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\* Views expressed are those of the authors and do not necessarily reflect official positions of De Nederlandsche Bank.

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## Abstract

Using a new, comprehensive database on bank ownership, identifying also the home country of foreign banks, for 137 countries over the period 1995-2009, this paper provides an overview of foreign bank activity and its impact of financial development and stability. We document substantial increases in foreign bank presence, especially in emerging markets and developing countries, but which slowed down dramatically with the onset of the global crisis. Over time, banks from many more home countries have become active as investors, with several emerging countries becoming important exporters. Investment, however, remains mostly regional. In terms of loans, deposits and profits, current market shares of foreign banks average 20 percent in OECD countries and close to 50 percent in developing countries and emerging markets. Foreign banks differ from domestic banks in key balance sheet variables, notably having higher capital and more liquidity, but lower profitability. Cross-country analysis shows that only in developing countries is foreign bank presence negatively correlated with domestic credit creation. Finally, using panel regressions, we show that during the global crisis foreign banks reduced credit more compared to domestic banks, but not when dominant in the host country.

**JEL Classification Codes:** F21, F23, G21

**Keywords:** foreign banks, foreign direct investment, cross-border banking, bilateral investment, financial globalization, financial sector development, financial stability, spillovers, financial crisis.

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## **1. Introduction**

Although interrupted by the recent financial crisis, the past two decades have seen an unprecedented degree of globalization, especially in financial services. Not only have cross-border bank (and other capital) flows increased dramatically, but also many banks, from both advanced and developing countries, have ventured abroad and established presence in other countries. Although there are exceptions and regional differences, few countries have been left out from this trend of increasing financial integration. As a result, foreign banks have become important in domestic financial intermediation. For example, in terms of loans, deposits and profits, current market shares of foreign banks average 20 percent in OECD countries and close to 50 percent in emerging markets and developing countries.

Given the importance of foreign banks in many countries, understanding the motivations of foreign banks to enter a particular host country, the mode by which they do so, and the impact they have on financial sector development and lending stability has become essential. These questions have become even more prominent as a result of the financial crisis. Although much research has been conducted, many questions remain unanswered, however, partly because data availability has been limited.

This paper contributes to the literature on foreign banking in two ways. It introduces a new and comprehensive database on bank ownership, including the home country of foreign banks, covering 137 countries from 1995 to 2009. And, using this extensive database, it provides salient facts on trends in foreign ownership, compares foreign and domestic bank characteristics, and analyzes the relationship between foreign bank presence and financial development and the impact of foreign banks on lending stability during the recent crisis.

Before the crisis, the general consensus was that the benefits of foreign banks greatly outweigh costs in many dimensions. Particularly, it was generally considered that foreign banks add to domestic competition, increase access to financial services, enhance financial and economic performance of their borrowers, and bring greater financial stability (Clarke, Cull, Martinez Peria and Sanchez, 2003, Claessens, 2006, Chopra, 2007, and Cull and Martinez Peria, 2011). Generally, lower costs of financial intermediation (measured by margins, spreads, overheads) and lower profitability are documented with greater foreign bank presence (Claessens, Demirguc-Kunt, and Huizinga, 2001 and related studies, e.g., Mian, 2003, Berger, Clarke, Cull, Klapper and Udell, 2005). Also, evidence exists of better quality financial intermediation, e.g., lower loan-loss provisioning with more foreign entry (Martinez-Peria and Mody, 2004). Likely a number of factors are behind these effects of

foreign banks, such as the introduction of new, more diverse products, greater use of up-to-date technologies, and know-how spillovers (e.g., as people learn new skills from foreign banks, they migrate over time to domestic banks). In addition, foreign banks likely pressured governments to improve regulation and supervision, increase transparency, and more generally catalyze domestic reform (Levine 1996, Dobson, 2005, and Mishkin, 2006).

The effects of the entry of foreign banks on development and efficiency appear to depend though on some conditions. Limited general development and barriers can hinder the effectiveness of foreign banks (Garcia-Herrero and Martinez Peria, 2005; Demirguc-Kunt, Laeven and Levine, 2004). Also, the relative size of foreign banks' presence seems to matter. With more limited entry (as a share of the total host banking system), fewer spillovers seem to arise, suggesting some threshold effect (Claessens and Lee, 2003). In terms of individual bank characteristics, it seems that larger foreign banks are associated with greater effects on access to financial services for small and medium-sized enterprises, perhaps as they are more committed to the market, while smaller banks are more niche players (Clarke et al. 2005). Furthermore, the health of both the home and the local host bank operation seem to matter, with healthier banks showing better credit growth (Dages, Goldberg and Kinney, 2000; see also Haber and Musacchio, 2005 and De Haas and Van Lelyveld, 2006).

While the entry of foreign banks is generally thought to have favorable effects on the development of host banking systems, including through increased credit extension, some studies find more ambiguous results. Some show that foreign banks "cherry pick" borrowers (Detragiache, Gupta, and Tressel, 2008; Beck and Martinez Peria, 2007). This can undermine overall access to financial services, since cherry picking worsens the remaining credit pool, and lower financial development, especially in low-income countries where relationship lending is important. Indeed, Detragiache, Tressel and Gupta (2008) show the presence of foreign banks in low-income countries to be associated with less credit being extended.

At the same time, a number of studies show that (funding) shocks to parent banks can be transmitted to their foreign subsidiaries with negative consequences for their lending (Peek and Rosengren (1999, 2000); Acharya and Schnabl (2010), Chava and Purnandam (2011); Cetorelli and Goldberg, 2011). Since the onset of the global financial crisis, more studies have also pointed out the risks of foreign banking for financial stability. De Haas, Korniyenko, Loukoianova and Pivovarsk (2011) and Popov and Udell (2010) find for emerging European countries that foreign subsidiaries reduced their lending more compared to domestic banks. De Haas and Van Lelyveld (2011), comparing loan growth of foreign subsidiaries of large multinational banking groups with large domestic banks, find similar results.

Some though find that global banks support their foreign affiliates during times of financial stress through internal capital markets (De Haas and Van Lelyveld, 2006 and 2010; and Barba-Navaretti, Calzolari, Levi and Pozzolo, 2010). Ongena, Peydro Alcalde and Van Horen (2011) find that, while foreign banks reduced lending more than local domestic banks did, they did not compared to domestic banks that had financed their lending boom through borrowing from international capital markets. In addition, De Haas and Van Horen (2011) show that during the global crisis foreign banks continued to lend to those countries that were geographically close and with whom they have established long-term lending relationships, suggesting that foreign banks do differentiate between countries during times of stress.

The crisis also highlighted that, while foreign banks play important roles in the global financial system and affect domestic financial systems, access to financial services, and consequent economic performance, many aspects are not yet well understood, in part due to lack of data. Many studies to date have only used short time periods and a limited number of countries, and hardly any have investigated bilateral ownerships. These three aspects are important to consider, however. A long time period is necessary to properly disentangle effects of cyclical developments and structural changes. A broad spectrum of countries needs to be studied as the causes and effects of foreign bank presence might differ with respect to the importance of foreign banks in the host country or (home and host) development and business and institutional environments. And bilateral patterns need to be studied given the interplay between home and host countries features in entry decisions (Galindo, Micco and Serra 2003, and Claessens and Van Horen, 2010) and between (cultural and institutional) distance and performance (Claessens and Van Horen, 2011).

This paper introduces an extensive database on that contains information on the ownership of 5377 banks in 137 countries from 111 home countries.<sup>1</sup> For each bank, ownership, domestic versus foreign, is determined for each year the bank was active over the period 1995 to 2009, with all changes in ownership (from domestic to foreign and foreign to domestic) and all exits recorded. Important to investigate the factors behind the spread and impact of foreign banks, the home country of the main investor of each bank is identified.

Using this database, the paper illustrates salient trends in foreign bank presence over the past two decades. It shows that, albeit interrupted by the global financial crisis, foreign bank presence has increased substantially in most countries, sometimes from none to foreign banks holding 67 percent market share (in terms of numbers) in a single decade. Also many

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<sup>1</sup> An earlier version of the database was described in Claessens, Van Horen, Gurcanlar and Mercado (2008).

more home countries have become active as investors, with several emerging countries becoming important “exporters.” Substantial differences still exist, though, with foreign bank presence ranging from zero to 100 percent. And foreign ownership is still mostly regional, with this pattern becoming stronger over time.

Taking stock as of end 2007, i.e., just before the crisis, the paper shows that in terms of loans, deposits and profits, foreign banks capture on average about 20 percent of market shares in OECD countries and close to 50 percent in emerging markets and developing countries. Interesting, in those countries with over 50 percent foreign banks in numbers, foreign banks tend to play an important part in financial intermediation. In contrast, when less important in numbers, foreign banks tend to be niche players.

The paper then studies balance sheet and performance characteristics of domestic and foreign banks, and the relationships between foreign bank presence and financial sector development and stability. In terms of balance sheets, the paper finds that foreign banks generally have higher capital adequacy and better liquidity positions. They also engage relatively less in traditional lending businesses. In terms of performance, maybe surprising, foreign banks underperform domestic banks in emerging markets and developing countries, but do not perform differently in high-income countries. Differences reflect in part variations in business strategies between foreign and domestic banks and host country circumstances. Particularly, performance may differ because foreign banks have more conservative portfolios and operate with less ease in some countries than domestic banks do.

In terms of the relations between foreign bank presence and financial sector development, patterns differ by host country. Specifically, in middle-income and high-income countries, foreign bank presence tends to have an insignificant relationship with credit extended. In low-income countries, however, foreign bank presence is associated with less credit extended. In terms of financial stability, we find that foreign banks generally reduced their domestic credit during 2009 more than domestic banks did. Foreign banks did enhance the stability of domestic financial systems though in countries with majority foreign bank presence since their credit growth declined there less than that of domestic banks.

The crisis continues to affect banks in many ways. Faced with large losses and capital shortfalls, many banks in advanced countries are undergoing major restructurings, either voluntary or as conditions of government recapitalizations. Furthermore, banks need to comply with stricter regulations, such as Basel III and other measures triggered by the crisis. And all banks are responding to changing global economic patterns, including the economic slowdown in advanced countries and the increased economic importance of emerging

markets. While many advanced countries' banks are less likely to be active investors in the near future, banks from emerging markets, being in much better financial positions, are likely to step into the void, increasing their relative importance as foreign investors, especially within their geographical regions.

The paper itself is structured as follows. Section 2 provides an extensive description of the construction of the database. Section 3 starts with an overview of the main trends in foreign banking. It then reviews the trends in regionalization in foreign bank presence. Section 4 examines the importance of foreign banks in the host country banking system, the balance sheets and performance of foreign banks relative to domestic banks and provides some evidence on the relationship between foreign bank presence and financial sector development. Section 5 studies the impact of foreign bank ownership on lending stability during the global financial crisis. Section 6 discusses the future of foreign banking, including the rising importance of emerging market foreign banks. Section 7 concludes.

## **2. Description of the dataset**

The dataset used in this paper is an original, newly collected database.<sup>2</sup> This section provides a detailed description of the methods used to create the database.

The goal of the data collecting effort is to document for an extensive time-period the evolution of foreign banking, also relative to that of domestic banks. Therefore, we obtained for the period 1995-2009, year-by-year information on the ownership structure of 5377 banks active at least one year in 137 countries, thus covering all income levels, including advanced countries like the United Kingdom and the United States, emerging markets like Brazil and China, and developing countries like Cambodia and Zambia.<sup>3</sup> The database includes commercial banks, savings banks, cooperative banks, bank holdings, and holding companies.<sup>4</sup>

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<sup>2</sup> The database on bank ownership created by Micco, Panizza and Yañez (MPY) (2007) differs in a number of ways from ours. First, our database spans the period 1995-2009, while the MPY database covers only 1995-2002. Second, in our database ownership is determined for almost all banks active in a country, while in the MPY database ownership is only determined for those banks that capture 75 percent of the bank assets in a country. Third, the MPY database determines the ownership of a bank based on indirect ownership, while we focus on direct ownership. We nevertheless cross-checked our data with the MPY data and in case of discrepancies undertook extra efforts to ascertain ownership.

<sup>3</sup> Our sample includes all countries with more than 5 active banks reporting to Bankscope in 2008. For the advanced countries in our sample, we restrict our coverage to the 100 largest banks in terms of 2008 assets, so smaller (typically regional) banks are not included in the database for these countries. For all these countries, we cover at least 90 percent of the banking system in terms of assets.

<sup>4</sup> Including bank holdings and holding companies can potentially lead to double counting as both the holding company as well as the bank is often included in Bankscope. In all countries where bank holdings were included in the sample we checked whether also the bank itself was represented. If this was the case we excluded the holding company from the sample.



In building the database, many sources were used, including Bankscope, individual banks' annual reports and corporate governance reports, Central Bank publications and websites, banking regulation agencies, local stock exchanges, US SEC forms F-20, parent company's reports, The Economist Intelligence Unit, Factiva, The Banker, etc. This allowed us to cover many more countries than many past papers have and to cross-verify information.

For each year and for each bank in our sample, we determined the exact moment of entry and exit. For many banks the year of establishment was available in Bankscope or on the bank's website. For some banks, however, this information was not provided. In those cases, we obtained the information from other sources like the website of the parent company (if applicable). When we could not determine the exact year of establishment, but additional information indicated that the bank was in operation prior to 1995 (e.g., the presence of financial statements), we coded as 1500 the fictive year of establishment.<sup>5</sup> In terms of exit, we took in general the year a bank became inactive in Bankscope as the year of exit. In all cases, we cross-checked this using additional sources and made corrections if necessary.

We need to correctly account for mergers and acquisitions (M&A). We carefully went through all M&As and made sure that only the merged entity or the acquiring bank remained in the sample after a take-over. For example, if two banks, bank A and bank B merged in 2000 to create a new entity, bank C, then the two individual banks A and B were each included in the dataset until 2000. Then, from 2000 on, these two banks were considered inactive and the new bank (bank C) was included in the database. Similarly, if bank A was acquired by bank B in 2000, both banks were included in the database until 2000, with bank A then becoming inactive after 2000 and bank B remaining active after 2000. Information on mergers and acquisitions was mostly obtained from Bankscope. Again, we cross-checked our findings with other sources, among others Micco, Panizza and Yañez (2007).

For each bank in every year, we identified its shareholders, the nationality of the largest shareholder(s), and recorded any change in ownership. We determine a bank foreign-owned using the definition generally applied in the literature, i.e., if 50 percent or more of its shares are owned by foreigners. We next sum the percentages of shares held by foreigners by country of residence, with the country with the highest percentage of shares then considered the home country.<sup>6</sup> Ownership, and country of ownership, is based on direct ownership, i.e.,

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<sup>5</sup> For 134 banks (2.5 percent of our sample) we were not able to find the exact year of establishment nor could we determine whether the bank was active prior to 1995. In these cases the year of establishment is left blank.

<sup>6</sup> In recent years, identifying home countries and tracing ownership information has become more complicated with more banks raising equity through capital markets. To overcome the problem of determining the nationality of anonymous shareholders, we only consider block shareholdings when determining ownership.

we do not consider indirect ownership. We do, however, take into account that in some cases the direct owner is an entity just established for tax purposes. In such cases we record the country of nationality of the ultimate owner as the source country (these cases typically involve entities registered in Mauritius, Panama and Luxembourg).

The following is an example how the coding of a hypothetical foreign bank was carried out. First, let a bank in Hungary be 40 percent domestic owned and 60 percent foreign owned. Then, let shareholder X from Austria hold all shares not held by domestic owners. This bank is coded as foreign owned with Austria as the home country. In this case the foreign shareholder is the largest shareholder. There are cases though in which the foreign shareholder is not the largest shareholder, but the bank is still foreign owned. An example can clarify this case. Let a bank in Poland be 40 percent domestic owned and 60 percent foreign owned. Then, let shareholders X and Y from Germany hold 35 percent of shares, while shareholder Z from Italy holds 25 percent of shares. This bank is then coded as foreign owned, with Germany as the home country because the largest portion of shares in foreign hands is held by German investors, even though German investors hold fewer shares than domestic owners do. When determining ownership, we erred on the side of caution and reported ownership as missing when the reliability of the information was in question.

For 5059 banks of the 5377 banks in our sample (i.e., 94 percent), we were able to determine complete ownership structure, including the home country of the largest foreign shareholder, for all the years the bank was active. For 92 banks only partial ownership information and for 226 banks no ownership could be determined. All in all, our database provides an almost complete picture of bank ownership around the world and changes thereof over time. We next discuss a number of developments in foreign bank presence between 1995 and 2009, compare foreign and domestic bank characteristics and analyze the relationship between foreign bank presence and financial development and financial stability.

### **3. Trends in foreign banking**

Driven by domestic deregulation, including the removal of entry barriers, technological advances allowing for easier telecommunication, increased financial integration, and more generally heightened globalization, the relative importance of foreign banks has increased substantially in many countries. This section describes these key trends in foreign banking and highlights main differences across income groups and regions.

For comparison purposes, we divide our countries into four income groups. The first group, OECD, includes all core OECD countries. The second group, other high-income countries (OHI), includes all countries classified as high-income by the World Bank in 2000 but not belonging to the OECD. The third group, emerging markets (EM), includes all countries that are included in the Standard and Poor's Emerging Market and Frontier Markets indexes and that were not high-income countries in 2000. The last group, developing countries (DEV), includes all other countries.<sup>7</sup> Offshore banking centers, 8 in total, are excluded from the analysis.<sup>8</sup> In total the following comparisons cover 129 countries.

### *Aggregate trends*

The total number of domestic and foreign banks in our sample increased slightly over the period, from 3894 in 1995 to 3910 in 2009 (Table 1).<sup>9</sup> These numbers reflect two, counterbalancing trends. On the one hand, the number of domestic banks decreased by about 17 percent, due to consolidation driven by technological changes and deregulation in many advanced and developing markets as well as financial crises in some markets. At the same time, and partly due to ownership changing from domestic to foreign, the number of foreign banks increased by 72 percent. Due to these different trends, the relative importance of foreign banks increased substantially, from a share of 20 percent in 1995 to 34 percent in 2009. Figure 1 shows this steady increase in the number of foreign banks present over the sample period, from 774 in 1995 to 1334 in 2009, with the foreign share rising as well.

While there was a steady increase in presence, the intensity of foreign bank entry has fluctuated over the sample period (Figure 2). Foreign bank investment activity was especially high in the late nineties and early 2000s and again in 2006-2007. This reflected in part waves of reforms in various countries, including the opening up of Eastern Europe and other transition economies, and the liberalization of entry by East Asian countries. It also reflected the sharp increase in general financial globalization before the global financial crisis. However, these years also saw foreign banks exiting various markets, with 2001 standing out with 48 banks exiting, mostly due to the various financial crises affecting emerging markets and the consolidation trends spurred by these crises and related reforms.

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<sup>7</sup>Accordingly, current OECD countries like Hungary, Czech Republic, Poland, Slovakia and Korea are included in the emerging markets group. Slovenia, which already was a high-income country in 2000, is included in the OHI group. A number of countries that were low-income in 2000 but which are in the Frontier Market Index (Bangladesh, Cote d'Ivoire, Ghana, Kenya and Zimbabwe), are included in the developing countries group.

<sup>8</sup> Offshore host countries included in our database are: Antigua and Barbuda, Bahrain, Barbados, Cyprus, Mauritius, Panama, Seychelles and Singapore.

<sup>9</sup> Note that for some OECD countries in our sample the database does not include all active banks. Very small (typically regional) banks (outside the top 100 banks in terms of assets in 2008) are not included.

Entry peaked in 2007 but slowed down markedly after the start of the global financial crisis. While 2008 still saw entries at levels similar to 2005, in 2009 the number of entries was the lowest since the beginning of our sample period. This drop in entry is due to a combination of bank-specific and home- and host-country factors. Many banks suffered capital losses and other balance sheet impairments and, due to market forces or government interventions, were forced to consolidate. Many choose to retreat from cross-border banking in general, including through cutting back on new entry.

At the same time, host countries affected by the crisis became less interesting as investment opportunities. While the crisis affected new entry, it impacted until 2009 little exit which remained at levels similar to earlier periods. Parent banks, apparently, did not (yet) feel the need to close or sell their foreign affiliates. This likely reflects that most affiliates were located in countries at the time only marginally affected by the crisis and/or with substantial long-term growth opportunities (with fixed costs involved in setting up a foreign affiliate large, exits are in general not driven by short-run fluctuations but long-run opportunities).

#### *Income group and regional trends*

Not only over time but also across income groups, has foreign bank activity varied substantially (Table 1). In terms of distribution in numbers across host countries, in 1995 31 percent of all foreign banks were present in OECD countries, 4 percent in other high-income countries, 43 percent in emerging markets, and 23 percent in developing countries. This compares to 25 percent, 3 percent, 43 percent and 29 percent in 2009 for the respective country groups. In other words, in relative terms, foreign bank presence shifted over the period away from OECD countries towards developing countries as host countries. Some of this can be explained by the trend towards more open financial markets, but also by the improved prospects in those countries.

In terms of host banking systems, foreign banks accounted in 1995 for 19 percent of the total number of banks present in OECD countries, 30 percent in other high-income countries, 18 percent in emerging markets, and 24 percent in developing countries. This differs greatly from 2009, when foreign banks represent 24 percent of the banking systems in OECD countries, 41 percent in other high-income countries, 36 percent in emerging markets, and 46 percent in developing countries. This comparison shows how important foreign banks have become, especially for emerging markets and developing countries.

Figure 3 shows the distribution of foreign bank presence in 1995 and 2009 across host countries. It shows that the distribution has shifted to the right, with the median increasing

from 17 percent in 1995 to 40 percent in 2009. Not many countries remained unaffected by this increase. While 19 countries did not have any foreign bank present in 1995, only 11 countries (Cuba, Ethiopia, Haiti, Iceland, Iran, Libya, Oman, Qatar, Saudi Arabia, Sri Lanka and Yemen) remained without any foreign bank in 2009. And whereas in only 18 percent of the countries, foreign ownership exceeded 50 percent in 1995, in 2009 this had increased to 42 percent (or 54 countries). Quite a few countries have in 2009 more than 70% of their banks owned by foreigners and in Burkina Faso, Hungary, Luxembourg, Madagascar, Mozambique and Zambia over 90 percent of banks are foreign (see Appendix Table 1 for details).

In terms of growth rates, differences between income groups and regions are substantial as well. In OECD and other high-income countries, the number of foreign banks grew by 40 and 38 percent respectively between 1995 and 2009. In emerging markets the number of foreign banks grew by 72 percent, while foreign bank presence in developing countries increased by some 122 percent. Within the emerging market and developing country groups, substantial regional differences can be found (see Table 1). Growth rates over this period were by far the highest in countries in Eastern Europe and Central Asia (225 percent), followed by South Asia (120 percent, although, as the base was very low, foreign bank penetration in this region remains relatively limited, only 14 percent). Latin America saw very strong growth as well early in the period. After 1999, however, in the aftermath of the Argentine and other financial crises, many foreign banks exited the region and new entries remained limited until a renewed surge in investment in the region started in 2006.

In terms of home countries, a number of trends can be distinguished (Table 2). As expected, advanced countries tend to have more banks operating abroad than emerging markets and developing countries do. Especially, banks from North America and Western Europe have been active investors, representing 63 percent of all foreign banks in the sample in 2009. The importance of these regions as home countries is nevertheless somewhat declining, as their share used to be 66 percent in 1995. While the number of foreign banks owned by OECD home countries grew by 61 percent over the sample period, those owned by other high-income countries, emerging markets and developing countries grew by 115, 90 and 103 percent respectively. Consequently, there has been an increase in the share of foreign banks from emerging market and developing countries over the sample period, now accounting for 27 percent. In terms of growth, differences across regions are pronounced as well. Banks in Eastern Europe and Central Asia increased investments abroad the most, 240 percent, and now own 85 foreign banks. Also banks in sub-Saharan Africa sharply increased

their foreign investments (179 percent), as did banks in the Middle East and Northern Africa (134 percent). Latin American banks though saw a slight decrease in outward investments.

The rise in foreign banks thus reflected established investors from the same countries further increasing the number of banks they own and the entrance of investors from new home countries. While in 1995, 77 home countries were active as foreign investors, in 2009 this increased to 99. This again reflects mostly a growing importance of emerging markets and developing countries as investors. While in 1995, 46 different emerging market/developing countries owned foreign banks abroad, by 2009 this number increased to 61. As a result, foreign ownership has become less concentrated. In 1995 the five biggest investors (France, Germany, the Netherlands, the United Kingdom and the United States,) owned 45 percent of all foreign banks. By 2009, this percentage has dropped to 38 percent.

### *Globalization and regional integration*

The recent literature stressing the role of distance – physical as well as institutional – in foreign investment and other financial decisions suggests that investing regionally could be more attractive than investing globally. As our database includes the home country of all foreign banks, it can be used to examine whether banks indeed have regional preferences in their investments and whether this has changed over time.

Table 3 and Figure 4 show that foreign bank entry indeed tends to be regionally concentrated. Splitting countries in four broad geographical regions that cut across income groups (America, Asia, Europe, and Middle East and Africa), we see that both in 1995 and 2009 the share of foreign banks coming from countries within each region is always more than 50%.<sup>10</sup> The highest intraregional share is, maybe surprisingly, found for Middle East and Africa, more than 70%. This reflects the importance of South-South investment in this region, as also documented in Claessens, Van Horen, Gurcanlar and Mercado (2008) and analyzed by Van Horen (2006). In all regions except America, the intraregional share has increased over time, especially in Asia and Europe, by some 9 and 11 percentage points respectively.

This trend towards greater intraregional activity mirrors the trends found in trade patterns.<sup>11</sup> To the extent that foreign bank activities follow trade patterns (as found, for example, by Grosse and Goldberg, 1991 and Brealey and Kaplanis, 1996), this can explain

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<sup>10</sup> America includes the United States, Canada and the countries in Latin America and the Caribbean. Asia includes all countries in Central, East and South Asia and the Pacific countries including Japan, Australia and New Zealand. Europe includes all Western and Eastern European countries. Middle East and Africa includes all countries in the Middle East and in North and Sub-Saharan Africa.

<sup>11</sup> As shown by Whalley and Xin (2007), trade has become increasingly more regional over the last three decades, which they explain by the proliferation of regional free trade agreements over this period.

why also banking FDI has become increasingly more regional. Furthermore, banks may benefit from regional specialization because they acquire specific knowledge. Therefore, when already active in a specific region, foreign banks are more likely to expand in that same region. Other factors, like past colonial links, language or other similarities that do not overlap with regional groupings, may then become less important.

Other factors likely play a role as well in driving expansion. While banks from advanced countries are mostly venturing outside their region (reflecting past colonial linkages or desires to operate globally), over 70 percent of investments from emerging markets and developing countries tend to be within their own region (Figure 4). Over time, banks from advanced countries have actually become less regional and more global, possibly due to advances in telecommunication and other technologies, and economies of scale for these banks in the provision of some financial services. Banks from emerging markets and developing countries on the other hand have become more regional, possibly because they have a stronger competitive advantage in countries physical closer compared to banks from advanced countries (as shown by Claessens and Van Horen, 2010).

#### **4. Importance of foreign banks, their behavior and impact on domestic systems**

In the preceding section we showed that foreign presence in terms of numbers has increased dramatically between 1995 and 2009 in many countries. In terms of assets, this rise has likely been equally dramatic. Lack of balance sheet (and other financial) information in the early part of our sample period, however, prevents us from documenting these trends in a rigorous fashion.<sup>12</sup> Instead we use balance sheet information for foreign and domestic banks at one point in time to show how important foreign banks are as financial intermediaries in their respective host countries and in what way they differ from their domestic counterparts. We use data for 2007 so as to avoid the global financial crisis impacting numbers and comparisons. This comparison will then lead into our analysis of the relation between foreign bank presence and financial development.

##### *Relative importance of foreign banks*

The importance of foreign banks in terms of assets, like that in numbers, varies widely across countries, ranging from 0 to 100 percent (see Appendix Table 2 for detailed country-

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<sup>12</sup> Prior to 2005 asset information in Bankscope is missing for over 60 percent of the banks in each year, for both large and small banks, making it difficult to assess foreign banks' asset shares.

level information). Figure 5 shows how the number shares compare to the asset shares across host countries. Obviously the correlation between the two shares is high. The graph, however, shows an interesting phenomenon: the likelihood of the asset share exceeding the number share is closely linked to the share of foreign banks in terms of numbers. Only in 33 percent of the cases when the share of foreign banks in numbers is less than 50 percent, does the asset share exceed the number share. Yet in 54 percent of the cases when the foreign bank share in numbers is over 50 percent, does the asset share exceed the number share. In other words, when foreign banks are less (more) important in terms of numbers, they tend to play a relatively less (more) important part in financial intermediation. This suggests that when less important in terms of numbers, foreign banks are more niche players. And conversely, when dominant in numbers, foreign banks tend to focus on large operations.

Given this variation how important are foreign banks on average in financial intermediation? Table 4 shows that when summing over foreign and domestic banks in all countries, foreign banks account for only 12 percent of total lending, 11 percent of total deposit taking and 15 percent of total profits (first row group-based results). However, these aggregate numbers hide much heterogeneity across countries and are very much driven by large banking systems where foreign banks are relatively unimportant. When considering the average country, i.e., taking averages over all 129 countries, foreign banks are responsible for 41 percent of lending, 40 percent of deposit taking and 42 percent of profits.

The data also show large differences by income. Especially in emerging markets and developing countries, do foreign banks play important roles in financial intermediation, with average loan, deposit and profit shares close to 45 percent in emerging markets and close to 50 percent in developing countries. In contrast, and perhaps not surprisingly, in OECD countries the vast majority of financial intermediation is done by large domestic banks, with foreign bank loan, deposit and profit shares on average ranging only about 20 percent.

#### *Differences in balance sheets and performance between foreign and domestic banks*

How do foreign banks differ from their domestic counterparts in various balance sheet and performance characteristics? Table 5 provides some insights. For almost all balance sheet and profitability indicators we consider, foreign banks differ from domestic banks (with significance at the 10 percent level indicated by bold marked coefficients). Taking all countries together, foreign banks on average have lower loan to asset ratios compared to domestic banks, suggesting that foreign banks are less involved in lending than domestic



banks and more in other, less-traditional forms of financial intermediation. However, in emerging markets the reverse is true.

Loan to deposits ratio is a proxy for the degree to which banks are active in traditional forms of financial intermediation, i.e., lending. It also shows the importance of wholesale funding relative to traditional deposits. The ratio is on average higher for domestic banks compared to foreign banks, consistent with the notion that foreign banks are relatively less active in lending. This is especially so for the group of developing countries. However, in emerging markets, foreign banks tend to have higher loan to deposits ratios compared to domestic banks. This suggests that they are relatively more active in lending and are also able to attract non-deposit sources of funding (including funding from their parent banks).

In all countries (except for the group of other high-income countries) foreign banks have significant more liquid assets than domestic banks. The difference is especially high in OECD countries, and less so in emerging markets. On the one hand, this suggests that foreign banks operate more conservatively compared to domestic banks, as they have greater liquidity buffers. On the other hand, since this liquidity measure also includes tradeable securities, varying from government bonds to asset-backed securities, it probably also reflects the foreign banks' general greater activity in capital markets. Since some of these activities were important triggers for the recent financial crisis, the overall meaning of the higher liquidity ratios in terms of financial stability is not so clear.

In terms of solvency, that is, the ratio of capital to (unweighted) assets, foreign banks tend to be less leveraged compared to domestic banks, especially in OECD and developing countries, and less so in other high-income countries and emerging markets. Also, foreign banks in general tend to have higher capital ratios (capital to weighted assets) than domestic banks do, with differences across income groups similar to those in leverage. The one exception is that in emerging markets, foreign banks have similar leverage but higher capital adequacy ratios, which implies that foreign banks hold portfolios with lower risk weights. Finally, in other high-income countries and emerging markets, foreign banks tend to provision less for bad loans, maybe because they tend to target better quality firms. Together, this suggests that foreign banks are in general more conservative than domestic banks are with respect to their asset composition and capital buffers.

In terms of performance, foreign banks tend to underperform domestic banks in emerging market and developing countries. This may surprise since foreign banks, with greater access to know-how, technology and lower cost of funds than domestic banks, are generally believed to be more profitable in such markets. Some of this lower profitability

reflects differences in activities, such as the fact that foreign banks have more conservative portfolios. However, it may also reflect differences of origin of the foreign banks and variations in the ease by which foreign banks operate in emerging markets and developing countries. As shown by Claessens and Van Horen (2011), the profitability of foreign banks is importantly affected by home, host and institutional factors. They find, for example, that foreign banks perform better when from a high income country and when regulations in the host country are relatively weak. Also foreign banks from home countries with the same language and similar regulation as the host country tend to perform better. These factors may explain some of the differences in the simple averages.

#### *Foreign banks and domestic credit creation*

The effects of foreign banks on domestic banking system development and credit creation specifically have been much debated. Our database allows us to have a renewed look at this relation. Specifically, we adapt the cross-section model used by Detragiache, Tressel and Gupta (2008) and investigate whether the ratio of private credit to GDP (from the IMF International Financial Statistics, averaged over 2005-2007) is correlated with the share of foreign bank assets over total assets. As control variables, we add a number of variables known to affect the level of private credit in an economy (see, for example, Djankov, McLiesh and Shleifer 2007): GDP per capita, inflation, the availability of information to creditors, and the time it takes to enforce contracts (the latter two variables come from the World Bank, Doing Business Indicators). We measure all regressors in 2004 to reduce joint endogeneity problems, and estimate our model using OLS with robust standard errors.<sup>13</sup>

We find a negative correlation between the presence of foreign banks and private credit to GDP (Table 6, column 1). A one standard deviation increase in the share of foreign banks is associated with a decline in private credit by some 6 percentage points, economically significant, since the average ratio of private credit to GDP in our sample is 50 percent. We also find some evidence of a non-linear relationship (column 2). This, however, is mostly driven by a few outliers: high-income countries with very large financial sectors compared to the size of their economy that are either dominated by foreign banks (Hong Kong, Ireland and

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<sup>13</sup> The obvious drawback of this type of cross-sectional regression is that the market share of foreign banks is likely to be endogenous to financial development. The bias could run both ways, however. On the one hand, foreign banks might be more willing to enter countries where (for other reasons) financial development is particularly low as they expect these markets to grow faster. On the other hand, business prospects might be worse in countries with low levels of development, making foreign banks more reluctant to enter. Detragiache, Tressel and Gupta (2008) show that their cross-section regression results hold when using several other regression techniques (including panel and IV) to control for endogeneity.

New Zealand) or with hardly any foreign banks (Iceland). When we exclude these countries, we find again a negative (linear) relation, which is even stronger (not reported).

Pooling all countries, however, masks significant differences across countries. If we split our sample by income groups (leaving out other-high income countries as there are only 5 observations for this sample), we find the relation with foreign bank presence to vary with economic development. For both OECD countries and emerging markets (columns 3-4), there is no significant relationship between foreign ownership and credit. However, as column 5 shows, for developing countries there is a strong negative relationship between foreign banks presence and credit. Indeed, a one standard deviation increase in the foreign bank share is associated with a decline in private credit of 5 percentage points, economically very large, since the mean of private credit to GDP in this group of countries is only 19 percent.

In terms of our other control variables, we find that inflation is generally associated with less financial sector development, except for OECD countries, where it is not significant, in part as inflation differences are limited in these countries. Access to creditor information has generally no statistically significant relationship with the level of credit extended, except in developing countries where it has a positive impact. The longer it takes for contracts to be enforced, the less credit is created in both emerging markets and developing countries. The fact that these two institutional environment variables matter more in emerging markets and developing countries may not be a surprise as for OECD countries these variables differ less.

We also investigate whether the effects of institutional characteristics differ by the relative presence of foreign banks. Since gaining access to soft information can be more difficult for foreign banks, having better hard information (for example, through credit registries) might make foreign banks more able and willing to extend credit. This in turn could reduce some of the general negative impact of foreign ownership on credit. Using an interaction variable between creditor information and foreign bank presence, however, we do not find this to be the case (not reported). Similarly, if it is easier to enforce business contracts, foreign banks might be more eager to extend credit when present in a country. Using again an interaction variable, we do neither find evidence for this.

Our results thus confirm the finding of Detriagiache, Tressel and Gupta (2008) that in poor countries foreign bank presence can have a negative relation with financial development (although we cannot claim the direction of causality). Our results also show, however, that this is not a general result and that it is important to allow for differences in development when considering the relation of foreign banks with domestic credit creation.

## 5. Foreign banks and financial stability during the global financial crisis

The role of foreign banks in lending stability has received renewed attention amidst the current financial turmoil. Concerns have been raised that, when faced with capital or funding shocks, foreign banks withdraw from cross-border banking activities, and reduce credit extension in host markets. While most studies (in large part due to data limitations) focus on specific regions, our database allows us to study how the global financial crisis has affected lending stability of foreign banks in a large number of countries. This allows us to analyze how different levels of development and differences in relative market share of foreign banks affect foreign bank behavior. Furthermore, our database includes virtually all domestic and foreign banks, allowing for a detailed comparison of lending stability of both types of banks. Finally, since we know the home country of all foreign banks, we can examine whether foreign banks owned by certain home countries were a more stable source of credit.

Our empirical strategy builds on Ongena, Peydro Alcalde and Van Horen (2011) who study changes in credit extension by foreign (and domestic) banks in Central and Eastern Europe during the crisis. Our sample starts in 2005, as prior balance sheet information is missing for many banks, and ends in 2009. It includes 118 countries which have at least one foreign bank active over this period. We also exclude banks that became inactive or entered the market during the sample period. We end up with 3,615 banks, of which 1198 foreign.

Our dependent variable is the growth rate of loans, measured as the log difference in total lending (sum of net loans and loan loss reserves) of bank  $i$  in country  $j$  in year  $t$ . Since we want to study whether foreign banks behaved differently from domestic banks, our main variable of interest is a foreign bank dummy interacted with time dummies. Similar to Ongena, Peydro Alcalde and Van Horen (2011), we distinguish the first crisis year (2008) from the second crisis year (2009). Following the base regression, we allow in subsequent regressions the impact of foreign ownership on lending stability to differ with respect to a number of home and host country, and bank characteristics.

We also add a number of controls. We control for time-invariant differences between banks (like different business models, funding structure, strategies etc) using bank fixed effects. We control for differences across countries by including country-year fixed effects. To the extent that there are no systematic differences with respect to the type of firms in the portfolios of foreign versus domestic banks or those differences are not correlated with crisis-induced shocks to credit demand, these fixed effects should control for differential changes in credit demand across countries. We control for a number of bank-specific characteristics

which we interact with our two crisis dummies to allow for differential impact of the crisis by type of bank. These characteristics are bank size (log assets), solvency (equity to asset ratio), liquidity (liquid to total assets) and deposits (deposits to liabilities). All bank characteristics are measured as of end-2007 to limit any endogeneity problems.<sup>14</sup> Observations below the 1<sup>st</sup> percentile and above the 99<sup>th</sup> percentile of loan growth are excluded to reduce the impact of influential outliers. All regressions are estimated using OLS with clustering at the bank level.

Our regression results are in Table 7. We find strong evidence that in 2009 foreign banks reduced lending more compared to their domestic counterparts. In the base regression (column 1), we find that foreign banks reduced their lending in 2009 by some 6 percentage points more compared to domestic banks (compared to mean credit growth in 2009 of 5 percent). We do not find loan growth to differ between domestic and foreign banks in 2008, probably as the financial crisis only became truly global in 2009 and did not yet affect many foreign banks' operations in 2008.

Our control variables show some interesting relations. Banks that generated a relative large part of their funding from deposits (a relatively stable source of funding during the crisis) continued to lend relatively more in 2009. This effect is large: a one standard deviation increase in the deposit to liability ratio means loan growth in 2009 was some 4 percentage points higher. We also find that larger banks generally reduced their credit more. And more solvent and liquid banks maintained credit more, with effects larger in 2008 than in 2009.

Next, we test whether this difference in credit growth was specific to particular host countries. First, we examine, using an OECD versus non-OECD country dummy, whether the general economic development of the host country played a role. We find (column 2) that in 2008, foreign banks in OECD already reported lower growth in their lending compared to domestic banks (note that on average overall credit growth in 2008 was still 11 percent, double the average growth in 2009). Since the crisis started in OECD-countries, this result suggests that in these countries foreign banks responded faster to the onset of the crisis than domestic banks did. In 2009, however, as the crisis spread, foreign banks reduced lending compared to their domestic counterparts similarly in OECD and non-OECD countries.<sup>15</sup>

Next, we study whether the difference in credit extension of domestic and foreign banks credit extension varies between countries where foreign banks represent less or more

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<sup>14</sup> We tested whether including lagged loan growth had an impact on the regression results. This was not the case. Therefore we exclude this variable from our baseline regression in order to avoid correlation between lagged credit growth and the bank fixed effects.

<sup>15</sup> We also examined the impact of foreign ownership on lending behavior in the four income groups (OECD, OHI, EM and DEV) separately. We found similar magnitude and significance for the foreign ownership times crisis interactions for all regions except OHI, where we found no significant difference.

than 50 percent of the country's banking assets. We find the loan growth of foreign banks compared to that of domestic banks to be 8 percent less in countries where they have a low market share (column 3). In countries where they dominate, however, foreign banks actually have a 1 percent higher loan growth compared to domestic banks.<sup>16</sup> This shows (again) that it is important to allow for heterogeneity across foreign banks when examining their behavior.

We also examine the importance of home country characteristics. First, we allow the impact of foreign bank ownership on lending stability to differ between foreign banks owned by a parent located in an OECD country or a non-OECD country. Somewhat surprisingly, we do not find significant differences between the two types of foreign banks (column 4). This may be because not all OECD countries were as severely affected by the financial crisis. We therefore interact foreign ownership with a dummy whether the home country experienced a systemic banking crisis during the period 2007-2009 (as classified by Laeven and Valencia, 2010). Our results (column 5) indicate that foreign banks owned by a parent located in a country that experienced a systemic crisis reduced their lending more in both 2008 and 2009 compared to domestic banks; however, the parameter is imprecisely estimated.

Finally, we examine whether having access to local deposits is more important for foreign than for domestic banks. In principle, the relation can go two ways. On the one hand, foreign banks that are large local deposit-takers might be less affected by any shock to their parents' balance sheets. On the other hand, as shown by Cetorelli and Goldberg (2011), parent banks faced with funding shocks might be inclined to transfer funds from subsidiaries more active in deposit-taking. Our results (column 6) show that the first effect dominates: having a strong deposit base is especially important for foreign banks in maintaining local lending. While one standard deviation increase in the deposit to liability ratio increases credit growth of domestic banks by some 3 percentage points, it is 7 percentage points for foreign banks.

Summarizing our results, we find that on average foreign banks reduced lending more compared to domestic banks during the global crisis. As such, foreign banks arguably contributed to financial instability. Important heterogeneity exists, however, some of which we document. When dominant in a banking system, foreign banks turned out to be a more stable source of credit compared to domestic banks. And foreign banks that generated an important part of their funding from local deposits were much less likely to reduce lending.

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<sup>16</sup> A joint significance test of  $\text{Foreign} \times 2009$  and  $\text{Foreign} \times 2009 \times \text{Majority foreign}$  has a F-statistic of 9. Note that these regressions control for bank size and other characteristics like funding structure that might be different for foreign banks active in these types of host countries.

## **6. The future of foreign banking**

The global financial crisis continues to have major adverse impact on banks and economies worldwide. Indeed, as noted, foreign bank investment slowed down substantially in the first two years of the crisis. Is this trend likely to continue in the coming years? And how will the landscape of foreign banks change in the medium term? While it is obviously hard to be very definitive on what will happen, our analysis suggests some possible scenarios and trends.

In the short-run, new foreign investment from crises-affected countries will likely be limited and only increase once their banking systems stabilize. Indeed, in late 2011, foreign banks actually started to sell some of their foreign subsidiaries as they faced capital shortfalls. At the same time, banks from emerging markets can seize opportunities to increase market shares since they are currently in strong positions in several respects. First, their loan-to-deposit ratios are in general low. Having access to a stable and often growing source of deposit funding shelters them to a large extent from stresses in interbank markets. Second, many emerging market banks have capital ratios well above those of banks in advanced countries, limiting pressures for balance sheet adjustments. Also, the new Basel III capital rules are likely less costly for these banks as they typically have lower risk weighted assets, including more limited non-traditional (investment) banking business. Third, many of these banks are highly profitable which allows them to invest and at the same time gives them a buffer to absorb potential losses. Does this greater involvement from emerging markets offset in the short-run the decline in investments from advanced countries? Probably not fully, and foreign bank investment is likely to remain subdued in the coming years and below levels witnessed between 1995 and 2007.

In the medium term, emerging markets are likely to increase their foreign investment as well. As documented, the number of banks from emerging markets active as investors has already risen steadily over the past decades and account now for about 30 percent of all foreign investments. There are some opposing trends, though. With growth rates in emerging markets exceeding those in advanced countries and a large part of the population still unbanked, emerging market banks may prefer to grow domestically, also because of political pressures, rather than to expand abroad. Regulators in these countries may also oppose foreign investment as it exposes banks to new foreign exchange and counterparty risks. On balance though, more foreign bank expansion from emerging markets is very likely.

Our analysis suggests, however, that this expansion will be mostly in other emerging markets and regional for both conjectural and structural reasons. In terms of conjectural

factors, growth opportunities and profit margins are likely higher in emerging markets than in advanced countries. Related, an increasing number of emerging market companies are establishing presence in other emerging markets, providing emerging market banks incentives to extend their foreign network there as well. In contrast, growth in advanced economies is expected to be low. Furthermore, regulatory reforms may make it more difficult to set up a branch or subsidiary in advanced countries. In terms of structural factors, foreign bank entry is in part driven by economic integration, common language and proximity, making regional investment more attractive. Also, banks from emerging markets have a competitive advantage in dealing with weak institutions. Indeed, as discussed in Section 3, 70 percent of all foreign entry by emerging market banks was within their own geographical region.

## **7. Conclusions**

The potential benefits of foreign bank presence have been studied for some time. Still, little is known about the channels by which foreign banks can improve the efficiency of domestic financial systems, increase financial sector development and access to financial services, and enhance countries' overall economic growth. Furthermore, the recent financial crisis has highlighted again that there can be risks associated with cross-border banking and foreign banks presence. These developments have led to an increased demand among policy makers and interest among academics for more analyses of the benefits and risks of foreign bank presence to help guide regulatory reforms.

Research and policy questions that are being asked include: for which types of countries and under which circumstances do foreign banks add the most to domestic financial sector development; given that the impact of foreign ownership is less advantageous for countries with a certain level of development, which institutions are most important to improve when having greater foreign bank presence; when does the presence of foreign banks help mitigate the effects of various shocks on host countries' banking systems and when do they not; do differences between types of foreign banks – country of origin, size, degree of international operations, distance between home and host countries etc. – and the relative presence of foreign banks affect their roles in financial sector development and their role as risk absorber or risks amplifier; and what balance sheets and performance indicators are most important to monitor for assessing foreign banks' role in domestic financial intermediation?

Related there are a number of reforms under discussion internationally that can benefit from more analyses. These include: the need for specific financial, disclosure or corporate



governance requirements for foreign banks; the optimal degree of separation and segmentation of international activities from domestic bank activities, including by requirements on subsidiarization and ring-fencing; the best modalities for international liquidity and lender of last resort facilities to mitigate cross-border financial turmoil; and the optimal institutional framework and burden sharing arrangements in case cross-border banks need to be resolved.

These and other issues will be well served by more in-depth research that in turn can enhance policy recommendations on how to appropriately deal with foreign banks. The database documented and analysed in this paper can help with research in these areas. It shows that in many countries foreign banks have become an important part of the local banking system. At the same time it makes clear that the impact of foreign banks on financial sector development and financial stability importantly depends on host country, home country and bank characteristics. Therefore, when conducting research on the questions highlighted above it is important to take this heterogeneity into account.

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**Table 1**  
**Number of banks by host country, aggregates by income level and region**

	1995		2000		2005		2009		
	Number	Share	Number	Share	Number	Share	Number	Share	
<b>All countries</b>									
	Domestic	3,120	0.80	2,993	0.74	2,805	0.70	2,576	0.66
	Foreign	774	0.20	1,058	0.26	1,175	0.30	1,334	0.34
	Total	3,894	1	4,051	1	3,980	1	3,910	1
<b>Income groups</b>									
<i>OECD</i>									
	Domestic	1,044	0.81	1,070	0.79	1,087	0.78	1,054	0.76
	Foreign	237	0.19	280	0.21	315	0.22	332	0.24
	Total	1,281	1	1,350	1	1,402	1	1,386	1
<i>Other high-income</i>									
	Domestic	73	0.70	67	0.66	61	0.59	63	0.59
	Foreign	32	0.30	34	0.34	42	0.41	44	0.41
	Total	105	1	101	1	103	1	107	1
<i>Emerging markets</i>									
	Domestic	1,456	0.82	1,293	0.73	1,143	0.70	1,001	0.64
	Foreign	330	0.18	473	0.27	488	0.30	569	0.36
	Total	1,786	1	1,766	1	1,631	1	1,570	1
<i>Developing countries</i>									
	Domestic	547	0.76	563	0.68	514	0.61	458	0.54
	Foreign	175	0.24	271	0.32	330	0.39	389	0.46
	Total	722	1	834	1	844	1	847	1
<b>Region</b>									
<i>East Asia and Pacific</i>									
	Domestic	254	0.82	272	0.81	289	0.81	282	0.75
	Foreign	57	0.18	64	0.19	69	0.19	95	0.25
	Total	311	1	336	1	358	1	377	1
<i>Eastern Europe and Central Asia</i>									
	Domestic	664	0.85	602	0.72	500	0.61	418	0.53
	Foreign	114	0.15	234	0.28	317	0.39	371	0.47
	Total	778	1	836	1	817	1	789	1
<i>Latin America and Caribbean</i>									
	Domestic	596	0.75	479	0.65	395	0.65	367	0.61
	Foreign	198	0.25	256	0.35	217	0.35	232	0.39
	Total	794	1	735	1	612	1	599	1
<i>Middle East and North Africa</i>									
	Domestic	143	0.82	131	0.77	116	0.71	101	0.64
	Foreign	32	0.18	40	0.23	48	0.29	57	0.36
	Total	175	1	171	1	164	1	158	1
<i>South Asia</i>									
	Domestic	133	0.93	143	0.91	148	0.91	139	0.86
	Foreign	10	0.07	15	0.09	15	0.09	22	0.14
	Total	143	1	158	1	163	1	161	1
<i>Sub Saharan Africa</i>									
	Domestic	213	0.69	229	0.63	209	0.58	152	0.46
	Foreign	94	0.31	135	0.37	152	0.42	181	0.54
	Total	307	1	364	1	361	1	333	1

*Note:* The definition of the four different income groups can be found in the main text. The regions represent the regional classification as used by the World Bank.

**Table 2**  
**Number of foreign banks by home country, aggregates by income level and region**

	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009</b>
<i>All countries</i>	774	1,058	1,175	1,334
<b>Income groups</b>				
<i>OECD</i>	550	738	813	884
<i>of which:</i>				
<i>Western Europe</i>	389	539	625	686
<i>North America</i>	123	162	153	159
<i>Japan, Australia and New Zealand</i>	38	37	35	39
<i>Other high-income</i>	33	47	52	71
<i>Emerging markets</i>	147	201	225	279
<i>Developing countries</i>	38	56	67	77
<b>Region</b>				
<i>East Asia and Pacific</i>	39	57	58	71
<i>Eastern Europe and Central Asia</i>	25	55	69	85
<i>Latin America and Caribbean</i>	64	76	65	62
<i>Middle East and North Africa</i>	38	53	64	89
<i>South Asia</i>	12	13	15	17
<i>Sub Saharan Africa</i>	29	37	57	81

*Note:* The definition of the four different income groups can be found in the main text. The regions represent the regional classification as used by the World Bank. The sum of foreign banks does not completely correspond with the total number of foreign banks in Table 1. This discrepancy is caused by the fact that when a foreign bank is owned by an international investor no home country has been assigned. In addition, for some foreign owned banks no home country could be determined. Therefore those banks could not be categorized in an income group or region.

**Table 3**  
**Number and share of foreign banks from home regions to host regions, 1995 and 2009**

Number and share of foreign banks from home country present in host country	1995									
	<i>Host region</i>								Total	
	<i>AMERICA</i>		<i>ASIA</i>		<i>EUR</i>		<i>MEA</i>		Total	
	Nr.	Share	Nr.	Share	Nr.	Share	Nr.	Share	Nr.	Share
<b><i>Home region</i></b>										
<i>AMERICA</i>	118	0.63	19	0.10	40	0.21	10	0.05	187	1
<i>ASIA</i>	15	0.17	50	0.56	15	0.17	9	0.10	89	1
<i>EUR</i>	92	0.22	38	0.09	235	0.55	60	0.14	425	1
<i>MEA</i>	2	0.03	4	0.06	15	0.22	46	0.69	67	1

Number and share of foreign banks from home country present in host country	2009									
	<i>Host region</i>								Total	
	<i>AMERICA</i>		<i>ASIA</i>		<i>EUR</i>		<i>MEA</i>		Total	
	Nr.	Share	Nr.	Share	Nr.	Share	Nr.	Share	Nr.	Share
<b><i>Home region</i></b>										
<i>AMERICA</i>	127	0.57	25	0.11	56	0.25	13	0.06	221	1
<i>ASIA</i>	22	0.17	86	0.65	18	0.14	7	0.05	133	1
<i>EUR</i>	121	0.15	60	0.08	522	0.66	84	0.11	787	1
<i>MEA</i>	4	0.02	12	0.07	33	0.19	121	0.71	170	1

*Note:* Countries are grouped in four geographical regions irrespective of the income level of the countries. "America" includes Canada, United States and all countries in Latin American and the Caribbean, "Asia" includes all countries in Central, East and South Asia and the Pacific countries including Japan, Australia and New Zealand. "Europe" includes all Western and Eastern European countries "MEA" includes all countries in the Middle East and North and Sub-Saharan Africa.

**Table 4**  
**Importance foreign banks in local banking system (2007)**

	<i>Group-based</i>			<i>Country-based</i>		
	Foreign bank loans in total bank loans	Foreign bank deposits in total bank deposits	Foreign bank profits in total bank profits	Foreign bank loans in total bank loans	Foreign bank deposits in total bank deposits	Foreign bank profits in total bank profits
<i>All countries</i>	0.12	0.11	0.15	0.41	0.40	0.42
<i>Income groups</i>						
<i>OECD</i>	0.10	0.08	0.11	0.21	0.20	0.22
<i>Other high-income</i>	0.46	0.59	0.62	0.26	0.25	0.30
<i>Emerging markets</i>	0.17	0.15	0.19	0.44	0.42	0.44
<i>Developing countries</i>	0.24	0.25	0.24	0.49	0.49	0.50

*Note:* The definition of the four different income groups can be found in the main text. Country-based figures are the simple average of the countries within a group  $((1/n)\sum_i [FB_i/(DB_i+FB_i)])$  for country *i*, whereas group-based figures are obtained from  $\sum_i FB_i/(\sum_i DB_i+\sum_i FB_i)$  for country *i* within a group. FB and DB represent foreign bank and domestic bank respectively.



**Table 5**  
**Differences in balance sheet between foreign and domestic banks (2007)**

	Loan to assets	Loan to deposits	Liquidity	Solvency	Capital ratio	LLR to assets	ROA
<i>All countries</i>							
Domestic	<b>0.58</b>	<b>1.19</b>	<b>0.22</b>	<b>0.12</b>	<b>0.16</b>	0.02	<b>0.01</b>
Foreign	<b>0.49</b>	<b>1.11</b>	<b>0.33</b>	<b>0.15</b>	<b>0.22</b>	0.02	<b>0.01</b>
<i>Income groups</i>							
<i>OECD</i>							
Domestic	<b>0.65</b>	<b>1.28</b>	<b>0.17</b>	<b>0.09</b>	<b>0.13</b>	0.01	0.01
Foreign	<b>0.43</b>	<b>1.16</b>	<b>0.37</b>	<b>0.11</b>	<b>0.17</b>	0.01	0.01
<i>Other high-income</i>							
Domestic	<b>0.57</b>	0.96	0.26	0.12	0.18	<b>0.02</b>	0.02
Foreign	<b>0.50</b>	1.06	0.31	0.13	0.16	<b>0.01</b>	0.02
<i>Emerging markets</i>							
Domestic	<b>0.51</b>	<b>1.15</b>	<b>0.25</b>	0.15	<b>0.18</b>	<b>0.03</b>	<b>0.02</b>
Foreign	<b>0.54</b>	<b>1.24</b>	<b>0.29</b>	0.15	<b>0.22</b>	<b>0.02</b>	<b>0.01</b>
<i>Developing countries</i>							
Domestic	<b>0.54</b>	<b>1.08</b>	<b>0.26</b>	<b>0.16</b>	<b>0.22</b>	0.03	<b>0.02</b>
Foreign	<b>0.49</b>	<b>0.88</b>	<b>0.35</b>	<b>0.18</b>	<b>0.27</b>	0.03	<b>0.01</b>

*Note:* The definition of the four different income groups can be found in the main text.

**Table 6**  
**Private credit and foreign banks**

	All countries		OECD	EM	DEV
Share foreign banks	-0.173** (0.022)	-0.597** (0.035)	-0.112 (0.723)	-0.032 (0.778)	-0.147*** (0.008)
Share foreign banks squared		0.468* (0.083)			
GDP per capita	0.000*** (0.000)	0.000*** (0.000)	0.000 (0.891)	0.000 (0.907)	0.000 (0.753)
Inflation	-0.007*** (0.000)	-0.006*** (0.000)	0.113 (0.242)	-0.025*** (0.000)	-0.004*** (0.001)
Creditor information	0.022 (0.175)	0.025 (0.116)	-0.033 (0.767)	-0.011 (0.599)	0.029** (0.018)
Enforcement	-0.000 (0.510)	-0.000 (0.790)	0.012 (0.515)	-0.003** (0.021)	-0.001** (0.026)
Number of observations	111	111	22	39	46
R2	0.64	0.65	0.08	0.27	0.44

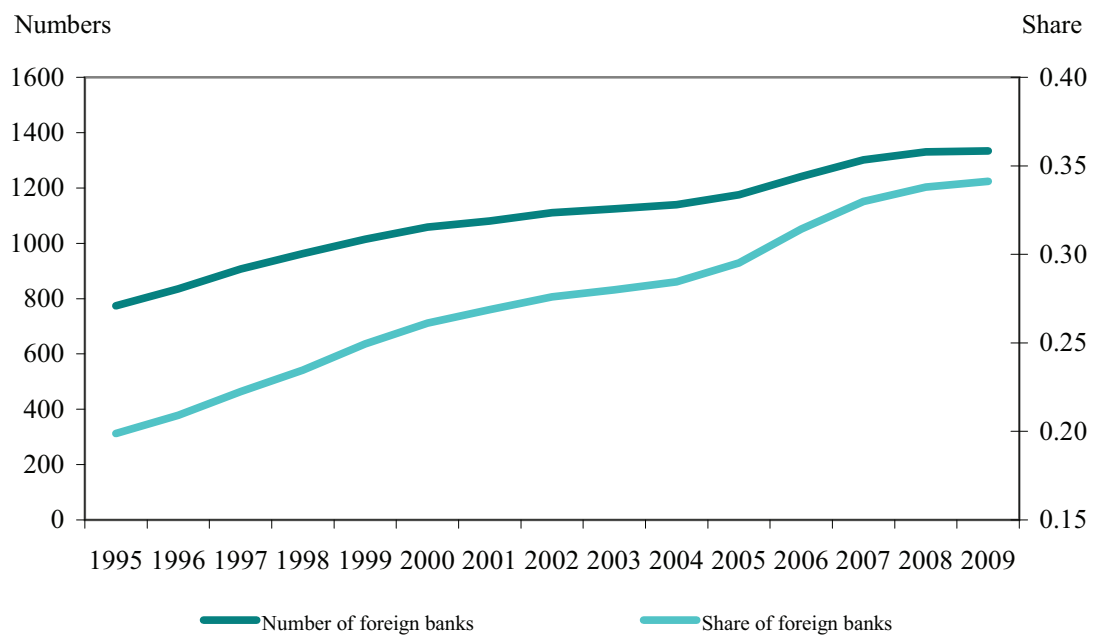
*Note:* The table reports the results of a cross-section regression over a sample of 111 countries. The dependent variable is private credit to GDP averaged over the period 2005-2007. *Share foreign banks* equals the assets held by foreign banks as a share of total assets in the country. *GDP per capita* is GDP in US dollars divided by the population. *Inflation* is the log difference in the consumer price index. *Creditor information* captures the cost to banks of obtaining information about borrowers and *enforcement m* measures the number of days it takes to enforce a basic business contract. All regressors are based on 2004 values. The model is estimated using OLS and the standard errors are robust. Robust p-values appear in parentheses and \*\*\*, \*\*, \* correspond to the one, five and ten percent level of significance, respectively

**Table 7**  
**The global financial crisis and credit growth of foreign and domestic banks**

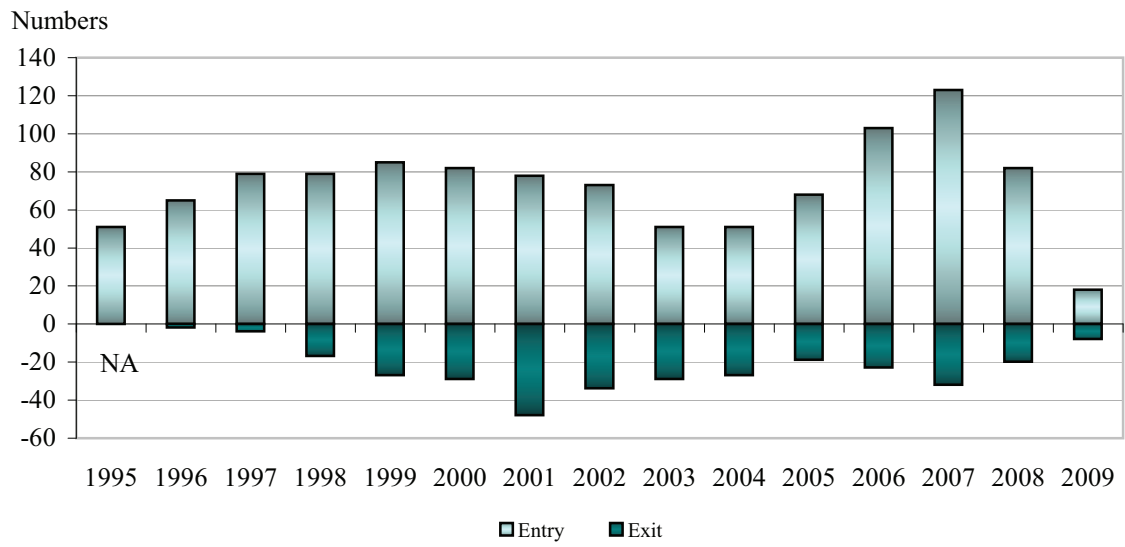
	(1)	(2)	(3)	(4)	(5)	(6)
Foreign*2008	0.021 (0.219)	0.039* (0.053)	0.014 (0.481)	0.018 (0.498)	0.050* (0.052)	0.007 (0.882)
Foreign*2009	-0.061*** (0.000)	-0.061*** (0.002)	-0.084*** (0.000)	-0.053** (0.022)	-0.043** (0.035)	-0.162*** (0.000)
Foreign * 2008 * OECD country		-0.066* (0.081)				
Foreign * 2009 * OECD country		-0.002 (0.959)				
Foreign * 2008 * Majority foreign			0.027 (0.444)			
Foreign * 2009 * Majority foreign			0.094** (0.016)			
Foreign * 2008 * OECD home				0.004 (0.899)		
Foreign * 2009 * OECD home				-0.012 (0.634)		
Foreign * OECD home				0.004 (0.913)		
Foreign * 2008 * Crisis home					-0.047 (0.111)	
Foreign * 2009 * Crisis home					-0.029 (0.234)	
Foreign bank * 2008 * Deposits						0.024 (0.735)
Foreign bank * 2009 * Deposits						0.185*** (0.007)
Deposits * 2008	-0.003 (0.939)	-0.008 (0.819)	-0.004 (0.909)	-0.003 (0.945)	-0.006 (0.865)	-0.010 (0.790)
Deposits * 2009	0.156*** (0.000)	0.155*** (0.000)	0.152*** (0.000)	0.155*** (0.000)	0.154*** (0.000)	0.095** (0.010)
Size * 2008	-0.008* (0.055)	-0.008** (0.041)	-0.008** (0.048)	-0.008* (0.056)	-0.007* (0.076)	-0.008* (0.052)
Size * 2009	-0.007* (0.066)	-0.007* (0.065)	-0.008** (0.038)	-0.007* (0.077)	-0.007* (0.083)	-0.008** (0.037)
Solvency * 2008	0.535*** (0.000)	0.531*** (0.000)	0.533*** (0.000)	0.536*** (0.000)	0.518*** (0.000)	0.532*** (0.000)
Solvency * 2009	0.336*** (0.003)	0.336*** (0.003)	0.333*** (0.003)	0.335*** (0.003)	0.328*** (0.004)	0.325*** (0.004)
Liquidity * 2008	0.200*** (0.000)	0.207*** (0.000)	0.202*** (0.000)	0.200*** (0.000)	0.195*** (0.001)	0.200*** (0.000)
Liquidity * 2009	0.107* (0.056)	0.108* (0.058)	0.112** (0.046)	0.106* (0.059)	0.104* (0.062)	0.106* (0.058)
Number of observations	12,781	12,781	12,781	12,781	12,781	12,781
R2	0.59	0.59	0.59	0.59	0.59	0.59

*Note* : The table reports the results of a panel regression over the period 2005-2009. The dependent variable is the log difference in total lending of bank  $i$  in country  $j$  at time  $t$ . *Foreign* is a dummy variable which is one if the bank is foreign owned. *OECD country* is a dummy which is one if the host country is an OECD country. *Majority foreign* is a dummy which is one if foreign banks hold over 50 percent of all assets in the country. *OECD home* is a dummy which is one if the home country of the foreign bank is an OECD country. *Crisis home* is a dummy which is one if the home country of the foreign bank experienced a banking crisis in 2007 or 2008. *Deposits* is the ratio of deposits to liabilities, *size* is the log of total assets, *solvency* is defined as equity to total assets and *liquidity* equals liquid to total assets. All regressors are based on 2007 values. All regressions include bank and country-year fixed effects. The model is estimated using OLS and the standard errors are clustered by bank. Robust p-values appear in parentheses and \*\*\*, \*\*, \* correspond to the one, five and ten per cent level of significance, respectively

**Figure 1**  
**Number and share of foreign banks, 1995 - 2009**



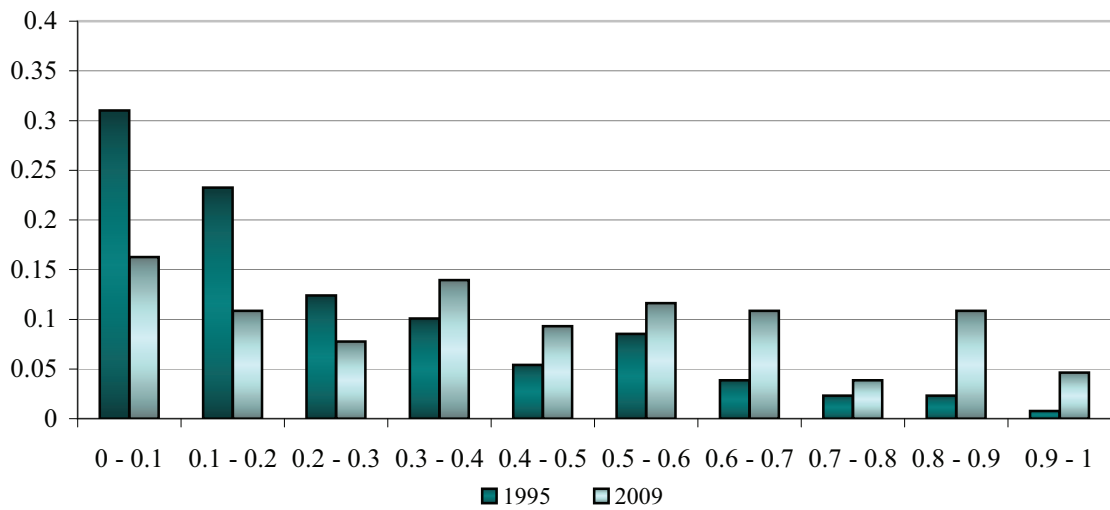
**Figure 2**  
**Number of entries and exits of foreign banks**



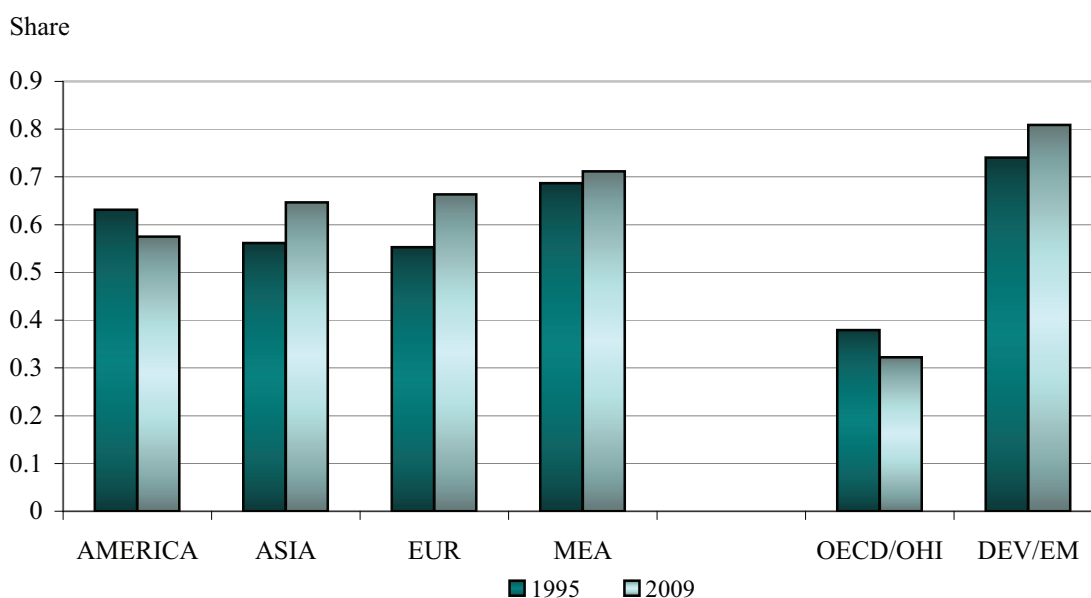
*Note:* As the database starts in 1995 the number of foreign banks that exited the market in that year cannot be determined.

**Figure 3**  
**Relative foreign bank presence across host countries, 1995 and 2009**

Share of countries in sample

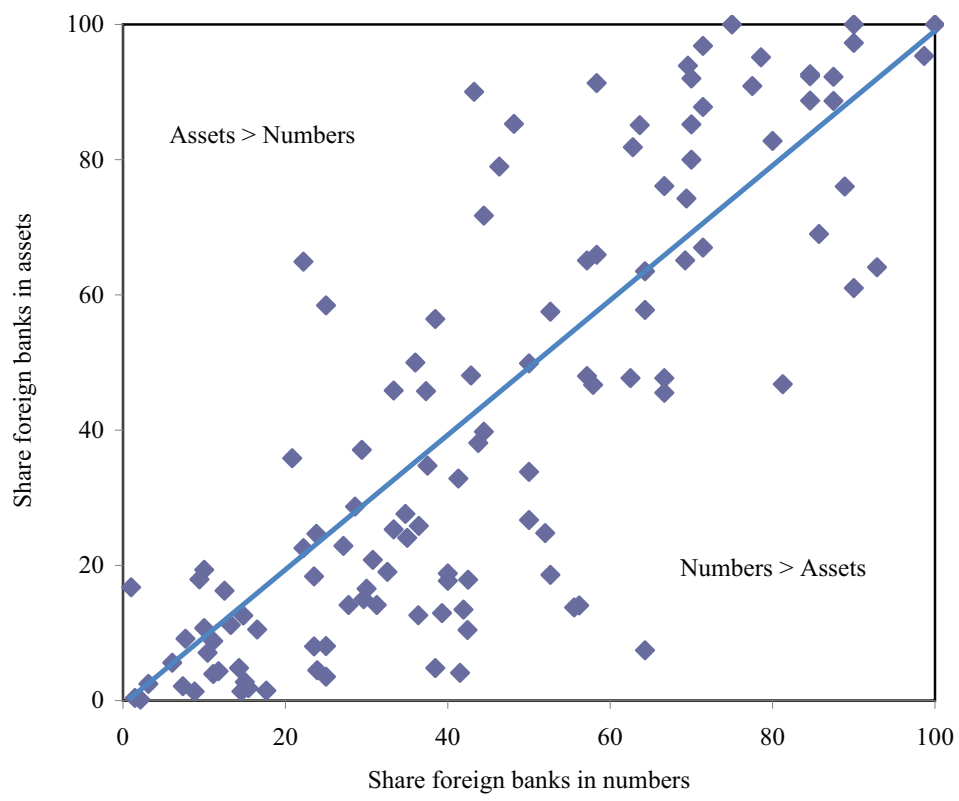


**Figure 4**  
**Share of foreign banks in investing in own region, 1995 and 2009**



*Note:* The first four column pairs show for each of the four regions the share of foreign banks from the region investing in host countries located in that same region (e.g. banks from the United States investing in Canada or any Latin American country). Countries are grouped in four geographical regions irrespective of the income level of the countries. "America" includes Canada, United States and all countries in Latin American and the Caribbean, "Asia" includes all countries in Central, East and South Asia and the Pacific countries including Japan, Australia and New Zealand. "Europe" includes all Western and Eastern European countries "MEA" includes all countries in the Middle East and North and Sub-Saharan Africa. In the last two column pairs we first grouped the foreign banks according to the income level of the home country (OECD/OHI or DEV/EM) and then determined for each of the banks whether it invested in its own region or not (e.g. an American owned foreign bank is included in the group OECD/OHI; if it has invested in one of the countries included in the region "America" the investment is considered regional).

**Figure 5**  
**Relative importance foreign banks (2007)**





**Appendix Table 1 - Percentage of foreign banks among total banks, by country**

<b>Country</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>EAP</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>24</b>	<b>25</b>	<b>25</b>
Cambodia	14	14	14	29	29	43	43	38	33	33	40	38	38	38	38
China	13	14	11	10	10	9	9	8	8	7	7	6	15	18	19
Indonesia	26	27	28	29	31	33	31	34	32	33	35	36	50	50	52
Malaysia	27	25	25	25	25	26	32	29	29	30	30	32	33	33	33
Mongolia	0	0	0	0	0	0	14	25	25	25	25	25	25	25	25
Philippines	12	13	13	14	16	17	16	14	12	14	14	14	15	15	13
Thailand	11	11	6	6	12	12	12	17	17	17	15	15	14	19	19
Vietnam	11	10	10	10	10	10	10	9	12	12	12	9	9	9	9
<b>ECA</b>	<b>9</b>	<b>11</b>	<b>14</b>	<b>17</b>	<b>19</b>	<b>22</b>	<b>23</b>	<b>26</b>	<b>27</b>	<b>29</b>	<b>33</b>	<b>37</b>	<b>40</b>	<b>42</b>	<b>42</b>
Albania	25	40	50	63	63	75	75	75	70	73	82	77	85	83	83
Armenia	17	17	17	23	36	36	38	42	42	46	54	69	69	73	80
Azerbaijan	5	10	10	14	14	14	14	10	10	10	10	10	15	16	16
Belarus	12	16	15	15	15	24	30	32	36	36	45	45	53	55	55
Bosnia-Herzegovina	11	17	20	18	22	28	41	43	44	46	54	52	58	57	57
Bulgaria	22	28	31	36	46	44	48	54	54	54	61	70	67	67	67
Croatia	4	12	17	22	27	30	33	34	26	28	32	35	43	43	43
Estonia	9	8	9	13	33	50	50	50	43	57	71	71	71	71	71
Georgia	0	0	0	0	18	25	18	18	25	23	33	55	58	67	67
Kazakhstan	21	16	25	35	32	33	32	36	32	32	36	36	39	39	39
Kyrgyzstan	50	25	50	43	38	38	38	38	50	63	63	63	57	57	57
Latvia	13	17	27	29	32	29	27	32	32	41	45	50	57	62	62
Lithuania	0	0	0	9	18	50	56	67	67	67	67	67	70	70	70
Macedonia	9	15	15	15	21	36	38	38	44	44	47	50	64	71	71
Moldova	8	8	21	27	31	31	31	38	38	38	38	38	44	44	44
Romania	19	21	32	39	45	57	57	63	70	70	74	81	85	81	81
Russia	7	7	8	9	9	9	9	12	13	14	15	16	17	19	19
Serbia & Montenegro	3	3	3	3	6	9	17	18	26	34	43	60	63	60	61
Turkey	11	11	12	13	14	15	14	19	20	20	24	38	43	43	43
Ukraine	4	4	9	12	14	16	18	19	19	23	28	34	37	43	45
Uzbekistan	20	27	25	23	23	21	20	20	20	19	18	18	24	24	24
<b>LAC</b>	<b>28</b>	<b>30</b>	<b>33</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>37</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>39</b>	<b>41</b>	<b>42</b>	<b>42</b>
Antigua & Barbuda	0	0	0	0	0	0	0	17	17	17	17	17	33	33	33
Argentina	22	24	29	32	37	37	37	34	36	35	34	34	35	35	35
Barbados	60	60	60	60	60	60	60	60	100	100	100	100	100	100	100
Bolivia	27	27	29	42	45	45	45	45	45	45	45	40	40	40	40
Brazil	23	25	29	33	34	35	35	35	36	36	35	36	36	37	38
Chile	48	48	50	48	52	52	48	44	44	39	41	41	48	48	48
Colombia	20	23	27	29	28	29	29	29	25	23	24	28	28	28	28
Costa Rica	14	14	14	16	19	18	20	20	20	20	21	22	21	18	18
Cuba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dominican Rep.	5	5	5	5	5	5	7	9	11	12	12	10	10	10	10
Ecuador	18	17	18	18	22	23	18	15	15	15	15	15	15	15	19
El Salvador	18	25	46	46	46	54	58	58	67	67	73	82	90	90	90
Guatemala	11	11	17	17	20	21	21	21	23	22	23	26	36	41	41
Haiti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	19	19	22	22	22	26	30	35	35	41	41	41	58	56	56
Jamaica	30	30	30	30	33	33	50	63	63	71	71	71	71	71	71
Mexico	32	38	44	44	43	49	48	56	56	54	50	47	46	48	48
Nicaragua	17	17	33	33	36	50	57	50	50	50	40	67	67	83	83
Panama	64	63	62	60	60	58	58	62	60	60	60	60	61	64	65
Paraguay	50	52	50	57	60	58	61	63	62	62	62	62	64	64	62
Peru	33	39	42	48	50	59	63	63	60	60	57	60	63	63	63

**Appendix Table 1 cont'd - Percentage of foreign banks among total banks, by country**

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Trinidad & Tobago	43	43	50	44	44	44	44	44	44	44	56	56	56	67	67
Uruguay	77	77	77	74	74	73	76	81	79	77	77	81	81	81	81
Venezuela	10	15	16	25	25	25	24	28	22	24	26	26	24	26	22
<b>MENA</b>	<b>20</b>	<b>19</b>	<b>20</b>	<b>22</b>	<b>22</b>	<b>25</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>31</b>	<b>35</b>	<b>38</b>	<b>38</b>	<b>39</b>
Algeria	17	17	17	29	25	45	45	53	53	53	57	57	64	64	64
Egypt	6	6	9	13	16	16	19	19	19	19	24	44	52	52	52
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jordan	11	10	10	10	10	10	10	10	10	20	30	30	30	40	40
Lebanon	29	29	30	32	31	33	33	35	35	33	37	38	41	39	39
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morocco	36	36	31	38	38	38	38	33	40	44	40	40	40	40	50
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunisia	36	36	33	33	33	38	38	44	44	44	50	50	50	50	50
Yemen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>OHI</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>32</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>42</b>	<b>42</b>	<b>42</b>
Bahrain	57	57	57	50	50	50	43	43	50	60	58	58	57	60	56
Cyprus	50	53	53	53	53	53	56	62	60	60	60	60	61	61	61
Hong Kong	63	63	63	63	67	67	68	74	76	78	78	78	78	77	79
Iceland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	13	13	13	13	13	13	13	13	20	8	8	8	8	8	8
Kuwait	0	0	0	0	0	0	0	0	0	0	13	11	11	11	11
Qatar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Singapore	38	38	38	43	48	45	45	50	55	55	55	55	57	57	55
Slovenia	13	13	13	15	17	22	22	32	32	33	35	35	35	35	35
United Arab Emirate	13	13	13	13	13	13	13	13	13	13	13	13	18	21	21
<b>OECD</b>	<b>21</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>28</b>	<b>28</b>
Australia	36	36	41	41	41	46	46	46	46	42	40	40	38	38	38
Austria	4	5	5	5	5	7	7	8	8	9	10	10	10	10	10
Belgium	35	35	34	35	37	38	42	42	42	41	42	42	42	43	47
Canada	41	41	44	44	44	41	41	41	42	42	42	42	42	42	42
Czech Republic	39	39	39	44	52	52	54	54	57	57	55	59	64	67	67
Denmark	1	1	1	3	3	5	9	9	12	12	10	9	9	8	10
Finland	13	13	13	13	13	13	13	13	11	11	11	20	22	22	22
France	7	7	7	6	7	8	8	7	7	6	6	6	6	6	6
Germany	10	10	11	10	10	11	12	13	13	12	13	13	13	14	14
Greece	17	15	8	8	8	15	14	13	18	24	24	35	31	31	31
Hungary	67	68	73	75	78	78	81	79	86	85	85	90	93	93	92
Ireland	82	83	83	84	80	81	85	89	89	89	89	90	90	90	90
Italy	3	3	3	4	5	5	5	5	5	5	5	7	10	10	10
Japan	0	0	0	0	0	0	1	1	1	1	1	1	2	1	1
Korea (South)	0	0	0	0	6	6	12	13	18	24	24	24	24	24	24
Luxembourg	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99
Netherlands	47	48	48	52	52	48	50	50	50	50	47	47	42	39	39
New Zealand	57	67	67	67	67	67	60	60	60	70	70	70	70	70	70
Norway	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Poland	30	38	42	50	61	62	67	70	69	69	75	73	69	68	69
Portugal	17	17	17	17	17	20	23	27	27	31	30	30	30	32	33
Slovakia	41	43	42	42	43	58	71	88	94	89	89	88	88	88	87
Spain	4	4	5	5	5	5	6	6	6	5	5	7	7	7	7
Sweden	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
Switzerland	26	25	24	24	24	24	24	23	24	23	22	24	24	24	24

**Appendix Table 1 cont'd - Percentage of foreign banks among total banks, by country**

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
United Kingdom	42	45	46	47	48	48	48	49	51	53	54	54	56	57	57
United States	15	16	16	15	17	19	21	21	21	23	24	24	27	29	32
<b>SA</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>14</b>
Bangladesh	0	5	5	5	3	3	3	3	3	3	3	3	3	3	3
India	6	7	7	8	8	8	8	9	9	9	10	11	12	12	12
Nepal	36	31	31	25	25	25	22	15	15	15	15	15	13	13	13
Pakistan	5	5	9	9	14	19	14	13	12	12	16	31	36	40	40
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SSA</b>	<b>32</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>43</b>	<b>50</b>	<b>51</b>	<b>54</b>	<b>54</b>
Angola	50	40	40	40	50	50	50	50	44	44	50	50	50	50	50
Benin	60	60	67	67	71	71	71	71	63	63	67	67	67	67	67
Botswana	60	60	60	43	43	44	44	44	44	50	50	44	44	50	50
Burkina Faso	80	83	83	86	88	88	88	88	88	88	88	89	89	100	100
Burundi	20	20	20	17	20	20	20	20	20	20	20	20	25	50	50
Cameroon	50	50	43	43	38	56	56	56	56	56	56	60	70	80	89
Congo	50	60	60	60	60	60	67	67	67	67	67	71	71	83	86
Cote d'Ivoire	57	63	56	56	56	56	70	70	73	73	73	77	75	77	71
Ethiopia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghana	56	55	46	46	54	54	58	54	54	60	65	58	53	53	53
Kenya	24	24	24	24	24	27	26	26	28	28	30	30	29	35	35
Madagascar	75	75	75	80	100	100	100	100	100	100	100	100	100	100	100
Malawi	33	33	33	33	33	29	43	43	43	43	43	43	29	29	29
Mali	20	17	17	29	38	38	43	38	38	38	38	44	44	56	56
Mauritania	0	0	0	0	17	17	17	14	14	14	14	14	25	38	38
Mauritius	60	64	73	73	73	75	69	67	73	73	71	71	67	62	62
Mozambique	33	33	80	83	100	100	90	90	90	90	90	90	90	91	91
Namibia	60	50	50	50	50	50	50	38	38	38	38	38	38	38	38
Niger	75	75	75	75	83	83	83	83	83	83	83	86	86	86	86
Nigeria	5	5	5	5	6	9	9	8	9	6	3	11	11	11	11
Rwanda	17	17	17	17	17	0	0	0	0	33	50	50	43	57	57
Senegal	50	50	50	50	60	60	64	64	64	64	64	85	85	83	83
Seychelles	33	33	33	25	25	25	25	25	40	40	40	40	40	40	40
South Africa	18	17	16	16	16	14	16	17	17	17	22	22	22	22	22
Sudan	11	11	11	11	10	10	10	0	9	15	15	23	31	31	31
Swaziland	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Tanzania	55	54	53	50	56	58	58	55	57	64	68	68	70	70	70
Togo	33	50	50	50	50	50	50	50	50	50	40	33	33	33	33
Uganda	47	53	56	60	67	67	67	71	71	71	71	79	79	76	82
Zambia	56	56	56	56	56	56	63	63	63	71	75	75	88	100	100
Zimbabwe	30	27	27	27	33	25	23	21	20	20	21	25	33	33	33
<b>TOTAL</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>34</b>	<b>35</b>	<b>35</b>

**Appendix Table 2 - Percentage of foreign bank assets among total bank assets, by country**

<b>Country</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>EAP</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>3</b>
Cambodia	17	27	33	56	56	54
China	..	..	..	2	2	1
Indonesia	30	32	26	34	31	32
Malaysia	18	17	17	19	18	18
Mongolia	..	11	9	8	..	..
Philippines	..	1	2	..	..	..
Thailand	3	3	2	5	7	6
Vietnam	..	2	1	1	1	2
<b>ECA</b>	<b>27</b>	<b>23</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>28</b>
Albania	..	..	..	93	94	..
Armenia	..	46	58	65	70	79
Azerbaijan	1	1	1	3	2	3
Belarus	..	14	12	19	19	18
Bosnia-Herzegovina	67	87	90	91	92	93
Bulgaria	72	71	77	76	80	79
Croatia	88	92	90	90	90	91
Estonia	95	99	98	97	99	99
Georgia	13	32	66	66	66	64
Kazakhstan	27	24	5	13	15	17
Kyrgyzstan	..	91	..	..	..	..
Latvia	51	58	64	65	66	66
Lithuania	91	92	92	92	93	92
Macedonia	54	54	56	63	69	70
Moldova	31	30	31	38	45	49
Romania	54	55	87	89	89	85
Russia	..	7	10	11	13	12
Serbia & Montenegro	61	70	85	82	75	75
Turkey	..	..	18	18	16	14
Ukraine	28	28	42	46	58	..
Uzbekistan	..	..	..	..	..	..
<b>LAC</b>	<b>35</b>	<b>38</b>	<b>38</b>	<b>35</b>	<b>35</b>	<b>31</b>
Antigua & Barbuda	..	..	..	..	..	..
Argentina	29	27	26	28	29	28
Barbados	100	100	100	100	100	100
Bolivia	36	37	18	18	16	15
Brazil	19	24	26	26	22	..
Chile	..	..	..	..	37	34
Colombia	10	18	14	14	13	9
Costa Rica	26	27	29	36	37	31
Cuba	0	0	0	0	0	0
Dominican Rep.	12	13	12	11	7	10
Ecuador	12	11	12	13	13	5
El Salvador	69	80	80	97	97	96
Guatemala	11	11	12	13	28	29
Haiti	0	0	0	0	0	0
Honduras	31	32	30	47	46	40
Jamaica	84	87	87	88	95	96
Mexico	82	83	81	79	76	75
Nicaragua	31	22	49	48	68	55
Panama	47	46	54	65	..	..
Paraguay	68	63	60	58	62	39
Peru	41	49	48	48	50	50

**Appendix Table 2 cont'd - Percentage of foreign bank assets among total bank assets, by count**

<b>Country</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Trinidad & Tobago	13	13	13	14	56	54
Uruguay	50	75	87	47	48	..
Venezuela	31	30	29	25	26	..
<b>MENA</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>17</b>	<b>17</b>	<b>24</b>
Algeria	5	8	8	7	8	14
Egypt	10	12	21	25	25	23
Iran	0	0	0	0	0	0
Jordan	2	14	16	17	22	23
Lebanon	..	..	..	33	35	36
Libya	0	0	0	0	0	0
Morocco	..	..	..	19	18	34
Oman	0	0	0	0	0	0
Tunisia	20	29	27	27	28	..
Yemen	0	0	0	0	0	0
<b>OHI</b>	<b>45</b>	<b>44</b>	<b>44</b>	<b>42</b>	<b>42</b>	<b>43</b>
Bahrain	69	67	65	69	65	55
Cyprus	16	20	22	22	23	19
Hong Kong	..	91	91	91	91	92
Iceland	0	0	0	0	0	0
Israel	..	..	..	9	9	..
Kuwait	0	..	11	9	7	8
Qatar	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0
Singapore	..	2	10	10	3	2
Slovenia	21	25	25	24	26	25
United Arab Emirates	3	3	1	1	2	2
<b>OECD</b>	<b>10</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>12</b>	<b>12</b>
Australia	..	..	5	5	3	2
Austria	24	21	16	19	22	20
Belgium	..	13	14	13	15	50
Canada	4	4	4	4	4	5
Czech Republic	84	83	84	85	84	86
Denmark	7	20	19	18	18	20
Finland	..	55	65	65	67	65
France	..	5	5	6	6	6
Germany	5	24	14	11	12	12
Greece	4	4	14	14	14	14
Hungary	65	63	61	64	67	64
Ireland	..	62	62	61	60	56
Italy	..	1	6	7	6	6
Japan	0	0	0	0	0	0
Korea (South)	24	23	19	18	20	19
Luxembourg	100	100	100	95	96	95
Netherlands	..	7	9	10	3	2
New Zealand	..	..	84	80	78	79
Norway	..	33	16	17	16	16
Poland	72	76	75	74	72	68
Portugal	..	16	15	15	15	15
Slovakia	95	94	93	92	92	88
Spain	..	2	2	2	2	2
Sweden	14	0	0	0	0	0
Switzerland	2	4	4	4	5	5

**Appendix Table 2 cont'd - Percentage of foreign bank assets among total bank assets, by count**

<b>Country</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
United Kingdom	9	12	12	14	19	15
United States	20	20	21	23	19	18
<b>SA</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>8</b>
Bangladesh	2	2	3	2	2	3
India	4	4	4	4	5	5
Nepal	22	14	20	16	14	13
Pakistan	29	23	48	50	51	53
Sri Lanka	0	0	0	0	0	0
<b>SSA</b>	<b>12</b>	<b>25</b>	<b>26</b>	<b>28</b>	<b>26</b>	<b>28</b>
Angola	50	48	49	50	52	57
Benin	..	45	54	46	49	..
Botswana	77	77	69	72	66	66
Burkina Faso	77	79	80	76	100	100
Burundi	42	40	36	58	64	..
Cameroon	74	71	74	85	..	..
Congo	45	46	61	67	74	..
Cote d'Ivoire	89	89	..	..	..	..
Ethiopia	0	0	0	0	0	0
Ghana	..	..	..	58	60	65
Kenya	46	46	43	37	44	44
Madagascar	100	100	100	100	100	100
Malawi	49	46	46	29	31	30
Mali	25	28	30	40	52	..
Mauritania	5	3	0	4	10	..
Mauritius	37	44	58	69	60	52
Mozambique	..	99	99	100	100	100
Namibia	..	44	35	35	44	40
Niger	68	72	74	69	..	..
Nigeria	..	..	5	4	2	3
Rwanda	41	62	60	48	56	..
Senegal	56	62	94	92	93	90
Seychelles	57	52	57	60	67	27
South Africa	..	22	21	23	21	22
Sudan	..	1	8	21	23	22
Swaziland	82	80	81	83	81	88
Tanzania	..	92	93	94	80	78
Togo	53	50	48	46	51	..
Uganda	88	89	95	95	86	89
Zambia	70	70	72	89	100	100
Zimbabwe	..	..	..	..	..	..
<b>TOTAL</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>13</b>

*Note:* Foreign bank asset share is only reported when asset information is available in Bankscope for more than 60 percent of the banks active in the country in that year. Since asset information is lacking in Bankscope for the vast majority of banks before 2004, we do not report asset shares for any country before that year.

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