DO BANKS FOLLOW THEIR CUSTOMERS ABROAD?

by
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Abstract: The market share of U.S. business loans made by foreign-owned banks has increased dramatically since 1980. At the same time, foreign direct investment in the U.S. rose, so that much of the increase in foreign-owned U.S.-based bank lending to businesses in the U.S. could conceivably be accounted for by an increase in loans to the U.S. affiliates of firms headquartered abroad, an expectation in line with the conventional wisdom that banks "follow their customers" abroad. Our study investigates the lending patterns of U.S.-based banks from Japan, Canada, France, Germany, the Netherlands, and the U.K., countries which account for the vast majority of foreign-owned bank activity in the U.S. Simultaneously, we look at the borrowing patterns of U.S. nonbank affiliates of firms from those countries. We find that banks from four of the six countries (Japan, Canada, the Netherlands, and the U.K.) allocated a majority of their loans to non-home country borrowers, for some or all of the 1981-1992 period. That result suggests that the "follow the customer" hypothesis may have a more limited applicability than previously supposed.

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Introduction

International bank lending soared during the 1980s, part of the explosion of international capital flows that characterized the decade. In tandem with the increase in cross-border lending, many banks also increased the degree to which they operated as multinationals, starting up and/or augmenting foreign-based subsidiaries and branches of the home country office. Given the increasingly sophisticated nature of banking and the growing globalization of both goods and capital markets, the issue of why many banks have chosen to increase their international lending via this kind of direct investment route is one of more than academic interest. Particularly in the U.S., where U.S.-based operations of foreign-owned banks grew substantially during the 1980s and early 1990s, questions about both the motives of, and strategies employed by foreign-owned banks have received a good deal of attention in the business press and in public policy-making circles.[1]

This paper investigates the widely held view that banks rely on a strategy of "following their customers" abroad. On public policy grounds alone, the issue of whether banks follow their customers is far from trivial. If foreign-owned banks are perceived in the host country to be "capturing" market share from host country banks, rather than servicing subsidiaries of home country firms, concerns about foreign banks "out-competing" host country banks could

[1]For example, see "International Competitiveness of U.S. Financial Institutions," Hearings before the Subcommittee on Financial Institutions Supervision, Regulation and Insurance, (1990); and LaFalce, "Report of the Task Force on the International Competitiveness of U.S. Financial Institutions," (1990). Business press reports on market share gains by foreign banks in the U.S. include Fred R. Bleakley, "U.S. Banks Lose Corporate Clients To Lenders Abroad," *The Wall Street Journal* (Sept. 29, 1992); James R. Kraus, "Foreign Banks Control 45% of Corporate Loans in U.S.," *American Banker* (June 15, 1992); and James R. Kraus, "Estimate of Foreign Bank Lending in U.S. Raised," *The Washington Post* (June 16, 1992).

be heightened.[2] As well, bankers, rating agencies, and regulators are concerned about motives for, and performance subsequent to, cross-border expansion by multinational banks.[3]

Our basic approach is to compare the lending patterns of foreign-owned banks in the U.S. with financing patterns of foreign-owned nonbank firms in the U.S. Using bank call report data and unpublished Commerce Department data, we arrive at a straightforward estimate of the maximum extent to which foreign-owned banks in the U.S. could have been servicing the bank borrowing needs of U.S. affiliates of their home country firms (i.e., the extent to which they "followed their customers"), and therefore the *minimum* amount of lending in which those banks *must have* been engaged with respect to other firms in the U.S. We find that banks from Japan, Canada, the Netherlands, and the U.K. allocated a majority of their loans to non-home country borrowers, for some or all of the 1981-1992 period. That result suggests that the "follow the customer" hypothesis may have a more limited applicability to the theory of banks as multinational firms than previously supposed.

The paper is organized as follows. Part I briefly reviews the literature on banks as multinationals. Section II describes our data. Part III presents the results of our analysis on lending patterns of foreign-owned banks in the U.S., as well as the borrowing patterns of U.S. affiliates of foreign firms. Section IV summarizes those findings and discusses possible

[2]For example, in early 1994 concerns that foreign banks were "out-competing" U.S. banks in the U.S. market influenced the debate on the treatment of foreign banks under the then-pending Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (which was subsequently enacted in September of 1994). For a discussion of this aspect of the debate see "Week of Decision Awaits Interstate Banking Bill," and "OCC Study Adds Much-Needed Leverage to Interstate Battle," *International Banking Regulator*, June 27,1994; and "Study Shows While Foreign Banks Lend Widely in U.S., They're Behind in Profit," *The Wall Street Journal*, June 13, 1994.

[3]See, for example, "The End of An Awful Story," *Financial Times*, December 20, 1995.

extensions of this research.

I. Banks as Multinationals

Over the past decade or so empirical studies of the determinants of direct investment by banks in overseas operations have focused on the lead-lag relationship between foreign direct investment by nonbank firms from the home country (henceforth referred to as "firms"), and entry or growth by overseas affiliates of banks from the home country (henceforth referred to as "banks"). The central thesis is that banks have "followed" client firms from their home countries into overseas markets as those firms engaged in a growing volume of international trade and direct investment. Fieleke (1977) concluded from his study of U.S. banks' overseas expansion that the major determinant was to respond to the financial needs of U.S. firms abroad, a result corroborated by Nigh, Cho, and Krishnan (1986) and, for U.S. bank expansion into the U.K., by Goldberg and Saunders (1980). Goldberg and Saunders (1981) modeled the growth of foreign banks in the U.S. market for the 1972-1979 period, and found from a multiple regression analysis of their model that direct investment by foreign firms into the U.S. market was a significant positive determinant of the growth of foreign banks' market share in the United States. Hultman and McGee (1989), Grosse and Goldberg (1991), and Budzeika (1991) also provide evidence that foreign banks entered the U.S. market to service the international trade and direct investment needs of their home-country clients. A host of other studies focusing on issues related to the growth of international banking emphasize the "follow the customers" factor as one of the principal motives for multinational expansion by banks.[4] Indeed, a recent U.S. General Accounting Office study on foreign banks in the United States reports "that most foreign banks serve customers of their home countries. An industry representative told us that only a few banks are large enough to penetrate through home country loyalties to attract other customers."[5]

In contrast to this literature, Terrell (1993, p. 913) notes that, once in the U.S., "many foreign banks have expanded their customer base by actively soliciting business from U.S. companies." Studies by Seth and Quijano (1991, 1993) add credence to Terrell's claim. They point out that the "follow the customer" claim has been made in reference to Japanese-owned banks in the United States.[6] Juxtaposing data on liabilities of U.S. affiliates of Japanese firms and data on the lending patterns of U.S. branches and agencies of Japanese banks, they infer the share of Japanese bank lending to Japanese-owned affiliates over the 1984-1989 period. Making the extreme assumption that all bank borrowing by U.S.-based Japanese companies was provided by the U.S. branches and agencies of Japanese banks, they conclude that "about three-fifths of the lending by the branches and agencies was to debtors other than US affiliates of Japanese multinationals," a result at odds the follow-the-customer expectation.[7] However, no study has yet investigated whether banks from other countries show similar behavior. In view of the mixed evidence, the question of the motives for direct investment by banks in

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[4]For example, see Key and Welsh (1988), Damanpour (1991), Aguilar (1995), and Graham and Krugman (1995).

[5]U.S. General Accounting Office (1996).

[6]See the references in Seth and Quijano (1993) to Zimmerman (1989) and Terrell (1990).

[7]Seth and Quijano (1993, pp. 366-367)

banking operations abroad remains an open one.

Part of the answer to this question may be found in earlier, mostly theoretical, work on banks as multinational corporations. Grubel (1977), Gray and Gray (1981), Rugman and Kamath (1987), and Casson (1990) hypothesize that the possession of firm-specific advantages allow banks to operate successfully abroad. Under this view "following the customers" is, at best, incidental to the decision by a bank to engage in activities outside the borders of the home country. Using this hypothesis to interpret the Seth and Quijano results, we should look for a particular advantage (or set of advantages) embodied in Japanese banks relative to other banks to help explain the growing presence and lending pattern of Japanese banks in the U.S.

In light of the mixed evidence on motives for foreign direct investment in banking, further investigation is warranted. Our tact in this paper is to review a unique data set in a fundamental and straightforward manner. In particular, we match up information on lending patterns of foreign-owned banks in the U.S. with bank borrowing patterns of U.S.-based companies from the same home country.

II. Foreign Firms and Foreign Banks in the U.S.

II.A. Foreign Firms in the U.S.

The U.S. Commerce Department compiles annual statistics on the external financial position of U.S. affiliates of foreign firms as part of its survey of foreign direct investment into the United States.[8] A U.S.-based firm in which a foreign investor has a 10 percent or more controlling interest is designated by the Commerce Department as an "affiliate". The

[8]The latest information available to us (including unpublished data for non-benchmark years) is for 1992. Hence, our analysis of borrowing patters extends from 1981 through 1992.

data is published in "benchmark years" (approximately every 5 years) in aggregate form for all U.S. affiliates of foreign firms, and for all affiliates of firms from selected countries with a large foreign direct investment presence in the U.S.[9] We used benchmark data for 1987 and 1992, and unpublished annual data for all others years in the 1981-1992 period which our study covers. In addition to aggregated data for all foreign-owned firms in the U.S., we investigated external financing patterns for firms from Japan, Canada, France, Germany, the United Kingdom, and the Netherlands.[10] Our study focuses in particular on affiliates' borrowing from U.S. banks and on affiliates' liabilities owed to U.S. nonbanks. U.S.-based affiliates' liabilities owed to U.S.-based banks and nonbanks account for the vast majority of credit extended to these firms: in 1992, for example, over 82 percent of total bank borrowing by U.S. affiliates of foreign firms was from U.S.-based banks, and over 75 percent of their liabilities to nonbanks were to U.S. nonbank creditors.[11] Though creditors can include U.S.-based foreign-owned banks, the Commerce Department data does not identify the ownership of the banks and nonbanks providing credit.

The relative importance of foreign direct investment from each of the six countries in our study is apparent in Table 1. Together, firms from the six countries accounted in 1992 for more than four-fifths of the year-end book value of foreign companies' equity and retained

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[9]Those countries include Canada, France, Germany, the Netherlands, the United Kingdom, Switzerland, Japan, and beginning in 1987, Australia.

[10]Because the Commerce Department suppresses information which, even when aggregated over all firms from a particular country could be used to ascertain the identity of a particular company, we had to exclude Switzerland because of missing values for key variables. In addition, Australian-owned firms were not included in our study because Commerce Department coverage did not extend for the entire period.

[11]The remainder of U.S. affiliates' debt is owed to foreign parents and other foreign entities, including foreign-based banks.

earnings in, and net loans outstanding to, their U.S. affiliate firms (the "direct investment position"), and more than three-fourths of the total assets of U.S.-based nonbank affiliates. U.S.-based nonbank affiliates from the major 6 countries also accounted for the vast majority of bank debt owed to U.S.-based banks. By any of those measures Japanese firms ranked (or tied for) first, but firms from the other countries, especially the U.K., played important roles as well.

II.B. Foreign Banks in the U.S.

Foreign banks can operate in the U.S. as fully capitalized, national- or state-chartered subsidiaries ("subs") of the home-country parent, or as federal- or state-licensed branches and agencies of the parent bank.[12] Subs can engage in the same range of banking services as any other U.S.-chartered bank; generally, branches have banking powers similar to subs, but face some restrictions on retail deposit taking, while agencies basically are prohibited from taking deposits. Data for foreign-owned banks in the U.S. came from the call reports collected by the Federal Financial Institutions Examination Council (FFIEC).[13] The data is broken down by type of borrower: commercial and industrial (C&I), real estate, nonbank financial

[12]We included as "subs" banks in which there was 50 percent or greater foreign ownership, as defined in the Federal Reserve System's NIC database. Foreign banks can also operate Edge Act corporations, Agreement corporations, investment companies, and representative offices, all of which entail significant restrictions on banking activities, and which together account for only a small portion of foreign bank presence in the U.S. See Key and Welsh (1988), Houpt (1988), Lund (1993), Jackson (1993), Aguilar (1995), and U.S. General Accounting Office (1996) for descriptions of the types and amounts of foreign banking activities in the U.S. Detailed descriptions of foreign banking in the U.S. prior to 1980 are contained in Longbrake, Quinn, and Walter (1980), Goldberg and Saunders (1981), and Houpt (1983).

[13]Specifically, subs file the FFIEC 031, 032, 033, or 034. Call report data for branches and agencies are from the FFIEC 002. We used fourth quarter data. Note that U.S.-based branches and agencies of foreign banks book some of their activity at offshore offices. Call report data on the activities of these "Caribbean branches" of U.S.-based branches and agencies of foreign banks did not become available until 1993, and hence is not included in our analysis. See Terrell (1993) and Nolle (1995) for descriptions of the nature and amount of this activity.

institutions, foreign governments, and purchasers of securities; C&I loans are decomposed into those to U.S.-based firms ("U.S. Addressees") and to firms based outside the United States ("Non-U.S. Addressees"). However, the data do not reveal the identity of the specific borrower. Hence, for example, a business loan made by a Canadian-owned branch in the United States to a U.S. affiliate of a Canadian firm is lumped into the category "commercial and industrial loans to U.S. addressees".

The relative importance of U.S.-based banks from each of the six countries covered in our study is illustrated in Table 2. In 1992, U.S.-based banks from Japan, Canada, France, the U.K., Germany, and the Netherlands collectively accounted for 73 percent of foreign bank assets in the United States. Banks from these six countries also extended three-fourths of all loans to nonbank borrowers generated by foreign banks in the U.S., and 80 percent of all foreign bank commercial and industrial loans. Japanese-owned banks dominated, accounting for 45 percent of U.S.-based foreign bank assets, and more than 50 percent of loans made by foreign banks. The other five countries accounted for roughly equal shares of foreign banking activities in the United States.

III. External Financing of Foreign Firms in the U.S. and Lending by Foreign Banks in the U.S.

Following the procedure Seth and Quijano (1993) used to investigate Japanese-owned branches and agencies in the U.S., we juxtapose the Commerce Department data on the external financing of foreign-owned firms in the U.S. with call report data on lending by foreign-owned banks in the U.S. Specifically, using the extreme assumption that all foreign-owned affiliate bank borrowing came from U.S.-based offices of banks from a given country, we calculate the share of bank lending that would have to have been devoted to "following customers" from the home country. Any additional lending beyond meeting 100 percent of the bank borrowing of home-country clients in the U.S. *must have been* allocated to pursuing other, non-home country firms. The share of total lending by foreign-owned banks in the U.S. that it would have taken to meet all of the actual bank borrowing needs of foreign-owned firms in the U.S. thus reflects the *maximum* possible extent to which foreign banks followed their home country clients. In addition, the difference between total lending by foreign-owned banks in the U.S. and bank borrowing by foreign-owned firms in the U.S. constitutes the *minimum* degree to which foreign-owned banks *did not* follow their traditional customers.

III.A. Aggregate Results

Based on the results of empirical studies discussed in the first section of this paper, our expectations might be that a large percentage of lending by foreign-owned banks in the U.S. is devoted to U.S. affiliates of home-country companies -- i.e., that banks follow their customers abroad. Figure 1, which compares total (nonbank) lending by all foreign-owned banks in the U.S. with total (U.S.-based bank) borrowing by U.S. affiliates of foreign firms, presents a somewhat different picture, however. During the early to mid-1980s slightly less than half of U.S.-based foreign bank loans went to U.S.-based foreign firms. Hence the majority of foreign bank lending went to U.S.-owned borrowers, a result that can be interpreted as evidence that foreign banks did *not* primarily focus on following their customers into the U.S. market during that time period.

That pattern seems to have changed in the late 1980s and early 1990s, however. If we use the extreme assumption that foreign banks in the U.S. first met all of the bank borrowing needs of U.S. affiliates of foreign firms, and then allocated the remainder of their lending to U.S.-owned borrowers, row "D" in the table below Figure 1 indicates that by 1992 three-quarters of foreign bank lending was aimed at "following" their home-country customers. Of course, the data do not necessarily bear this interpretation. It is possible, for example, that U.S.-based foreign banks, having devoted half or more of their lending to U.S. borrowers during the early 1980s, chose to ignore all or part of the increased loan demands of foreign-owned affiliates. In that case, U.S.-owned banks would have accounted for the increased bank borrowing by U.S. affiliates of foreign firms. In an absolute sense this must be true to some extent because between 1987-1992 bank borrowing by foreign affiliates increased by $156.5 billion, while lending by foreign banks increased by less than this ($131.1 billion). The most we can say is that after *not* focusing predominantly on "following" their traditional customers to the U.S. market in the early 1980s, foreign banks *may have* switched tactics.

III.B. Decomposition by Type of Lending

Two major aspects of these trends bear closer scrutiny: the composition of foreign bank lending, and a country-by-country breakdown. Figure 2 decomposes the borrowing and lending patterns of U.S.-based foreign firms and banks into the major categories "C&I" (commercial and industrial) and real estate. Trends for two distinct time periods emerge: 1981-1986/87, and 1986/87-1992. However, the trends across these time periods, and the inferences we can draw, for C&I affiliates and for real estate affiliates are very different.[14]

[14]We also examined bank debt trends for nonbank financial firms. The basic result was that borrowing by nonbank financial affiliates of foreign firms accounted for 100 percent or more of foreign bank lending to nonbank financial firms over the entire 1981-1992 period. Until recently, foreign-owned U.S.-based banks generally allocated only a small proportion of their loan portfolio to this type of lending, and even 100 percent of it was not enough to cover the borrowing needs of home-country affiliates. However, we cannot say for sure whether they

C&I firms account for a clear majority of bank borrowing, as described in Table 3, which presents figures on the bank debt of C&I, real estate, and nonbank financial affiliates of foreign firms. Under the assumption that U.S.-based foreign banks lent first to U.S.-based foreign firms, Figure 2 shows that borrowing by C&I affiliates of home-country firms accounted for 90 percent or more of foreign banks' C&I lending over 1981-1984. That is, in the early 1980s foreign banks appear to have followed their C&I customers to the U.S. market. However, in 1985 the maximum percent of the C&I lending by foreign banks in the U.S. accounted for by U.S. affiliates of foreign firms dropped substantially, to 65 percent. This decline continued through 1987, by which time at least 43 percent of foreign banks' C&I loans must have been going to U.S.-owned firms. From 1987 forward the maximum possible share of foreign-owned bank lending that (possibly) went to U.S. affiliates of C&I borrowers turned upward, though it did not return to the pre-1985 level.

Though foreign affiliate real estate firms accounted for a much lower share of total bank borrowing than did C&I affiliates, the pattern of foreign bank lending to them was basically the opposite of that for C&I firms. In the early 1980s foreign-owned banks in the U.S. pursued non-home country real estate borrowers, but might have switched to "following" home-country owned real estate borrowers in the mid-1980s as their (maximum possible) share of bank debt owed to U.S.-based foreign banks increased. However, even if foreign-owned banks met foreign-owned real estate affiliates' borrowing needs fully, it is clear from Figure 2 that after 1986 foreign banks in the U.S. pursued U.S. real estate customers. By 1992 the

followed their nonbank financial firm customers abroad.

minimum share of real estate lending by foreign banks in the U.S. that must have gone to U.S. customers was 69 percent. In summary, foreign banks probably focused on following commercial and industrial affiliates during the early 1980s, and after clearly turning attention to U.S.-based C&I borrowers in the mid-1980s, they may have returned to following their home-country customers in the late 1980s and early 1990s; we can say with certainty that they pursued non-home country real estate borrowers, particularly from the mid-1980s onward.

III.C. Country-Specific Results

With the exception of the research on Japanese banks and multinationals in the U.S. by Seth and Quijano (1991, 1993), no country-specific analysis matching bank call report and Commerce Department data has appeared prior to the current investigation. Figure 3 illustrates the results of juxtaposing the banking data with the external financing data for six major countries with substantial direct investment in the U.S. The trends vary substantially from country to country.

One significant point illustrated in Figure 3 is that over the entire period Japanese banks committed fewer loans to Japanese-owned borrowers than to non-Japanese borrowers. Relative to banks from other countries, Japanese banks did not rely on a "follow-the-customers-abroad" strategy. The highest possible percentage commitment there could have been to Japanese multinational borrowing in the U.S. was 49 percent of Japanese banks' loan portfolio, in 1992; hence, even in that year, a majority of Japanese bank lending was to non-Japanese firms.

Despite this basic conclusion, pre-1987 and post-1987 patterns are discernible for Japanese banks. From 1981 to 1987 the maximum share of their lending that went to U.S.

affiliates of Japanese multinationals decreased somewhat, from 31 percent to 27 percent. After 1987, however, the maximum share of Japanese bank lending that (possibly) went to U.S. affiliates of Japanese firms increased dramatically, to 49 percent in 1992. Hence, either Japanese banks began to "catch up" with the borrowing requirements of Japanese-owned firms in the U.S. or, if Japanese-owned banks did not actually increase the proportion of their loan portfolios committed to Japanese multinational affiliates, then those needs were met by non-Japanese banks in the U.S.

In the early 1980s U.S.-based banks from four of the five other countries also pursued non-home country customers, but the pattern for each country is different. The only group of banks for which we can say it is possible that they exclusively followed home-country customers are the Germans: in every year bank borrowing by U.S. affiliates of German multinationals exceeded total lending by U.S. affiliates of German banks. In contrast, in 1981 *at least* 80 percent of U.K. bank lending was *not* to home country affiliates in the U.S., an allocation that put them ahead of Japanese banks in this respect. However, throughout the remainder of the time period, the minimum amount of lending that U.K. banks (possibly could have) committed to U.K. banks rose sharply, so that by 1988 it would have been possible for U.K. banks to have loaned exclusively to U.K. multinational affiliates.

Canadian and French banks behaved similarly for most of the period, diverging only in the last two years. Banks from both countries allocated between 10 percent and 40 percent (at least) of their loans to non-home country borrowers over the 1981 to 1987 period. However, the minimum lending each country's banks (possibly could have) allocated to home country firms rose between 1981 and 1988. By 1988 the total bank borrowing of home country firms from both countries exceeded the amount of loans made by U.S.-based Canadian and French banks. Subsequently, borrowing by French multinational affiliates exceeded all loans by French-owned banks in the U.S., but Canadian banks allocated an increasingly large portion of their loan portfolios to non-Canadian firms in the U.S. By 1992 more than 50 percent of loans made by Canadian banks in the U.S. went to non-Canadian borrowers, a proportion which rivaled that of Japanese banks.

Dutch banks made a massive shift in their home country versus non-home country lending patterns over the period. Until 1988, bank borrowing by U.S. affiliates of Dutch multinationals exceeded all lending by U.S.-based Dutch banks, suggesting that those banks might have been concentrating on servicing home-country affiliates. However, beginning in 1988, Dutch banks in the U.S. lent more than Dutch affiliates borrowed. We can say with certainty that, no later than 1991, Dutch banks in the U.S. made the majority of their loans to non-Dutch borrowers.

Country-by-country lending patterns to affiliate C&I firms were roughly similar to trends for aggregate patterns, as Figure 4 illustrates. Notable exceptions to that generalization are as follows. Though by the mid-1980s Japanese banks made the majority of their C&I loans to non-Japanese firms, in the early 1980s they may have committed less to pursuing non-Japanese borrowers. As with the aggregate data in Figure 3, Figure 4 shows that in the early 1980s U.K. banks made the majority of their C&I loans to non-U.K. firms; however, the level of that commitment was below that for all types of loans in the aggregate. Finally, unlike in the case of all loans aggregated, French-owned banks in the U.S. might not have pursued non-French C&I borrowers in the early 1980s: for the entire time period, bank borrowing by

French-owned C&I firms exceeded all French-owned bank C&I lending.

Trends for real estate lending differed considerably from those for all loans, and C&I lending.[15] As Figure 5 shows, throughout the entire period 1981-1992, U.S.-based banks from Japan, the U.K., and France lent far more to non-home country real estate borrowers than to home country real estate affiliates. Banks from those countries were joined by Dutch banks late in the period.

III. D. Changes in Lending and Borrowing Patterns

The substantial evidence that banks from a number of countries did not employ a "follow the customer" strategy in the U.S. market is muddied somewhat by a trend since 1987 which, generally speaking, indicates that foreign banks *might have* increased the proportion of their loan portfolios devoted to home country firms. This post-1986 trend warrants further scrutiny from two viewpoints: changes in lending patterns by foreign-owned banks, and changes in bank borrowing patterns by U.S. affiliates of foreign multinationals.

In a proximate sense, the share of foreign banks' lending that is (possibly) accounted for by bank debt incurred by foreign affiliates could increase if lending (the denominator in the ratio) declined, and/or if bank borrowing (the numerator) increased. Figures 6a and 6b examine the evidence on trends in foreign bank lending. Very roughly speaking, Figure 6a groups together, by country of parent, the banks which decreased their lending, post-1987,

[15]"Real estate loans' are loans collateralized by either commercial or residential real estate. These two types of real estate have different characteristics (it can be argued, for example, that commercial real estate loans are, in fact, "business" loans). Unfortunately, because branches and agencies (unlike subs) are not required to decompose, by type, their real estate loans on the call report they file, it is not possible to segregate types of real estate loans in our analysis.

while Figure 6b shows the banks, by country, which increased lending since 1987.[16] For some groups there seems to be evidence that the (apparent) post-1987 trend toward following home country customers in fact can be explained in part by a decrease in lending. Japanese and U.K. banks both decreased the growth rate of loans in the U.S., with U.K. banks actually shrinking loans in 1991 and 1992, while Japanese banks posted negative loan growth in 1992. Those patterns are consistent with the upturn in bank debt of foreign-owned affiliates as a share of foreign bank loans. Of course, those trends are also consistent with a scenario in which, as Japanese and U.K. banks retrenched in the U.S. market, they shed non-home country customers in a greater proportion than they did home country customers.[17] We might call this the "home country first" strategy of multinational bank operations.

Another way in which the ratio of bank borrowing by affiliates to home country bank lending can rise is if bank borrowing increased at a greater rate than did bank lending. As previously mentioned, this certainly occurred in the post-1987 period. Beyond this, we investigated whether there was a shift in the composition of external financing by nonbank affiliates. Figure 7 summarizes our findings on the proportion of bank financing relative to all debt incurred by U.S. affiliates of foreign multinationals. Grouping countries with similar patterns together gives us three groups: Japanese firms, Canadian firms, and all other firms ("non-Japanese, non-Canadian").

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[16]See appendix Table A.4 for the percentage data underlying Figures 6a and 6b, as well as for the dollar amounts of nonbank loans, by country, for 1981-1992.

[17]For a discussion of the retrenchment by Japanese banks in U.S. see Zimmerman (1993), Nolle (1993), Kim and Moreno (1994), and Huh and Kim (1994). To our knowledge there is no research on a retrenchment by U.K. banks in the U.S., but credit quality problems of U.K. banks, particularly due to problems in the U.K. real estate sector, have been documented. For example, see "U.K. Banks: Asset Quality Angst," BankWatch (1992).

Significantly, two distinct time periods, 1981-1986/87, and 1986/87 to 1992 emerge for all three groups. During the first half of 1980s the non-Japanese, non-Canadian firms slightly decreased their reliance on bank debt, while Japanese firms made a massive shift away from bank debt. Of the six major countries for which we have data, only Canadian firms increased their reliance on bank debt during the first half of the 1980s. After 1986/87 though, those trends completely reversed. Japanese firms substantially increased their reliance on bank debt as a percent of all debt, as did non-Japanese, non-Canadian firms. However, Canadian firms markedly decreased their reliance on bank debt after 1986.

An investigation of the causes of those trends in reliance on bank debt versus other debt is beyond the scope of this paper, but would appear to be a crucial element in a model explaining multinational activities of banks. We note at this point that the changes in affiliates' reliance on bank debt is, with one exception, consistent with the patterns we observed in the ratio of affiliate bank debt to foreign bank lending (see Figure 3, in particular). That is, the upward trend in that ratio for Japanese, U.K., and French banks seems to be in line with the shift to more bank debt reliance by Japanese and non-Japanese, non-Canadian affiliates since 1986/87. Furthermore, the downward trend in the ratio of affiliate bank debt to foreign bank lending we saw for Canadian banks is caused in part by the reduced reliance on bank debt for Canadian-owned firms in the U.S. since 1986. The only exception to the pattern of foreign banks responding to shifts in the bank-borrowing-to-total-borrowing ratio of foreign affiliates is for Dutch banks. Though U.S. affiliates of Dutch multinationals increased their reliance on bank debt relative to other debt since 1986/87, we already saw that, since 1990, Dutch banks have increasingly emphasized servicing non-Dutch borrowers.

IV. Conclusions and Extensions

The aggregate data suggest that foreign banks did not always rely heavily on a "follow the customer" strategy to support their multinational expansion in the U.S. In the early part of the time period that result was largely a consequence of strategies followed by Japanese and U.K. banks. More recently, though U.K. banks might have shifted from their earlier strategy, Dutch and Canadian banks have allocated a growing proportion of their loans to non-home country firms.

To the extent banks from some countries pursue non-home country customers, we need to consider other explanatory factors in addition to what Graham and Krugman call the "industrial-organization explanation" (i.e., following the customers).[18] Part of that research can be informed by earlier literature on banks as multinationals, which focuses on firm-specific and country-specific advantages which banks seek to exploit as they cross borders. For example, a possible source of firm-specific advantage is the form of corporate organization chosen by a bank. Hoshi, Kashyap, and Scharfstein (1991), Kim (1992), and Flath (1993) examine the possibility that Japan's keiretsu system allows banks to more accurately and cheaply monitor much of their loan portfolio. Frankel and Montgomery (1991) make a related argument for German banks, which as universal banks can own shares in, and have representation on the boards of, companies to which they lend. Other "microeconomic" factors should also be explored. Key determinants of multinationalism by banks could be differences in home country relative to host country regulatory and supervisory frameworks

[18]Graham and Krugman (1995, p. 55).

and practices. Taxation differences could also play a role.

Macroeconomic factors also are likely to be significant. For example, Graham and Krugman (1995) suggest that Japanese banks may have expanded abroad, particularly into the U.S., in order to help intermediate Japan's large current account surpluses. Exchange rate fluctuations and international differences in interest rates could also be significant. Bilateral and multilateral trade and investment agreements might also play a significant role in explaining multinational expansion by banks. Pursuing that kind of analysis is beyond the scope of this study, which nevertheless can serve as a useful platform to launch such an investigation.

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Table 1. Foreign-Based Firms in the U.S., 1992: Direct Investment and Bank Borrowing

U.S. Affiliates from:	Direct Investment Position in U.S. — Billions of Dollars	Direct Investment Position in U.S. — Percent of All Foreign	Total Assets of Nonbank U.S. Affiliates — Billions of Dollars	Total Assets of Nonbank U.S. Affiliates — Percent of All Foreign	Bank Borrowing from U.S.-Based Banks — Billions of Dollars	Bank Borrowing from U.S.-Based Banks — Percent of All Foreign
All Countries	419.53	100	1,809.95	100	275.47	100
Japan	96.74	23	458.519	25	94.38	34
Canada	39.00	9	212.208	12	15.97	6
France	23.81	6	174.208	10	24.26	9
U.K.	94.72	23	294.783	16	35.90	13
Germany	29.21	7	127.778	7	21.19	8
Netherlands	61.34	15	104.672	6	6.82	2
Major 6	344.81	82	1372.17	76	198.51	72

Note: The Major 6 are Japan, Canada, France, U.K., Germany, and the Netherlands.

Sources: "Foreign Direct Investment in the United States: Detail for Historical-Cost Position and Balance of Payments Flows, 1992," U.S. Commerce Department, Survey of Current Business, Vol. 73, No. 7, July 1993, pp. 59-87; Zeile, William J., "Foreign Direct Investment in the United States: 1992 Benchmark Survey Results," U.S. Commerce Department, Survey of Current Business, Vol. 74, No. 7, July 1994, pp. 154-186.

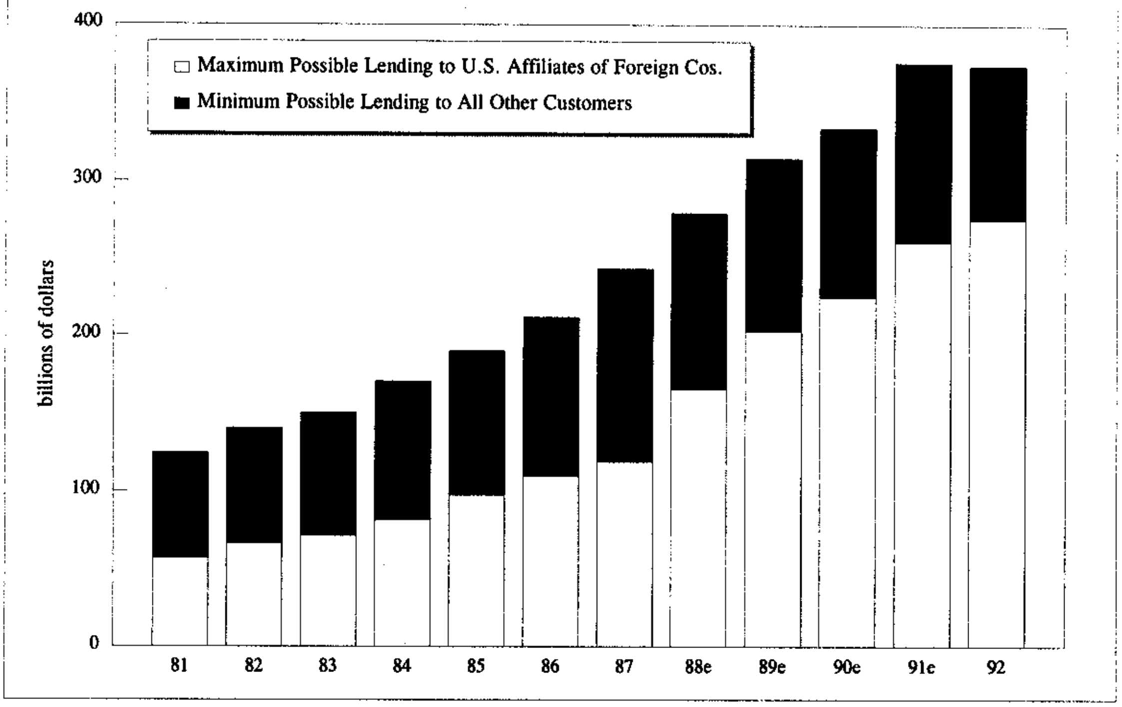
Table 2. Characteristics of Foreign-Owned Banks in the U.S., 1992

U.S.-Based Banks from:	Assets		Loans to Nonbanks		C&I Loans		Number of:	
	Billions of Dollars	Percent of All Foreign	Billions of Dollars	Percent of All Foreign	Billions of Dollars	Percent of All Foreign	Separately Capitalized Subsidiaries	Branches and Agencies
All Countries	901.39	100	374.10	100	189.81	100	119	558
Japan	408.88	45	193.52	52	99.91	53	23	123
Canada	59.18	7	31.27	8	17.59	9	21	20
France	78.90	9	17.97	5	11.07	6	2	31
U.K.	44.45	5	17.95	5	9.39	5	4	24
Germany	30.83	3	6.61	2	2.42	1	0	22
Netherlands	36.28	4	17.83	5	11.92	6	9	12
Major 6	658.53	73	285.15	76	152.30	80	59	232

Notes: C&I loans are those to U.S. addressees. Subsidiaries are those with 50 percent or greater foreign ownership. Major 6 countries are Japan, Canada, France, U.K., Germany, and the Netherlands.

Source: Federal Financial Institutions Examination Council, Reports of Condition.

Figure 1. Lending by U.S.-Based Foreign Banks:
Lending to Affiliates of Home-Country Cos. and to All Other Borrowers

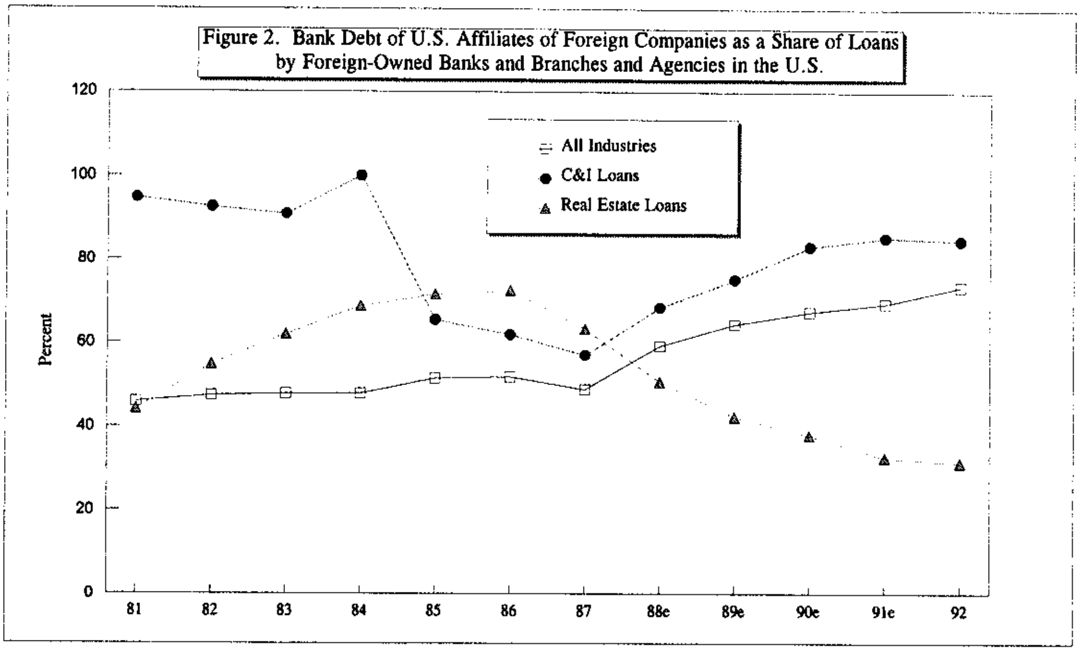


Lending Patterns of Foreign-Owned Banks, and Borrowing Patterns of Foreign-Owned Companies in the U.S.
(billions of dollars unless otherwise indicated)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
A. Nonbank Loans by U.S.-Based Foreign-Owned Banks (billions of dollars)	124.4	140.4	150.2	170.4	190.0	211.9	243.3	279.2	314.6	333.8	375.7	374.1
B. Bank Borrowing by U.S. Affiliates of Foreign Companies = Maximum Possible Lending to U.S. Affiliates of Foreign Cos. (billions of dollars)	57.1	66.6	71.8	81.6	97.8	109.9	119.0	165.5	203.1	225.2	261.0	275.5
C. Minimum Possible Lending to All Other Customers (A - B) (billions of dollars)	67.3	73.7	78.4	88.7	92.2	102.0	124.3	113.7	111.4	108.6	114.7	98.6
D. Bank Borrowing of U.S. Affiliates of Foreign Cos. as a Share of Loans by U.S.-Based Foreign Banks (percent)	46	47	48	48	51	52	49	59	65	67	69	74

Notes: e = estimate. Bank borrowing by U.S. affiliates of foreign companies excludes borrowing from banks outside the U.S.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council, Reports of Condition; Office of the Comptroller of the Currency (OCC) and Federal Reserve Bank of New York (FRBNY) staff estimates.



Bank Debt of U.S. Affiliates of Foreign Companies as a Share of Loans by Foreign-Owned Banks and Branches and Agencies in the U.S., by Type of Industry (percent)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
All Industries	45.9	47.5	47.8	47.9	51.5	51.9	48.9	59.3	64.6	67.5	69.5	73.6
C&I Industries	94.8	92.6	90.9	100.0	65.5	62.0	57.1	68.5	75.2	83.1	85.3	84.7
Real Estate	44.2	54.8	62.0	68.8	71.6	72.5	63.3	50.7	42.4	38.0	32.7	31.4

Notes: e = estimate. Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

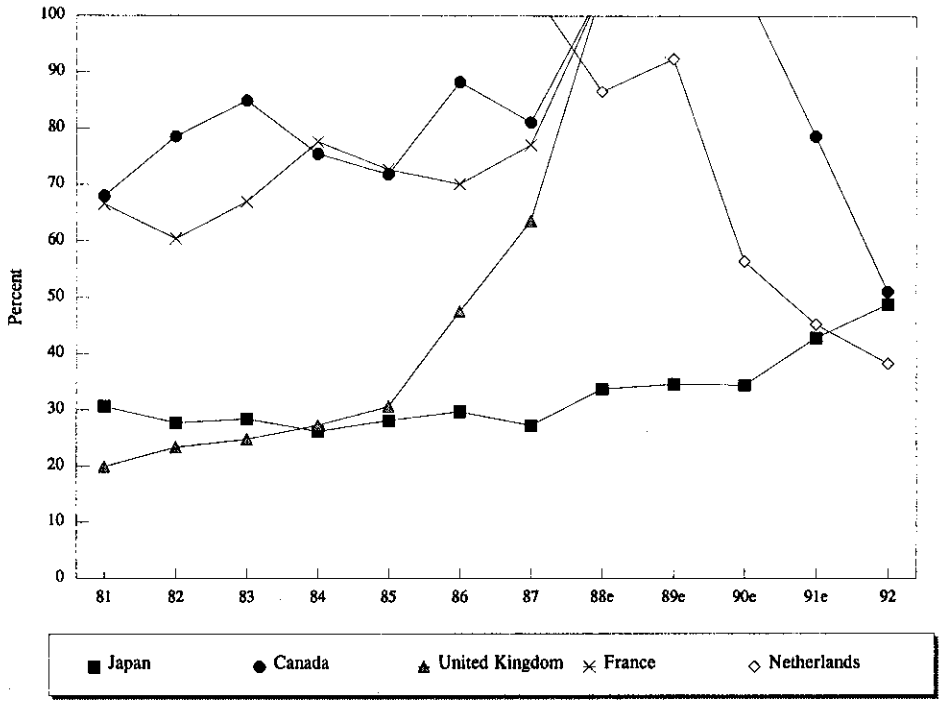
Table 3. U.S. Affiliates of Foreign Companies: Current Liabilities and Long-Term Debt to U.S.-Based Banks (bil. $)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
All Industries	57.1	66.6	71.8	81.6	97.8	109.9	119.0	165.5	203.1	225.2	261.0	275.5
C&I Industries	44.9	49.4	49.5	50.5	53.9	62.3	69.5	99.1	122.0	140.9	158.9	160.7
Real Estate	7.9	11.0	13.0	15.6	18.2	19.7	23.7	25.6	27.7	31.3	31.9	29.2
Nonbank Financial Institutions	4.3	6.3	9.2	15.5	25.7	28.0	25.8	40.8	53.4	52.9	70.2	85.6

Notes: e = estimate. Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

Figure 3. Bank Debt of U.S. Affiliates of Foreign Companies as a Percent of Loans by Foreign-Owned Banks and Branches and Agencies in the U.S.



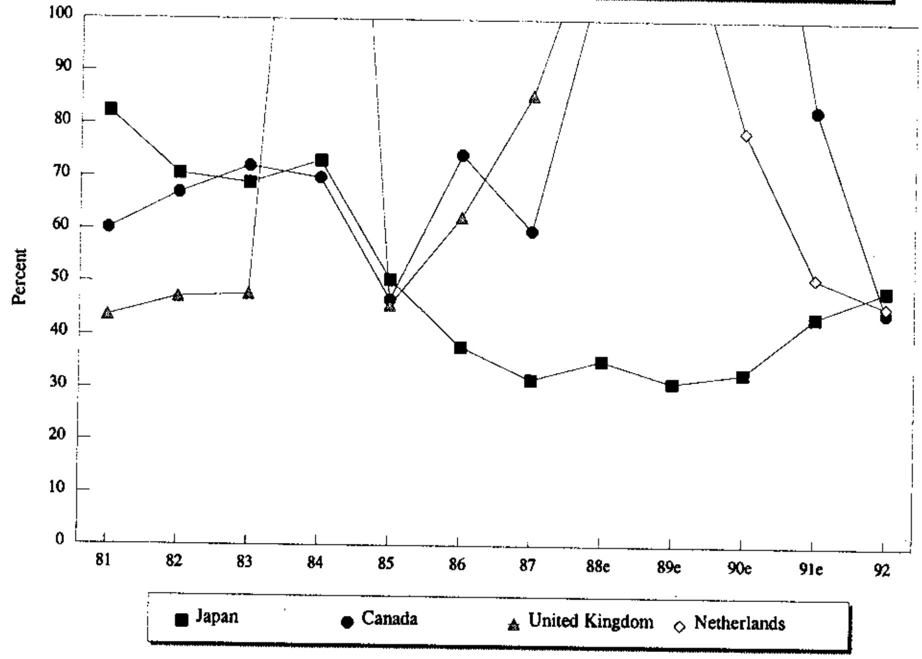
Bank Debt of U.S. Affiliates of Foreign Companies as a Percent of Loans by Foreign-Owned Banks and Branches and Agencies in the U.S., by Country of Parent

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	30.7	27.7	28.4	26.2	28.1	29.7	27.2	33.7	34.6	34.5	42.8	48.8
Canada	67.9	78.6	84.8	75.4	71.9	88.2	81.0	113.8	136.6	134.5	78.6	51.1
France	66.6	60.5	66.9	77.6	72.7	70.1	77.0	116.8	129.5	150.9	172.9	135.0
Germany	174.7	193.5	176.3	193.6	215.4	146.9	192.3	212.0	328.0	379.2	363.3	320.5
The Netherlands	270.8	237.4	193.8	150.4	142.8	140.6	108.1	86.5	92.4	56.5	45.2	38.2
United Kingdom	19.9	23.4	24.8	27.2	30.6	47.5	63.6	100.3	116.8	124.0	157.4	200.0

Notes: e = estimate. Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.
For scaling purposes, values above 100 percent are not included in the figure (i.e., whenever bank borrowing by nonbank affiliates exceeded total lending by foreign-owned banks).

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; Office of the Comptroller of the Currency (OCC) and Federal Reserve Bank of New York (FRBNY) staff estimates.

Figure 4. Bank Debt of U.S. C&I Affiliates of Foreign Companies as a Percent of C&I Loans by Foreign-Owned Banks and Branches and Agencies in the U.S.

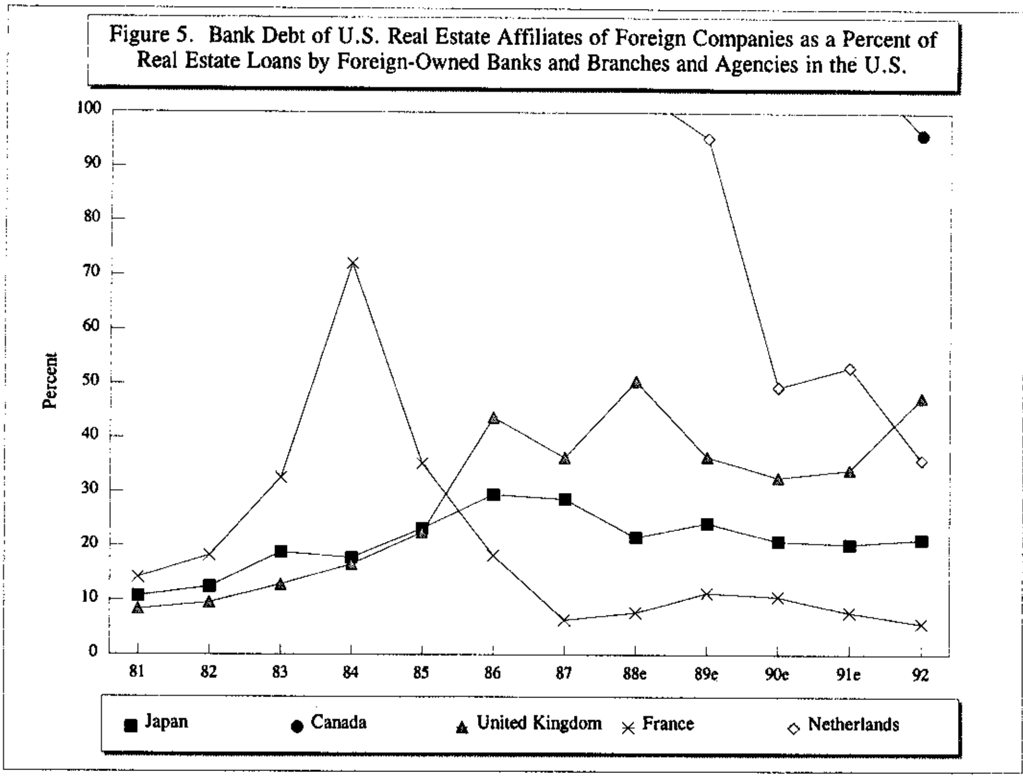


Bank Debt of U.S. C&I Affiliates of Foreign Companies as a Percent of C&I Loans by Foreign-Owned Banks and Branches and Agencies in the U.S., by Country of Parent

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	82.32	70.58	68.93	73.13	50.57	38.01	31.85	35.48	31.28	33.10	43.80	48.89
Canada	60.12	66.93	72.07	69.82	46.76	74.35	59.96	112.92	156.72	154.63	83.04	44.70
France	113.66	104.09	119.15	118.37	113.11	109.92	121.70	181.33	188.47	213.72	191.94	125.39
Germany	279.83	335.05	363.59	417.34	477.04	233.27	317.57	259.89	182.01	236.72	336.28	284.28
The Netherlands	411.95	383.94	352.61	244.30	128.91	165.70	112.13	107.15	123.57	78.88	51.20	45.82
United Kingdom	43.63	47.18	47.73	223.05	45.75	62.53	85.73	125.50	174.08	203.04	273.49	337.91

Notes: e = estimate. C&I loans by foreign-owned subsidiaries and branches and agencies are those to U.S. addressees. For scaling purposes, values above 100 percent are not included in the figure (i.e., whenever bank borrowing by nonbank affiliates exceeded total lending by foreign-owned banks).

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

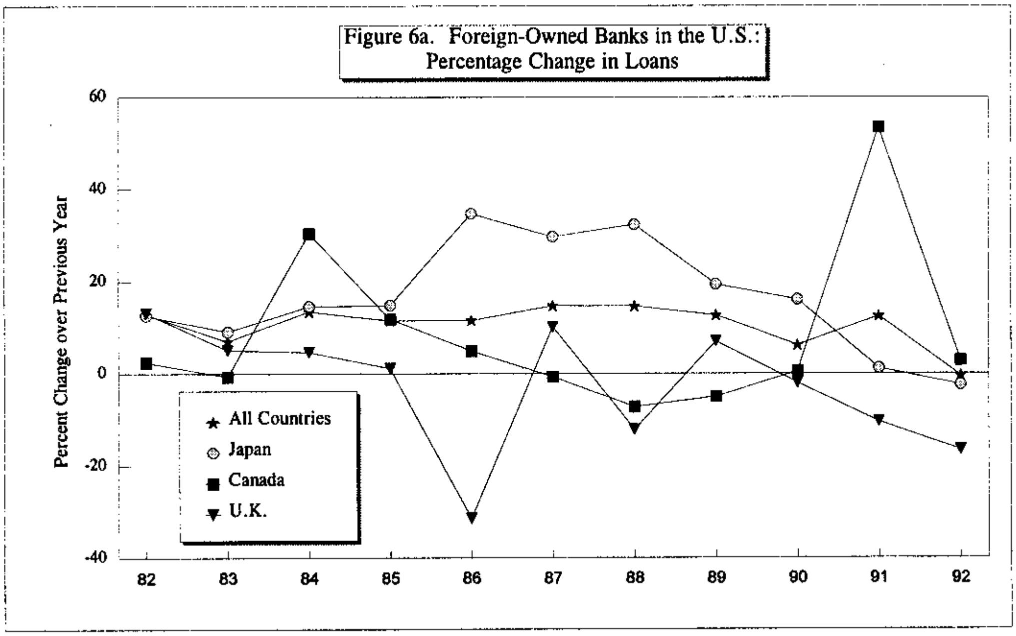


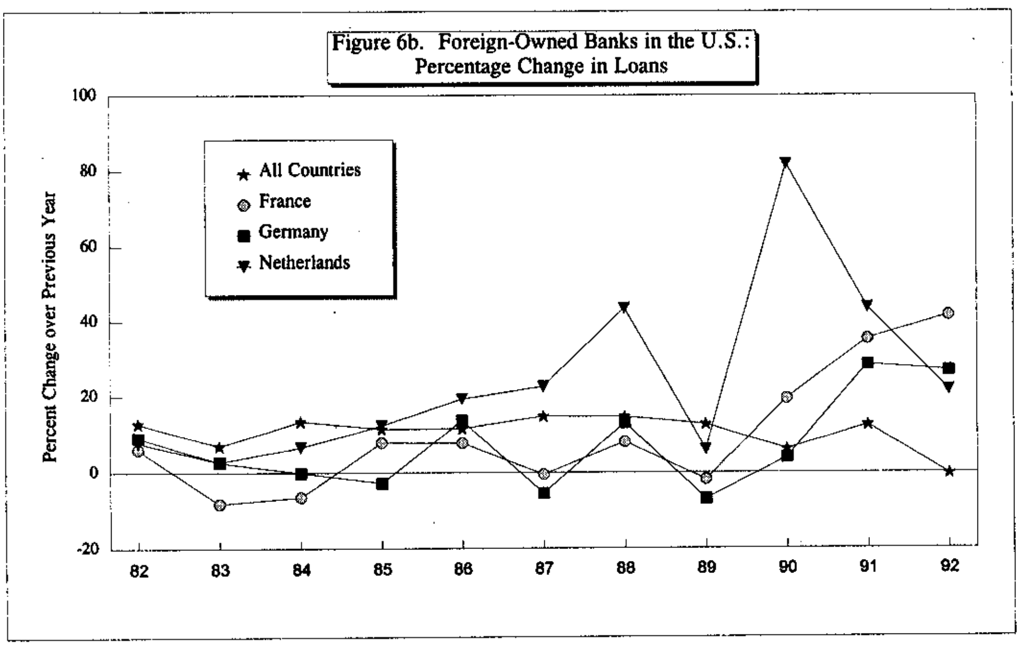
Bank Debt of U.S. Real Estate Affiliates of Foreign Companies as a Percent of Real Estate Loans by Foreign-Owned Banks and Branches and Agencies in the U.S.

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	10.8	12.4	18.8	17.8	23.2	29.5	28.7	21.7	24.3	20.9	20.3	21.3
Canada	104.3	113.8	126.4	153.1	167.4	163.5	169.0	191.3	210.1	179.8	110.0	96.0
France	14.2	18.2	32.6	72.2	35.3	18.2	6.4	7.8	11.4	10.6	7.8	5.7
Germany	4963.2	7855.7	8321.4	7570.8	5794.7	3166.1	549.6	227.3	322.7	310.9	294.8	111.4
The Netherlands	333.9	444.7	402.8	530.7	446.7	401.9	289.8	104.0	95.3	49.5	53.1	36.0
United Kingdom	8.4	9.6	12.9	16.6	22.5	43.8	36.4	50.6	36.5	32.8	34.2	47.6

Notes: e=estimate.
For scaling purposes, values above 100 percent are not included in the figure (i.e., whenever bank borrowing by nonbank affiliates exceeded total lending by foreign-owned banks).

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

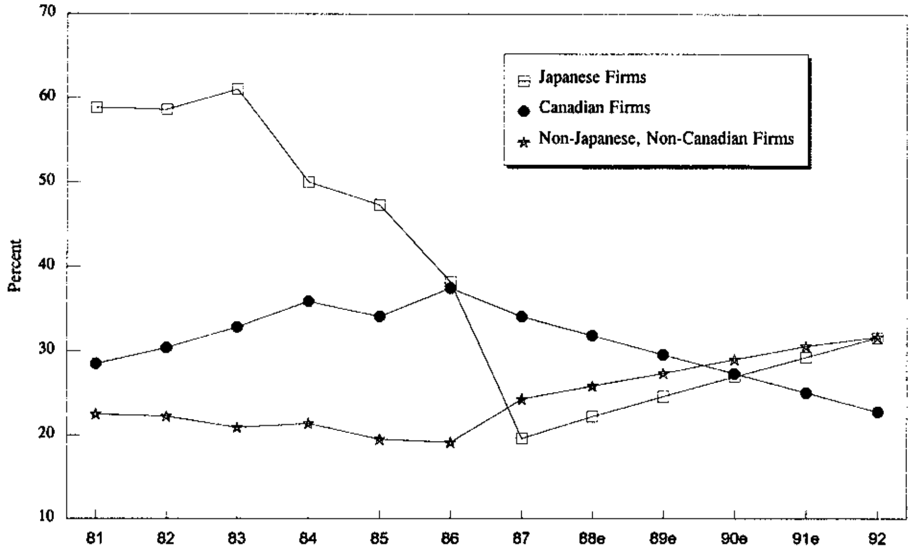




Note: Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks. See appendix Table A.4 for underlying data.

Source: Federal Financial Institutions Examination Council (FFIEC), Reports of Condition.

Figure 7. Bank Share of U.S. Liabilities of U.S. Affiliates of Foreign Firms (Percent)



Bank Share of U.S. Liabilities of U.S. Affiliates of Foreign Firms (percent)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japanese Affiliates	58.9	58.6	61.1	50.1	47.3	38.3	19.6	22.2	24.5	26.9	29.2	31.6
Canadian Affiliates	28.5	30.4	32.9	35.9	34.1	37.5	34.1	31.8	29.6	27.3	25.0	22.7
Non-Japanese, Non-Canadian	22.5	22.2	20.9	21.4	19.5	19.1	24.2	25.8	27.3	29.0	30.5	31.6

Notes: e = estimate. Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

Table A.1

U.S. Affiliates of Foreign Companies: Current Liabilities and Long-Term Debt to U.S.-Based Banks, by Country of Parent (bil. $)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	11.6	11.8	13.2	13.9	17.1	24.4	29.1	47.7	58.5	67.6	85.0	94.4
Canada	9.8	11.7	12.5	14.5	15.4	19.9	18.1	23.6	26.9	26.6	23.9	16.0
France	4.7	4.5	4.6	5.0	5.0	5.2	5.7	9.3	10.2	14.2	21.9	24.3
Germany	5.6	6.7	6.3	6.9	7.4	5.8	7.1	8.9	12.8	15.4	18.9	21.2
The Netherlands	5.1	4.9	4.1	3.4	3.6	4.2	4.0	4.6	5.2	5.8	6.6	6.8
United Kingdom	5.5	7.2	8.1	9.3	10.5	11.2	16.6	22.9	28.6	29.7	33.8	35.9

Notes: e = estimate. Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

Table A.2 C & I Affiliates of Foreign Companies: Current Liabilities and Long-Term Debt to U.S.-Based Banks, by Country of Parent (billion $)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	10.5	10.6	11.1	11.9	13.8	15.6	18.3	27.8	30.3	35.9	44.5	48.8
Canada	4.8	4.9	5.2	5.8	5.7	9.9	7.4	13.8	16.5	15.1	14.1	7.9
France	4.1	3.8	3.8	4.0	4.1	4.3	4.9	7.8	8.1	9.5	15.1	13.9
Germany	5.1	6.1	5.4	6.0	6.1	4.3	5.1	5.4	4.4	5.4	6.5	6.9
The Netherlands	4.3	3.7	3.0	1.8	2.0	2.9	2.7	3.5	4.0	4.3	5.1	5.5
United Kingdom	4.1	5.3	5.4	6.2	6.8	7.6	11.6	16.7	22.9	25.7	29.4	31.7

Notes: e = estimate. C&I loans by foreign-owned subsidiaries and branches and agencies are those to U.S. addressees.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

Table A.3

Real Estate Affiliates of Foreign Companies: Current Liabilities and Long-Term Debt to U.S.-Based Banks
($ billions)

	1981	1982	1983	1984	1985	1986	1987	1988e	1989e	1990e	1991e	1992
Japan	0.29	0.31	0.49	0.66	0.98	2.09	3.89	5.45	8.61	11.13	11.75	11.73
Canada	4.04	5.51	6.18	7.40	8.40	8.67	9.48	9.07	9.28	9.93	8.41	6.84
France	0.08	0.11	0.18	0.21	0.15	0.10	0.05	0.07	0.10	0.14	0.13	0.11
Germany	0.32	0.54	0.64	0.70	0.67	0.71	0.64	0.62	0.69	0.81	0.76	0.97
The Netherlands	0.58	0.77	0.80	1.03	1.13	1.14	0.89	0.98	1.00	1.18	1.14	0.92
United Kingdom	0.66	0.78	1.09	1.45	2.02	2.10	2.19	2.33	2.09	2.07	2.11	1.96

Notes: e=estimate.

Sources: U.S. Department of Commerce; Federal Financial Institutions Examination Council (FFIEC), Reports of Condition; OCC and FRBNY staff estimates.

Table A.4. Nonbank Loans by Foreign-Owned Banks in the U.S.

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
All Countries (bil. $)	124.4	140.4	150.2	170.4	190.0	211.9	243.3	279.2	314.6	333.8	375.7	374.1
% change over prev. yr.	-	*12.9*	*7.0*	*13.5*	*11.5*	*11.6*	*14.8*	*14.7*	*12.7*	*6.1*	*12.5*	*-0.4*
Japan	37.8	42.5	46.4	53.1	61.0	82.3	106.8	141.5	169.0	196.2	198.4	193.5
% change over prev. yr.	-	*12.6*	*9.0*	*14.6*	*14.9*	*34.8*	*29.8*	*32.5*	*19.4*	*16.1*	*1.1*	*-2.5*
Canada	14.5	14.8	14.7	19.2	21.5	22.5	22.4	20.7	19.7	19.8	30.4	31.3
% change over prev. yr.	-	*2.4*	*-0.7*	*30.3*	*11.9*	*4.9*	*-0.7*	*-7.2*	*-5.0*	*0.4*	*53.6*	*2.9*
France	7.1	7.5	6.9	6.4	6.9	7.4	7.4	8.0	7.9	9.4	12.7	18.0
% change over prev. yr.	-	6.0	-8.3	-6.6	7.9	7.8	-0.5	8.1	-1.9	19.5	35.3	41.6
Germany	3.2	3.5	3.6	3.6	3.5	3.9	3.7	4.2	3.9	4.1	5.2	6.6
% change over prev. yr.	-	*9.2*	*2.6*	*-0.1*	*-2.9*	*13.7*	*-5.6*	*13.1*	*-7.0*	*4.0*	*28.5*	*26.8*
Netherlands	1.9	2.0	2.1	2.2	2.5	3.0	3.7	5.3	5.6	10.2	14.6	17.8
% change over prev. yr.	-	*7.8*	*2.7*	*6.6*	*12.3*	*19.3*	*22.7*	*43.6*	*6.1*	*81.7*	*43.8*	*21.7*
United Kingdom	27.4	31.0	32.6	34.1	34.5	23.6	26.0	22.9	24.5	24.0	21.5	17.9
% change over prev. yr.	-	*13.1*	*5.0*	*4.6*	*1.1*	*-31.5*	*10.1*	*-12.1*	*6.9*	*-2.0*	*-10.4*	*-16.4*

Note: Loans by foreign-owned subsidiaries and branches and agencies exclude loans to other banks.

Source: Federal Financial Institutions Examination Council (FFIEC), Reports of Condition.