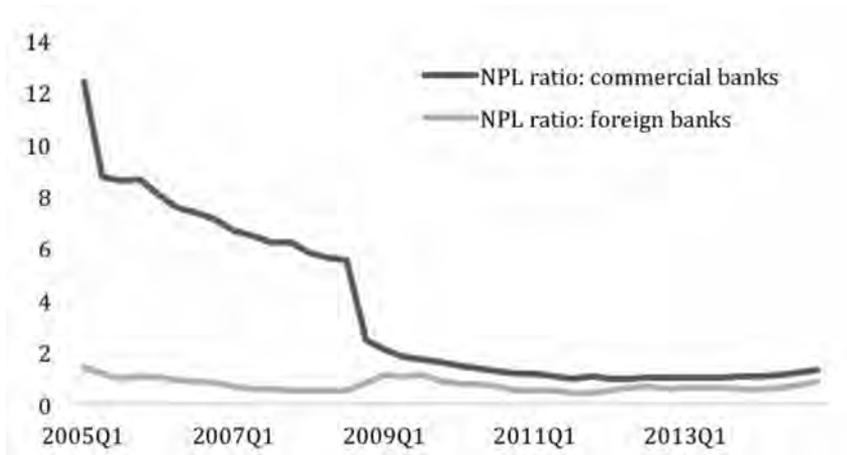


Figure 4.6 NPL ratio of commercial banks and foreign banks

Source: WIND.

In summary, the opening up and liberalisation process helped foreign banks penetrate the Chinese market and provide more sophisticated banking services to local customers. That said, the asset share of foreign banks remains low, and the main funding source of foreign banks is still from overseas. The business range of services provided by foreign banks has also not developed extensively, in part thanks to the incremental progress in areas of the banking sector that have been liberalised.

In this context, further investigation could shed light on how theoretical views of the benefits associated with foreign bank entry hold in the applied case of a transitional economy. This could include the potential of a foreign banking presence to increase competition within the domestic banking system, thus increasing the efficiency of local banks, and helping to more efficiently allocate capital through improved evaluation and pricing of credit risks. Our empirical analysis focuses, first, on the impact of foreign bank penetration on efficiency and competition in the domestic banking system, and second, on its influence on credit allocation.

There are several methods used to estimate the degree of competition in a banking system. First, bank-level indicators of net interest margins and costs, which will be affected if competition levels change. For example, when competition is strengthened, domestic banks are forced to lower lending rates or to increase deposit rates to retain market share. This in turn narrows net interest margins. Similarly, in the first instance, domestic banks often incur costs when competing with large international banks with better reputations. Without considering the increased efficiency benefits, these banks' operational costs will increase. Second, we also use provincial data on the share of deposits in non-state-owned

financial institutions, to measure the effect of foreign bank entry on provincial deposit competition. The logic here is that if the presence of locally incorporated foreign banks in a province is accompanied by a larger share of deposits in the non-SOB sector, we can interpret this to mean that foreign bank entry could be associated with competition in the domestic banking system.

Net interest margins (*NIM*) are interest incomes minus interest expenses divided by total earnings, where expenses refer to non-interest expenses divided by total earnings (*COST*). We explore the effects of foreign bank entry (*FEI*), representing the asset share of foreign banks in the whole banking system, on net interest margins and cost by running two regressions in which the dependent variables are *NIM* (Equation 4.1) and *COST* (Equation 4.2), respectively. We control for a bank's book value of equity over total earning assets (*EQT*) and national economic conditions including annual GDP growth rate (*gdp*), inflation (*inf*) and lending rate (*lendrate*). Bank-level data come from *Bankscope* and national economic data from the World Development Indicators (*WDI*) (World Bank various years). There are 303 bank-year observations in our unbalanced panel dataset, covering 75 commercial banks from 1999 to 2013. Like Xu (2011), we run the following two regressions with fixed effect (Equations 4.1 and 4.2).

Equation 4.1

$$NIM_{it} = \beta_0 + \beta_1 FEI_{it} + \beta_2 EQT_{it} + \beta_3 COST_{it} + \beta_4 gdp_{it} + \beta_5 inf_{it} + \beta_6 lendrate_{it} + \varepsilon_{it}$$

Equation 4.2

$$COST_{it} = \beta_0 + \beta_1 FEI_{it} + \beta_2 EQT_{it} + \beta_3 NIM_{it} + \beta_4 gdp_{it} + \beta_5 inf_{it} + \beta_6 lendrate_{it} + \varepsilon_{it}$$

Results from Equations 4.1 and 4.2 are shown in Table 4.1. The results suggest a statistically significant negative effect on net interest margins and a positive effect on non-interest costs are associated with foreign bank entry. These results are in line with most existing theoretical literature that supports the hypothesis that the increased competition associated with foreign bank penetration comes from domestic banks facing a narrowed interest margin, and also that their costs rise by having to spend proportionately more on operations and services against their market share. It also suggests, at least as far as the sample applies—for 1999–2013 and to the impact of foreign banks on the local provincial privately owned banking sector (which is tiny within the scheme of China's banking system)—that foreign banks appear to be associated with increased competition.

Table 4.1 Net interest margin, operational cost and foreign bank entry

	NIM	COST
FEI	-2.519	2.937
	(2.97)***	(3.75)***
EQT	0.529	-0.431
	(1.01)	(0.88)
gdp	-0.028	0.025
	(1.14)	(1.10)
inf	-0.060	0.049
	(2.62)***	(2.28)**
lendrate	0.149	-0.131
	(1.74)*	(1.64)
NIM		0.881
		(43.04)***
COST	1.013	
	(43.04)***	
_cons	-0.493	0.437
	(1.04)	(0.99)
Fixed effect	Yes	Yes
R ²	0.90	0.90
N	303	303

*** p < 0.01

** p < 0.05

* p < 0.1

Note: Robust standard errors in parentheses.

In a recent study, Li and Huang (forthcoming) use provincial data to run regressions of the bank competition index (*BankCompt*) on foreign bank entry (*Foreign*) (Equation 4.3). Following Fan et al. (2003, 2004, 2007, 2010), they compute the NERI Index of Marketisation for provinces in China to proxy bank competition. The index is the share of deposits in non-state-owned financial institutions. Since almost all financial institutions in China are banks, they use this index to reflect the competitiveness of the banking sector.

Equation 4.3

$$BankCompt_{pt} = c + \alpha_p + \mu_t + \gamma_0 Foreign_{pt} + \epsilon_{pt}$$

The datasets used in this study were constructed by the National Bureau of Statistics (NBS) and collected through annual surveys of all large-scale industrial firms in the PRC. On average, they cover close to 190,000 enterprises, from

37 two-digit manufacturing industries and 31 provinces every year. Given that China's WTO accession took place at the end of 2001, we employ post-accession data for the period 2002–07.

Table 4.2 summarises the estimation results. Foreign bank entry actually intensifies banking competition based on the significantly positive coefficient estimates, which implies that the share of deposits in SOBs declines because the entry of foreign banks increases competition and weakens their dominance. To check if the conclusion is model-dependent, Li and Huang also include provincial GDP and provincial population (both in log form) as control variables and add a time trend to the equation. In all these exercises, the main finding remains unchanged.

Table 4.2 Foreign bank entry and bank competition

	Level		Linear trend	
Foreign	0.857**	0.887**	0.509*	0.508**
	(0.359)	(0.331)	(0.271)	(0.249)
Trend			0.365*	0.399*
			(0.214)	(0.219)
Log(provincial GDP)		4.515*		4.792**
		(2.37)		(2.168)
Log(provincial population)		0.48		-0.269
		(2.923)		(2.921)
Constant	3.253***	-34.23	3.259***	-30.29
	(0.384)	(25.25)	(0.377)	(24.05)
Observations	400	400	400	400
R-squared	0.557	0.584	0.57	0.599
Number of provinces	31	31	31	31
Year dummy	Yes	Yes	Yes	Yes

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

Notes: The dependent variable is the bank competition index (*BankCompt*). Robust standard errors in parentheses.

More than 35 years since China's great reform and opening-up policy, and more than a decade since China became a formal member of the WTO, the achievements of that opening-up are unquestionable, and have led to China becoming a leading member of the global economic community. The degree of reform and liberalisation observed in its financial systems is remarkable compared with the early years. Based on the WTO's agenda, China has implemented its promised

policy changes. The real progress since that accession has, however, been slow and conservative, especially from the perspective of foreign bank entry. Although the number of active foreign banks has expanded, many fields (such as the local funding market and business expansion) are still under regulation, explicitly or implicitly. There are even signs of reversal in market entry, judging from the asset share of foreign banks (Figure 4.1). Despite this, the entry of foreign banks has had an important influence on the domestic banking system. The presence of more experienced (in terms of customer management) and more knowledgeable (in terms of organisation efficiency) foreign banks, who furthermore have easier access to international funding, has increased the degree of competition in the domestic banking industry—an assertion supported by our empirical evidence, from both the bank level and the provincial level. For a full picture of the effects of banking sector liberalisation, the next section will focus on the impact of foreign bank entry on the allocation of firm credit.

China's banking sector liberalisation: Real economy effects

As mentioned, although the total asset share of foreign banks in the Chinese banking industry dropped to 1.9 per cent in 2013 (compared with 2 per cent in 2001), the scale of foreign bank assets has been rapidly increasing, with the average annual growth rate once reaching as high as almost 20 per cent during the decade since 2001. Their business lines, coverage of target customers, as well as business area have also been expanding. In addition, it has become a prevalent phenomenon in China for foreign banks to hold stakes in state-owned and joint stock banks, or even city commercial banks. Now that foreign bank entry has evolved, what substantive change will it bring to the Chinese economy? This section intends to analyse the impact on domestic enterprises, which are vital components of the real economy.

It is widely acknowledged that despite more than 30 years of successful reform, the Chinese economy still exhibits typical features of repressive financial policies, which protect the state sector but discriminate against private enterprises. Could the entry of foreign banks—taken as an important step in financial liberalisation—work on the efficiency of domestic enterprises and exert some effects on discriminatory policies? The existing literature on this issue has controversial conclusions. On the one hand, conventional theory suggests that foreign bank entry can enhance competition in and improve the efficiency of the domestic banking system, thus increasing credit supply to enterprises; on the other hand, banking theory incorporating information asymmetry argues that some firms' access to credit could be reduced due to the high information cost and greater competition (Petersen and Rajan 1995). High information costs

can also induce foreign banks to do business with the most profitable local firms (Dell’Ariccia and Marquez 2004; Sengupta 2007). Combining these various predictions with the situation in China, we expect foreign banks will work on domestic firms through indirect channels rather than directly providing loans, as their share in China remains quite low so far.

In fact, China’s gradual opening up to foreign banks since 2001 has created an excellent laboratory in which to study the effects of foreign bank entry. Li and Huang (forthcoming) have conducted a case study based on this unique policy experiment. Since the policy plan is exogenous, they construct a counterfactual using the ‘difference in differences’ (DID) approach, in which the control group consists of firms located in regions where foreign bank credit is unavailable and which are therefore plausibly unaffected by foreign bank entry, and the treatment group comprises firms with access to foreign bank lending. They then apply a basic DID fixed-effect model, with the log of total factor productivity (TFP)¹ as the dependent variable, employing a panel dataset constructed by the NBS that covers close to 190,000 enterprises in 31 provinces. They choose data from 2002 to 2007 given that the PRC’s accession to the WTO took place at the end of 2001. A dummy variable (*Foreign*) is introduced to represent whether foreign bank loans are available in the region in which the firm is located. In addition, they use the age of the firm (*Age*), and, in log form, total assets ($\text{Log}(\text{Assets})$), GDP ($\text{Log}(\text{GDP})$) and the population of the city in which the firm is located ($\text{Log}(\text{Population})$) as independent variables to explain productivity.

The model is estimated using both the full sample and subsamples, which are classified by different ownership types as defined by the largest shareholder² (Table 4.3). The results reveal several important findings. First, financial opening does exert an overall positive impact on TFP since the coefficient for foreign bank entry is significantly positive in the full sample estimation; however, as the coefficients of *Foreign* in subsample estimations indicate, the effects on TFP vary across ownership groups: negative for state-owned enterprises (SOEs) and collectively owned enterprises (COEs), positive for privately owned enterprises (POEs) and insignificant for foreign-invested firms (FIEs). These findings seem to be at odds with the information asymmetry and cream-skimming effect mentioned in previous sections. The strong policy implication behind these is that foreign bank entry does play an essential role in reversing the financial repression that favours SOEs and COEs but discriminates against POEs. Due to

1 They estimated TFP by the consistent semi-parametric method developed by Olley and Pakes (1996), and also provided robustness checks by calculating TFP using the Solow residual.

2 An alternative definition of ownership is also used to check the robustness of the estimation results in Li and Huang (forthcoming).

such a vital component of financial liberalisation, SOEs and COEs, which previously enjoyed more policy support from the Chinese Government, are now worse off; while POEs, previously discriminated against, now become better off.

Table 4.3 The basic model (TFP)

	Full sample	SOEs	COEs	POEs	FIEs
Foreign	0.0251** (0.0116)	-0.0339*** (0.0130)	-0.0366*** (0.0137)	0.0464*** (0.0132)	-0.000450 (0.0228)
Age	-0.00128*** (0.000347)	-0.000398 (0.000681)	-0.000855 (0.000700)	6.10e-05 (0.000412)	0.00312** (0.00140)
Log(Assets)	0.0430*** (0.0115)	0.0282* (0.0156)	0.0659*** (0.0188)	0.0256** (0.0114)	0.187*** (0.0229)
Log(GDP)	-0.0109 (0.0762)	0.0391 (0.0556)	0.00209 (0.0834)	0.0122 (0.0939)	0.0517 (0.0617)
Log(Population)	-0.0461 (0.0473)	-0.177*** (0.0501)	-0.0841 (0.0667)	-0.0776 (0.0637)	-0.0268 (0.0211)
Constant	0.956*** (0.347)	0.915*** (0.303)	0.846* (0.503)	1.077** (0.485)	-1.288** (0.548)
Observations	1,202,245	68,418	93,784	860,188	179,855
R-squared	0.006	0.004	0.007	0.007	0.033
Number of firms	318,167	25,382	43,287	252,404	53,519
Clustered at	Region	Region	Region	Region	Region
Year dummy	Yes	Yes	Yes	Yes	Yes

COEs = collectively owned enterprises.

FIEs = foreign-invested enterprises.

GDP = gross domestic product.

POEs = privately owned enterprises.

SOEs = state-owned enterprises.

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

Notes: The dependent variable is the log of TFP. Robust standard errors in parentheses.

Source: Li and Huang (forthcoming).

But how does foreign bank entry affect firms' productivity? What are the detailed mechanisms through which the policy takes effect? Since POEs in China are widely considered to be subject to lack of credit, one possible channel could be its role in the improvement of financing conditions. Li and Huang (forthcoming) further exploit this by introducing an index used in Rajan and

Zingales (1998),³ which represents the demand for external funds of the industry of which the firm is part. In addition, they construct its interaction term with the dummy variable *Foreign* to capture the different impact that foreign bank entry could exert on enterprises with different levels of demand for external financing. With other control variables staying the same as those in Table 4.3, they estimate the model using the full sample as well as subsamples again, and the results are presented in Table 4.4. As expected, the significantly positive coefficient of the interaction term for POEs indicates that the impact of foreign bank entry on POEs' TFP will be larger in industries that have more demand for external funds. In other words, one possible channel is that foreign bank entry enhances POEs' TFP by easing their credit constraints. The insignificant coefficients in the other three groups are a natural consequence since SOEs and COEs generally do not suffer from financing constraints, and FIEs are neither substantially discriminated against nor substantially favoured under the financial repression in China.

The case study of Li and Huang (forthcoming) above lends strong support to the positive effects foreign bank entry has on industrial efficiency at the aggregate level, which conforms to prior expectations. Additionally, this policy takes effect through easing the financing constraints on private firms, which are heavily discriminated against by banks and have limited access to credit before foreign bank entry. Combined with the analysis in the previous section that shows foreign bank entry can improve bank efficiency, this easing effect could be ascribed to the fact that by competing for the same businesses with local banks, foreign banks force local banks to deflect their services to those clients not previously covered, and thus improve the financing conditions of private firms.

Therefore, the introduction of foreign banks to China benefits domestic enterprises by enhancing overall productivity, and it improves POEs' efficiency by easing their credit constraints. As a result, the previous effects of financial repression can be reduced or even reversed. We could gain some insights—though admittedly there are some limitations when applying this specific case study to a more general case—that this reversal effect will play an essential role in leading Chinese financial reform to a more market-oriented stage and facilitating the healthy development of the Chinese real economy, of which domestic enterprises, especially POEs, are important driving forces.

3 The index was originally used to capture the dependence of US firms on external financing, but is also justified as a reasonable proxy for external financing dependence in developing countries (Rajan and Zingales 1998).

Table 4.4 Financial constraints and foreign bank entry (TFP)

	SOEs	COEs	POEs	FIEs
Foreign×Index	0.107	-0.00472	0.0493**	0.0182
	(0.0668)	(0.0380)	(0.0201)	(0.0232)
Foreign	0.000327	-0.0272*	0.0460***	-0.00534
	(0.0147)	(0.0146)	(0.0131)	(0.0236)
Index	-0.138*	0.0917*	0.0314	-0.0162
	(0.0724)	(0.0470)	(0.0203)	(0.0282)
Age	0.000690	-0.000610	0.000306	0.00223
	(0.000863)	(0.000767)	(0.000415)	(0.00141)
Log(Assets)	-0.101***	-0.0976***	-0.0699***	0.00428
	(0.0156)	(0.0147)	(0.00748)	(0.0138)
Log(GDP)	0.0151	-0.0269	-0.00111	0.0506
	(0.0679)	(0.102)	(0.0948)	(0.0663)
Log(Population)	-0.156**	-0.0771	-0.0640	-0.0314
	(0.0635)	(0.0707)	(0.0612)	(0.0243)
Constant	1.607***	2.086***	1.663***	0.686*
	(0.371)	(0.599)	(0.463)	(0.367)
Observations	41,192	73,705	761,091	164,304
R-squared	0.018	0.012	0.009	0.012
Number of firms	15,969	33,598	218,458	48,377
Clustered at	Region	Region	Region	Region
Year dummy	Yes	Yes	Yes	Yes

COEs = collectively owned enterprises.

FIEs = foreign-invested enterprises.

GDP = gross domestic product.

POEs = privately owned enterprises.

SOEs = state-owned enterprises.

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

Notes: The dependent variable is the log of TFP. Robust standard errors in parentheses.

Source: Li and Huang (forthcoming).

Conclusion

Since China's accession to the WTO in late 2001, the Chinese Government has been incrementally relaxing restrictions on foreign banks—a process that continues. Initially, this raised some concerns among participants in the Chinese financial sector. The fear was that foreign banks would crowd out domestic

banks, and also that foreign banks would be under the control of their parent corporations rather than responsive to China's monetary authorities, and this would be a source of financial instability for China. Would incremental liberalisation of the banking sector prove to be a case of 'barbarians at the gate' or a positive opportunity for China?

Our empirical analysis shows that liberalising foreign bank lending benefits China's economy, at least in the case of the non-state banking sector. Despite their small market share in China, foreign banks help to improve the efficiency and competition of the Chinese banking sector. This in turn alleviates the financial constraints of firms, especially private firms that are less connected to the government—a finding that is consistent with the literature. The evidence above lends some support to the view in favour of achieving greater financial openness.

Liberalisation, however, is never a single-edged sword. Although foreign banks are under domestic regulation and rely on Chinese financial stability to generate profits, risk regulation should be undertaken with care. The right framework by which to rationalise the generally positive policy effects above is that of financial repression. In an economy with seriously repressive financial policies—which is a reasonable depiction of the current situation in China—the state sector is often strongly favoured, while the private sector (the focus of this study) is discriminated against.

Research has identified that the arrival of foreign banks in China appears to be associated with reduced repression in the banking sector, and therefore should reverse earlier adverse policy effects. This could mean hurting state enterprises while benefiting private enterprises, other things being equal. Reform programs should be designed with caution to ensure a smooth transition. While the case of foreign bank entry is useful for thinking about future reform steps, it is important to remember that our case study of opening-up foreign banks' RMB business is quite different from opening up the entire banking sector. However, this risk-reward framework and the positive results for competition in the banking sector offer the basis for broader policy deliberation.

Another crucial question for future research is that, although foreign bank entry can be beneficial in the current stage, will it be different if foreign banks are ever to take a much larger share of the financial market? Our answer is: possibly. The size of foreign banks in China will increase dramatically in the future and the domestic banking sector will face great challenges.

The decline of the size of foreign banks in China since 2008 was largely due to the GFC and the increasing liquidity challenges facing foreign parent companies. The current Chinese Government has shown great determination to implement

reforms. Even though economists expect China's 'new normal' growth rate to be 7 per cent, well down from the first decades of the reform era, this still points to a vast opportunity given the size of China's economy. Moreover, the Chinese Government has a sound fiscal system. An economic crush is unlikely to happen in the near future. Foreign banks will most likely seize this opportunity.

If our prediction of a big advance of foreign banks turns out to be true, domestic banks, especially large SOBs, will face the biggest challenges. Preparing the domestic banking sector is especially critical for China, a bank-centred economy. But reform in the banking sector is deeply intertwined with reforms in other areas. The NPLs of SOBs are largely from SOEs and local government financing vehicles. The new 'one belt and one road' policy could induce more long-term loans backed up by the government. The ongoing interest rate liberalisation further decreases banks' profit margins, leaving them less room to handle the challenges. The situation is tough, but the appropriate timing and sequencing of comprehensive reforms will help the Chinese economy smoothly adapt to its new normal.

However, foreign banks in China will also face tough competition; their Chinese counterparts are giants, and there is a large, established domestic customer base. Similarly, Chinese banks have rich experience in screening and monitoring Chinese customers. Without further reforms, implicit discrimination against foreign banks will persist.

References

- Abiad, A., Detragiache, E. and Tressel, T. (2008), *A new database of financial reforms*, Working Paper No. 2008-2266, Washington, DC: International Monetary Fund.
- Barajas, A., Steiner, R. and Salazar, N. (2000), The impact of liberalization and foreign investment in Colombia's financial sector, *Journal of Development Economics*, 63(1): 157–96.
- Berger, A., Hasan, I. and Zhou, M. (2009), Bank ownership and efficiency in China: What will happen in the world's largest nation?, *Journal of Banking and Finance*, 33(1): 113–30.
- Blomström, M. and Kokko, A. (1998), Multinational corporations and spillovers, *Journal of Economic Surveys*, 12(3): 247–77.
- Bonin, J. and Huang, Y. (2001), Dealing with the bad loans of the Chinese banks, *Journal of Asian Economics*, 12(2): 197–214.

Caves, R. (1974), The distinctive nature of multinational enterprise, in Dunning, J. (ed.), *Economic analysis and the multinational enterprise*, London: Allen & Unwin.

CEIC, a standing online commercial data service provider.

China Banking Regulatory Commission (CBRC) (2006), *Annual report 2006*, Beijing: CBRC.

China Banking Regulatory Commission (CBRC) (2011), *Annual report 2011*, Beijing: CBRC.

China Banking Regulatory Commission (CBRC) (2013), *Annual report 2013*, Beijing: CBRC.

Chung-Hua, S., Lu, C.H. and Wu, M.W. (2009), Impact of foreign bank entry on the performance of Chinese banks, *China & World Economy*, 17(3): 102–21.

Claessens, S., Demirgüç-Kunt, A. and Huizinga, H. (2001), How does foreign entry affect domestic banking markets?, *Journal of Banking and Finance*, 25(5): 891–911.

Clarke, G., Cull, R., D'Amato, L. and Molinari, A. (1999), *The effect of foreign entry on Argentina's domestic banking sector*, Policy Research Working Paper No. 158, Washington, DC: The World Bank.

Dell'Ariccia, G. and Marquez, R. (2004), Information and bank credit allocation, *Journal of Financial Economics*, 72(1): 185–214.

Dunning, J. (1980), Toward an eclectic theory of international production: Some empirical tests, *Journal of International Business Studies*, 11(1): 9–31.

Dunning, J. (1983), Market power of the firm and international transfer of technology: A historical excursion, *International Journal of Industrial Organization*, 1(4): 333–51.

Gang, F., Wang, X. and Zhu, H. 2003. NERI Index of Marketization for China's Provinces: 2003 Report. Beijing: Economic Science Press.

Gang, F., Wang, X. and Zhu, H. 2004. NERI Index of Marketization for China's Provinces: 2004 Report. Beijing: Economic Science Press.

Gang, F., Wang, X. and Zhu, H. 2007. NERI Index of Marketization for China's Provinces: 2007 Report. Beijing: Economic Science Press.

Gang, F., Wang, X. and Zhu, H. 2010. NERI Index of Marketization for China's Provinces: 2010 Report. Beijing: Economic Science Press.

- Giannetti, M. and Ongena, S. (2009), Financial integration and firm performance: Evidence from foreign bank entry in emerging markets, *Review of Finance*, 13(2): 181–223.
- Huidan, L. (2011), Foreign bank entry and firms' access to bank credit: Evidence from China, *Journal of Banking & Finance*, 35: 1,000–10.
- Hymer, S.H. (1960), *The international operation of national firms: A study of direct foreign investment*, Cambridge, Mass.: Massachusetts Institute of Technology Press.
- Leung, M.K. and Chan, R. (2006), Are foreign banks sure winners in post-WTO China?, *Business Horizons*, 49(3): 221–34.
- Leung, M.K., Rigby, D. and Young, T. (2003), Entry of foreign banks in the People's Republic of China: A survival analysis, *Applied Economics*, 35(1): 21–31.
- Levine, R. (1996), Foreign banks, financial development, and economic growth, in Barfield, C. (ed.), *International financial markets: Harmonization versus competition*, Washington, DC: AEI Press, pp. 224–54.
- Li, R. and Huang, Y. (forthcoming), How does financial opening affect industrial efficiency? The case of foreign bank entry in the People's Republic of China, *Asian Development Review*.
- Mao, Z., Wu, J. and Liu, M. (2010), An empirical study of foreign banks' effect on Chinese credit supply, *Journal of Financial Research*, 1: 106–16.
- Miller, T., Holmes, K.R. and Kim, A. (2015), *Index of economic freedom*, Washington, DC: The Heritage Foundation.
- Olley, G.S. and Pakes, A. 1996. The dynamics of productivity in the telecommunications equipment industry. *Econometrica*, 64: 1263–1297.
- Petersen, M. and Rajan, R. (1995), The effect of credit market competition on lending relationships, *Quarterly Journal of Economics*, 110(2): 407–43.
- Rajan, R. and Zingales, L. (1998), Financial dependence and growth, *American Economic Review*, 88(3): 559–86.
- Sarma, M. and Prashad, A. (2013), Do foreign banks in India indulge in cream skimming?, Paper presented at the Annual International Studies Convention, 10–12 December, Jawaharlal Nehru University, New Delhi.
- Sengupta, R. (2007), Foreign entry and bank competition, *Journal of Financial Economics*, 84(2): 502–28.

- Shen, Y., Shen, M., Xu, Z. and Bai, Y. (2009), Bank size and small- and medium-sized enterprise (SME) lending: Evidence from China, *World Development*, 37(4): 800–11.
- Unite, A. and Sullivan, M. (2003), The effect of foreign entry and ownership structure on the Philippine domestic banking market, *Journal of Banking and Finance*, 27(12): 2323–45.
- WIND, Wind Information Co., Ltd (Wind Info), a leading integrated service provider of financial data, information and software.
- World Bank (various years), *World development indicators*, Washington, DC: The World Bank.
- Xu, Y. (2011), Towards a more accurate measure of foreign bank entry and its impact on domestic banking performance: The case of China, *Journal of Banking and Finance*, 35(4): 886–901.

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