How Internationally Exposed are U.S. Banks?

Linda S. Goldberg and Glenda Oskar[1]

International Research, Federal Reserve Bank of New York

The globalization that is increasingly a phenomenon of brick and mortar industries is also a phenomenon that has extended to banking activities. U.S. banking in foreign markets changes the mixture of risks to which banks are subjected, broadening the role of risks from global markets (country risk and transfer risk) in the pool of risks associated with more domestically-oriented banking (market risk, credit risk, and liquidity risk). Changes in the mix of banking activities are important for the risk management of banks –- and indeed may sometimes help with portfolio diversification -- and for regulators concerned with systemic stability and banking oversight. While there is a generally accepted view that banking has become more globalized (as have many other industries), less well established are the facts on the form of such globalization. In this *note*, we provide information on the size of international claims in U.S. banking activity and detail how the form of this internationalization has changed over time.

Before turning to this set of themes, it is useful to consider the context of the extensive changes in the U.S. banking system over the past two decades. Very briefly, the threat of insolvency of some banks in the 1980s led to improvements in banking regulation in an effort to reduce the vulnerability of the U.S. banking system. Competition from capital markets and pressures from regulators led to improvements in bank risk management. A striking phenomenon since the late 1980s was the stark consolidation among banks in the U.S. system and the mixing of commercial banking, investment

[1] The views expressed in this paper are those of the individual authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. Address correspondences to Linda S. Goldberg, Federal Reserve Bank of NY, Research Department, 33 Liberty St, New York, N.Y. 10045. Tel: 212-720-2836; fax: 212-720-6831; email: Linda.Goldberg@ny.frb.org.

banking and insurance activities in the same company, with the latter resulting from the Gramm-Leach-Bliley Act[2].

For examining the magnitude of international orientation of U.S. banks we apply the concept of *foreign exposure*. For regulatory reporting purposes, foreign exposure is defined as the total claims, including cross-border claims and net local claims on local residents (i.e., local claims less local liabilities), that a U.S. bank has on foreign markets.[3] Foreign exposure, as discussed in this context, is not a direct measure of likelihood of losses, as "total claims in foreign markets" does not imply that borrowers are unable to fulfill their financial obligations. Rather it is a single, consolidated gross amount that a U.S. bank could directly lose if risks most pertinent to international banking were to be realized and foreign borrowers were no longer able to pay their debts. These exposure amounts are allocated among banks on an ultimate risk basis in order to best reflect the incidence of transfer risks.[4]

Analysis of foreign exposure provides insight into the reach of U.S. banks in foreign markets and, ultimately, how in aggregate such positions may bear on the stability of the U.S. banking system. These data can also inform policy discussions pertaining to emerging markets, by quantifying the type and volatility of flows from banks in large developed financial systems to developing country customers. Critics argue that banks from Industrialized countries may be unstable lenders who undermine local financial markets. Supporters argue that banks from large, well-regulated markets can serve as key sources of otherwise scarce capital and have broader positive spillovers on the

[2] Federal Reserve Bank of Philadelphia. "The Gramm-Leach-Bliley Act: A New Frontier in Financial Services." April 2000.

[3] The regulatory agency overseeing this concept is the Federal Financial Institutions Examination Council (Council), established on March 10, 1979. The Council is a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions by the Board of Governors of the Federal Reserve System (FRB), the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS) and to make recommendations to promote uniformity in the supervision of financial institutions. http://www.ffiec.gov/about.htm

[4] This exposure concept is broadly acknowledged as an incomplete indicator of overall vulnerabilities and risks to U.S. banks from international markets. Related issues are discussed at length in CBO (2002).

stability and efficiency of local financial markets.[5] To date, bank foreign exposure data has been used to show that -- even during times of crises in 1997 to 1999 -- U.S. banks remained active in foreign markets. Over recent decades, U.S. banks generally were not volatile lenders; even in periods of international financial crises, extensive retrenchments of U.S. bank claims were not observed (Goldberg 2002). So, although the focus of this *note* is not primarily an evaluation of the presence of U.S. banks in foreign financial systems, it is abundantly clear that a factual groundwork detailing levels of international bank activities provides a solid and informed foundation for such discussions.

In this *note*, we take stock of the status of the international exposures of U.S. banks over the past 25 years. Based on this examination of the data on the levels of foreign exposure and the clients who constitute the bulk of this exposure, we conclude that:

- While the total foreign exposure of U.S. banks has increased over the past decade, in real terms these totals have only recently surpassed levels reached in the early 1980s.
- Local country claims -- i.e. claims extended by local affiliates of the U.S. parent[6] -- exceeded all types of cross-border claims by U.S. banks beginning in 1987. Since the early 1980s, U.S. cross-border claims on banks in foreign markets steadily declined in importance.
- The weight of international exposure in the operations of U.S. banks is highly uneven and increasingly differentiated. For those banks reporting international exposures, the (unweighted) average of this exposure has remained in the 10 to 15 percent range of total bank assets over the past two decades.
- Over time, the number of banks with exposure in foreign markets has decreased. The overall international exposures of U.S. banks are increasingly concentrated in a

[5] For a good overview of these themes, see Clarke, Cull, Martinez Peria, and Sanchez. "Foreign Bank Entry: Experience, Implications for Developing Countries, and Agenda for Further Research", June 2002 The World Bank.
[6] Local claims are a net concept, reflecting gross local claims minus gross local liabilities.

few large U.S. bank holding companies[7]. Indeed, the five most exposed banks account for over 75 percent of total foreign exposure by U.S. banks, up from less than 50 percent in the mid 1980s.

- Most of the U.S. claims on foreign countries are in Industrialized countries, especially the United Kingdom, Japan, Germany, Italy, France and Canada. The group of top ten countries for placement of U.S. bank claims also consistently includes two developing countries, Mexico and Brazil.
- U.S. bank lending has become increasingly important in some developing countries, consistent with the broader observation that developing country financial systems have allowed more foreign bank entry. Overall, U.S. banks account for more than 20 percent of all foreign claims in Latin America and Developing Asia/Pacific and less than 10 percent in Industrialized countries. Within Latin America, the U.S. bank claims on Mexico are currently almost 40 percent of all external claims on Latin America[8]. In contrast to this very large stage in Latin America, U.S. banks maintain minority positions in other Industrialized countries.

How is the Foreign Exposure of U.S. Banks Measured?

As part of its regulatory oversight responsibilities, the Federal Financial Institutions Examination Council (FFIEC) collects detailed information on the distribution, by country, of claims on foreigners held by U.S. banks and bank holding companies in the Country Exposure Report. The panel of banks completing the quarterly exposure reports consists of U.S. commercial banks and bank holding companies holding \$30 million or more in claims on residents of foreign countries, and responses to the Country Exposure Report are collected as of the last business day of each quarter.

---

[7] Bank Holding Company is any company that has control over any bank or over any company that is or becomes a bank holding company by virtue of the Bank Holding Act.

[8] A large share of U.S. bank claim growth in this region has been through mergers with or acquisitions of previously domestically-owned banks.

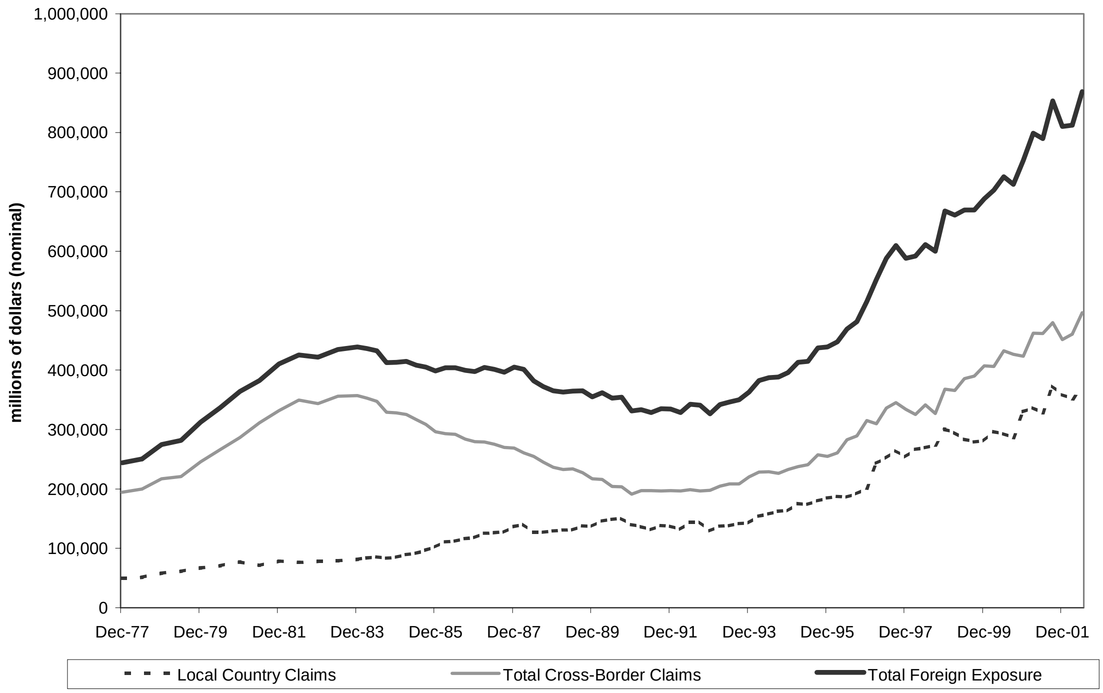
Foreign exposure is calculated as the sum of cross-border and net local country claims. *Cross-border claims* are defined as all claims of a bank's offices located in the United States with residents of foreign countries, regardless of the currency in which the claim is denominated, plus all claims of each of the bank's offices in a foreign country with residents of other foreign countries, regardless of the currency in which those claims are denominated. Cross-border claims consist of claims on *banks* (including commercial banks, savings banks, discount houses, and other similar institutions accepting short-term deposits), the *public sector* (including central governments and departments of central governments, corporations and on other agencies of central governments, state, provincial and local governments and nonbank commercial enterprises that are majority owned by central governments) and claims on *others* (persons, businesses and nonbank, non-public institutions).

Local country claims are outstanding claims of the respondent bank's foreign offices that are on residents of the country in which the offices are located. Prior to 1997, those claims only represented local currency claims and excluded claims denominated in other currencies. This category now includes claims denominated in both local currency and non-local currency, reported in U.S. dollar equivalents, originating at the offices of U.S. banks in the foreigners' home countries. The expanded coverage is intended to provide better information for gauging a bank's country and transfer risks.[9]

How exposed to international markets are U.S. banks?

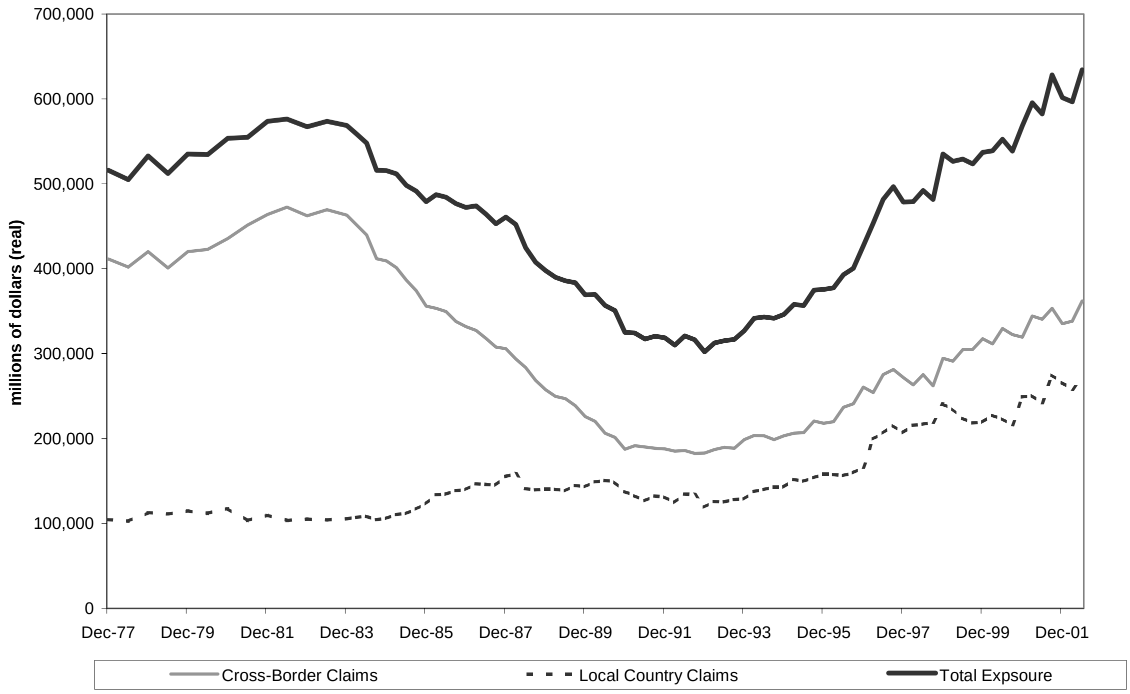
[9] Another change in foreign exposure reporting occurred in 1997, as surveys were expanded to capture the potential importance of financial derivatives in overall risk assessment. The increased participation of banks in derivatives market developed alongside their provision of services aimed to unbundle the wide variety of risks of their customers. But, such derivatives positions may also obscure the full scale of risks that banks face. For discussion, see the recent CBO study, "U.S. Banks' Exposure to Foreign Financial Losses," (May 2002). In 1997 the Country Exposure Report began including requests for information on revaluation gains resulting from derivative positions by banks. As of the second quarter of 2002, 84 percent of the revaluation gains (on cross-border and local country claims) – a proxy for derivative exposure -- were in Industrialized countries.

Figure 1 Total U.S. Bank Claims in Foreign Countries



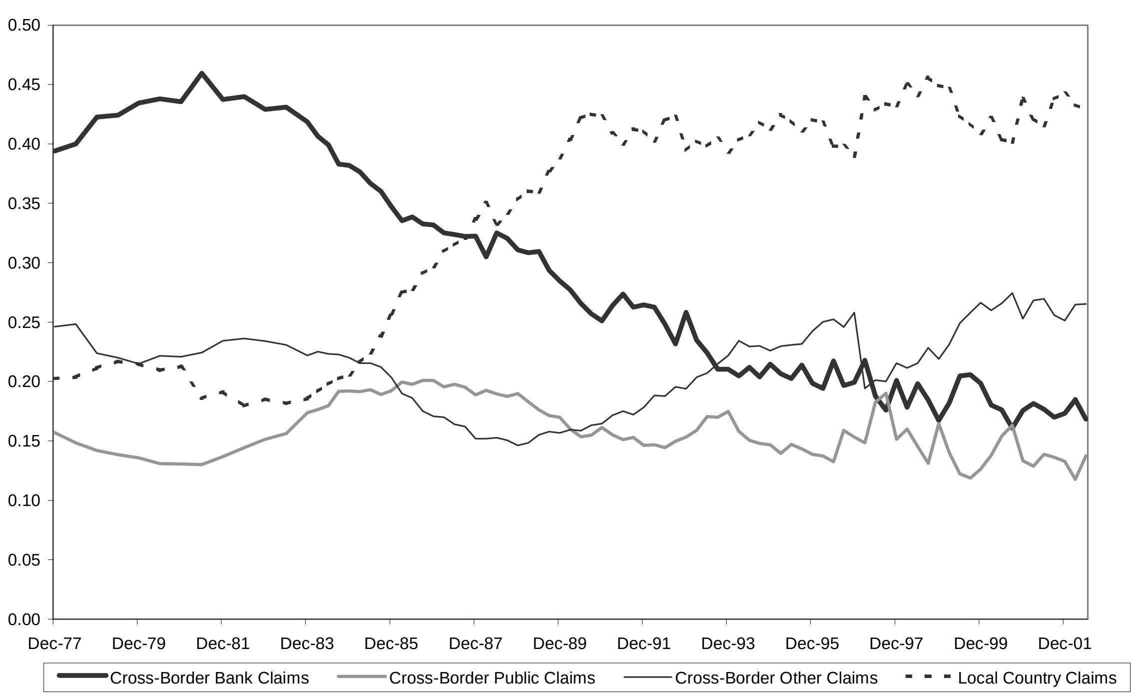
Total U.S. bank exposure to foreign markets has more than tripled (in nominal dollars) over the past 25 years (Figure 1), with these outstanding claims on the order of $900 billion by 2002. Part of this expansion of bank foreign exposure was generated by the steady rise in claims generated by local affiliates of U.S. banks over this whole period, rising from about $50 billion to about $350 billion by 2002. Some of the rise is accounted for by U.S. bank acquisitions of state-owned or privately-owned banks in liberalizing financial markets worldwide. By contrast, cross-border claims experienced longer, more dramatic cycles. In both nominal and real terms (Figure 2), Cross-border lending declined steadily in real terms through the entire second half of the 1980s, and resumed real growth only in the prolonged boom period of the mid 1990s. Only recently has the real value of U.S. bank international claims recovered to levels seen in the early 1980s.

Figure 2 Real U.S. Bank Claims in Foreign Countries
1990=100



The customer bases of U.S. banks also has changed over time. In terms of type of borrower, the reporting conventions distinguish between U.S. bank cross-border claims on banks located abroad, on public sector borrowers, and on other private borrowers. Over time the data show that banks have reduced the relative importance of cross-border lending between banks and instead increased the role of locally generated claims (Figure 3). While claims on public sector borrowers abroad have trended over time along with total U.S. bank foreign exposure, generally such claims have remained between 15 and 20 percent of total U.S. bank foreign exposure for much of the last 25 years. Local placements of U.S. bank claims steadily rose, with cross-border bank-to-bank lending less important as a conduit for this international intermediation of loanable funds. While these foreign exposure reports do not identify the composition of the recipients of claims from local affiliates (i.e. whether these claims were on other banks, public sector borrowers, or others in the private sector), other analyses based on bank balance sheet show that lending to private sector borrowers has been growing over time.

Figure 3 Share of Total Exposure by Type of Claim



Despite these observations about the way U.S. banks serve foreign markets, the actual geographic concentration of these claims has remained fairly consistent over time. To demonstrate this point, we divide reporting banks into quartiles, in ascending order, over 5 year intervals and on the basis of their total assets. For each bank within each interval, we compute the amount of it's total foreign exposure accounted for by Industrialized countries, versus by Developing Countries in different regions. Table 1 presents the average breakdown of regional orientation by the group of banks in each quartile and at each interval. The most dramatic changes in exposure are observed in the smaller banks within the reporting groups, Quartile 1 and Quartile 2 banks. The relative importance of Latin America rose over time – especially in the 1990s -- to almost 2/3 of their total foreign exposure. Some of this growth occurred for banks that started out in this quartile and expanded their focus on Latin America. But, primarily this growth is attributed to banks entering the sample in the 1990s with large shares of exposure in Latin America. These entrants primarily serviced Latin American countries through cross-border claims, not local exposures, and often had other banks as their counterparties.

More generally, U.S. bank foreign exposure to Industrialized countries represents at least half of U.S. bank claims abroad. Latin America follows with almost a quarter of U.S. claims, followed by Asia, and small exposures to Africa and the Middle East. Looking more closely at the country breakdown, United Kingdom consistently remained the top ranking country, with total exposure on average at least double the claims on the second ranking country. Additionally, Japan, Germany, Brazil, Mexico, Canada, Italy and France have been regularly within the top 10 largest country recipients of U.S. bank claims. Within Developing Asia, U.S. bank claims were concentrated in Hong Kong, South Korea, Singapore and Taiwan.

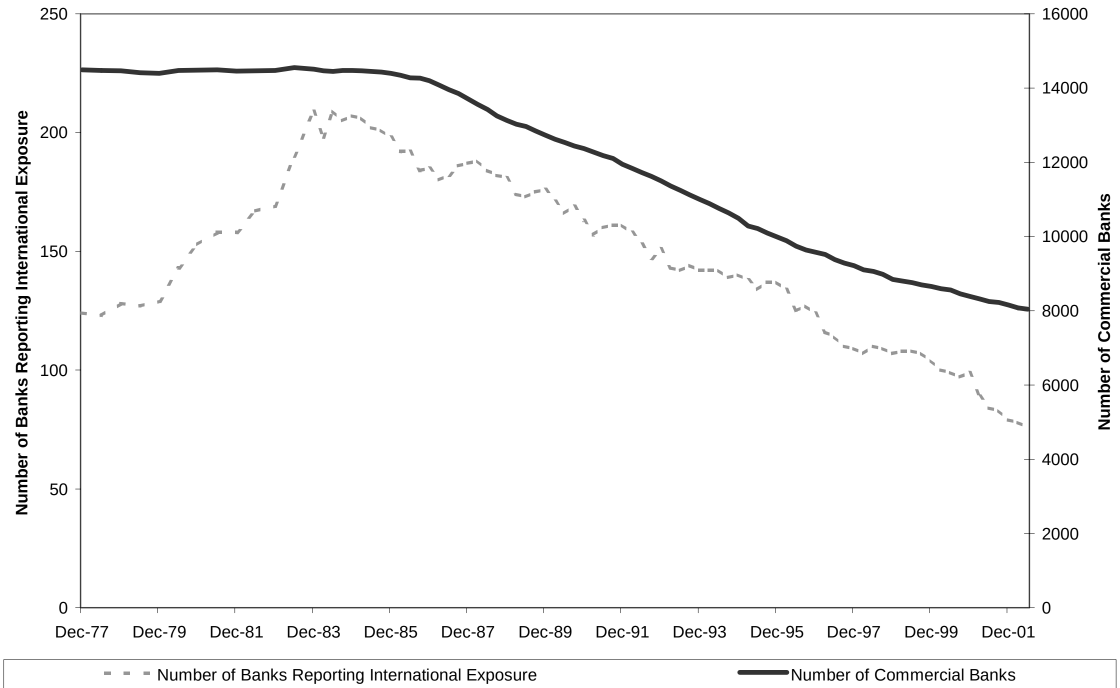
Table 1 Regional Total Exposure Shares, Over Time and by Bank Type								
		Industrialized Countries	**Developing Countries**					
			Europe	**Latin America**	**Asia**	**Africa**	**Middle East**
1984-1989	Quartile 1	52.3	2.5	33.9	6.5	1.8	3.0
	Quartile 2	57.3	1.2	30.6	9.7	0.5	0.7
	Quartile 3	53.8	1.3	32.1	9.3	1.5	2.02
	Quartile 4	55.5	1.5	25.5	13.3	2.4	1.8
1990-1996	Quartile 1	51.7	1.9	39.0	3.3	1.8	2.3
	Quartile 2	50.1	0.7	31.5	16.6	0.4	0.8
	Quartile 3	54.8	0.9	31.2	11.5	0.6	1.0
	Quartile 4	58.9	1.5	19.5	17.5	1.4	1.3
1997-2001	Quartile 1	23.0	3.3	66.8	2.6	1.1	3.4
	Quartile 2	49.1	0.5	31.3	17.7	0.44	0.97
	Quartile 3	48.6	2.3	34.9	12.0	0.9	1.3
	Quartile 4	59.3	2.7	19.7	15.9	1.2	1.2

U.S. bank foreign exposures are now more concentrated within a small number of banks. The steady consolidation of financial services in recent years and the possibility of increased concentration of risks in a few large banks enhances interest in bank foreign exposure patterns. The number of U.S. commercial banks operating domestically has declined considerably over the past 25 years: approximately 14,000 banks were active in the late 1970s and early 1980s, but by 2002 the total number of commercial banks had declined by about 40 percent, to about 8,000[10]. Over this same period of time, the number of banks reporting international exposures rose to over 200 by the early 1980s, but has steadily declined by more than 60 percent, to less than 80 banks (Figure 4).[11]

[10] Data from Federal Reserve Board. Public version of this data available on FDIC website.

[11] Regulatory changes allowing inter-state banking increased consolidation of banks across state lines. These regulatory changes had less of an effect on the number of banks reporting foreign exposures, since exposure reporting had been permitted at the level of the bank holding company.

Figure 4 Number of Banks



The percentage of U.S. banking system assets accounted for by international claims remained well under 20 percent for this entire period of time. Yet, those banks reporting international exposures to the FFIEC cover on the order of 10 to 15 percent of U.S. commercial banking assets. These statistics highlight the joint phenomenon of large bank consolidation and an increase in the concentration of total U.S. bank foreign exposure among the largest banks. As shown in Table 2, the distribution of foreign exposure among the largest banks is more concentrated now than in recent history.[12] In 1984 Q1, the top 5 U.S. banks (ranked by assets) had nearly half of all U.S. bank foreign exposure. By 1993 Q1, the share accounted for by the top 5 banks rose to two thirds of total U.S. bank foreign exposure. Finally, by the beginning of 2002, the top 5 banks had over 75 percent of total foreign exposure by U.S. banks internationally. For these largest banks, international exposures relative to assets have declined over time.

---

[12] Increased concentration does not imply more financial instability because of this concentration. Such assessments are related to the capitalization and risk management practices of the banks.

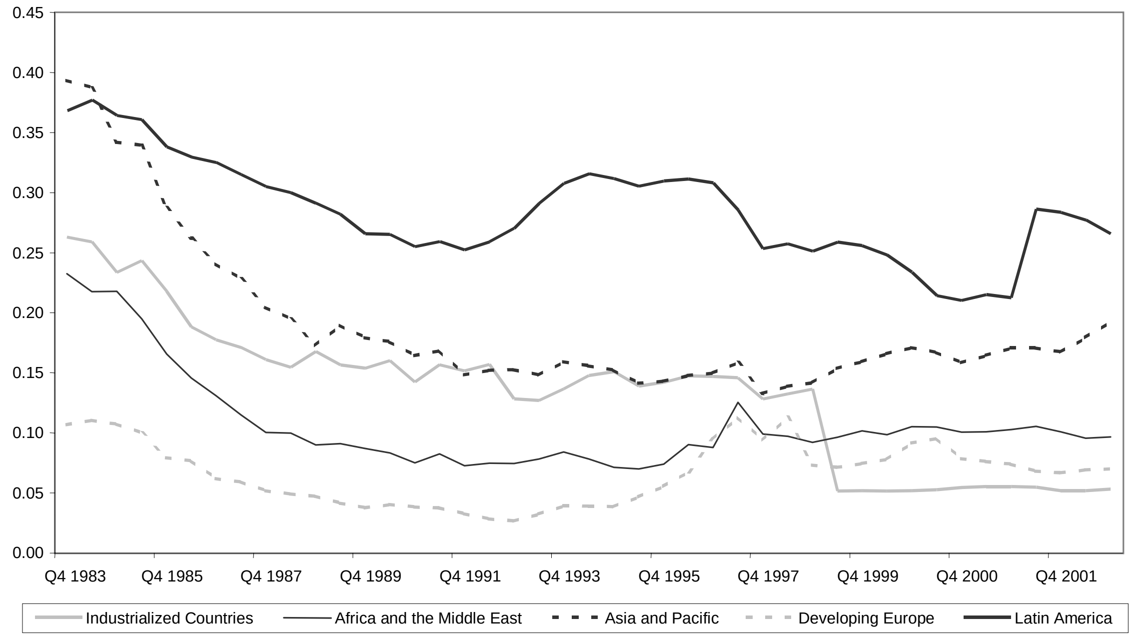
Table 2 Total Exposure Accounted for by the Largest U.S. Banks (as share of total exposure by all U.S. banks)			
	1984 Q1	**1993 Q1**	**2002 Q1**
Top 5 Banks	48.8	66.1	77.2
Top 10 Banks	66.3	76.2	86.7
Note: top banks are defined by rankings by size of bank assets			

Despite this concentration of foreign exposure, changes in banking practices have reduced the importance of these exposures relative to bank assets and bank capital. As shown in Table 3, for the largest banks foreign exposure was on average about half of their respective assets in the early 1980s. Even though U.S. bank foreign claims returned (in real terms) to those earlier levels, these exposures are now, on average, closer to 15 percent of large bank assets.

Table 3 Average Share of Foreign Exposure of the Largest U.S. Banks (unweighted average across banks of total exposure relative to bank assets)			
	1984 Q1	**1993 Q1**	**2002 Q1**
Top 5 Banks	50.7	26.2	16.5
Top 10 Banks	43.7	19.3	12.0
Note: top banks are defined by rankings by size of bank assets			

As a final note, this exposure data highlights the size of U.S. bank international exposures relative to the positions of U.S. banks, but do not adequately reflect the importance of these same banks to the regions they serve. For this type of comparison, we also consider U.S. bank foreign exposures relative to Bank for International Settlement (BIS) data on all international bank exposures across countries. Despite the minority shares of Latin America and Asia in overall U.S. bank foreign exposures, these claims are relatively large as a show of total international bank claims on these specific regions. U.S. bank lending, whether achieved via cross-border flows or claims by local affiliates, accounts for approximately one-third of foreign claims in Latin America and less than 10 percent of claims in Industrialized countries. In some countries – most notably Mexico – the U.S. claims reach 30 percent of all international bank flows. U.S. banks represent about one-quarter of overall international bank claims on developing Asia and Pacific countries (Figure 5)[13].

Figure 5 Shares of Total Foreign Claims by Region Belonging to the U.S.
Source: BIS



Conclusion

The information we have presented from the Country Exposure Report provides insights into the form of individual bank exposures and the systemic exposure implied when exposure aggregations are done across all banks. Over time, we observe an increase in the concentration of total U.S. bank exposures in a few very large banks. However, these exposures still are much smaller relative to bank assets than had been the case in the 1980s, presumably reflecting better risk management practices by banks. While Industrialized Countries remain the counterparty for at least half of U.S. bank external claims, Latin American counterparties have grown in importance – especially among smaller reporting banks. With the exception of these small regionally focused

[13] Note on Figure 5: Data reporting conventions changed in 1999 and explain the large drop in U.S. share of Industrialized country loans from that point onward. More specifically, many countries did not begin reporting this data until 1999. When the new countries were added to the list of existing Industrialized countries it dramatically reduced the share of U.S. claims in the Industrialized countries. (Source BIS)

banks, U.S. claims via local subsidiaries of U.S. banks have been steadily growing in importance, and are playing an increasingly visible role in the globalization of financial systems.

References

Bomfin, Antulio and William Nelson, "Profits and Balance Sheet Developments at U.S.Commercial Banks in 1998", *Federal Reserve Bulletin* vol. 85 (June 1999) pp. 369-95.

Clarke, George, Robert Cull, Maria Soledad Martinez Peria, and Susana Sanchez. "Foreign Bank Entry: Experience, Implications for Developing Countries, and Agenda for Further Research", June 2002 The World Bank.

Congressional Budget Office. "U.S. Banks" Exposure to Foreign Financial Losses" May 2002.

Federal Reserve Bank of Philadelphia. "The Gramm-Leach-Bliley Act: A New Frontier in Financial Services." April 2000.

Goldberg, Linda. 2002. "When is U.S. Bank Lending to Emerging Markets Volatile? In *Preventing Currency Crises in Emerging Markets*, eds. Sebastian Edwards and Jeffrey Frankel. (NBER and University of Chicago Press, October). NBER Working Paper #8209 April 2001.

Houpt, James V. 1999. "International Activities of U.S. Banks and in U.S. Banking Markets." *Federal Reserve Bulletin,* September (Board of Governors of the Federal Reserve System), pp. 599-615.

Palmer, David. 2000. "U.S. Bank Exposure to Emerging-Market Countries during Recent Financial Crises." *Federal Reserve Bulletin*, February (Board of Governors of the Federal Reserve System) pp. 81-96.

Wooldridge, Philip D. "The International Banking Market". *The BIS Quarterly Review*, September 2002.