

Foreign Bank Participation in Developing Countries

What Do We Know about the Drivers and Consequences
of This Phenomenon?

Robert Cull

Maria Soledad Martinez Peria

The World Bank
Development Research Group
Finance and Private Sector Development Team
August 2010



Abstract

Foreign bank participation has increased steadily across developing countries since the mid-1990s. This paper documents this trend and surveys the existing literature to explore the drivers and consequences of this phenomenon, paying particular attention to the differences observed across regions both in the degree of foreign bank participation and in the impact of this process. Local profit opportunities, the absence of barriers to entry, and the presence of mechanisms to mitigate information problems have been the main factors

driving foreign bank entry across developing countries. In general, foreign bank participation has been shown to exert a positive influence on banking sector efficiency and competition. The weight of the evidence suggests that foreign bank presence does not endanger, but rather enhances banking sector stability. And although some case studies suggest that foreign bank entry limits access to finance, many cross-country studies offer evidence to the contrary.

This paper—a product of the Finance and Private Sector Development Team, Development Research Group—is part of a larger effort in the department to study the causes and consequences of financial integration. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The authors may be contacted at rcull@worldbank.org or mmartinezperia@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

**Foreign Bank Participation in Developing Countries:
What Do We Know about the Drivers and Consequences of This Phenomenon?**

Robert Cull and Maria Soledad Martinez Peria*

Keywords: financial globalization, foreign banks, foreign bank participation
JEL: F23, F36, G21

* Both authors are in the Finance and Private Sector Development Group of the World Bank (DECRG). We thank Diego Anzoategui, Natalia Teplitz, and Yan Zhu for excellent research assistance. We are grateful to Stijn Claessens and Neeltje van Horen for providing us data. The views expressed in this paper are those of the authors and do not reflect the opinions of The World Bank.

1. Introduction

The process of financial globalization, which accelerated in the 1990s, has brought many changes to developing countries' financial sectors. Countries have opened up their stock markets to foreign investors, allowed domestic firms to cross-list and issue debt overseas, and welcomed foreign direct investment into their local financial sectors. When it comes to the banking sector, arguably no change has been as transformative as the increase in foreign bank participation in developing countries. On average, across developing countries, the share of bank assets held by foreign banks has risen from 22 percent in 1996 to 39 percent in 2005.¹ At the same time, foreign bank claims on developing countries, which together with the loans extended by foreign bank branches and subsidiaries include cross-border loans, increased from 10 percent of GDP in 1996 to 26 percent in 2008.

There is significant debate surrounding the implications of foreign bank participation for developing countries. Supporters of this process argue that foreign banks can bring much needed capital as well as technical skills, and product innovation to developing countries. Also, they highlight the potential gains in terms of increased competition and improvements in the efficiency of the banking sector. On the other hand, the critics of foreign bank entry argue that foreign banks can destabilize the local banking sector due to a number of reasons. First, foreign banks can “import” shocks from their home countries and/or spread shocks from other developing countries in which they operate. Second, fierce competition with foreign banks can threaten the survival of the local banks. Finally, foreign banks can lead to reduced access to finance for a majority of domestic firms and consumers, if they only concentrate on a top and selected segment of the market.

This paper documents the increase in foreign bank participation in developing countries and, through an exhaustive literature review, explores the drivers and consequences of this phenomenon, paying particular attention to the differences observed across regions both in the degree of foreign bank participation and in the impact of this process. The increase in foreign bank participation has not been even. While the share of assets held by foreign banks has

¹ These statistics come from data collected by Claessens, Gurcanlar, Mercado Sapiani, and Van Horen (2008a). Though they also collect data for 2006, we do not include data up to that year because information on foreign bank ownership is missing for many countries in 2006.

increased steadily and achieved significant levels in Eastern Europe (52 percent), Latin America (34 percent), and Sub-Saharan Africa (50 percent), foreign bank participation has remained constant at very low levels in South Asia (7.5 percent). In East Asia and the Middle East, foreign bank entry has increased since the mid-1990s, but it still represents less than 20 percent of the system.

In terms of the drivers of foreign bank entry, the available empirical literature suggests that local profit opportunities, the absence of barriers to entry, and the presence of mechanisms to mitigate information problems have been the main factors driving the process of foreign bank entry in developing countries. Regarding the implications of foreign bank participation, with few exceptions, the overwhelming evidence from cross-country research and from a significant number of case studies focused on Eastern Europe and Latin America suggests that foreign banks are more efficient than domestic banks and, consequently, can exert competitive pressure. On the other hand, the evidence for Asia, a region that has been a latecomer to the process of foreign bank entry and where many barriers still exist, is more mixed. Research on the impact of foreign bank participation on banking stability suggests that for the most part foreign banks have played a stabilizing role in developing countries. As for the effects of foreign bank participation on access to finance, the evidence is mixed with many cross-country studies suggesting that foreign banks enhance access, but some case studies providing evidence to the contrary.

The rest of the paper is organized as follows. Section 2 discusses the trends and regional patterns of foreign bank participation. Section 3 summarizes the existing literature on the factors that have propelled this process, while Section 4 presents a survey of the literature on the implications of foreign bank participation for developing countries. Section 5 concludes and offers some suggestions for areas in need of further research.

2. Foreign Bank Participation in Developing Countries: Trends and Regional Patterns

While most developing countries have witnessed an increase in foreign bank participation since the mid-1990s, there are significant differences in the extent to which different regions have embraced this process. We look at the importance of foreign banks across regions in three ways. First, we examine the number of foreign banks relative to the total number of banks (see Figure 1). Second, we look into the share of assets held by foreign banks (Figure 2). Data on both of

these measures come from Claessens et al. (2008a). Finally, we also consider the ratio of total foreign claims relative to GDP (Figure 3). Total foreign claims refer to the sum of local plus cross-border claims, where the former are those booked by foreign bank branches or subsidiaries in the host country and the latter are booked outside of the host country.

Foreign bank presence as measured in terms of the number of foreign banks relative to the total number of banks has increased across every region between 1996 and 2005. In particular, Figure 1 shows that in regions like Sub-Saharan Africa and in Eastern Europe more than half of the banks in the system are foreign. Latin America also has a sizeable presence of foreign banks. In this region, the share of foreign banks rose from 27 percent in 1996 to almost 42 percent in 2005. In the Middle East, the share of foreign banks relative to the total number of banks rose from 14 percent to 24 percent between 1996 and 2005. East Asia and South Asia also witnessed an increase in the relative number of foreign banks, but both the change and the level are lower in these regions than in the others. In East Asia, the percentage of foreign banks rose from 12 to 19 percent. In South Asia, this percentage increased only from close to 6 to close to 8 percent.

According to data on the share of assets held by foreign banks, countries in Latin America and, especially, in Eastern Europe and Central Asia witnessed a remarkable transformation in their banking sectors. The share of foreign bank assets rose from an average of 17 percent to 34 percent in the case of the Latin America and 52 percent in the case of the Eastern Europe and Central Asia. Countries in Sub-Saharan Africa also have high levels of foreign bank participation - close to 50 percent of the system is foreign owned. But the increase in foreign bank participation between 1996 and 2005 was smaller than in the other two regions mentioned so far, given that Africa inherited high levels of foreign bank participation due to its colonial past. Relative to the aforementioned regions, the level of foreign bank participation in East Asia and in the Middle East and Northern Africa is much smaller, but in both regions (more so in East Asia) foreign bank presence has increased considerably since the mid-1990s. In East Asia, foreign bank participation increased from 4 to 15 percent. Among countries in the Middle East and Northern Africa, foreign bank presence rose from 7 to 11 percent. On the other hand, in South Asia, the share of assets held by foreign banks has remained fairly constant at 7.5 percent.

Table 1 illustrates the extent of heterogeneity in foreign bank participation within each region by reporting the maximum and minimum share of assets held by foreign banks in each region along with the coefficient of variation. The table also reports the median for each region. Across all regions, there is at least one country with practically no foreign bank participation: Vietnam in East Asia, Uzbekistan in Eastern Europe, Cuba in Latin America, Iran, Libya and Yemen in the Middle East and Northern Africa region, Bangladesh and Sri Lanka in South Asia, and Ethiopia in Sub-Saharan Africa. However, the median and maximum share of assets held by foreign banks is quite different across regions. The median (at 5 percent) and maximum values (for Pakistan at 23 percent) are lowest for South Asia and highest in Eastern Europe and Central Asia, where the median is 60 percent and the maximum corresponding to Estonia is almost 100 percent. In East Asia, the median share of assets held by foreign banks is 16 percent and the maximum corresponding to Korea is 44 percent. In the case of Latin America, the median share is 31 percent and the maximum corresponds to Peru, where foreign bank participation is at 95 percent. The median share of assets held by foreign banks is 11 percent in the Middle East and North Africa region. Lebanon with 34 percent of assets held by foreign banks is the country with the highest share of foreign bank participation in this region. Finally, the median share of assets held by foreign banks in Sub-Saharan Africa is 51 percent and the share is highest in countries such as Madagascar, Mozambique, and Swaziland, which have close to 100 percent foreign bank participation.

Not surprisingly, the degree of variability in the share of foreign bank participation within region, as captured by the coefficient of variation, is lowest for Eastern Europe and Sub-Saharan Africa, at 0.6, and highest for South Asia at 1.3. This statistic is 0.8 for Latin America, 1.1 for Middle East and North Africa, and 1 for East Asia. In other words, while most countries in Eastern Europe, Latin America, and Sub-Saharan Africa have embraced foreign bank entry, we observe greater variation in the degree of foreign bank participation in the remaining regions of the developing world.

One drawback with using the figures discussed so far on the share of assets held by foreign banks is that these statistics do not consider the importance of cross-border loans (i.e., those booked outside the host country). Hence, to address this potential limitation, we also look at data on total foreign claims to GDP (see Figure 3). These data, which come from the

Consolidated Banking Statistics published by the Bank for International Settlements, include both local claims extended by foreign bank branches and subsidiaries in the host country as well as cross-border claims extended from outside the host country.

Figure 3 shows that consistent with the other measures of foreign bank importance, data on foreign bank claims reveal a fairly steady increase in the role of foreign banks across developing countries.² As with other measures, foreign bank claims are largest and have witnessed the most sizeable increase in Eastern Europe and Central Asia and in Latin America. In Eastern Europe and Central Asia, the share of foreign claims to GDP rose from 8 percent in 1996 to 45 percent in 2008 and in Latin America this ratio increased from 19 to 44 percent over the same period. On the other hand, while Sub-Saharan Africa ranked among the regions with the highest level of foreign bank presence measured as a fraction of total bank assets, this region is at the bottom of the list when the importance of foreign banks is measured by the share of foreign claims to GDP. This might be due to the fact that relative to other regions, Sub-Saharan Africa receives fewer cross-border loans.³ Nonetheless as with the other two regions, foreign claims to GDP for Sub-Saharan Africa rose from 7 to 15 percent. In the case of East and South Asia, foreign claims to GDP rose from 13 and 5 percent, respectively, to 22 and 18 percent, respectively. Finally, in the case of the Middle East and North Africa region, foreign claims to GDP rose from 9 to 15 percent between 1996 and 2008.

3. The Drivers of Foreign Bank Entry

What is behind the rise in foreign bank participation in developing countries? The literature on the drivers of foreign bank participation has focused on four main sets of factors, namely: the desire of banks to follow their home customers abroad, the attractiveness of local profit opportunities in the host countries, the absence or elimination of barriers to foreign bank entry, and the presence of mechanisms to mitigate information costs of doing business in foreign markets. Below, we review and discuss the evidence on each of these factors.

² The recent crisis appears to have primarily impacted the ratio of foreign claims to GDP for Eastern Europe and Central Asia, which fell from 54 to 44 percent of GDP between 2007 and 2008.

³ Unfortunately, the BIS does not report separate statistics for local claims and cross-border claims so we cannot know this for sure.

Following home country customers

Early studies on foreign bank entry have argued that an important motivation for banks to enter new markets is the desire to follow their customers overseas. In other words, they open operations outside of the home country to meet the needs of their clients with international operations. As evidence for this motivation, many of the early studies found a significant relationship between the level of foreign direct investment in the United States and the level of participation by banks from the country of origin in the U.S. banking market (Goldberg and Saunders, 1981a; Hultman and McGee, 1989; Goldberg and Grosse, 1994). Subsequent studies found strong links between the participation of German banks in other countries and the level of German non-financial FDI in those countries (Buch, 2000; Wezel, 2004).

Other studies have linked foreign bank participation to measures of bilateral trade (Goldberg and Saunders, 1980, Focarelli and Pozzolo, 2000) or general measures of trade openness such as the ratio of imports to GDP (Goldberg and Saunders, 1981b, Focarelli and Pozzolo, 2001). A number of studies find significant relationships for both FDI and trade measures within the same econometric model of foreign bank participation (Goldberg and Johnson, 1990; Brealey and Kaplanis, 1996; Fisher and Molyneux, 1996).

A potential criticism of all of these studies is that FDI and trade are indirect measures, and thus not adequate proxies for the financial services provided by foreign banks to customers from their home countries that operate abroad. However, a similar conclusion is reached by studies using more direct data. For example, there is evidence that Japanese banks were more prevalent in countries where the demand for finance by Japanese manufacturing firms was high (Yamori, 1998). Also, the lending patterns of banks operating in the United States from Canada, France, Germany, Japan, the Netherlands, and the UK indicate that a sizable share of their portfolios went to home country borrowers (Seth et al., 1998).

At the same time, banks from four of the six countries in the Seth et al. study allocated the majority of their loans to non-home country borrowers. And cross-country evidence indicates that the marginal effects of trade openness on the level of foreign bank participation are small (Focarelli and Pozzolo, 2001). For these reasons, some researchers have argued that the follow-the-customer hypothesis might be overemphasized in the literature. However, it could be that

foreign banks start by serving customers from their country of origin and later branch out to pursue host country clients. Following customers abroad therefore could be an important, even necessary, first step on the way to fuller immersion in a new market. In that vein, Lee (2003) finds that after the Asian financial crisis, foreign bank participation in South Korea was largely determined by local economic growth and financial sector development, whereas in the pre-crisis period foreign banks were primarily supporting clients from their home country.

Pursuing opportunities in the host country

Along with the desire to serve home clients, studies have emphasized the importance of economic opportunities in the host countries as a motivation for foreign bank entry. In this regard, there is ample evidence that foreign banks are drawn to larger, more vibrant economies, with greater profit opportunities. Early studies for the US and Japan demonstrated that foreign bank participation was linked to measures of real GNP and GNP per capita (Goldberg and Johnson, 1990; Yamori, 1998) and to more specific measures of banking sector activity such as the size and growth rate of the banking sector and the rate of domestic investment (Goldberg and Saunders, 1980; Goldberg and Saunders, 1981b; Goldberg and Johnson, 1990; Yamori, 1998). Cross-country studies have also shown that foreign bank participation is positively related to the host country's GNP (Claessens et al., 2000) and financial depth (Focarelli and Pozzolo, 2000). Similarly, research on German banks indicates that these banks are drawn to markets with high levels of GDP and GDP per capita (Buch, 2000; Buch and Lipponer, 2004), while foreign bank participation in Hong Kong and Korea is linked to growth in the local banking sector (Leung, Young, and Fung, 2008; Lee, 2003).

Restrictions on foreign participation and the role of crisis

Another obvious factor that has been shown to affect the level of participation by foreign banks is the existence of restrictions on foreign bank entry and on the activities that banks can pursue, as well as the burdens imposed by regulations and supervision in the host country. Early studies pointed to the importance of specific pieces of legislation in spurring foreign bank participation such as the 1978 Banking Act in the United States and the Japanese Banking Act of 1982 (Goldberg and Saunders, 1981a; Hultman and McGee, 1989). Subsequent studies demonstrated that foreign bank participation is greater in markets where they face fewer regulatory restrictions

on their activities (Goldberg and Grosse, 1994; Focarelli and Pozzolo, 2000; Buch, 2003; Buch and De Long, 2004; Buch and Lipponer, 2004; Galindo et al, 2003; Bertus, Jahera, and Yost, 2008) and lower taxes (Claessens et al., 2000).

Although financial regulation and the restrictions on the entry and activities of foreign are typically taken to be exogenous in the empirical literature, those outcomes are the product of a political process, one that is heavily influenced by external events such as crises. After the Asian financial crisis, for example, governments relaxed entry barriers both in that region (Montgomery, 2003) and more broadly throughout the developing world (Domanski, 2005). Post-crisis policy measures in Argentina, Brazil, and Mexico also led to rapid increases in foreign bank participation (Peek et al., 2000). In Mexico and South Korea foreign banks were brought in specifically to re-capitalize the banking sector post-crisis (Moreno and Villar, 2005). A review of crisis episodes in twelve countries concluded that foreign banks tended not to have substantial presence pre-crisis, but were brought in to act as rehabilitators of weak or failed banks ex-post (Tschoegl, 2005).

Mechanisms that help mitigate information costs

Another strand of the literature on the determinants of foreign bank participation examines the costliness of acquiring information on borrowers in a destination market. Data from the top 100 multinational banks link greater foreign bank participation to the existence and quality of the credit reporting agency in the host country (Tsai et al, 2009). Another means of coping with informational asymmetry between lender and borrower is through ex-post enforcement in cases of default. Studies have shown that foreign bank participation levels are higher where there is less corruption and greater adherence to the rule of law (Galindo et al., 2003) and greater judicial efficiency (Focarelli and Pozzolo, 2000).

A final strand of the literature on how information costs affect the level of foreign bank participation emphasizes the roles of cultural similarity and geographic proximity. Cross-country evidence indicates that proximity between home and host country and a common language are associated with higher levels of foreign bank participation and greater likelihood of acquisition by a foreign bank (Buch, 2003; Buch and De Long, 2004). A common legal framework between home and host also coincides with higher levels of foreign bank participation (Galindo et al.,

2003; Buch, 2003; Buch and De Long, 2004). A more recent study emphasizes that it is not the absolute physical or cultural distance between home and host but rather a relative comparison with distances for other foreign competitors in the host market that affects location decisions (Claessens and Van Horen, 2008b).

4. The Consequences of Foreign Bank Entry

What is the impact of foreign bank participation in developing economies? Studies on the consequences of foreign bank entry have predominantly focused on three main areas: the implications of foreign bank entry on the efficiency and degree of competition in the banking sector, the impact on banking sector stability, and the effects on access to finance, in particular for opaque borrowers such as small businesses. In what follows, we review the evidence on each of these topics, highlighting wherever appropriate the differences observed across regions.

Foreign bank presence, efficiency, and competition

A series of cross-country empirical studies show that the presence of foreign-owned banks is associated with greater efficiency and competition in a host country's banking sector. In particular, foreign bank presence has been linked to lower net interest margins, profitability, cost ratios, and non-interest income for domestic banks in developing countries (Claessens et al., 2000, 2001; Claessens and Lee, 2003; Bayraktar and Wong, 2004). Also, foreign bank presence and fewer restrictions on banks' activities have been directly linked to greater competitiveness in a host country's banking sector as reflected in the Panzar-Rosse H statistic (Claessens and Laeven, 2003, Gelos and Roldos, 2004).

Other cross-country studies that compare the relative performance of foreign and domestic banks, find that foreign banks have relatively higher interest margins and profitability and lower overhead costs in developing host countries (Demirguc-Kunt and Huizinga, 2000; Micco, Panizza, and Yanez, 2007). Those authors, therefore, conclude that foreign banks in developing countries are relatively strong competitors in under-developed banking markets and can exert pressure on domestic banks to become more efficient and competitive.

Early case studies for countries in Latin America find results in line with those from the cross-country empirical literature. Foreign bank presence through the mid-1990s was linked to lower interest margins, overhead costs, and profitability of domestic banks in Argentina (Clarke et al., 2000). In Colombia, foreign bank presence was linked to declining non-financial costs for domestic banks (Barajas, et al., 2000).

Case study evidence from individual countries in Eastern Europe and Central Asia also points to increased competition as a result of foreign bank entry. Based on stochastic frontier analysis, foreign banks in Hungary were found to be more cost efficient than domestic banks, except in the medium-size range (Kiraly, et al., 2000). In Poland, foreign banks were found to be more cost efficient than domestic banks, except those domestic banks that had a high share of foreign customers (Nikiel and Opiela, 2002). At the same time, foreign banks (and domestic banks that catered to a foreign clientele) were not necessarily more profit efficient than other banks. In all, the results from Poland suggest that foreign bank entry contributed to increased competitiveness, but in specific market niches.

Regional studies for Latin America and Eastern Europe yield more ambiguous conclusions than country case studies. While a study on Argentina, Chile, Colombia, Mexico, and Peru reveals that increased foreign presence coincided with reductions in operating costs which, in turn, help to narrow spreads (Martinez Peria and Mody, 2004), another study that used the H-statistic as the measure of competition, including the same countries along with Brazil, Costa Rica, and El Salvador, concludes that foreign bank presence weakened competition (Levy-Yeyati and Micco, 2007). For Eastern Europe and Central Asia, while some studies based on cost estimations for nine countries from 1995 to 1999 fail to confirm that foreign banks are more cost efficient than domestic banks (Green et al., 2004, 2003), a series of other studies yield opposite results. For example, one study based on 319 banks across ten countries finds that greater foreign bank presence is associated with lower non-interest income, profits, and interest rates. Stochastic frontier analysis revealed foreign banks to be more cost and profit efficient than domestic banks, especially state-owned domestic banks (Bonin et al., 2005). Data envelope analysis on a larger set of banks from 17 countries also confirms that foreign banks were more efficient than their domestic counterparts in the last half of the 1990s (Grigorian and Manole, 2006). Moreover, a stochastic frontier analysis of 562 banks in Eastern Europe and Central Asia from 1993 to 2000

also finds that foreign banks are more cost efficient than domestic banks, but less profit efficient (Semih, Yildirim, and Philippatos, 2007). On balance, we view the results from Eastern Europe and Latin America as supporting improvement in competition due to foreign bank entry, especially in terms of cost reduction.

On the other hand, the evidence from Asia is much less supportive of the hypothesis that foreign banks help to improve competition in the domestic system. In part, this could be a reflection of the limited extent to which Asian countries have embraced foreign bank participation relative to other regions. At the extreme are China and India, which severely limited the entry and activities of foreign banks. In the case of India, stochastic frontier analysis shows that foreign banks are less cost efficient and productive than domestic banks (Sensarma, 2006). In part, this can be explained by the dominance of India's state-owned banking sector. It also comes as little surprise that the profitability of the few foreign banks in China was lower than that of domestic banks from 1996 to 2004 (Wu, Chen, and Lin, 2007). Those authors argue that majority-foreign owned banks do not affect the operational performance of domestic Chinese banks. However, recent evidence indicates that banks with greater (minority) foreign ownership shares and less state ownership are more cost and profit efficient than others in China (Berger, Hasan, and Zhou, 2009); and Chinese banks that signed cooperation agreements with foreign strategic investors reduced their non-performing loans (NPLs) ratios and increased their ratio of reserves to NPLs (Zhu et al., 2009). Results from the last two papers could provide an indication of the potential competitive benefits if China and India were to pursue a policy of greater openness to foreign banks.

Results are more positive, though still mixed for other Asian countries. In part, this may be due to the Asian financial crisis and to the limited extent to which Asian countries permitted foreign bank participation prior to the crisis. Both factors make it more difficult to identify any pro-competitive effects of foreign entry. For example, in Korea foreign bank entry was associated with lower costs ratios for domestic banks, but only among larger banks that had nationwide reach (Lee, 2003). As in Korea, increased foreign bank presence in the Philippines was associated with improvements in the efficiency and competitiveness of large domestic banks, while the profits of banks associated with business groups declined and their efficiency did not improve (Unite and Sullivan, 2002). In Thailand, family ownership of banks gave way to

foreign and state ownership as a result of the crisis. Results based on movements in the Lerner index do not reveal substantial improvement in competition as a result of this change in ownership structure (Kubo, 2006). Of course, little time had passed since the crisis and foreign banks were acquiring the most troubled domestic banks during this period. A more recent study indicates that foreign bank presence is associated with reductions in net interest margins, personnel expenses and return on assets for domestic banks and that improvement on efficiency measures was highest for banks acquired by foreign banks (Heberholz, 2008). Our overall view is that given the relatively low levels of foreign bank participation in most Asian countries, modest competitive effects on the domestic banking sector should have been expected.

Foreign bank penetration and banking sector stability

Evidence on the effects of foreign bank presence on banking sector stability is more clear-cut than that regarding efficiency and competition. Early cross-country evidence from developed and developing countries indicates that greater foreign bank presence is associated with lower probability of systemic banking crisis in the host country (Demirguc-Kunt et al., 1998). Subsequent research on a broader sample of 107 countries shows that official barriers to foreign bank entry are associated with measures of banking system fragility (Barth et al., 2004).

Another strand of this literature focuses on the response of foreign banks during crisis in a host country. For example, a study of 1565 banks from twenty emerging markets from 1989 to 2001 finds weak evidence that foreign banks' credit levels are less sensitive to monetary conditions in the host country while their lending and deposits rates are less volatile than those of domestic banks during crises (Arena, Reinhart, and Vazquez, 2007). Similar results are found for a sample of 250 banks from ten countries in Eastern Europe from 1993 to 2000 (De Haas and Van Lelyveld, 2006).

Other studies focus on foreign banks' actions in particular countries and during particular crises. Case studies of Argentina, Brazil, and Mexico from 1994 to 1999 indicate that foreign banks do not pull back from host countries in the face of their economic problems, but rather view these difficulties as an opportunity to become more firmly rooted in these economies (Peek et al., 2000). And in fact, in Argentina and Mexico foreign banks had higher growth rates and lower volatility of lending than domestic banks during the crises of the mid to late 1990s (Dages

et al., 2000). More generally, foreign banks in Latin American countries (Argentina, Brazil, Chile, Mexico, Peru, and Venezuela) showed more robust loan growth, a more aggressive response to asset deterioration, and greater ability to absorb losses than did domestic banks during this period (Crystal et al., 2001, 2002).

In case studies of the Asian financial crisis, foreign banks were not a major stabilizing force, but again this could be because they did not constitute a large share of the banking sectors of these countries. In Korea, foreign banks reduced their lending during the crisis while domestic banks did not (Jeon et al., 2006). A study of Malaysian banks from 1996 to 2001 comes to more nuanced conclusions (Detragiache and Gupta, 2006). Domestic and foreign banks that were mainly active in Malaysia had substantially lower profits and more non-performing loans than diversified foreign banks that were not specialized in Asia. The authors speculate that Malaysian subsidiaries of diversified banks received support from parent banks during the crisis and that their clienteles differed from those of Malaysian-focused banks. Support from parent banks did, therefore, play a small stabilizing role during the crisis in Malaysia.

More recent evidence also sheds light on how foreign banks' lending patterns promote stability in host country banking sectors. A study of banks and firms in 13 countries in Eastern Europe from 2000 to 2005 shows that lending relationships for foreign banks tend to be more stable than those of domestic banks in that foreign banks are less likely to drop their clients, even in the aftermath of an acquisition (Giannetti and Ongena, 2009b). Over time, however, competition from foreign banks has produced changes in the lending policies of domestic banks, making their lending relationships more stable and generally improving access to credit for all firms. A study of 91 countries from 1995 to 2003 finds that foreign bank presence is associated with real growth in industrial value added and with relatively lower volatility in that measure during crisis periods (Bruno and Hauswald, 2009). In that sense, foreign banks are seen as a stabilizing force, though the authors admit that these effects are more pronounced in middle and high-income countries than in low-income countries.

And yet there are indications that foreign banks can at times transmit economic shocks from their country of origin to host countries. For example, from 1989 to 1996 the Japanese banking crisis negatively affected the supply of real estate loans in U.S. states with high levels of

participation by Japanese banks (Peek and Rosengren, 2000). Similarly, while U.S. banks' claims on foreign countries from 1984 to 2000 were not highly sensitive to GDP and interest rates in a host country, they were sensitive to GDP growth in the U.S. (Goldberg, 2002). A study of claims on emerging economies from banks in the world's largest markets from 1992 to 2007 indicates that negative shocks to the financial health of those banks coincided with slowdowns in the growth of credit to those economies (McGuire and Tarashev, 2008).

Our overall view is that there are mechanisms by which foreign banks transmit economic problems from their country of origin to host markets, but, based on the cross-country studies and case studies of specific crises, it appears that on balance that disadvantage is outweighed by the relatively stable lending relationships forged by foreign banks and their generally stabilizing response to systemic crises in host countries.

Foreign bank entry and access to credit

A long-standing concern is that foreign banks skim off the top customers of domestic banks, thus undermining their financial health. In principle, this competition could be so destabilizing that some domestic banks would go out of business and the overall level of credit in the host country might decline. Indeed, one theoretical model demonstrates that when domestic banks are better at relationship lending, meaning they rely on 'soft' information in assessing a borrower's creditworthiness, the entry of foreign banks that are able to compete away clients that can secure loans based on hard information (e.g., balance sheets) could leave soft-information clients worse off and reduce welfare (Detragiache, Tressel, and Gupta, 2008). Ultimately, however, whether this theoretical possibility is valid is an empirical question.

Some cross-country level evidence suggests that foreign bank presence is associated with less provision of credit. For example, foreign bank presence is negatively associated with the average level of credit to the private sector (relative to GDP) and the growth rate in credit for 89 low income countries over the period 1999 to 2002 (Detragiache, Tressel, and Gupta, 2008). In effect, this is cross-sectional analysis because private credit levels and growth rates are averaged over the period of study. Some of our own research that looks more closely at the timing of foreign entry suggests that those associations might not be causal but rather are driven by the non-random entry of foreign banks into banking markets that were in crisis. First, we find strong

evidence that foreign bank entry from 1995 to 2002 did not precede crises (and drops in credit levels), but occurred largely as a result of those crises (Cull and Martinez Peria, 2008). Foreign banks often were brought in to acquire failed domestic banks and thus re-capitalize crisis-wrecked banking sectors in this period. Ridding the balance sheets of the non-performing assets of those target banks likely contributed to lower overall credit levels, but this could hardly be blamed on the foreign acquirers. Second, we find that when foreign bank presence was not crisis-induced, meaning that it was relatively high and stable from the beginning of the period, private credit levels were significantly higher than in other countries, and this was true even during and after crises. In that sense, foreign banks could be seen as a stabilizing force, in line with some of the evidence from the previous section.

While the cross-country evidence on credit levels yields inconclusive results, the evidence on differences in lending styles between foreign and domestic banks is clearer. Foreign banks tend to have difficulties in lending to borrowers that lack the hard information to prove their creditworthiness. A study of 1600 banks across 100 developing countries from 1992 to 1999 concludes that foreign banks have access to external liquidity from their parent banks, but in return for that source of funding the local branch of a foreign bank has little discretion to make lending decisions based on anything other than hard information (Mian, 2003). Smaller, informationally opaque borrowers should therefore find it harder to borrow from foreign banks, and micro-evidence from a sample of 80,000 loans in Pakistan from 1996 to 2002 shows that as geographic distance and cultural dissimilarities between the headquarters of a foreign bank and its branches in the host country increase, lending is increasingly based on hard information (Mian, 2006). That distance also makes foreign banks in Pakistan less likely to renegotiate the terms of a loan and to recover in cases of default. Based on the borrowing profiles of over 60,000 non-financial firms in Argentina in 1997, large and foreign-owned banks are less likely to lend to small, informationally opaque borrowers than other banks (Berger, Klapper, and Udell, 2001).

Does the tendency for foreign banks to rely on hard information in lending decisions result in less overall lending to small and medium-sized businesses? The evidence here is mixed. A descriptive study of banks in eleven countries in Eastern Europe and Central Asia from 1995 to 2006 concludes that while foreign banks contributed to the overall development and stability of banking sectors, those markets remain shallow and access to credit for SMEs limited (Marton

and McCarthy, 2008). Evidence from India in the 1990s indicates that the entry of foreign banks expanded access to credit for only a small subset of profitable firms, and that long-term lending by development banks might have declined (Gormley, 2007). Looking at the consequences of foreign bank entry for access to financial services more generally, Beck and Martinez Peria (2010) find that primarily rich and urban municipalities in Mexico benefited from the significant increase in foreign bank participation (from 2 to 83 percent) that occurred in that country between 1997 and 2005.

Some survey evidence leads to the opposite conclusion, however. Interviews with managers of foreign banks in Central Europe and the Baltics indicate that the intention was to incorporate lending to small firms over time and that there was no intended bias toward lending to large multinationals (De Haas and Naaborg, 2006). Competition from foreign banks could conceivably compel domestic banks to pursue new market niches, and 44% of the managers of 220 banks in 60 countries indicated that their bank began lending to small businesses because of the competition in lending to large and medium-sized businesses (Jenkins, 2000). Evidence collected via surveys of banks in Latin America (de la Torre, Martinez Peria, and Schmukler, 2010) and in 45 countries around the world (Beck, Demirguc-Kunt and Martinez Peria, 2009) shows that though foreign banks are more likely to rely on hard information to lend to SMEs, there is no difference in the extent of their involvement with these firms relative to large domestic and government-owned banks.

Empirical analysis based on large samples of firms and countries helps shed light on these issues. Analysis of a survey of over 3000 firms in 35 developing and transition countries reveals that foreign bank presence is associated with improved financing conditions for all firms, though the effects were greater for larger firms (Clarke et al., 2006). Data from 60,000 firms from fourteen countries in Eastern Europe and Central Asia from 1993 to 2002 indicates that foreign bank lending was associated with growth in firms' sales, assets, and leverage, though again the effects were less pronounced for small firms (Giannatti and Ongena, 2009a). On the other hand, these effects were most pronounced for young firms, indicating that foreign banks helped broaden access to credit.

Bank-level empirical analyses of individual countries also lead to the conclusion that, while foreign banks face difficulties in lending to small businesses based on soft information, they can reach that market segment via other methods. For example, a study in Argentina from 1998 to 2000 concluded that, although foreign banks tended to lend a smaller share of their portfolios to SMEs, those banks, which tended to be relatively large, accounted for almost half of total lending to SMEs (Escude et al., 2001). A study of Argentina, Chile, Colombia, and Peru also found that foreign banks typically lent a smaller share of their portfolios to SMEs than domestic banks, but the disparity was due to smaller foreign banks (Clarke et al., 2005). Large foreign banks either lent about as much to SMEs as large domestic banks (in Argentina and Peru) or more (Chile and Colombia).

In all, the evidence suggests that the effect of foreign bank presence on lending to SMEs and overall credit levels could be positive or negative. Our sense is that this might differ across countries depending on the level of development and the extent of competition in the domestic banking sector and the ability of banks to circumvent information problems using lending technologies other than relationship lending. Finally, differences might also arise depending on the extent of participation of foreign banks in the banking sector. However, more research will be needed to determine what exactly drives the differences observed in the literature.

5. Conclusions

Most developing countries around the world have seen an increase in foreign bank participation since the mid-1990s. However, this process has not been uniform. While regions like Eastern Europe, Latin America, and Sub-Saharan Africa quickly welcomed and promoted foreign bank entry, Asia and the Middle East have been late-comers to this process and so far have only partially opened up their banking sectors. This paper has reviewed these trends and attempted to condense and draw conclusions from the existing evidence on the drivers and consequences of foreign bank entry.

When it comes to the drivers of foreign bank participation, there is little doubt that the search for profit opportunities, the elimination of barriers to entry, and the presence of factors that help mitigate the information costs of operating in foreign markets have played a key role in promoting foreign bank participation in developing countries. On the other hand, the evidence on

the consequences of foreign bank participation is less clear cut. Overall, our reading of the literature is that foreign bank entry has enhanced competition and stability in developing countries, but the impact on access to finance is less clear and needs to be explored further. At the same time, as countries emerge from the 2007-2008 crisis, it will be interesting to see what measures are taken regarding the presence of foreign banks (i.e., whether countries like China and India continue to open up) and what the evidence reveals regarding their role in the international transmission of this past crisis.

References

- Arena, M., Reinhart, C. M. and Vazquez, F., 2007, "The Lending Channel in Emerging Economics: Are Foreign Banks Different?" IMF Working Paper No. 07/48.
- Barajas, A., Steiner, R. and Salazar, N., 2000, "Foreign Investment in Colombia's Financial Sector," in Claessens, S. and Marion Jansen, (eds.), *The Internationalization of Financial Services: Issues and Lessons for Developing Countries*, Boston, Mass.: Kluwer Academic Press.
- Barth, J. R., Caprio, G. and Levine, R., 2004, "Bank Regulation and Supervision: What Works Best?" *Journal of Financial Intermediation*, Vol. 13, No.2, pp. 205-48
- Bayraktar, J.R. and Wang, Y., 2004, "Foreign Bank Entry, Performance of Domestic Banks and Sequence of Financial Liberalization." World Bank Policy Research Working Paper No. 3416.
- Beck, T., Demirguc-Kunt, A., and Martinez Peria, M.S., 2009, "Bank Financing for SMEs: Evidence Across Countries and Bank-Ownership Types." World Bank. Mimeo.
- Beck, T., and Martinez Peria, M.S., 2010, "Foreign Bank Participation and Outreach: Evidence from Mexico." *Journal of Financial Intermediation* Vol. 19, pp. 52-73.
- Berger, A. N., 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*, Vol. 33, No. 1, pp. 113-30.
- Berger, A. N., Klapper, L. F. and Udell, G. F., 2001, "The Ability of Banks to Lend to Informationally Opaque Small Businesses." *Journal of Banking and Finance*, Vol. 25, No. 12, pp. 2127-67.
- Bertus, M., Jahera, J. J. and Yost, K., 2008, "A Note on Foreign Bank Ownership and Monitoring: An International Comparison." *Journal of Banking & Finance*, Vol. 32, No. 2, pp. 338-45.
- Bonin, J. P., Hasan I., and Wachtel P., 2005, "Privatization Matters: Bank Efficiency in Transition Countries." *Journal of Banking and Finance*, Vol. 29, No. 8-9, pp. 2155-78.
- Brealey, R. A. and Kaplanis, E. C., 1996, "The Determination of Foreign Banking Location" *Journal of International Money and Finance*, Vol. 15, No.4, pp. 577-97.
- Bruno, V., Hauswald, R. B. H., 2009, "The Real Effect of Foreign Banks," Paolo Baffi Centre Research Paper Series No. 2009-50. Available at SSRN: <http://ssrn.com/abstract=1344074>
- Buch, C. M., 2000, "Why Do Banks Go Abroad – Evidence from German Data." *Financial Markets, Institutions and Instruments*, Vol. 9, No. 1, pp. 33-67.
- Buch, C. M., 2003, "Information or Regulation: What Drives the International Activities of Commercial Banks?" *Journal of Money, Credit and Banking*, Vol. 35, No. 6, pp. 851-69.

- Buch, C. M. and DeLong, G., 2004, "Cross-Border Bank Mergers: What Lures the Rare Animal?" *Journal of Banking and Finance*, Vol. 28, No. 9, pp. 2077-2102.
- Buch, C. M. and Lipponer, A., 2004, "FDI Versus Cross-Border Financial Services: the Globalization of German Banks." Deutsche Bundesbank, Studies of the Economic Research Centre Discussion Paper No.05/2004.
- Claessens, S., Demirgüç-Kunt, A. and Huizinga, H., 2000, "The Role of Foreign Banks in Domestic Banking Systems" in Claessens, S. and Marion Jansen, (eds.), *The Internationalization of Financial Services: Issues and Lessons for Developing Countries*, Boston, Mass.: Kluwer Academic Press.
- Claessens, S., Demirgüç-Kunt, A. and Huizinga, H., 2001, "How Does Foreign Entry Affect Domestic Banking Markets?" *Journal of Banking and Finance*, Vol. 25, No.5, pp. 891-911.
- Claessens, S. and Laeven, L., 2003, "What Drives Bank Competition? Some International Evidence." *Journal of Money, Credit and Banking*, Vol. 36, No. 3, pp. 563-83.
- Claessens, S. and Lee, J. K., 2003, "Foreign Banks in Low Income Countries: Recent Developments and Impacts," in J. Hanson, P. Honohan, and G. Majnoni, (eds.), *Globalization and National Financial Systems*. Washington, DC: World Bank.
- Claessens, S. , Gurcanlar, T., Mercado Sapiani, J, and Van Horen, N., 2008a, "Foreign Bank Presence in Developing Countries 1995-2006: Data and Trends." Mimeo. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1107295.
- Claessens, S. and Van Horen, N., 2008b, "Location Decisions of Foreign Banks and Institutional Competitive Advantage." De Nederlandsche Bank Working Paper, n. 172, April.
- Claessens, S. and Van Horen, N., 2009, "Being a Foreigner among Domestic Banks: Asset or Liability?" Munich Personal RePEc Archive Paper No. 13467, February.
- Clarke, G., Cull, R., D'Amato, L. and Molinari, A., 2000, "On the Kindness of Strangers? The Impact of Foreign Entry on Domestic Banks in Argentina," in Claessens, S. and Marion Jansen, (eds.), *The Internationalization of Financial Services: Issues and Lessons for Developing Countries*, Boston, Mass.: Kluwer Academic Press.
- Clarke, G., Cull, R. and Martínez Pería, M. S., 2006, "Foreign Bank Participation and Access to Credit Across Firms in Developing Countries." *Journal of Comparative Economics*, Vol. 34, No. 4, pp. 774-95.
- Clarke, G., Cull, R., Martínez Pería, M. S. and Sánchez, S.M., 2005, "Bank Lending to Small Businesses in Latin America: Does Bank Origin Matter?" *Journal of Money, Credit and Banking*, Vol. 37, No. 1, pp. 83-118.
- Crystal, J. S., Dages, B.G. and Goldberg, L.S., 2001, "Does Foreign Ownership Contribute to Sounder Banks in Emerging Markets? The Latin American Experience," *Open Doors: Foreign Participation in Financial Systems in Developing Countries*, April 19-21.

- Crystal, J. S., Dages, B.G. and Goldberg, L.S., 2002, "Has Foreign Bank Entry Led to Sounder Banks in Latin America?" Federal Reserve Bank of New York, Current Issues in Economic and Finance, Vol.8, No.1, January.
- Cull, R. and Martinez Peria, M. S., 2008, "Crises as Catalysts for Foreign Bank Activity in Emerging Markets." In Justin Robertson, (ed.), *Power and Politics After Financial Crisis: Rethinking Foreign Opportunism in Emerging Markets*, New York: Palgrave Macmillan.
- Dages, B.G., Goldberg, L.B. and Kinney, D., 2000, "Foreign and Domestic Bank Participation in Emerging Markets: Lessons from Mexico and Argentina." NBER Working Paper No. W7714. New York: Federal Reserve Bank of New York.
- De Haas, R. and Naaborg, I., 2006, "Foreign Banks in Transition Countries: To Whom Do They Lend and How Are They Financed?" *Financial Markets, Institutions & Instruments*, Vol. 15, No. 4, pp. 159-99.
- De Hass, R. and Van Lelyveld, I., 2006, "Foreign Banks and Credit Stability in Central and Eastern Europe. A Panel Data Analysis." *Journal of Banking and Finance*, Vol. 30, No. 7, pp. 1927-52.
- De la Torre, A., Martinez Peria, M.S., and Schmukler, S., 2010, "Bank Involvement with SMEs: Beyond Relationship Lending." *Journal of Banking and Finance*, Forthcoming.
- Demirgüç-Kunt, A. and Huizinga, H., 2000, "Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence," *World Bank Economic Review*, Vol. 13, No. 2, pp. 379-408.
- Demirgüç-Kunt, A., Levine, R. and Min, H., 1998, "Opening to Foreign Banks: Issues of Stability, Efficiency and Growth," in Seongtae Lee, (ed.), *The Implications of Globalization of World Financial Markets*, Seoul, Korea: The Bank of Korea, 1998, p. 83-115.
- Detragiache, E. and Gupta, P., 2006, "Foreign Banks in Emerging Market Crises: Evidence from Malaysia." *Journal of Financial Stability*, Vol. 2, No. 3, pp. 217-42.
- Detragiache, E., Tressel T., and Gupta P., 2008, "Foreign Banks in Poor Countries: Theory and Evidence." *Journal of Finance*, Vol. 63, No. 5, pp. 2123-60.
- Domanski, D., 2005, "Foreign Banks in Emerging Market Economies: Changing Players, Changing Issues," *BIS Quarterly Review*, December, pp. 69-81.
- Escude G., Burdisso, T., Catena, M., D'Amato, L., Mc Candless, G. and Murphy, T., 2001, "Las MIPyMES y el Mercado de Crédito en la Argentina," Documento de Trabajo Nro. 15, Banco Central de la República Argentina,
- Fisher, A. and Molyneux, P., 1996, "A Note on the Determinants of Foreign Bank Activity in London between 1980 and 1989." *Applied Financial Economics*, Vol. 6, No. 3, pp. 271-77.

- Focarelli, D. and Pozzolo, A., 2000, "The Determinants of Cross-Border Shareholding: An Analysis with Bank-Level Data from OECD Countries." Bank of Italy, Economic Working Paper Series No. 381, October.
- Focarelli, D. and Pozzolo, A., 2001, "The Patterns of Cross-Border Bank Mergers and Shareholdings in OECD Countries." *Journal of Banking and Finance*, Vol. 25, No. 12, pp. 2305-37
- Galindo, A., Micco, J. and Serra, C., 2003, "Better the Devil that you Know: Evidence on Entry Costs Faced by Foreign Banks," IDB Research Department Working Paper 477.
- Gelos, R.G. and Roldós, J., 2004, "Consolidation and Market Structure in Emerging Market Banking Systems," *Emerging Markets Review*, Vol. 5, No. 1, pp. 39-59.
- Giannetti, M. and Ongena, S., 2009a, "Financial Integration and Firm Performance: Evidence from Foreign Bank Entry in Emerging Markets," *Review of Finance* Vol. 13, pp. 181-223.
- Giannetti, M. and Ongena, S., 2009b, "Lending by Example: Direct and Indirect Effects of Foreign Banks in Emerging Markets" Second Singapore International Conference on Finance 2008, AFA 2009 San Francisco Meetings Paper and ECGI - Finance Working Paper No. 221/2008.
- Goldberg, L. B., 2002, "When is U.S. Bank Lending to Emerging Markets Volatile?" in S. Edwards and J.A. Frankel, (eds.), *Preventing Currency Crisis in Emerging Markets*, National Bureau of Economic Research.
- Goldberg, L.G. and Grosse, R., 1994, "Location Choice of Foreign Banks in the United States." *Journal of Economic and Business*, Vol. 46, pp. 367-79.
- Goldberg, L.G. and Johnson, D., 1990, "The Determinants of US Banking Activity Abroad." *Journal of International Money and Finance*, Vol. 9, No. 2, pp. 123-37.
- Goldberg, L.G. and Saunders, A., 1980, "The Causes of U.S. Bank Expansion Overseas: The Case of Great Britain." *Journal of Money, Credit and Banking*, Vol. 12, No. 4, pp. 630-43.
- Goldberg, L.G. and Saunders, A., 1981a, "The Determinants of Foreign Banking Activity in the United States." *Journal of Banking and Finance*, Vol. 5, No. 1, pp. 17-32.
- Goldberg, L.G. and Saunders, A., 1981b, "The Growth of Organizational Forms of Foreign Banks in the US: Note." *Journal of Money, Credit and Banking*, Vol. 13. No. 3, pp. 365-74.
- Gormley, T. A., 2007, "The Impact of Foreign Bank Entry in Emerging Markets: Evidence from India." *Journal of Financial Intermediation*, Vol.19, No. 1, pp. 26-51
- Green, C. J., Murinde, V. and Nikolov, I., 2004, "The Efficiency of Foreign and Domestic Banks in Central and Eastern Europe: Evidence on Economies of Scale and Scope." *Journal of Emerging Market Finance*, Vol. 3, No. 2, pp.175-205.

Green, C. J., Murinde, V. and Nikolov, I., 2003, "Are Foreign Banks in Central and Eastern Europe more Efficient than Domestic Banks?" Mimeo, Loughborough University, July.

Grigorian, D. and Manole, V., 2006, "Determinants of Commercial Bank Performance in Transition: An Application of Data Envelopment Analysis." *Comparative Economic Studies*, Vol. 48, No. 3, pp. 497-522.

Herberholz C., 2008, "The Foreign Bank Effect on Value Creation in Commercial Banks Incorporated in Thailand," *The Singapore Economic Review*, Vol. 53, No. 2, pp. 215-244.

Hultman, C. W., and McGee, R., 1989, "Factors Affecting the Foreign Banking Presence in the United States," *Journal of Banking and Finance*, Vol. 13, No. 3, pp. 383-96.

Jenkins, H. 2000, "Commercial Bank Behavior in Micro and Small Enterprise Finance." Development Discussion Paper No. 741. Harvard Institute for International Development, Harvard University.

Jeon, Y., Miller, S. M. and Natke, P.A., 2006, "Do Foreign Bank Operations Provide a Stabilizing Influence in Korea?" *The Quarterly Review of Economic and Finance*, Vol. 46, No. 1, pp. 82-109.

Kiraly, J., Majer, B., Matyas, L., Ocsi, B., Sugar, A. and Varhegyi, E., 2000, "Experience with Internationalization of Financial Service Providers – Case Study: Hungary," in Claessens, S. and Marion Jansen, (eds.), *The Internationalization of Financial Services: Issues and Lessons for Developing Countries*, Boston, Mass.: Kluwer Academic Press.

Kubo, K., 2006, "The Degree of Competition in the Thai Banking Industry Before and After the East Asian Crisis." *ASEAN Economic Bulletin*, Vol. 23, No. 3, pp. 325-40.

Lee, B., 2003, "The Determinants of Foreign Banks' Entry in Korea and Its Effects on Korean Domestic Banks' Performance," *Economic Papers*, Vol. 6, No. 1, pp. 42-65

Leung, M. K., Young, T. and Fung, M. K., 2008, "The Entry and Exit Decisions of Foreign Banks in Hong Kong." *Managerial and Decision Economics*, No. 29, No. 6, pp. 503-12.

Levy-Yeyati, E. and Micco, A., 2007, "Concentration and Foreign Penetration in Latin American Banking Sectors: Impact on Competition and Risk." *Journal of Banking and Finance*, Vol. 31, No. 6, pp. 1633-47.

Martínez Pería, M. S. and Mody, A., 2004, "How Foreign Participation and Market Concentration Impact Bank Spreads: Evidence from Latin-America." *Journal of Money, Credit and Banking*, Vol. 36, No. 3, pp. 511-37.

Marton, K. and McCarthy, C. H., 2008, "From State to Foreign Ownership: The Banking Sector in Eastern and Central Europe." *2008 Global Economy Journal*, Volume 8, Issue 3 Article 8.

McGuire, P. and Tarashev, N., 2008, "Bank Health and Lending to Emerging Markets" *BIS Quarterly Review*, Available at BIS: http://www.bis.org/publ/qtrpdf/r_qt0812g.htm

- Mian, A., 2003, "Foreign, Private Domestic, And Government Banks: New Evidence from Emerging Markets." Working paper, University of Chicago. Available on line at http://faculty.chicagobooth.edu/atif.mian/research/Mian_DFGMacro.pdf
- Mian, A., 2006, "Distance Constraints: the Limits of Foreign Lending in Poor Countries." *The Journal of Finance*, Vol. 61, No. 3, pp. 1465-1505.
- Micco, A., Panizza, U. and Yañez, M., 2007, "Bank Ownership and Performance. Does Politics Matter?" *Journal of Banking and Finance*, Vol. 31, No. 1, pp. 219-41.
- Montgomery, H. A., 2003, "The Role of Foreign Banks in Post-Crisis Asia: The Importance of Method of Entry." ADB Institute Research Paper 51.
- Moreno, R. and Villar, A., 2005, "The Increased Role of Foreign Bank Entry in Emerging Markets." Bank of International Settlements Paper 23, August.
- Nikiel, E. M. and Opiela, T. P., 2002, "Customer Type and Bank Efficiency in Poland: Implications for Emerging Market Banking," *Contemporary Economic Policy*, Vol. 20, No. 3, pp. 255-71.
- Peek, J. and Rosengren, E. S., 2000, "Collateral Damage: Effects of the Japanese Bank Crisis on Real Activity in the United States" *American Economic Review*, Vol. 90, No. 1, pp. 30-45.
- Peek, J., Rosengren, E. S. and Kasirye, F., 2000, "Implication of the Globalization of the Banking Sector: The Latin American Experience." *Federal Reserve Bank of Boston New England Economic Review*, September-October, pp. 45-62.
- Semih Yildirim, H. and Philippatos, G. C., 2007, "Efficiency of Banks: Recent Evidence from the Transition Economies of Europe, 1993–2000." *The European Journal of Finance* Vol. 13, No. 2, pp. 123–43.
- Sensarma, R., 2006, "Are Foreign Banks Always the Best? Comparison of State-Owned, Private and Foreign Banks in India." *Economic Modeling*, Vol. 23, No. 4, pp. 717-35.
- Seth, R., Nolle, D. E., and Mohanty, S. K., 1998, "Do Banks Follow Their Customers Abroad?" *Financial Markets, Institutions, and Instruments*, Vol. 7, No. 4, pp. 1-25.
- Tsai, Hsiangping, Chang, Yuanchen and Hsiao, Pei-Hsin, 2009, "What Drives Foreign Expansion of the Top 100 Multinational Banks? The Role of the Credit Reporting System." 22nd Australasian Finance and Banking Conference 2009. Available at SSRN: <http://ssrn.com/abstract=1459882>
- Tschoegl, A.E., 2005, "Financial Crisis and the Presence of Foreign Banks," in Patrick Honohan and Luc Laeven, (ed), *Systemic Financial Crises: Containment and Resolution*, New York, USA, Cambridge University Press.

Unite, A. A. and Sullivan, M. J., 2002, "The Impact of Liberalization of Foreign Bank Entry on the Philippine Domestic Banking Market," Philippine APEC Study Center Network Discussion Paper No. 2001-08.

Wezel, T., 2004, "Foreign Bank Entry into Emerging Economies: An Empirical Assessment of the Determinants and Risks Predicated on German FDI Data," Deutsche Bundesbank, Discussion Paper, Series 1: Studies of the Economic Research Centre, No. 01/2004.

Wu, H-L., Chen, C-H. and Lin, M-H., 2007, "The Effect of Foreign Bank Entry on the Operational Performance of Commercial Banks in the Chinese Transitional Economy." *Post-Communist Economies*, Vol. 19, No. 3, pp. 343-357.

Yamori, N., 1998, "A Note on the Location Choice of Multinational Banks: The Case of Japanese Financial Institutions," *Journal of Banking and Finance*, Vol. 22, No.1, pp. 109-120.

Zhu, Y., Li, P., Zeng, Y. and He, J., 2009, "Foreign Ownership and the Risk Behavior of Chinese Banks: Do Foreign Strategic Investors Matter?" Mimeo, August.

Figure 1: Number of foreign banks relative to all banks across developing countries

This figure shows the average number of foreign banks (expressed as percentage of total banks) in each region at each point in time. The data come from Claessens et al. (2008a).

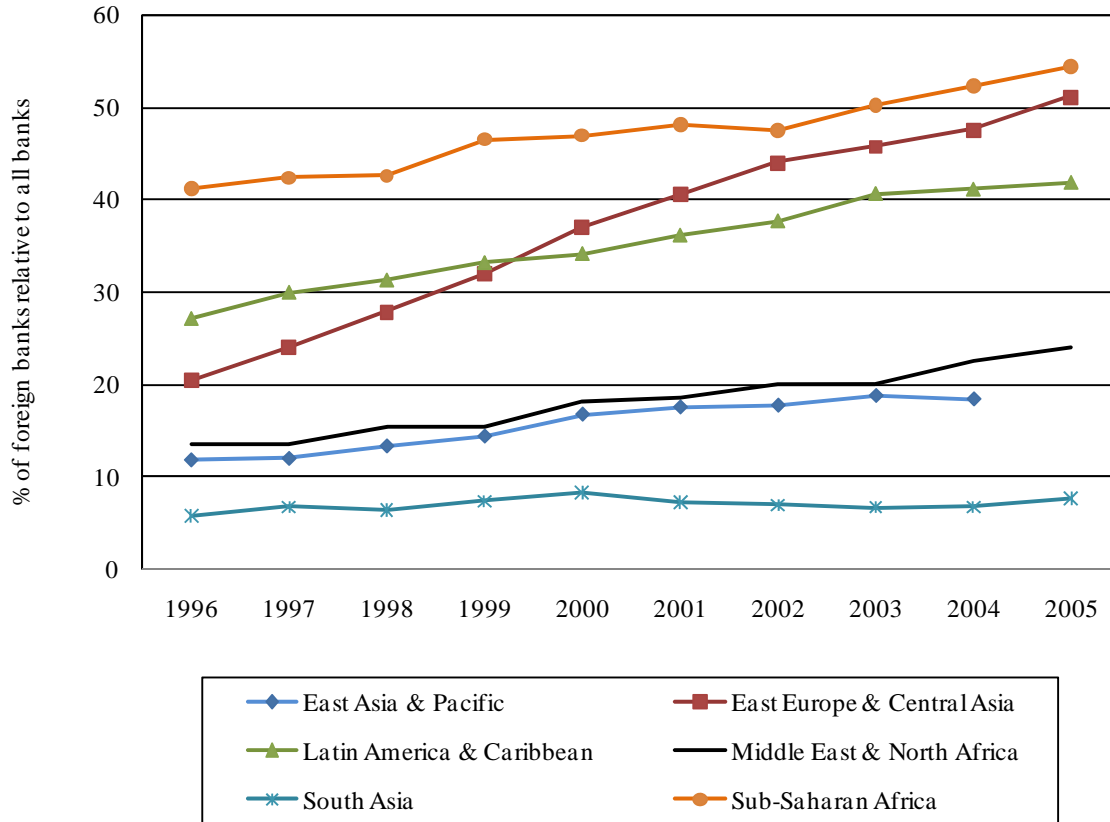


Figure 2: Share of assets held by foreign banks across developing countries

This figure shows the average share of assets held by foreign banks (expressed as percentage of total assets) in each region at each point in time. The data come from Claessens et al. (2008a).

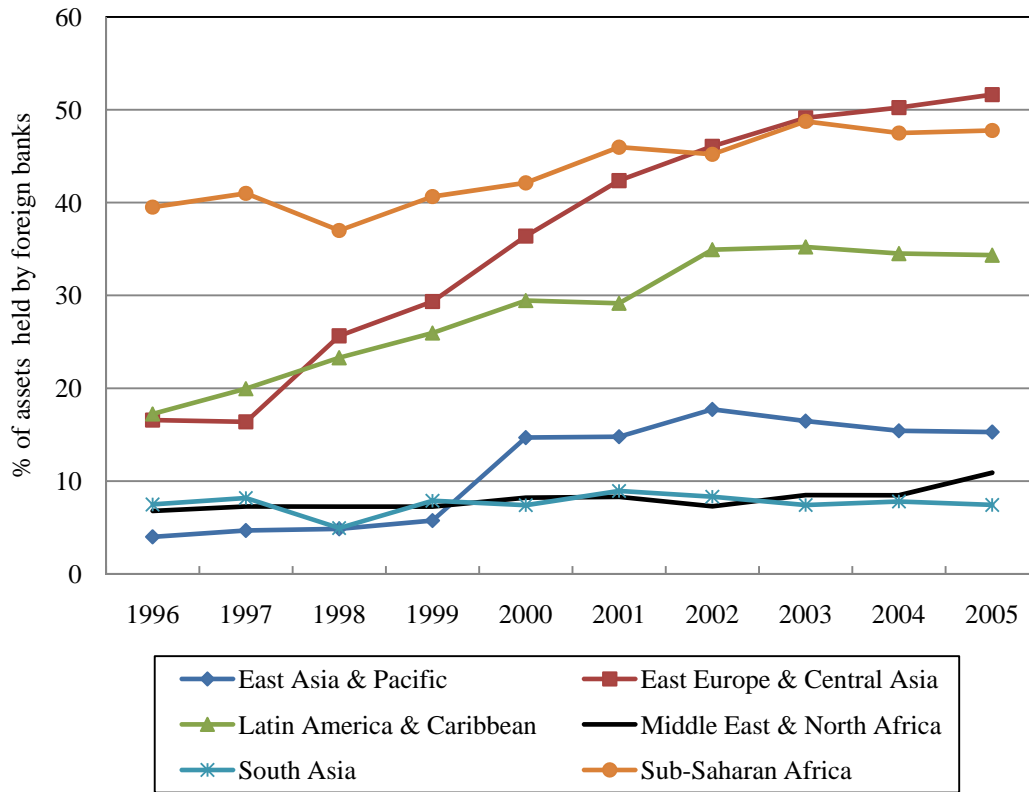


Figure 3: Total foreign claims relative to GDP across developing countries,

This figure shows the average share of total foreign claims (expressed as percentage of GDP) in each region at each point in time. The data come from the BIS *Consolidated Banking Statistics*.

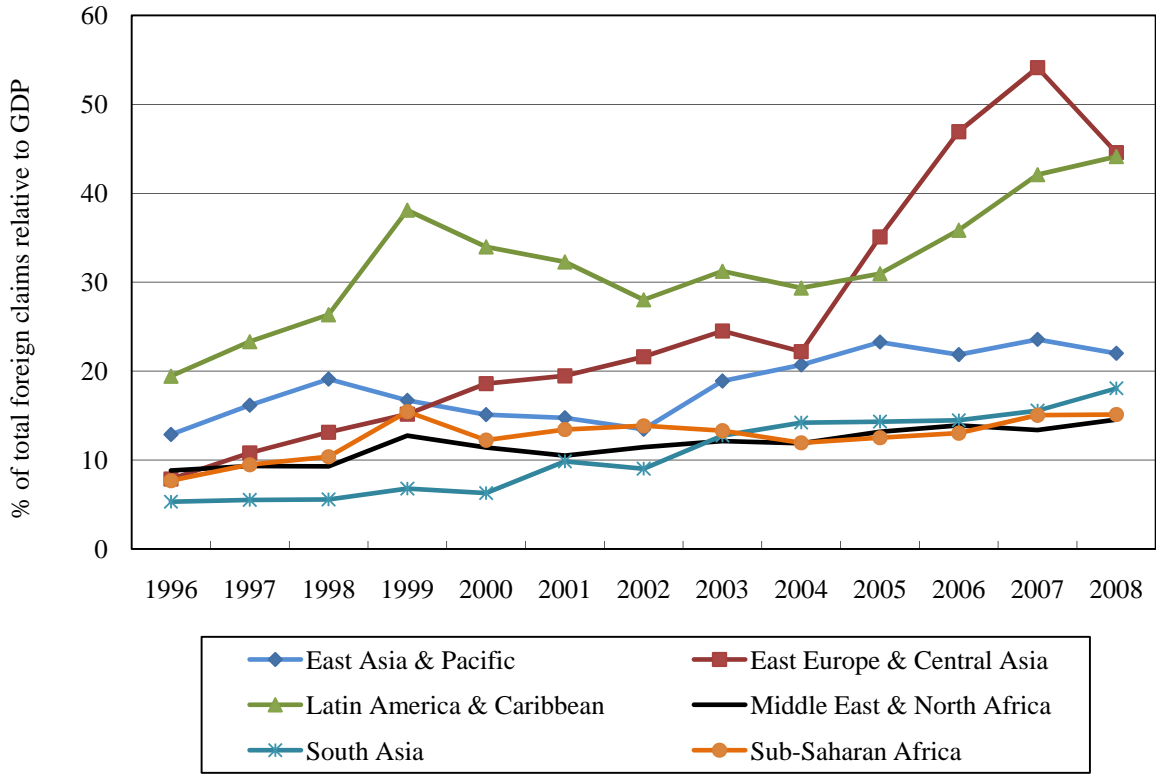


Table 1: Descriptive statistics for the share of assets held by foreign banks across regions, 2005

This table shows the minimum, median, maximum and coefficient of variation (standard deviation divided by the mean) of the share of assets held by foreign Banks in each region. The countries with the minimum and maximum share in each region are also reported. Data come from Claessens et al. (2008a).

Region	Minimum		Median	Maximum		Coefficient of variation
	%	countries		%	countries	
East Asia & Pacific	0.0	Vietnam	15.6	44.3	Korea, Rep.	1.0
East Europe & Central Asia	1.2	Uzbekistan	59.6	99.8	Estonia	0.6
Latin America & Caribbean	0.0	Cuba, Guatemala	30.7	95.3	Peru	0.8
Middle East & North Africa	0.0	Iran, Libya, Yemen	10.7	34.0	Lebanon	1.1
South Asia	0.0	Bangladesh, Sri Lanka	5.1	22.8	Pakistan	1.3
Sub-Saharan Africa	0.0	Ethiopia	50.8	100.0	Madagascar, Mozambique, Swaziland	0.6