

# Foreign Bank Entry: Experience, Implications for Developing Economies, and Agenda for Further Research

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*In recent years foreign banks have expanded their presence significantly in several developing economies. In Argentina and Chile in Latin America and in the Czech Republic, Hungary, and Poland in Eastern Europe, foreign-controlled banks now hold more than half of total banking assets. In other regions the trend is similar, though foreign bank entry has been slower. Despite the growing number of countries embracing foreign bank entry, important questions are still being debated: What draws foreign banks to a country? Which banks expand abroad? What do foreign banks do once they arrive? How do foreign banks' mode of entry and organizational form affect their behavior? This article summarizes current knowledge on these issues. Because the existing literature focuses heavily on developed economies, it also puts forth an agenda for further study of the causes and effects of foreign bank entry in developing economies.*

When foreign banks set up operations in a host country—the process referred to as *foreign bank entry*—they do so by opening a branch or a subsidiary, either as a new (de novo) operation or by acquiring a domestic bank. According to Tschoegl (1985), the level of financial integration represented by this activity today can only be compared to the level before World War I. Between 1920 and 1980 several countries that had allowed foreign bank entry restricted it, and no country that had forbidden foreign entry allowed it. Since that time the pendulum has swung back toward entry: in several countries in Latin America and Eastern Europe foreign-controlled banks now hold more than half the banking assets. As Eichengreen and Mussa (1998) argue, allowing entry by foreign financial institutions has been part of a general trend toward lower barriers to trade in financial services.

Although many developing economies are embracing foreign bank entry, its causes and effects are still being debated. This article summarizes the evidence on foreign

bank entry, focusing on four main questions: What draws foreign banks to a country? Which banks expand abroad? What do foreign banks do once they arrive? How do foreign banks' mode of entry and organizational form affect their behavior? Answers to these questions could help address concerns that foreign entry weakens domestic banks, diminishes the ability of local regulatory and monetary authorities to influence bank behavior, unduly exposes the host country to economic shocks in the entrants' home countries, and results in less credit to certain market segments (such as small and medium-size enterprises) or at certain key times (such as during financial crises).

Although this article is concerned mainly with the effect of foreign bank entry in developing economies, the existing literature focuses primarily on developed economies, where the effect may differ. For example, many studies have found that foreign banks in the United States are less efficient than domestic ones, perhaps because of linguistic or cultural barriers (see Chang and others 1998; DeYoung and Nolle 1996; Hasan and Hunter 1996; and Mahajan and others 1996). But recent cross-country research and country case studies suggest that the opposite is true in developing economies: In these countries foreign banks appear to be more efficient than their domestic counterparts, and foreign entry seems to improve the efficiency of domestic banks (see Barajas and others 2000; Claessens and others 2000; Denizler 2000; and Kiraly and others 2000). So if policymakers in developing economies relied primarily on the evidence from developed economies, they might underestimate the potential benefits of foreign entry, to the detriment of the banking sector's development. Thus this article seeks to identify areas where knowledge about the effect of foreign bank entry in developing economies is limited and puts forth an agenda for future research.

Nevertheless, the studies surveyed here allow a number of preliminary conclusions about the causes and consequences of foreign bank entry in developing economies.

*What draws foreign banks to a country?* Foreign banks follow their domestic clients abroad and also pursue market opportunities in the host developing economies. Foreign banks are generally attracted to countries with fewer restrictions on entry and bank activity. Although more research is needed, initial evidence suggests that countries that impose greater restrictions reap fewer benefits than those that provide a level playing field for foreign banks.

*Which banks expand abroad?* Many studies have found that larger banks are more likely to expand abroad. One plausible reason for this is that larger banks are more likely to have clients (such as multinational companies) that demand banking services abroad. Moreover, large banks might be better able to exploit the economies of scale associated with expanding overseas. Banks that are more innovative and efficient are also more likely to expand abroad. But restrictions on outward foreign direct investment reduce the likelihood that local banks will enter other countries.

*What do foreign banks do once they arrive?* Although more empirical work is needed on developing economies, foreign entry appears to exert competitive pressure on

domestic banks, forcing them to become more efficient by lowering their costs. But this competition is often concentrated in specific lines of business, which appear to vary among countries. Recent evidence on the type of lending undertaken by foreign banks appears to discredit the notion that foreign entry might reduce access to credit for small and medium-size enterprises. Empirical studies suggest that overall foreign banks do not threaten financial stability. Although foreign banks have the potential to transmit shocks from their home countries, their lending generally does not decline substantially during local financial crises, especially when compared with that of domestic banks. Whether recent events in Argentina—where some foreign banks do not intend to recapitalize subsidiaries—signal a change in foreign bank behavior or a justified response to bad government policies will surely be the subject of future research in this area.

*How do foreign banks' mode of entry and organizational form affect their behavior?* Foreign banks can enter developing economies by acquiring an existing domestic bank or by setting up de novo operations. As an organizational form, they can choose a representative office, an agency, a branch, or a subsidiary of the parent bank. Alternatively, they might prefer to lend directly to businesses in developing economies without actually setting up operations there (so-called cross-border lending). Regulatory restrictions and profit opportunities may influence foreign banks' mode of entry and organizational form.

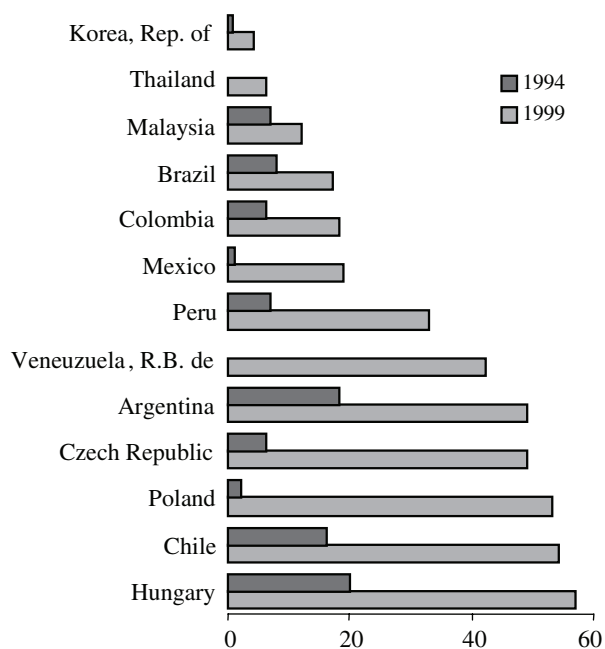
Most of the evidence on foreign banks' mode of entry and organizational form relates to banks from the United States operating abroad or to foreign banks operating in that country. Though more research is needed in developing economies, several issues are worth highlighting. First, recent technological changes may allow banks involved in cross-border consolidation to benefit from economies of scale arising from such transactions. Such benefits are likely to be passed on to consumers of financial services in the form of better financing conditions and greater access to financing. In particular, advances in electronic banking and credit scoring could assuage fears that the typically large banks resulting from mergers and acquisitions will shy away from lending to small customers. Second, although the evidence from the United States indicates that de novo banks are likely to increase credit to small customers as well, it is unclear whether these findings will carry over to developing economies, because de novo entrants in these markets tend to be neither truly young nor small. Third, subsidiaries might appear to be the preferred organizational form for developing economies—because they allow foreign banks to provide a wider range of activities than branches and appear to provide a more stable source of financing than cross-border lending—though more research is needed on this question. Existing evidence suggests that branches engage in a narrower set of activities, but they have more direct access to the parent bank's capital than do subsidiaries, as illustrated by the recent decision of some foreign banks not to recapitalize their subsidiaries in Argentina.

## The Pattern of Foreign Bank Penetration around the World

Although foreign bank entry has occurred in many developing countries, the pattern has not been uniform (IMF 2000). Countries in Latin America and Eastern Europe have permitted and attracted the most foreign bank entry: between 1994 and 1999 the share of banking assets held by foreign-controlled banks in Argentina, Chile, Hungary, and Poland rose from less than 20 percent to more than 50 percent (figure 1). By contrast, in East Asia over the same period, the average share rose only from 3 percent to 7 percent.

Based on a survey of national bank regulatory and supervisory authorities, Barth and others (2001c) provide data on the share of banking assets held by foreign-controlled banks in 91 countries, mostly for 1998 (table 1). (In an era of rapid entry, small differences in timing can have a significant effect on reported foreign ownership, explaining differences between figure 1 and table 1.) Two features of these data stand out. First, foreign-controlled banks hold widely differing shares of assets across countries—from 0 to 100 percent. In 31 countries foreign banks hold less than 10 percent of banking assets; in 24 others they hold more than 50 percent. Second, there

**Figure 1.** Share of Banking Assets Held by Foreign-Controlled Banks, Selected Countries, 1994 and 1999 (percent)



Source: IMF 2000.

**Table 1.** Economies by Share of Banking Assets Held by Foreign-Controlled Banks, 1998  
(percent)

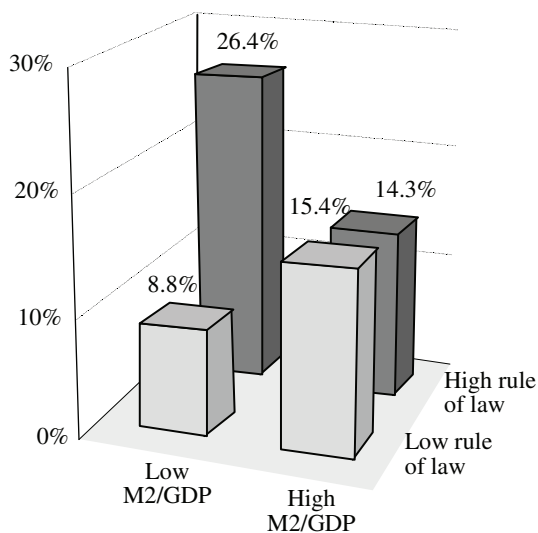
0–5 percent		5–10 percent		10–20 percent		20–40 percent		40–60 percent		60–80 percent		80–100 percent	
Burundi	0.0	Austria	5.1	Cyprus	10.9	Bhutan	20.0	Peru	40.4	Hungary	62.0	Estonia	85.0
Iceland	0.0	South Africa	5.2	Spain	11.0	Maldives	25.0	Bolivia	42.3	Zambia	64.0	Solomon Islands	90.0
India	0.0	Japan	5.9	Oman	11.1	Vanuatu	25.0	Jamaica	44.0	St. Kitts and Nevis	65.1	Turks and Caicos	90.0
Korea, Rep. of	0.0	Tajikistan	6.2	Portugal	11.7	Mauritius	25.8	Lithuania	48.0	Turkey	66.3	Macedonia, FYR	92.7
Kuwait	0.0	Bangladesh	6.4	Macau	12.0	Czech Republic	26.0	Malta	48.8	Jordan	68.0	Samoa	93.0
Nigeria	0.0	Croatia	6.7	El Salvador	12.5	Poland	26.4	Argentina	49.0	Cambodia	71.0	Luxembourg	95.0
Saudi Arabia	0.0	Indonesia	7.0	Philippines	12.8	Lebanon	27.2	Lesotho	49.0	Gambia	76.4	Botswana	97.6
Liechtenstein	1.0	Thailand	7.2	Qatar	14.9	Bahrain	28.0	Rwanda	50.0	Aruba	76.8	Cayman Islands	98.0
Honduras	1.6	Finland	7.8	Guyana	16.0	Puerto Rico	30.8	Singapore	50.0	Estonia	85.0	New Zealand	99.0
Sweden	1.8	Trinidad and Tobago	7.9	Brazil	16.7	Chile	32.0	Ghana	54.3			British Virgin Islands	100.0
Belarus	2.8	Romania	8.0	Australia	17.1	Moldova	33.4					Gibraltar	100.0
Egypt, Arab Rep.	4.2	Malawi	8.3	Malaysia	18.0	Venezuela, R. B. de	33.7					Guernsey	100.0
Germany	4.2	Switzerland	8.5	Morocco	18.8	Nepal	35.0					Tonga	100.0
Slovenia	4.6	Russian Federation	9.0	Mexico	19.9	Panama	38.3						
United States	4.7												
Guatemala	4.9												
Greece	5.0												
Italy	5.0												

Source: Barth and others 2001c.

is no obvious pattern based on level of development. Foreign banks hold less than 10 percent of banking assets in such developing economies as Bangladesh, Egypt, and India—but more than 60 percent in Cambodia, Hungary, and Turkey. In developed economies, such as Germany, Sweden, and the United States, foreign-controlled banks hold less than 10 percent of assets, whereas in Luxembourg and New Zealand they hold more than 90 percent.

The Barth and others data can help shed light on the links between the degree of foreign ownership and several macroeconomic and institutional indicators, including the rule of law index, which reflects the willingness of a country's citizens to accept the established legal traditions for making and implementing laws and adjudicating disputes, and the ratio of money plus quasi-money (M2) to GDP as a measure of financial development. The data show that foreign-controlled banks hold the largest share of assets, 26.4 percent, in countries where the rule of law is well established but the financial sector is relatively underdeveloped—as reflected in a relatively low ratio of M2 to GDP—and thus market opportunities are greater (figure 2). By contrast, in countries with a weak legal tradition and a relatively low ratio of M2 to GDP, they hold only 8.8 percent of assets. In financially developed economies the quality of the legal system appears to have less influence. In these countries foreign banks hold about 15 percent of assets regardless of the quality of legal institutions.

**Figure 2.** Foreign Bank Participation, Financial Development, and Rule of Law, 1998 (Banking Assets Held by Foreign-Controlled Banks) (percent)



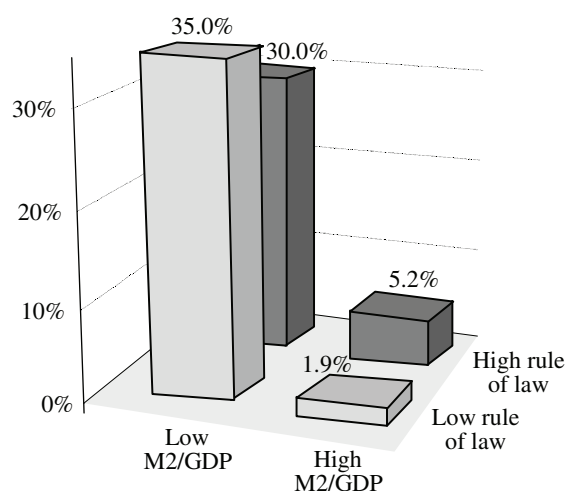
Source: World Bank 2001, Political Risk Services (PRS) Group 2001, Barth and others 2001c.

By comparison, regardless of the quality of the legal environment, state banks control a much larger share (30–35 percent) of banking assets in countries with less developed financial sectors than in those with more developed financial sectors (2–5 percent; figure 3). Considered together, figures 2 and 3 suggest that in financially underdeveloped economies with strong legal traditions, on average the banking sector is divided in thirds among state, foreign, and private domestic banks. In financially underdeveloped economies with weak legal traditions, state banks control a large share of banking assets, foreign banks a very small share, and private domestic banks the rest.

An examination of the relationship between foreign bank participation and foreign direct investment suggests that foreign banks play an important role in countries where the overall level of foreign direct investment is high regardless of the level of financial development (figure 4). This evidence suggests that foreign banks follow their clients abroad. But local market opportunities (as captured by low levels of financial development, measured here as the ratio of private sector credit to GDP) also appear to play a role. Among countries that receive large per capita inflows of foreign direct investment, foreign banks hold 44 percent of assets in those with underdeveloped banking sectors but only 18 percent in those with relatively developed sectors.

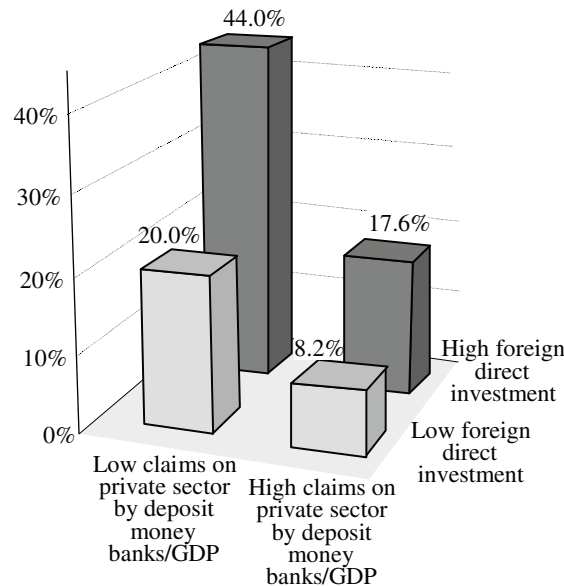
The data on foreign bank participation and private sector lending support the hypothesis that foreign banks can be a stabilizing influence (though they do not

**Figure 3.** State Bank Ownership, Financial Development, and Rule of Law, 1998 (Banking Assets Held by State-Owned Banks) (percent)



Source: World Bank 2001, PRS Group 2001, Barth and others 2001c.

**Figure 4.** Foreign Bank Participation, Financial Development, and Foreign Direct Investment, 1998 (Banking Assets Held by Foreign-Controlled Banks) (percent)



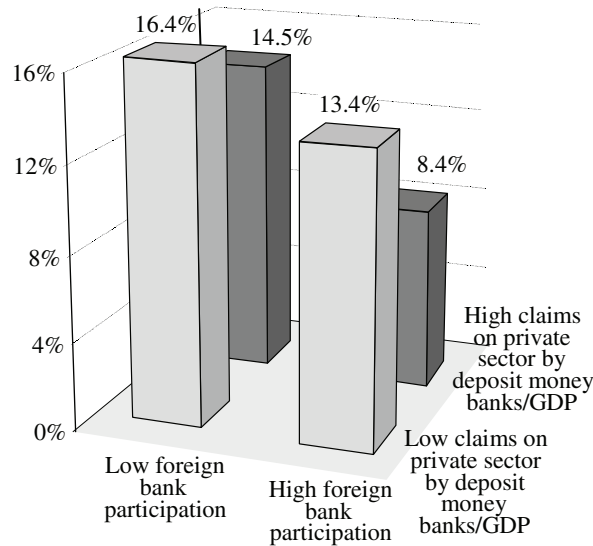
Source: World Bank 2001, PRS Group 2001, Barth and others 2001c.

include the recent experience of Argentina). The coefficient of variation for the ratio of claims on the private sector by deposit money banks to GDP (that is, the instability of credit growth) over the period 1996–2000 is lower in countries where foreign ownership is greater than the sample median for countries with both developed and less developed banking sectors (figure 5). It is smallest (8.4 percent) in countries where the level of foreign bank entry is relatively high and the banking sector is relatively developed.

A comparison of the behavior of international bank claims with that of domestic bank credit (both in real dollars) before and during recent financial crises in East Asia, Latin America (excluding the recent case of Argentina), and the Russian Federation provides further evidence that foreign banks do not increase instability in countries that host them (table 2). In all cases except Argentina (1995 crisis) both domestic credit and international bank claims dropped during the recent crises. But in most cases domestic credit declined significantly more than lending by international banks.



**Figure 5.** Private Credit Volatility, Foreign Bank Participation, and Financial Development, 1996–2000 (Coefficient of Variation for Ratio of Claims on Private Sector by Deposit Money Banks to GDP)



Source: World Bank 2001, PRS Group 2001, Barth and others 2001c.

The evidence in this section points in a number of directions. First, foreign bank entry has not been evenly distributed across developing economies. Second, foreign banks seem to not only follow their customers abroad but also pursue local market opportunities. Third, foreign banks do not appear to be more destabilizing than domestic banks in the countries that host them. Although suggestive, these associations are not formal tests of the causes and consequences of foreign entry. They are included here to provide context and motivation for the empirical literature on these subjects, to which the next section turns.

## What Draws Foreign Banks? Location-Specific Factors

Empirical research on the factors that encourage entry by foreign banks shows that economic integration between a foreign bank's home country and the host country it enters, the market opportunities in the host country, and entry restrictions and other regulations (including tax treatment) all affect the pattern and timing of foreign entry. Although much of the evidence comes from the United States, some cross-country evidence has recently emerged.

**Table 2.** The Impact of Financial Crises on Growth in Domestic Credit and International Bank Claims, Selected Countries  
(annual percentage growth in U.S. dollars)

Country	Crisis year	International bank claims <sup>a</sup>		Domestic credit <sup>b</sup>	
		Precrisis <sup>c</sup>	Crisis <sup>d</sup>	Precrisis <sup>c</sup>	Crisis <sup>d</sup>
Argentina	1995	5.17	4.89	11.41	2.34
Brazil	1999	12.22	-12.11	-6.17	-47.09
Mexico	1995	6.19	-14.60	9.37	-61.79
Russian Federation	1998	6.15	-22.24	5.93	-33.59
Indonesia	1997	20.44	-28.69	13.17	-82.16
Korea, Rep. of	1997	25.77	-37.82	12.79	-29.28
Malaysia	1997	22.30	-29.06	25.76	-37.55
Thailand	1997	20.78	-36.00	13.68	-30.46

<sup>a</sup>International bank claims refer to cross-border and local claims in foreign currency by countries reporting to the Bank for International Settlements (Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States).

<sup>b</sup>Domestic credit refers to the credit extended locally by domestic and foreign institutions.

<sup>c</sup>Precrisis refers to the two years before the crisis. The growth rates reported are an average over these two years.

<sup>d</sup>Crisis refers to the year in which the crisis occurred.

Source: Bank for International Settlements 2001, IMF 2001.

### *Economic Integration between the Home and Host Countries*

Looking at developed economies, many studies have found a positive and significant correlation between foreign direct investment in the banking sector and integration between home and host countries.<sup>1</sup> Several of these have examined the activities of foreign banks operating in the United Kingdom or the United States (Budzeika 1991; Fisher and Molyneux 1996; Hultman and McGee 1989). Others have analyzed the foreign activities of banks from one country—Germany, Japan, the United Kingdom, the United States—throughout the world.<sup>2</sup> Studies that link foreign bank entry with other foreign direct investment are often seen as supporting the claim that banks follow their customers abroad.

Even if foreign direct investment in the nonfinancial sector is correlated with foreign bank entry, it is not clear that it has a causal effect. Indeed, foreign bank entry might drive foreign direct investment in the nonfinancial sector, or other factors could drive such investment in both sectors. Moreover, although most empirical studies on this topic control for market size (as measured by GDP or population) and for trade links between home and host countries, these controls might not be sufficient. These problems aside, even if there is a positive association between foreign direct invest-

ment in banking and in the nonfinancial sector, this would not necessarily mean that foreign banks provide financial services only—or even principally—to the affiliates of home country clients.

Seth and others (1998) directly address this issue by looking at the lending patterns of U.S.-based banks from Japan, Canada, France, Germany, the Netherlands, and the United Kingdom—the countries accounting for the most foreign bank activity in the United States—and at the borrowing patterns of nonbank affiliates of firms from these countries. They find that banks from four of the six countries (Canada, Japan, the Netherlands, and the United Kingdom) allocated most of their loans to non-home country borrowers for some or all of 1981–92. They conclude that the “follow the customer” hypothesis might have more limited applicability than previously thought.

This hypothesis might be even less applicable in developing economies. In a study of U.S. banks in 32 countries from 1987 to 1995, Miller and Parkhe (1998) find that greater foreign direct investment flows to a host country are associated with foreign bank entry *except in developing economies*. One plausible explanation for this is that domestic competition might be less effective in developing economies, so that these countries might offer foreign bank entrants substantial profit opportunities. Thus foreign entry by banks might precede or even bring about foreign entry by nonfinancial firms.

### *Opportunities in the Host Country*

Several recent studies offer support for the notion that foreign banks are attracted by profit opportunities in host countries. Modeling foreign bank presence across 80 countries in 1988–95, Claessens and others (2000) find that foreign banks are attracted to markets with low taxes and high per capita income. Yamori (1998), Brealey and Kaplanis (1996), and Buch (2000) find similar results for per capita GDP.

Focarelli and Pozzolo (2000), using a richer set of variables to control for profit opportunities in the host market, model the location choices of 143 banks with at least one shareholding abroad across 28 OECD countries. Besides controls for the degree of economic integration between countries (bilateral trade, geographic distance, and nonfinancial foreign direct investment) and regulatory restrictions on bank entry, they include variables that measure prospects for economic growth and the competitiveness of the banking sector. They find greater foreign bank entry where the expected rate of economic growth is higher. They also find greater foreign presence where local banks have higher average costs, lower net interest margins, fewer chargeoffs, and higher cash flows (signaling an inefficient use of capital). They interpret these results as consistent with the hypothesis that foreign investors envision using their expertise and human capital to restructure inefficient banks. They also find greater foreign presence where banks are smaller on average, perhaps because

it is easier to acquire banks in these markets and because there is greater opportunity to increase market share after the restructuring.

Although most of the 28 host countries in Focarelli and Pozzolo's sample are developed, the study also includes several developing economies (the Czech Republic, Hungary, the Republic of Korea, Mexico, Poland, and Turkey). Because domestic banks are likely to be weakest in developing economies, Focarelli and Pozzolo's results provide another indication that foreign banks enter developing economies to exploit local profit opportunities. Also consistent with this hypothesis, Bonin and Abel (2000) find that foreign banks in Hungary (the transition economy quickest to open its banking sector) became heavily involved in both deposit taking and consumer lending (box 1).

So, foreign banks appear to enter developing economies for somewhat different reasons than they enter developed ones. Following the customer seems a less important motivation in developing economies, suggesting that foreign banks are genuinely interested in exploiting opportunities in the host country. But more research is needed, particularly in the least developed economies, where prospects for foreign bank profitability are bleak and Focarelli and Pozzolo's (2000) results on local market opportunities are less likely to apply.

### *Regulations in the Host Country*

The effects of host country regulations restricting foreign entry are straightforward: they limit competition and protect inefficient domestic banks. Focarelli and Pozzolo (2000) find that foreign banks prefer to invest in countries with fewer regulatory restrictions on banking activity. Barth and others (2001b) provide cross-country evidence that restrictions on entry (whether for foreign or domestic banks) are associated with higher net interest margins and overhead costs. In addition, major banking crises appear more likely in countries that limit foreign bank entry and ownership.

Again, the most studied case is the United States, where state regulations affected the nature and pattern of foreign participation. Goldberg and Grosse (1994) find that foreign banks had a greater presence in states with less strict regulations on foreign activities. Hultman and McGee (1989) argue that tax laws may also have affected foreign banks' decisions about where to locate and what type of office to establish.

For developing economies, it will be interesting to contrast the experiences of those that pursued open, "level playing field" approaches to foreign participation, such as Argentina and Chile, with those that have imposed special conditions on foreign banks, such as Egypt and the Republic of Korea. Initial indications are that less open approaches have produced meager benefits. Hao and others (2000), for example, find only limited efficiency improvements associated with foreign entry in Korea.

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**Box 1. The Evolution of Hungary's Banking Sector**

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During the economic transition in Hungary the ownership structure of its banking sector was rapidly overhauled. State-owned banks were privatized, and private foreign banks were allowed to enter. Despite some initial dislocation, services have slowly expanded and improved.

Foreign participation in banking has grown dramatically. At the end of 1999 banks in which foreign interests owned more than 50 percent of equity accounted for 57 percent of banking assets, up from 20 percent in 1994. If the threshold for foreign control is lowered to 40 percent of equity, their share increases to 80 percent of assets. Not all foreign banks have pursued the same objectives or clientele. Many are active in retail banking, both taking deposits and lending to households.

Concentration in the banking sector has declined sharply. In 1990, before the transition, Országos Takarékpénztár és Kereskedelmi Bank (OTP) held 98 percent of loans to households and collected 93 percent of household deposits. By 1999 the reorganized (and privatized) OTP retained only 56 percent of household loans and 52 percent of household deposits. OTP's share of the household loans extended by all private domestic banks fell from 93 percent in 1995 to 90 percent in 1999. Thus OTP accounted for almost all the decline in the share of household loans granted by these banks between 1995 and 1999 (see figure).

The combined share of the six largest banks—four of which are foreign owned—declined from 99 percent of household loans in 1990 to 85 percent in 1999. Their share of household credit fell from 99 percent to 66 percent, reflecting the important inroads into retail banking made by small and medium-size banks, most also foreign owned. But the *de novo* banks made even earlier inroads into that market.

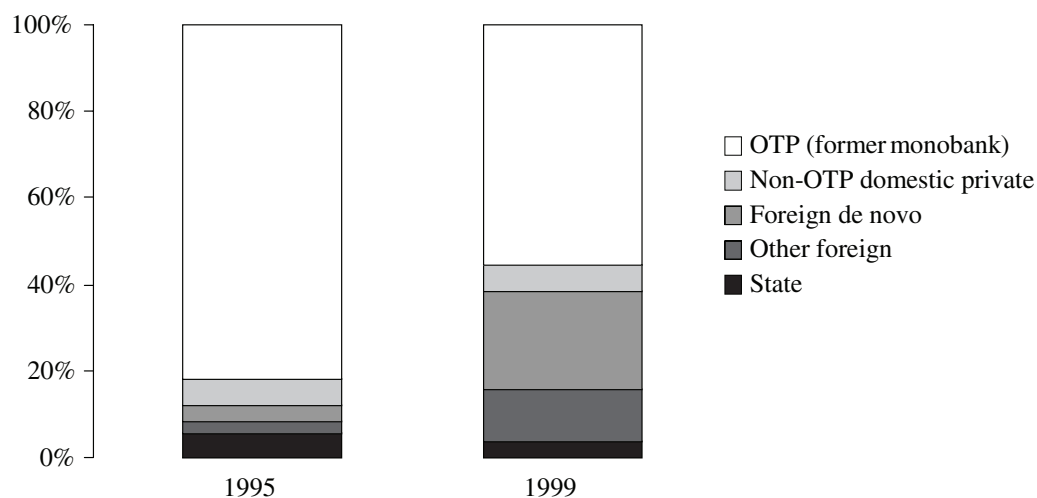
Banks have sought specific market niches. Small banks largely use the household deposits they collect to lend to other households, whereas larger banks use household deposits to support other types of lending, such as commercial loans. Foreign *de novo* banks return 23 percent of their deposits to the household sector in the form of loans, up from 10 percent in 1996. By contrast, private domestic banks return only 16 percent to the household sector, down from 18 percent in 1996.

Starting from a low level of checking accounts, Hungary “leapfrogged” that medium of payment and moved directly to electronic bankcards. In 1999 it had the region's second-highest number (after Slovenia) of Visa and Europay cards, 358 per 1,000 inhabitants. The Czech Republic had 208 per 1,000, and Poland 181. And from 1995 to 1999 the number of automated teller machines increased by 350 percent, though about a third of the machines are in Budapest.

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**Figure.** Total Bank Credit to Households by Type of Bank, Hungary, 1995 and 1999 (percent)

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Source: Bonin and Abel 2000.

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## Which Banks Expand Abroad?

The rich variation in foreign bank entrants, modes of entry, and choices of location might be expected to provide evidence about the ownership-specific factors that affect entry decisions. But most theoretical explanations of how ownership-specific factors affect entry center on product differentiation and comparative advantage. Buch (2000) notes that because it is difficult to obtain data on such ownership-specific factors, most research has focused on location-specific factors. Despite the data limitations, there is evidence suggesting that banks' size, their efficiency and performance, and their home country's restrictions on banking all play a part in determining which banks expand abroad.

### *Size*

There are several reasons why large banks might be more likely to expand abroad.<sup>3</sup> First, large banks are more likely to have multinational enterprises as customers and therefore might be more likely to be pulled to new locations. Second, banks with a large home market share might have stronger incentives to seek risk diversification opportunities abroad. Finally, increasing returns to scale in some of the banking services characteristic of international banking, such as portfolio management and investment banking, could favor large banks.

Several studies have found a positive correlation between size and internationalization. Tschoegl (1983), studying the activities of the world's 100 largest international banks in 1976, finds that larger banks had a greater global presence. Grosse and Goldberg (1991), using 1980–88 data on the average characteristics of the home country's banking sector, find that sector size was positively linked to foreign bank presence in the United States. Studying the activities of Japanese banks in the Republic of Korea, Ursacki and Vertinsky (1992) find a positive correlation between asset size and number of branches. Williams (1996, 1998) finds similar results for foreign banks in Australia. Focarelli and Pozzolo (2000), in their study of foreign banks in 28 OECD countries, find that bank size as measured by total assets is positively correlated with internationalization.

### *Efficiency and Other Performance Measures*

There are two types of evidence on efficiency and bank performance. One comes from comparisons of foreign and domestic banks, which show different results for developed than for developing economies. The other shows that among the banks that expand abroad, those that have a greater international presence perform better.

Several studies in developed economies have found that foreign-owned banks are less efficient than domestic ones.<sup>4</sup> For example, Hasan and Hunter (1996) find that



Japanese multinational banks in the United States are less efficient on average than U.S. multinational banks. But some studies have found that foreign institutions are nearly as efficient as domestic ones, especially when the United States is not the host nation (Hasan and Lozano-Vivas 1998; Vander Venet 1996).

Efficiency comparisons of foreign and domestic banks in developing countries yield very different results. Comparing the cost efficiency of various groups of banks in Hungary in 1994–97, Kiraly and others (2000) find that foreign-owned banks (especially those that are large) rank at the top of the efficiency list. In India, Bhattacharya and others (1997) find that foreign banks are slightly more efficient than domestic ones.

Comparisons of the performance (particularly profitability) of foreign and domestic banks also differ between developed and developing economies. Examining the performance of foreign and domestic banks in 80 countries, Demirgüç-Kunt and Huizinga (2000) and Claessens and others (2000) find that foreign banks exhibited lower profitability than domestic banks in developed economies. They find the opposite result in developing economies. Similar evidence is found in developing economy case studies. Denizer (2000) finds that foreign banks in Turkey attained higher profitability than domestic banks. Clarke and others (2000) find similar results for Argentina in the late 1990s. Comparing the performance of foreign-owned and domestic banks in Colombia in 1985–98, Barajas and others (2000) find that foreign-owned banks had fewer nonperforming loans, lower administrative costs, and higher productivity.

Mathieson and Roldós (2001) argue that the contrasting results in mature and emerging markets reflect differences in conditions at the time of foreign entry. Most studies in developed economies cover periods in which banking regulations and controls had long since been liberalized and banks were used to competing with not only other domestic banks but also nonbank sources of credit (especially capital markets). This competition had already put pressure on net interest margins, forcing banks to merge or adopt new technologies to reduce overhead costs. By contrast, studies in developing economies have typically focused on periods in which the banking system had only recently been liberalized or was coming out of a crisis. In both cases banks were emerging from periods typically characterized by entry restrictions, nonmarket interest rates, and limited competition from nonbank sources of credit. Although this type of environment allowed inefficient banks to survive, it also created strong profit opportunities for foreign banks that could operate with more efficient cost structures and offer market interest rates.

The second type of evidence, linking foreign entry to efficiency and performance, again comes from Focarelli and Pozzolo (2000). They find that a bank's return on assets is positively correlated with the degree to which it expands abroad. They argue that this result is consistent with the notion that efficiency, as proxied by profitability, has a positive effect on the level of internationalization. They also find that banks

with a higher share of noninterest income are more likely to have a foreign presence. They interpret these results as showing that more innovative banks look for new profit opportunities and therefore have both a larger share of revenues from nontraditional activities and a greater propensity to expand abroad.

Though size and efficiency are important determinants of which banks go abroad, other factors also appear to play a role. For example, Calderon and Casilda (1999), in a review of foreign bank entry into Latin America over the past decade, point to characteristics of the banks' home countries. They argue that financial deregulation in Spain, together with the greater competition brought about by the European Monetary Union, led Spanish banks to invest heavily in Latin America to expand their regional presence. Similarly, Goldberg (1992) notes that foreign banks were able to penetrate U.S. banking in the 1980s because of greater availability of funds at home. Many countries, such as Japan, had higher savings rates and trade surpluses than the United States and were trying to find places to invest.

### *Regulations in the Home Country*

Home country regulations can also affect the pattern and nature of foreign bank entry. Based on regressions explaining foreign presence, Focarelli and Pozzolo (2000) find that restrictions on outward foreign direct investment reduce the likelihood that local banks will enter other countries. Somewhat more surprisingly, they find that restrictions on the activities of domestic banks have the same effect. They speculate that the restrictions reduce the efficiency of a country's banking sector and thus the likelihood that its banks will have a comparative advantage over competitors in their destination market. In a cross-country study Barth and others (2001a, 2001b) find evidence that restricting the range of domestic banks' activities is negatively associated with the banks' performance and stability.

## What Do Foreign Banks Do? What Are the Implications for Domestic Banks?

The evidence shows that foreign banks do not merely follow home country customers abroad. They also go abroad to pursue local profit opportunities, especially in developing economies. What are the effects of foreign entry on competition for domestic banks? What are the implications for stability? Besides concerns that foreign banks will drive domestic ones out of business, there are concerns that in times of crisis foreign banks may curtail their lending in the host country, exacerbating the problems. There is also concern that foreign banks will "cherry pick" the best borrowers while neglecting market segments like small and medium-size enterprises. If



cherry picking weakens domestic banks enough so that some must exit the market, the supply of credit to such firms may decline.

### *Competition with Domestic Banks*

Studies show that foreign entry does exert competitive pressure on domestic banks. This appears to force domestic banks to lower their costs and in some cases appears to reduce their profitability. Moreover, because foreign banks do not necessarily enter all domestic market segments equally, domestic banks face different degrees of pressure—though the areas where pressure is applied probably vary across countries. The evidence on how foreign entry affects the quality of domestic banks' loan portfolios is mixed, suggesting that this issue requires further investigation.

Several studies have examined the activities of foreign banks in the United States. Goldberg and Saunders (1981a) find that foreign banks operating in the United States tended to be oriented toward wholesale business. Damanpour (1990) provides similar evidence, showing that foreign banks had a heavy concentration of commercial and industrial loans in their portfolios. Calomiris and Carey (1994) suggest that the growth of foreign banks' market share in the United States depended more on purchasing existing loans than on originating new ones. Similarly, Kraus (1995) finds that having established a presence in the United States, many foreign banks increased their market share by acquiring existing banks rather than originating new lending. Seth (1992) and Peek and others (1999) attribute the relatively low profitability of foreign banks operating in the United States to the preexisting conditions of banks acquired as well as to foreign banks' business strategies. These studies show that foreign banks tended to acquire banks with lower than average capital and higher than average nonperforming loans. Dealing with these problems reduced their profitability relative to that of domestic banks.

Although the wholesale orientation of foreign banks limited the benefits they could provide in the United States, some borrowers nevertheless gained. Goldberg (1992) notes that foreign banks that were new entrants were often accused of pricing their products lower than domestic competitors to obtain business. The foreign banks were able to accept smaller profit margins because of lower capital requirements and a greater ability to use leverage. Several studies conclude that foreign banks benefited from lower costs of capital compared with U.S.-owned banks (McCauley and Seth 1992; Terrell 1993; Zimmer and McCauley 1991).

Still, the high cost of doing business in a foreign country means that foreign banks often find themselves at a competitive disadvantage. In the United States, a developed economy with strong domestic banks, competing on the basis of special expertise or services is hard to do. So it is not surprising that foreign banks competed largely on price and in the wholesale market.

But the United States may not be a typical host country. Many recent studies have therefore focused on the activities of foreign banks and the effect of foreign entry in other countries that saw an increase in foreign bank participation in recent years. Claessens and others (2000) estimate the effect of foreign bank entry on the operations of domestic banks in a sample of 80 developed and developing economies. They conclude that foreign banks diminish the profitability of domestic banks and also find some evidence that foreign entry reduces the noninterest income and overall expenses of domestic banks. They argue that when other variables are controlled for, high profits reflect a lack of competition, and high overhead costs a lack of efficient management. Thus the authors interpret their results to mean that foreign bank entry increases efficiency in the domestic banking system.

Using bank accounting data from the Philippines for 1990–98, Unite and Sullivan (2001) investigate how foreign bank entry and increased foreign ownership affected domestic banks. The authors find that greater foreign bank entry and penetration reduced the interest spreads and operating expenses of domestic banks but not their profitability. They conclude that foreign competition forces domestic banks to be more efficient. They also find that foreign bank entry and penetration led to an increase in loan loss provisions, used as a measure of bank risk. Because greater loan loss provisions reflect an increase in estimates of bad loans or a more realistic evaluation of the quality of loan portfolios, the authors assume that the higher loan loss provisions reflected more conservative banking practices and lower bank risk.

Barajas and others (2000) provide evidence on the competitive effect of foreign entry in Colombia, using panel estimation and controlling for other aspects of financial liberalization (including the number and relative size of new domestic entrants and overall increases in capital flows). They find that foreign entry appeared to improve the efficiency of the domestic banking system by reducing nonfinancial costs. But foreign and domestic entry combined led to a deterioration in the quality of domestic banks' loan portfolios. The authors point out that this evidence is consistent with the notion that greater competition increases risk by leading to a loss of bank franchise value (a notion discussed most notably by Hellman and others 2000). Finally, the authors find that foreign entry lowered spreads among foreign banks, whereas domestic entry lowered spreads across all banks. This result suggests that foreign banks in Colombia did not compete against domestic ones in all sectors.

Similarly, Clarke and others (2000) find that although foreign banks in Argentina competed beyond the wholesale market in the late 1990s, they did not compete with domestic banks in all sectors. This result is consistent with the hypothesis that foreign banks enter areas where they have a comparative advantage, putting pressure on the domestic banks in those areas. The authors find that domestic banks with loan portfolios concentrated in manufacturing, where foreign banks have traditionally directed much of their lending, tended to have lower net interest margins and lower profits than other domestic banks. By contrast, banks active primarily in con-

sumer lending, where foreign banks have not been heavily involved, had higher net interest margins and higher profits.

### *Implications for Stability*

By permitting foreign banks to enter, host countries may open themselves up to economic fluctuations in entrants' home countries. Peek and Rosengren (2000a) find that the collapse of the equity and real estate markets and the subsequent banking crisis in Japan affected economic activity in the U.S. commercial real estate sector in the 1990s. Japanese bank subsidiaries in the United States responded to the problems in Japan by reducing their lending in U.S. markets. Because Japanese banks had a large presence in some major commercial real estate markets in the United States, that response had real effects on construction. Evidence also shows that cyclical conditions in the United States can affect the host countries of U.S. banks operating abroad. Based on data on U.S. bank claims on individual foreign countries since the mid-1980s, Goldberg (2001) concludes that foreign claims are highly correlated with GDP growth in the United States but not with economic conditions in the host countries.

But it has also been argued that foreign banks may be a stabilizing influence before or during local financial crises. One reason is that they tend to have access to a more diversified (international) pool of liquidity than do domestic banks. Even if external funds dry up, they may still have access to financial support from their parent banks (see Detragiache and Gupta 2002 and Peek and Rosengren 2000b). Cross-country evidence in Demirgüç-Kunt and others (1998) and Levine (1999) shows that when other factors likely to produce banking crises are controlled for, the presence of foreign banks reduces the likelihood of crisis and has a positive effect on growth. Barth and others (2001b) find that restrictions on foreign entry are associated with lower loan portfolio quality on average and greater fragility of the banking sector.

Moreover, studies examining the actions of foreign banks during crises conclude that they do not appear to retrench their lending significantly during these episodes, especially when compared with domestic banks. Dages and others (2000) show that foreign banks in Argentina and Mexico had stronger and less volatile loan growth than domestic banks between 1994 and 1999—that is, during and after the Tequila crisis. Peek and Rosengren (2000b) reach a similar conclusion after examining the direct (or cross-border) foreign lending and local claims by foreign banks in Argentina, Brazil, and Mexico in 1994–99. Focusing on U.S. banks' cross-border and locally funded claims since the mid-1980s, Goldberg (2001) finds that their foreign lending was virtually unaffected by crises in host (borrower) countries. In Malaysia, Detragiache and Gupta (2002) find that foreign banks not only did not abandon the local market in the immediate aftermath of the recent economic crisis but in fact increased their market share.

Nevertheless, the evidence on the behavior of foreign banks during crises is new and still limited. Moreover, recent events in Argentina, which experienced significant foreign bank entry in the 1990s (see figure 1), may challenge the notion that foreign banks can be a stabilizing force in developing economies' banking sectors. After a decade in which a currency board system pegged the Argentine peso one to one to the U.S. dollar, a run by investors in late December 2001 forced the government to freeze bank deposits (under the so-called *corralito*, or little fence), devalue the peso, and default on its debt.<sup>5</sup> Following these events, three foreign banks operating in Argentina (two owned by the French Crédit Agricole and one owned by the Canadian Scotia Bank) announced their decision to leave the country, and others have threatened not to recapitalize their subsidiaries.

Many observers accuse the foreign banks of being fickle. But the banks blame government policies for the enormous losses the banking system faces, and some blame the policies for their decision to leave. In particular, they point to the asymmetric "pesification" of assets and liabilities as a form of expropriation—while dollar-denominated loans were converted to pesos at a rate of 1 to 1, deposits were converted at 1 to 1.4. They note that because banks had become key financiers of the Argentine government before the crisis, they had been hurt severely by the debt default and the collapse of government bond prices.

Because the crisis is ongoing and threats to leave or not to recapitalize might be a negotiating tactic in some cases, it is difficult to assess what effect foreign bank ownership will have on stability in the Argentine banking sector. Whether the behavior of foreign banks in Argentina will become the norm or the exception in severe crises—and where government policies appear to have exacerbated banking sector problems—is likely to be the subject of much future research.

### *Lending to Small and Medium-Size Enterprises*

Foreign banks appear to allocate greater shares of their lending portfolios to commercial and industrial loans than do domestic banks—indirect evidence that foreign banks may be more oriented toward lending to large companies. Goldberg (1992) notes that foreign banks operating in the United States held 28.5 percent of commercial and industrial loans in 1989 but only 22.6 percent of banking assets. In a 1985 survey of 271 foreign banks operating in the United States, Cho and others (1987) find that 56 percent pointed to trade finance as a major area of specialization, 44 percent to corporate banking, and 31 percent to foreign exchange trading—all services likely to disproportionately benefit large businesses. Similarly, in Argentina in the late 1990s, Clarke and others (2000) find that foreign banks allocated about 35 percent of their lending to manufacturing, compared with less than 20 percent for private domestic banks and 10 percent for public domestic banks.

One reason that foreign banks may shy away from lending to small businesses is that, as Focarelli and Pozzolo (2000) indicate, most banks with an international presence are large. For large banks, organizational diseconomies may make it difficult to provide relationship lending services to small businesses at the same time that they are providing transaction lending and wholesale capital market services to their large clients (Berger and others 2001b).

Substantial evidence from the United States indicates that large (though not necessarily foreign) banks lend relatively less to small businesses than do smaller banks (see Berger and others 1995; Berger and Udell 1996; Keeton 1995; Levonian and Soller 1995; Peek and Rosengren 1996; and Strahan and Weston 1996). Although large banks (those with assets of more than \$5 billion) allocate only 3 percent of their assets to commercial and industrial loans to domestic borrowers with bank credit of less than \$1 million, small banks (those with assets of less than \$100 million) allocate 9 percent of their assets to such borrowers (June reports of income and condition for various banks, 1993–96, as cited in Strahan and Weston 1998).

Evidence on small business lending in Latin America is mixed. Berger and others (2001b) find that small businesses in Argentina are less likely than large ones to receive credit from large banks or from foreign banks. Also analyzing the case of Argentina, Escudé and others (2001) find that although foreign banks allocated a smaller share of their loan portfolio to small and medium-size enterprises than did domestic banks, they granted almost half the credit to this sector in 2000. The authors argue that this is evidence that foreign banks do not discriminate against small enterprises.

Clarke and others (2002) find that foreign banks in Argentina, Chile, Colombia, and Peru generally lent a smaller share of their portfolio to small and medium-size enterprises than did similar domestic banks in the late 1990s. But they also find that differences between foreign and domestic banks were far less pronounced among large banks than among small banks in all four countries. In fact, in Chile and Peru their analysis suggests that large foreign banks might have lent relatively more to small and medium-size enterprises (as a share of total lending) than did large domestic banks, once other factors that affect lending are controlled for. Moreover, the authors find that real growth in lending to small and medium-size enterprises was higher for large foreign banks than for large domestic banks in Argentina and Chile.

Technological change may explain this growth in lending by large foreign banks to small and medium-size enterprises. Mester (1997) argues that advances in credit scoring, coupled with greater computer power and data availability, might change small business lending. These factors could reduce the need for banks to have a physical presence in all geographic areas in which they lend (Petersen and Rajan 2000). They could also help large foreign banks overcome the diseconomies and difficulties in lending to small borrowers.



Even if foreign banks continue to focus on serving large customers in most developing economies, advocates of foreign entry argue that it might still benefit small borrowers. Besides the benefits associated with greater banking efficiency, foreign bank penetration could indirectly improve small borrowers' access to credit through its effect on domestic bank lending. Foreign bank competition for large customers could displace some domestic banks, forcing them to seek new market niches, such as providing credit to small and medium-size enterprises. Bonin and Abel (2000), in their descriptive account of Hungary's experience with foreign bank penetration in recent years, show that as foreign bank presence increased, some smaller domestic banks sought new market areas. Similarly, in a survey of banks from 78 countries, Jenkins (2000) finds that among the banks that lent to small and micro enterprises, 44 percent cited changed market conditions and greater competition in lending to large and medium-size enterprises as the two most important reasons for doing so.

Still, the studies cited thus far have failed to econometrically capture these indirect effects of foreign bank entry on access to credit. One possible reason is that it is difficult to isolate the effect of foreign bank penetration on domestic bank lending and access to credit from that of macroeconomic and technological changes. There are several challenges. Data are usually available only for short periods. Many developing economies, even many middle-income ones, have relatively few commercial banks. Comparable cross-country data on bank lending to small and medium-size enterprises are not readily available, especially because small local banks tend to be important lenders to this sector.

As far as is known, the study by Clarke and others (2001) is the first to try to capture both the direct and indirect effects of foreign entry on access to credit. The authors combine responses from a survey of about 3,000 enterprises in 36 developing and transition economies with data on the degree of foreign bank penetration in these countries. Controlling for a wide range of macroeconomic, institutional, and firm-specific factors, they analyze whether borrowers' perceptions about interest rates and access to long-term credit are positively associated with the presence of foreign banks. If the potential advantages of foreign bank entry in developing economies—greater sector efficiency, competitive pressures forcing a subset of domestic banks into new market niches, and new credit scoring technologies—outweigh the tendency of foreign banks to avoid lending to small and medium-size enterprises, all borrowers (including small ones) should rate access to credit as easier in countries with relatively high foreign bank penetration.

Overall, the authors' empirical results strongly support the assertion that foreign bank penetration improves access to credit. Controlling for other factors, they find that enterprises in countries with greater foreign bank penetration tend to rate interest rates and access to long-term loans as smaller constraints on operations and growth than do enterprises in countries with less foreign penetration. Moreover, although some evidence suggests that entry by foreign banks benefits large enter-

prises more than small ones, there is strong evidence that even small enterprises experience a net gain, and there is no evidence that they are harmed by foreign entry.

Thus recent evidence suggests that foreign entry might not reduce access to credit for small and medium-size enterprises, as was first suspected. Indeed, foreign entry might even increase lending to that sector. That said, however, the empirical studies on this subject remain few and cover only a small number of countries and periods. Clearly, more research is needed.

## How Do Foreign Banks' Mode of Entry and Organizational Form Affect Their Behavior?

In some cases host countries provide incentives or establish requirements for foreign banks to adopt specific modes of entry and organizational forms. For example, beginning in the 1970s Egypt permitted foreign entry only through joint ventures with the state, though in recent years the government has begun divesting those shares (Caprio and Cull 2000). In other cases governments limit the number of banking licenses, so that foreign banks can enter only by acquiring the license of a domestic bank through purchase or merger. In still other cases, as in Argentina, there appear to be no strong incentives toward particular modes of entry or organizational forms, and therefore not all foreign banks make the same choice.

This section discusses the potential implications of two modes of entry (the acquisition of or merger with a domestic bank and *de novo* entry) and four organizational forms (branch, subsidiary, representative office, and agency of the parent bank) as well as foreign bank penetration through cross-border lending. The impact of mode of entry and organizational form on foreign bank behavior is perhaps the area in which research on developing economies is most needed. This section draws primarily on the literature on developed economies, speculating about how these findings might translate to developing economies. It should therefore be considered a preliminary attempt to summarize some of the issues that need to be confirmed in future empirical analyses.

### *Mergers and Acquisitions*

Foreign bank participation in developing economies has increasingly occurred through cross-border mergers and acquisitions and will continue to do so. Berger and others (2000) summarize several hundred articles on the causes and consequences of consolidation, so that effort is not duplicated here. Most of that literature focuses on developed economies, particularly the United States and the European Union, and most examines mergers and acquisitions between domestic banks. The authors note that the literature on scale, scope, and product mix efficiencies provides little information

on the effects of cross-border consolidation, which may differ from the effects within a nation. Moreover, the within-country literature generally finds that scale and scope have small efficiency effects.

Berger and others (2000) also perform an empirical analysis of cross-border banking efficiency in France, Germany, Spain, the United Kingdom, and the United States in the 1990s. They find that domestic banks in these countries have both higher cost efficiency and profit efficiency than foreign banks, although the differences are not always statistically significant. A priori, these findings can be interpreted as supporting the home field advantage of domestic banks. When the authors disaggregate their results by nation of origin, however, they find that domestic banks are more efficient than foreign banks from *most* countries, are just as efficient as foreign banks from *some* countries, and are less efficient than foreign banks from *one* country, the United States.

Because foreign banks are generally less efficient than domestic banks in developed economies, the authors argue that efficiency considerations may limit the global consolidation in financial services. But efficiency differences between foreign banks from developed economies and domestic banks in developing economies (see Bhattacharya and others 1997 and Kiraly and others 2000) suggest that much of the future cross-border consolidation in financial services is likely to occur in developing economies, precisely because domestic banks in these countries are relatively inefficient.

What can be expected from the entry of foreign banks through cross-border mergers and acquisitions? Although the jury is still out for developing economies, the outcome for them is likely to be a net gain because they will benefit from the efficiency improvements brought about by foreign banks. Moreover, there are gains to be made from economies of scale that will result from such mergers and acquisitions. In particular, Berger and others (2000) note that technological change may have recently increased the potential for scale economies. Scale economies may be greater for new service delivery methods such as phone centers, Internet banking, and automated teller machines (Radecki and others 1997). Advances in payments technology appear to have created scale economies in back office operations and network economies that can be more readily exploited by large banks (see Bauer and Ferrier 1996; Bauer and Hancock 1993, 1995; and Hancock and others 1999). Indeed, Berger and Mester (1997) find evidence of substantial scale economies when they use data from the 1990s, even for mergers between large banks.

Along with cross-border consolidation, foreign entry in developing economies is likely to coincide with greater consolidation among domestic banks in the host country's banking sector, some of it probably involving large banks. One area of particular concern might be the impact of consolidation (cross-border or domestic) on lending to small businesses. The evidence from the United States suggests that mergers and acquisitions involving large banks lead to a fall in credit to this sector, given the informational disadvantages that large banks might face in lending to infor-



mationally opaque borrowers. Once again, however, technological improvements can mitigate some of these adverse effects. For example, if scale economies associated with consolidation lead to an increase in electronic banking, this could improve access to some financial services even for small customers. Moreover, as Mester (1997) argues, enhanced computer power, greater access to data, and use of credit scoring models can allow large banks to tap the small business lending market.

Even if the banks created through mergers and acquisitions shy away from small business lending, the literature also suggests that consolidation may have a strong “external effect.” If some types of credit provided by consolidating institutions decline, banks not in the process of consolidating may respond by increasing their own supplies of credit. In the United States Berger and others (1998) and Avery and Samolyk (2000) find that almost all the decline in lending to small businesses by participants in mergers and acquisitions was offset by an increase in lending by other banks in the same local markets. Short-term disruptions are possible, however. Berger and others (2001a) note that even if the external effect completely offsets the impact of consolidation on the quantity of credit supplied, some firms will probably face search and disruption costs and perhaps less favorable loan terms until new relationships mature.

### *De Novo Entry*

Although the evidence from developed economies is mixed, it suggests that consolidation might result in an increase in de novo entry—that is, new banks might enter markets where mergers and acquisitions occur (Berger and others 1999; Seelig and Critchfield 1999). This could also occur in developing economies. Moreover, developing economies might experience de novo entry by banks, because, as argued before, foreign banks enter these markets to pursue local profit opportunities.

What might be the impact of de novo foreign entry? Studies in the United States suggest that greater de novo entry could benefit small borrowers. For example, DeYoung and others (1999), controlling for factors including bank size, show that in the United States young banks appear to lend more to small businesses. Similarly, Goldberg and White (1998) find that the age of banks is inversely related to small business lending. In short, de novo banks in the United States tend to lend more to small businesses than incumbent banks of a similar size (\$5–100 million in assets). Using a sample of banks from 78 countries, Jenkins (2000) finds similar results.

But studies of de novo entry in the United States suggest that de novo entrants are unlikely to meet a large share of a host country’s credit needs in the near term, because they may find it difficult to attract deposits and identify profitable lending opportunities. For example, Houpt (1980) finds that de novo foreign entrants in the United States were less profitable than U.S. banks acquired by foreign banks, partly because they depended more on relatively expensive purchased funds.

It is unclear whether the findings for de novo bank entry in the United States will carry over to developing economies. De novo foreign banks in these countries may differ from de novo banks in the United States. In many instances foreign banks that set up de novo operations in developing economies have existed in their country of origin for some time and could even be large. It seems unlikely that these banks will behave as the relatively small de novo entrants in the United States do, but only further study of entry in developing economies will yield definitive conclusions.

### *Branches or Subsidiaries?*

Foreign banks can adopt a range of organizational forms when entering a host country. Goldberg (1992) notes that the most limited but most easily established organizational form is the representative office. These offices neither take deposits nor make loans. Instead, they act as agents for the foreign bank and make forward payments to the home office. Representative offices are generally established to test the possibility of further involvement in a host country.

Agencies represent a more expansive form of entry. They can make commercial and industrial loans but (at least in the United States) cannot make consumer loans or accept deposits. Although they are allowed to maintain credit balances similar to deposits, payments are rarely made from these accounts. In the United States agencies' funding comes from their parent bank or from borrowing in the federal funds or interbank market.

Because neither the agency nor the representative office represent full immersion in a host country, most of the benefits and risks of foreign entry for developing economies will probably come from two other organizational forms: the branch and the subsidiary.

In the United States branches are the most important organizational form, accounting for 63.8 percent of foreign banking assets in 1989 (Goldberg 1992). A branch is an integral part of a parent bank, meaning that it can draw on the parent's capital base and offer a wider range of services than agencies or representative offices. In the United States, however, branches have engaged mostly in wholesale operations (see Goldberg 1992 and Miller and Parkhe 1998).

Subsidiaries are permitted to engage in a broader range of financial services, and in many countries they have powers identical to those of domestic banks and thus are regulated in the same way. As wholly owned subsidiary companies of parent banks, they must lend based on their own capitalization. Unlike branches, many subsidiaries operating in the United States are oriented toward retail business.

By putting foreign banks on an equal footing with domestic ones, subsidiaries are thought to enable banks to draw on their comparative advantages (Goldberg 1992; Miller and Parkhe 1998). Despite these potential advantages, DeYoung and Nolle (1996) find that subsidiaries operating in the United States are significantly less profit

efficient than U.S. banks. But these results are not likely to apply to developing economies, and subsidiaries appear to have advantages over cross-border lending in Latin America.

Miller and Parkhe (1998) provide cross-country evidence on the overseas activities of U.S. banks suggesting that host countries influence the organizational form that entrants choose. They find, for example, that countries that permit universal banking have a larger percentage of subsidiaries, presumably because branches cannot take advantage of all the profit opportunities. They find that countries with high tax rates and explicit barriers to creating subsidiaries have a smaller percentage of subsidiaries. They find a positive relationship between nonfinancial U.S. foreign direct investment in a host country and the percentage of subsidiaries. They argue that as foreign direct investment increases, subsidiaries will become the preferred organizational form because, unlike branches, they can provide the broad array of financial services demanded by large nonfinancial firms. Although this finding might support the hypothesis that foreign banks follow their customers abroad, it does not hold for developing economies—another indication that foreign banks are more likely to be attracted to developing economies by local market opportunities.

The discussion has focused primarily on what determines a foreign bank's choice of organizational form. The literature has not directly addressed another important question: which organizational form should regulators promote? Regulators will probably want to encourage the form that supports the greatest range of financial services while not raising concerns about financial stability. The recent experience of Argentina, particularly the decision of some foreign banks not to recapitalize their subsidiaries, will probably spark a debate on the relative benefits of subsidiaries and branches. Whether the ability of branches to draw on their parent bank's capital is enough to make them the preferred choice is a question on which research is clearly needed.

### *Cross-Border Lending*

Most recent studies of foreign bank entry in developing economies focus on lending by foreign banks operating within the host country (see Claessens and others 2000; Clarke and others 2000; Dages and others 2000; and Focarelli and Pozzolo 2000). According to Peek and Rosengren (2000b), these studies exclude a potentially important source of credit—banks operating outside the host country. They find that until the end of 1997 the cross-border lending to Argentina, Brazil, and Mexico by foreign banking organizations exceeded the credit provided by foreign bank subsidiaries in those countries.

Peek and Rosengren note a major shift in the composition of foreign bank lending in the late 1990s as foreign banks increased their claims through existing and newly acquired onshore banking subsidiaries rather than through cross-border loans.

Moreover, the evidence from Argentina (until the recent crisis), Brazil, and Mexico does not indicate reluctance by foreign bank subsidiaries to expand operations when the host country is suffering from a crisis. Indeed, they find that foreign bank penetration rose after crises, mainly through acquisitions by foreign banks and growth in lending by existing foreign subsidiaries. By contrast, cross-border lending was more sensitive to economic instability in the host country, typically declining after a crisis (though less than domestic credit; see table 2).

Although few dispute that cross-border lending tends to be more volatile than bank lending through bricks-and-mortar operations, recent events in Argentina are likely to raise questions about foreign subsidiaries' commitment to staying in developing economies during crises. Future research will determine whether the recent case of Argentina is the exception or is becoming the norm.

## Conclusion

The past decade has seen a great influx of foreign banks into developing economies, a trend likely to continue. What benefits is foreign entry likely to bring, and what risks does it pose? Because the literature on this topic relates mainly to developed economies, it is difficult to fully answer these questions. Many results from studies of developed economies do not appear to carry over to developing economies. For example, most such studies have found that domestic banks are more efficient than foreign competitors, which some researchers have suggested might limit future cross-border consolidation. But the evidence suggests that in developing economies foreign banks typically outperform domestic banks, indicating a possibility for efficiency-enhancing restructuring through sales of domestic banks to foreign investors or through cross-border consolidation.

Some might argue that the efficiency benefits for developing economies are self-evident but that foreign entry poses risks for the range of services provided and the stability of the banking sector. But what evidence there is provides some reassurance. The evidence suggests that foreign banks do more than merely follow their domestic clients abroad. They appear genuinely interested in pursuing local lending opportunities in developing economies, even more so than in developed economies. Although they may not initially enter all sectors equally, the evidence suggests that their entry will be broad enough to exert competitive pressure on domestic banks, which should benefit consumers through both prices and services. Although foreign banks could increase instability in developing economies if they reduce their exposure during financial crises, the evidence from Asia and Latin America shows that foreign banks have been more likely than domestic banks to extend credit during recent crisis periods. The more recent crisis in Argentina may lead some to revisit this issue, however. Concerns also remain that foreign entry might expose developing economies to eco-

nomic fluctuations in the home countries of foreign banks or in other developing economies where these banks operate. These contagion effects have not yet been well researched, but having foreign entrants from a diversified group of countries seems likely to minimize these risks.

The initial empirical evidence on the effect of foreign entry on access to credit by small businesses suggests less reason for concern than previously thought. Although foreign banks tend to be large and large banks lend smaller shares of their portfolios to small businesses than do other banks, there are some signs that technological change might allow large foreign banks to serve this sector. Undoubtedly, this is an area requiring further research.

On the question of how the mode of foreign bank entry affects host countries, the only evidence comes from developed economies. For mergers and acquisitions, the evidence is mixed. Some studies suggest that because domestic banks in these countries tend to be more efficient than foreign banks (except for those from the United States), efficiency gains from mergers and acquisitions are likely to be limited. But other studies have shown that recent technological changes (like electronic banking) are allowing large banks—such as those that may result from cross-border consolidation—to reap benefits from economies of scale not possible before, perhaps even to the point where they can extend services to previously neglected customers such as small and medium-size enterprises. According to the U.S. literature, foreign entry through *de novo* operations is also likely to benefit small and medium-size enterprises. Whether the results on mode of foreign entry for developed economies can be extended to developing economies needs to be empirically tested.

Which organizational form should host countries promote? Recent studies suggest that subsidiaries allow foreign banks to provide a wider range of activities and could bring greater stability in lending to host countries than relying on cross-border bank loans. But the empirical evidence is limited, and further research on this issue is warranted.

## Notes

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1. Economic integration has been measured by geographic distance, volume of bilateral trade flows, bilateral foreign direct investment, or a combination of these. See Ball and Tschoegl (1982), Brealey

and Kaplanis (1996), Buch (2000), Goldberg and Saunders (1980, 1981a, 1981b), Goldberg and Johnson (1990), Grosse and Goldberg (1991), Miller and Parkhe (1998), Nigh and others (1986), Sagari (1992), and Yamori (1998).

2. For German banks, see Buch and Lapp (1998) and Buch (2000). For Japanese banks, see Yamori (1998). For U.S. banks, see Goldberg and Johnson (1990), Miller and Parkhe (1998), Nigh and others (1986), and Sagari (1992). The study by Moshirian and Van der Laan (1998), who look at evidence for German, U.K., and U.S. banks, is the only one that fails to find a strong link between nonbanking foreign direct investment and foreign bank penetration.

3. This discussion draws on Focarelli and Pozzolo (2000).

4. See, for example, Berger and others (2000), Chang and others (1998), DeYoung and Nolle (1996), Hasan and Hunter (1996), Mahajan and others (1996), Miller and Parkhe (1999), and Parkhe and Miller (1999).

5. For a description of the causes of the recent Argentine crisis see Calvo and others (2002), de la Torre and others (2002), Mussa (2002), and Perry and Servén (2002).

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