

# The Growth of Foreign Banking in the United States: An Analytical Survey

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## I. Introduction

One of the most significant recent developments in both international banking, and the structure of banking within the United States, has been the rapid growth in the activities of foreign banks in the United States. This growth has resulted from an expansion of the activities of banks with existing U.S. operations as well as *de novo* entry into the U.S. market by additional foreign banks. The U.S. offices of foreign banks currently offer a broad range of banking services to both foreign and domestic customers, and their increasing importance in U.S. markets has resulted in various legislative proposals to establish a uniform Federal policy concerning their activities.

To understand this growth it is necessary to understand the motives and the business orientation of the nearly 100 foreign banks operating banking facilities in the United States.<sup>1</sup> One reason the United States is an attractive location for these foreign banks is the size of its domestic financial markets, which provide foreign banks with a convenient investment outlet as well as a source of dollar financing. The attractiveness of establishing a banking facility in the United States is enhanced by the role of the dollar as a transaction currency in world trade and investment. In addition, the relaxation of capital controls in January 1974 clearly increased the desirability of U.S. markets to foreign banks since they could extend credits to foreign borrowers free of restraint.

Other important motivations for entry include providing financial services for the foreign bank's corporate clients doing business in the United States, developing closer contacts with U.S. corporations which may be

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<sup>1</sup>This number comprises foreign banks that operate one or more banking facilities in the United States, but does not include foreign banks that have only representative offices.

operating in the foreign bank's home country, and developing a profitable retail banking business in the United States, which in some cases is linked to a particular ethnic appeal.<sup>2</sup> Some U.S. offices of foreign banks offer a broad range of both wholesale and retail services in addition to conducting money-market transactions for their parent organizations, while others have preferred to develop only specialized services. A number of foreign banks that initially entered the U.S. market in order to service the U.S. activities of their home country corporations and to finance transactions between the United States and their home country have used the contacts and expertise developed through their U.S. presence as a base to compete for the domestic business of the *Fortune* 500 companies.

This paper will attempt to provide an analytic survey of the U.S. activities of foreign banks.<sup>3</sup> These activities are properly considered international banking because they are conducted by banking offices located outside of their home countries and therefore may be expected to differ in important respects from the activities of indigenous banks. Since, from the U.S. point of view, these offices are domestic banking institutions that have an important impact on domestic banking markets, this paper will also consider the role of the foreign banking institutions in relation to banking within the United States.

Before analyzing the U.S. activities of foreign banks it should be noted that this analysis refers only to the segment of the foreign banks' activities that are on the books of their offices in the United States.<sup>4</sup> Aggregate balance sheets of these offices illustrate the nature of the activities that foreign banks conduct in the United States and reveal the general impact of foreign banks on banking structure in the United States. However, these aggregate data represent institutions engaged in a wide range of operations and often conceal the diversity of their activities.<sup>5</sup>

<sup>2</sup>For a more detailed description of the motivations for foreign bank entry see: Fred Klopstock, "Foreign Banks in the United States: Scope and Growth of Operations," *Monthly Review of the Federal Reserve Bank of New York*, June 1973, pp. 140-154.

<sup>3</sup>Previous survey articles include: Henry S. Terrell and John Leimone, "The U.S. Activities of Foreign-Owned Banking Organizations," *The Columbia Journal of World Business*, Winter 1975, pp. 87-97; Jane D'Arista, "Foreign Bank Activities in the United States," *Compendium of Papers Prepared for the Fine Study*, U.S. House of Representatives, June 1976, Book II, pp. 733-800; Francis A. Lees, *Foreign Banking and Investment in the United States: Issues and Alternatives*, (New York: John Wiley and Sons, 1976); and "Recent Growth in Activities of U.S. Offices of Foreign Banks," *Federal Reserve Bulletin*, October 1976, pp. 815-824.

<sup>4</sup>In fact many foreign banks transact business with U.S. residents at their banking offices outside the United States.

<sup>5</sup>Fred Ruckdeschel, in an unpublished paper entitled "A Microeconomic Comparison of the Activities of Foreign Banks in the United States with Domestic U.S. Banks," has utilized discriminant analysis to show that there is considerably more diversity among the balance sheets of foreign banking "families" operating in the United States than among the balance sheets of major U.S. banks or a selected sample of nonmember domestic banks.

This paper is presented in two parts. The body of the paper discusses the aggregate size and growth of the U.S. offices of foreign banks, emphasizing the general nature of their activities and their impact on banking structure in the United States, including their multistate banking activities. An appendix presents a preliminary microanalytic analysis of the balance sheets of individual foreign banking institutions in the United States.

## II. *The Activities of Foreign Banks: An Overview*

### A. *Asset Structure*

#### 1. *Size and Growth*

Tables 1 and 2 provide data on the size and growth of major asset and liability categories for the U.S. offices of foreign banks and for banks that report weekly to the Federal Reserve.<sup>6</sup> The data are as of November 1972, the month for which data on the foreign banks were first collected by the Federal Reserve, November 1974, the month before legislation affecting the activities of the foreign banks was first proposed; and the more recent month of May 1977.<sup>7</sup>

The data in Table 1 reveal the dramatic growth in the U.S. activities of foreign banks compared with the domestic assets of the weekly reporting banks.<sup>8</sup> Between November 1972 and May 1977 the standard banking assets of foreign banks — defined to exclude clearing balances<sup>9</sup> and balances due to directly related institutions — increased 1¾ times from \$18.3 billion to \$50.5 billion, while similar assets of the weekly reporting banks increased about 40 percent from \$353 billion to \$488 billion. The dramatic

<sup>6</sup>The banks that report weekly to the Federal Reserve are in large part the money-market banks, the closest competitors of the U.S. offices of foreign banks. Since these data do not refer to all U.S. banks but only to the sample of weekly reporting banks (which account for about 54 percent of total assets of all banks in the United States), these data do not measure the impact of foreign bank activity on the entire U.S. banking system. We are indebted to our colleague John Leimone who developed a format for comparing the balance sheets of the foreign and weekly reporting banks.

<sup>7</sup>November and May data are useful because they do not contain the distortions caused by end-of-year and end-of-quarter "window-dressing." The selection of the three dates is arbitrary. The growth of the U.S. activities of foreign banks has not proceeded at a constant pace within the two periods.

<sup>8</sup>Four foreign-owned banks, European-American Bank and Trust Company, California First Bank, Lloyds Bank of California, and Sumitomo Bank of California, also report weekly to the Federal Reserve. The data for these banks have been subtracted from the data for the weekly reporting banks so that the data refer only to domestically owned weekly reporting banks. The data for both the weekly reporting banks and the foreign-owned banks are as of the last Wednesday of the month. It should be noted that the two banking samples are distinct and thus any percentage comparisons *do not reflect shares* but indicate only relative size and growth.

<sup>9</sup>Clearing balances comprise cash items in process of collection, demand balances due from banks in the United States, and deposits due from banks in foreign countries.

Table 1

Comparison of U.S. Offices of Foreign Banks with Weekly Reporting U.S. Banks by Asset Category  
(in millions of dollars)

	November 1972			November 1974			May 1977		
	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks
<b>I. Standard Banking Assets</b>	18,346	353,195	5.2	35,506	459,939	7.9	50,519	487,667	10.4
A. Loans and Credits	10,000	201,103	5.0	20,594	280,535	7.3	25,656	262,391	9.8
1. Commercial and industrial loans	8,878	88,406	10.0	17,815	129,375	13.8	20,669	115,689	17.9
a. United States	( 7,169)	( 83,583) <sup>a</sup>	( 8.6)	(13,764)	(123,703) <sup>a</sup>	(11.0)	(15,351)	(108,312) <sup>a</sup>	(13.7)
b. Foreign	( 1,709)	( 3,715) <sup>a</sup>	(46.0)	( 4,051)	( 4,305) <sup>a</sup>	(94.1)	( 5,319)	( 5,320) <sup>a</sup>	(99.4)
2. Other loans	1,122	112,697	1.0	2,779	151,160	1.8	4,986	146,702	3.4
B. Money-market assets	4,232	29,244	14.5	7,744	34,359	22.5	15,203	39,470	38.5
1. Interbank loans and time deposits due from banks	3,047	16,341	18.6	7,307	23,811	30.7	14,431	24,135	59.8
a. United States <sup>b</sup>	( 2,433)	( 13,412)	(18.1)	( 5,826)	( 17,647)	(33.0)	( 9,423)	( 18,571)	(50.7)
b. Foreign <sup>c</sup>	( 614)	( 2,929)	(21.0)	( 1,481)	( 6,164)	(24.0)	( 5,008)	( 5,564)	(90.0)
2. Loans for purchasing or carrying securities	1,185	12,903	9.2	437	10,548	4.1	772	15,335	5.0
C. Securities	2,066	84,319	2.4	3,560	84,896	4.2	4,233	112,969	3.7
D. Miscellaneous assets	2,048	38,529	5.3	4,608	60,149	7.7	5,427	72,837	7.5
<b>II. Clearing Balances</b>	2,000	39,669	5.0	4,669	49,893	9.4	6,390	50,695	12.6
A. Demand deposits due from U.S. banks	1,620	10,017	16.2	3,439	11,187	30.7	3,885	12,853	30.2
B. Deposits due from foreign banks <sup>d</sup>	244	531	46.0	897	911	98.5	1,882	2,485	75.7
C. Cash items in process of collection	136	29,121	0.5	333	37,795	0.9	623	35,357	1.8
<b>III. Due From Directly Related Institutions</b>	4,286	---	---	9,273	---	---	11,845	---	---
A. United States	1,773	---	---	4,580	---	---	4,740	---	---
B. Foreign	2,513	---	---	4,693	---	---	7,105	---	---
<b>TOTAL ASSETS</b>	24,633	392,865	6.3	50,447	509,833	9.9	68,754	538,362	12.8

Sources: 886(a) and 416

<sup>a</sup>Does not include acceptances held in loan portfolio.<sup>b</sup>Includes Federal funds sold.<sup>c</sup>Does not include time deposits.<sup>d</sup>Includes time deposits.

Note: Details may not add to totals due to rounding.

growth of foreign banks' assets has resulted in a doubling of the size of their assets relative to the weekly reporting banks' assets — from 5.2 percent as of November 1972 to 10.4 percent as of May 1977.

## 2. *Commercial and Industrial Loans*

Aside from demonstrating the general growth of foreign banks in the United States, the data in Table 1 also reveal the growth of various categories of assets of these institutions. As of May 1977, the most important asset item for these institutions consisted of their \$20.7 billion in commercial and industrial loans, which amounted to 41 percent of their standard banking assets, compared with 24 percent for the weekly reporting banks. The heavy concentration of (C & I) loans in the portfolios of the foreign banks is indicative of their wholesale business orientation. By contrast, loans other than C and I loans — which largely reflect more retail-oriented banking — amounted to only 10 percent of standard assets for the foreign banks compared with 30 percent for the weekly reporting banks.

What is even more striking than the relative concentration of commercial and industrial loans to both foreign and domestic customers in the portfolios of the foreign banks is the ability of these banks to expand their lending during a period of sluggish growth in C and I lending by the weekly reporting banks. In the two years between November 1972 and November 1974, total C and I loans at foreign banks increased from \$8.9 billion to \$17.9 billion, increasing from 10 percent to 13.8 percent of similar loans at weekly reporting banks. Furthermore, between November 1974 and May 1977 when C and I loans of the weekly reporting banks actually declined by \$13.7 billion to \$115.7 billion, C and I loans of the U.S. offices of foreign banks increased by \$2.9 billion to \$20.7 billion. Moreover, \$1.6 billion of this increase represented C and I loans to domestic borrowers. By May 1977 C and I loans at the foreign banks had grown to 17.9 percent of the C and I lending by the weekly reporting banks.

Clearly U.S. offices of foreign banks are an important competitive factor in the market for commercial and industrial lending from banking offices in the United States. Although available evidence is not conclusive, the expected long-run results of this increased competition should be smaller net interest rate spreads on domestic U.S. lending and a closer convergence between domestic and Euro-currency lending rates.<sup>10</sup>

<sup>10</sup>The evidence on declining spreads in domestic lending is largely anecdotal and is derived in part from bank stock analysts. Declining spreads are hard to document empirically since they may occur in a variety of ways other than through reductions in posted lending rates, i.e., reductions in compensating balance requirements, reductions in margins over prime for non-prime borrowers, and some Euro-currency pricing for domestic borrowers. Furthermore, it is difficult to disentangle the impact of foreign banks on domestic loan spreads from the competitive impact of commercial paper. Morgan Guaranty, in *World Financial Markets*, compares the costs of Euro-dollar credits to the costs of issuing commercial paper.

A third interesting aspect of the C and I lending of foreign banks is the relatively high proportion made to foreign borrowers.<sup>11</sup> In May 1977 one-fourth of the total C and I lending by these offices was to foreign borrowers, compared with less than one-twentieth for weekly reporting banks.<sup>12</sup> In November 1972 the foreign C and I loans portfolio of the foreign banking offices was about one-half the size of that of the weekly reporting banks; by May 1977 their foreign C and I loans were approximately equal to comparable loans at the weekly reporting banks.

The relatively high concentration of foreign C and I loans in the portfolios of the foreign banks is not surprising given the expectation that nonindigenous banks would be relatively more specialized in foreign trade and investment than domestic banks.<sup>13</sup>

### 3. Money-Market Assets

Foreign banks in the United States are active participants in domestic money markets as part of their role in managing the liquid dollar assets of their parent organization. In arriving at a desired liquidity structure, a foreign bank may simultaneously have large placements and large liabilities in the U.S. market.

Between November 1972 and May 1977 total money-market assets of these institutions more than tripled from \$4.2 billion to \$15.2 billion; the amount of these assets relative to the weekly reporting banks increased from 14.5 percent to 38.5 percent. In May 1977 money-market assets accounted for about 30 percent of the total standard assets of foreign banks, compared to about 8 percent of the standard assets of the weekly reporting banks. The foreign banking institutions' money-market assets consist largely of loans to and time deposits with commercial banks in the United States. These assets are close substitutes for Euro-dollar placements, but

<sup>11</sup>The weekly report of condition for domestic banks does not disaggregate their customers' liabilities on acceptances by domestic and foreign obligors. Thus the data for foreign and domestic C and I loans for the weekly reporting banks in Table 1 are net of acceptances. As of May 1977 weekly reporting banks held \$3.7 billion in acceptances, equal to 3 percent of their total C and I loans, and therefore the omission of acceptances from the domestic/ foreign disaggregation does not seriously affect the general trend.

<sup>12</sup>The data understate the true share of loans to foreign borrowers by the foreign banks since some of the loans that are recorded as domestic loans are really loans to foreign borrowers. For example, the Japanese agencies lend funds to the U.S. incorporated subsidiaries of Japanese trading companies.

<sup>13</sup>We have tested the hypothesis that the relatively lower concentration of foreign C and I loans to total C and I loans at the weekly reporting banks results from the inclusion of smaller U.S. banks that are not active in foreign lending in the sample of weekly reporting banks. For the ten largest domestic U.S. banks, all of which are active in international finance, the ratio of foreign to total C and I loans was .07 which although higher than the ratio for all weekly reporting banks is still well below the ratio for the U.S. offices of foreign banks. It should also be noted that the C and I loan figures for weekly reporting banks refer only to foreign lending from their domestic offices. For tax and other reasons, U.S. banks often book foreign loans at their foreign branches rather than their U.S. offices. As of May 1977, foreign branches of U.S. banks held \$68.7 billion in claims on nonbank foreign borrowers, which were largely C and I loans.

offer the additional feature of being domiciled in the United States, thereby lacking any elements of "country-risk" associated with dollar investments in banking facilities outside the United States.

#### 4. *Demand Balances with U.S. Banks*

A third important asset category for U.S. offices of foreign banks consists of demand balances due from banks in the United States. These balances increased from \$1.6 billion in November 1972 to \$3.9 billion in May 1977, and on the latter date were equal to about 30 percent of the "due from" balances of the weekly reporting banks. More striking, however, is the fact that noninterest bearing demand balances at banks accounted for 7.7 percent of the standard banking assets of U.S. offices of foreign banks compared to only 2.6 percent for the weekly reporting banks.<sup>14</sup>

There are three important reasons for the relatively high concentration of demand balances due from banks in the assets of the foreign banks: (1) the deposits can be used to satisfy state-imposed reserve requirements; (2) these balances are an important vehicle through which foreign banks clear and settle their dollar payments and receipts; and, (3) they are a means of compensating domestic U.S. banks for clearing, settlement, and other correspondent services.

Branches and subsidiary commercial banks in New York, agencies and subsidiary banks in California, and branches in Illinois are currently subject to state-imposed reserve requirements that are similar in magnitude to Federal Reserve requirements, but which can be satisfied by demand balances at domestic banks. Thus the foreign banks need these balances to satisfy the state-imposed reserve requirements. If, however, legislation were enacted requiring the U.S. offices of foreign banks to become Federal Reserve members, their demand for these balances would be reduced substantially because they would satisfy their reserve requirements through balances at Federal Reserve banks, and their access to Federal Reserve services would reduce their need to hold demand balances as compensation for correspondent services.<sup>15</sup>

The issue of demand balances maintained as compensation for services rendered by U.S. banks is complex.<sup>16</sup> U.S. banks perform a variety of

<sup>14</sup>Some of the recorded demand balances at U.S. commercial banks are deposits with clearinghouse banks which are not available for use by the foreign bank until the following business day. These clearinghouse funds are valuable to the foreign banks because they can be utilized to satisfy New York State reserve requirements.

<sup>15</sup>Some preliminary data are consistent with the hypothesis that Federal Reserve membership would reduce the amount of correspondent demand balances held by the U.S. offices of foreign banks. As of May 1977, the five foreign bank-owned commercial banks in New York State that are Federal Reserve members had demand balances due from banks equal to 1 percent of their total assets, while the comparable figure for the 11 foreign bank-owned commercial banks in New York State that are not members of the Federal Reserve was 7 percent.

<sup>16</sup>U.S. banks are also compensated with demand balances for services rendered to their domestic correspondent banks.

services for foreign banks in the United States including clearing of dollar funds, settlement (that is, effecting payment of dollar funds), access to the Federal funds market, provision of lines of credit, information on the U.S. economy or specific customers, and training services. Of this total package of services, the clearing and settlement facilities are generally the most important.

The costs and benefits of the services rendered by U.S. banks for foreign banks are continuously evaluated by both parties, and foreign banks often maintain demand balances at several major U.S. banks that offer clearing and settlement facilities. Although these balances fluctuate widely on a day-to-day basis depending upon the payments and receipts of the foreign bank, the average balance over time is computed to compensate the U.S. bank for the costs of the services provided. A foreign bank may shift its demand balances and its clearing and settlements business away from a U.S. bank which it believes is requiring too high a balance relative to the services it renders.

It is difficult, however, to draw a close parallel between the demand balances that U.S. offices of foreign banks maintain with domestic banks and the services *these offices* obtain from U.S. banks. The relationship between a major U.S. bank and a major foreign bank is evaluated on a worldwide basis and the balance may be maintained by either a U.S. or foreign office of the foreign bank.<sup>17</sup> Moreover, it is not easy to distinguish whether the services rendered are for the benefit of the domestic or foreign office of the foreign bank. For example, clearing and settlement services or lines of credit may be for the benefit of either the U.S. or the head office of the foreign bank. In addition, a foreign bank may render services to its U.S. correspondent bank in its home country for which it may be compensated either through a demand balance or a reduction in its required balance at the U.S. correspondent. Thus, the relatively large demand balances with U.S. banks maintained by the U.S. offices of foreign banks must be considered as part of the total compensation of their parent organization for services rendered by U.S. banks.

### B. *Liability Structure*

Because of their status as nonlocal banks, U.S. offices of foreign banks have a markedly different liability structure from domestic banks. This section compares the liability structure of the U.S. offices of foreign banks to the liability structure of both the domestic weekly reporting banks and the foreign branches of U.S. banks.

#### 1. *Deposits and Credit Balances (Liabilities to Nonbanks)*<sup>18</sup>

Deposits from nonbanks have traditionally played a relatively minor role in the funding of the U.S. offices of foreign banks, but in recent years

<sup>17</sup>As of May 1977 weekly reporting banks had \$5.6 billion in demand deposits from foreign offices of foreign banks.

<sup>18</sup>Credit balances, which are in many ways similar to demand deposits, are counted as deposits. In addition, the data on deposits in the tables and text *include* all borrowings from nonbanks and *exclude* both demand and time deposits due to banks. Thus the data on deposits are an approximation of the ability of foreign banks in the United States to attract funds from nonbanks.



their deposit-type liabilities have grown extremely rapidly — from \$6.2 billion in November 1972 to nearly \$24 billion in May 1977 — and the size of these liabilities relative to the comparable liabilities of the weekly reporting banks tripled from 2.2 percent to 6.7 percent.

The pattern of deposit growth at the U.S. offices of foreign banks has varied considerably by type of institution as noted in Table 3. Between November 1972 and May 1977 the total deposits and credit balances of the agencies and branches increased by about \$10 billion to \$12.8 billion. Of this total increase, \$6 billion was deposits due to foreign customers and only about \$4 billion was due to domestic residents. Time and savings deposits, almost exclusively large CDs, accounted for \$9 billion of the total increase in agency and branch deposits. The very high concentration of money-market type deposits and foreign obligations reflects the wholesale and trade orientation of the agencies and branches.

The growth of deposit liabilities of the subsidiary commercial banks has followed a different pattern. Of the nearly \$8 billion in total deposit growth at the subsidiary commercial banks in this period, \$7.2 billion has been to domestic residents, including an increase of \$2.2 billion in demand deposits to domestic residents. The relative importance of these domestic deposits at subsidiary banks indicates their high concentration in retail banking activities. In addition, nearly three-fifths of the growth in domestic deposits at the domestic subsidiary banks has resulted from the recent acquisitions of U.S. banks by foreign banks rather than through establishment of *de novo* banks or expansion in existing commercial banks.<sup>19</sup>

The growth in deposits and credit balance at the U.S. offices of foreign banks, taken as a whole, has proceeded more rapidly than the growth in their standard banking assets. In November 1972 their deposit-type liabilities amounted to 34 percent of their standard banking assets; by May 1977 this figure has risen to 47 percent, while their deposits to U.S. residents increased from 23 percent to 31 percent of their standard banking assets. For weekly reporting banks, deposit liabilities to nonbanks have generally amounted to about three-fourths of their standard banking assets. Thus although the statistical averages conceal considerable diversity among the foreign institutions, the rapid growth of their deposit base has brought their overall deposit to standard asset relationship somewhat closer to the pattern of domestic banks, although foreign banks continue to rely more heavily on nondeposit sources to fund their U.S. activities.<sup>20</sup>

<sup>19</sup>Major acquisitions included Franklin National Bank by the European-American Group, First Western Bank and Trust (now Lloyd's Bank of California) by Lloyd's International Bank, and Southern California First National Bank (now California First Bank) by The Bank of Tokyo.

<sup>20</sup>The same general pattern of increased funding of loans to nonbanks with deposits from nonbanks has not been true for foreign branches of U.S. banks. In May 1977 the ratio of claims on nonbanks to liabilities to nonbanks for the branches of U.S. banks was 2.44 compared to a ratio of 1.94 in November 1974.

## 2. *Interbank Liabilities*

Interbank liabilities, which include purchases of Federal funds and other borrowings from domestic banks, are an important source of funds for the U.S. offices of foreign banks. Total interbank liabilities of these offices increased from \$2.6 billion in November 1972 to \$12.3 billion in May 1977, and the amount of these liabilities relative to comparable liabilities of the weekly reporting banks increased from 7.7 percent to 16.8 percent.

The data in Table 2 demonstrate the growing importance of interbank liabilities in the total liability structure of the U.S. offices of foreign banks. Between November 1972 and May 1977 the ratio of interbank liabilities to deposits for the foreign banks increased from .43 to .51.<sup>21</sup> As noted earlier, analysis of the gross interbank liability position of the U.S. offices of foreign banks yields an incomplete picture of their use of this market as a source of funds, since some of these offices engage actively in both deposit-placing and deposit-taking activities as part of the management of the dollar positions of their parent organizations. On a net basis the domestic interbank market has at times been an important source of funds for the U.S. offices of foreign banks. As of November 1974, their net borrowings in the domestic interbank market amounted to \$3.7 billion, or 10 percent of their standard banking assets; by May 1977, however, net interbank borrowings had declined to \$2.0 billion or only about 4 percent of their standard banking assets.<sup>22</sup>

## 3. *Liabilities to Foreign-Related Institutions*

While funding from affiliates abroad is important, foreign banks in the United States are reducing their dependence on advances from their head offices. As of November 1972 the U.S. offices of foreign banks had net liabilities to their related offices in foreign countries of \$7.2 billion, which amounted to 39 percent of their standard banking assets. In May 1977 their net liabilities to these institutions were \$8.7 billion, or only 17 percent of their standard banking assets.<sup>23 24</sup>

<sup>21</sup>For the weekly reporting banks, the ratio of interbank liabilities to deposits increased from 0.12 to 0.20 in this same period. Thus the general trend on reliance of interbank funds has been in the same direction for both institutions.

<sup>22</sup>The use of aggregate statistics of net borrowings in the domestic interbank market is a useful generalization, but it obscures the fact that some foreign institutions are large lenders to and others are large net borrowers from that market.

<sup>23</sup>Net liabilities due to foreign-related institutions are computed excluding the capital accounts of the U.S. offices of foreign banks, which totaled \$2.2 billion in May 1977. If legislation is enacted which places *either* Federal Reserve reserve requirements or minimum capital standards on the agencies and branches of foreign banks, a proportion of what is currently reported as due to their head offices would be considered as a capital contribution.

<sup>24</sup>The attractiveness of advances from their head offices abroad to U.S. offices of foreign banks has been reduced by the Federal Reserve's request that these offices maintain reserves (through noninterest bearing deposits at correspondent member banks) on increases in net Euro-dollar borrowings above the level of net borrowings in May 1973. Since April 9, 1975, the voluntary reserve request has been 4 percent.

Table 2

Comparison of U.S. Offices of Foreign Banks with Weekly Reporting U.S. Banks by Liability Category  
(in millions of dollars)

	November 1972			November 1974			May 1977		
	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks
<b>I. Standard Banking Liabilities</b>	10,702	328,448	3.3	27,002	433,336	6.2	40,919	458,889	8.9
A. Deposits, credit balances, and other nonbank borrowings	6,205	278,888	2.2	12,670	344,180	3.7	23,969	359,540	6.7
1. Demand deposits and credit balances	1,863	120,920	1.5	3,650	127,120	2.9	5,338	128,386	4.2
a. United States	(1,285)	n.a.	--	(2,809)	n.a.	n.a.	(3,948)	n.a.	n.a.
b. Foreign	(578)	n.a.	--	(841)	n.a.	n.a.	(1,390)	n.a.	n.a.
2. Time and savings deposits and other nonbank borrowings	4,342	157,968	2.7	9,020	217,060	4.2	18,631	231,540	8.0
a. United States	(2,925)	n.a.	--	(5,375)	n.a.	n.a.	(11,466)	n.a.	n.a.
b. Foreign	(1,417)	n.a.	--	(3,645)	n.a.	n.a.	(7,166)	n.a.	n.a.
B. Interbank liabilities	2,645	34,507	7.7	10,635	63,939	16.6	12,336	73,604	16.8
1. United States <sup>a</sup> b	2,241	34,301	6.5	9,530	62,258	15.3	11,471	72,541	15.8
2. Foreign <sup>b</sup>	404	205	197.1	1,105	1,681	65.7	865	1,153	75.0
C. Miscellaneous liabilities	1,852	15,054	12.3	3,698	25,219	14.7	4,614	25,745	17.9
<b>II. Clearing Liabilities</b>	1,599	31,003	5.2	3,823	37,594	10.2	4,865	37,604	12.9
A. Demand deposits due to U.S. banks	377	21,277	1.8	1,039	25,424	4.1	1,360	24,728	5.5
B. Demand deposits due to foreign banks	464	2,847	16.3	703	5,086	13.8	1,371	5,571	24.6
C. Other <sup>c</sup>	758	6,879	11.0	2,081	7,085	29.4	2,134	7,305	29.2
<b>III. Liabilities to Directly Related Institutions</b>	11,671	--	--	18,134	--	--	20,800	--	--
A. United States	1,966	--	--	4,920	--	--	5,011	--	--
B. Foreign	9,705	--	--	13,214	--	--	15,789	--	--
<b>IV. Capital Account and Reserves</b>	658	33,414	2.0	1,488	38,902	3.8	2,170	41,869	5.2
<b>TOTAL LIABILITIES</b>	<b>24,633</b>	<b>392,865</b>	<b>6.3</b>	<b>50,447</b>	<b>509,834</b>	<b>9.9</b>	<b>68,754</b>	<b>538,362</b>	<b>12.8</b>

Source: 886(a) and 416

<sup>a</sup>Includes Federal funds purchased.<sup>b</sup>Does not include demand balances due to banks.<sup>c</sup>Includes certified and officers' checks, travelers' checks, letters of credit, etc.

Note: Details may not add to totals due to rounding.

In brief, the most important development on the liability side of the foreign banks' balance sheets has been the growth of their deposit base, which includes their ability to attract deposits from foreign as well as domestic sources. This has enabled them to reduce their reliance on net interbank borrowings and net advances from their head offices to finance their U.S. activities.

#### 4. *Comparison with Foreign Branches of U.S. Banks*

The preceding analysis has noted that foreign banks in the United States have a relatively large concentration of interbank liabilities, both as a net and gross source of funds, and a dependence on net advances from their head offices. The balance sheets of foreign branches of U.S. banks exhibit certain similarities which suggest useful generalizations about the liability structure of nonindigenous banks.

Liabilities to banks are the single most important gross source of funds to the foreign branches of U.S. banks. Interbank liabilities amounted to \$84 billion — or 52 percent of their total liabilities (excluding liabilities to directly related institutions) as of May 1977. Excluding branches in the United Kingdom and the offshore banking centers, that is, the locations where branches of U.S. banks specialize in interbank Euro-dollar trading, interbank liabilities still represented a relatively high 48 percent of the total.<sup>25 26</sup> Thus one important general characteristic of offices of nonindigenous banks appears to be the importance of interbank liabilities to banks in their total liability position.<sup>27</sup>

A second important similarity between the U.S. offices of foreign banks and the foreign branches of U.S. banks is their reliance on funds advanced from their head offices. As of May 1977, U.S. offices of foreign banks owed \$8.7 billion, on a net basis, to their related offices outside the United States, while foreign branches of U.S. banks owed \$16.7 billion to their related offices inside the United States. This somewhat surprising result suggests that offices of nonlocal banks encounter demand for funds in their new markets in excess of their ability to fund themselves, and, in the absence of restraints on capital flows, tend to rely heavily on advances from their home offices.

<sup>25</sup>The offshore banking centers where U.S. banks conduct operations include: Nassau, Caymans, Panama, Bahrain, Hong Kong, and Singapore.

<sup>26</sup>By contrast, interbank liabilities of the U.S. weekly reporting banks amounted to only 15 percent of total liabilities as of May 1977.

<sup>27</sup>U.S. banks in the past have also relied on foreign interbank markets as an important net source of funds. In recent years the large inflows from the oil-producing countries combined with conditions favoring advances from their head offices have resulted in foreign branches of U.S. banks having a balanced asset/liability position vis-à-vis banks in foreign countries.

Table 3

Deposits and Credit Balances of U.S. Offices of Foreign Banks\*  
(in millions of dollars)

Agencies and Branches	November 1972	November 1974	May 1977	Percentage Increase November 1972- May 1977
<u>Total Deposits and Credit Balances</u>	<u>2,818</u>	<u>5,563</u>	<u>12,750</u>	<u>352</u>
Due to: <u>Domestic customers</u>	1,606	2,133	5,666	253
Demand	414	671	847	105
Time and savings	1,192	1,462	4,819	304
<u>Foreign customers</u>	1,212	3,430	7,083	484
Demand	367	570	1,055	187
Time and savings	845	2,860	6,028	613
<u>Subsidiary Commercial Banks</u>				
<u>Total Deposits and Credit Balances</u>	<u>2,884</u>	<u>6,472</u>	<u>10,720</u>	<u>272</u>
Due to: <u>Domestic customers</u>	2,498	5,911	9,689	288
Demand	802	2,075	3,051	280
Time and savings	1,696	3,836	6,638	291
<u>Foreign customers</u>	386	561	1,031	167
Demand	143	202	216	51
Time and saving	243	359	815	235
<u>Total Deposits and Credit Balances</u>	<u>5,702</u>	<u>12,035</u>	<u>23,470</u>	<u>312</u>

\*Excludes New York State Investment Companies and foreign bank-owned Agreement Corporations.  
Note: Details may not add to totals due to rounding.

### C. Institutional Structure

#### 1. Type of Organization and Country of Parent Bank<sup>28</sup>

Foreign banks operate in the United States through three major types of banking facilities: agencies, branches, and subsidiary commercial banks. The characteristics of these institutional forms are discussed in detail elsewhere.<sup>29</sup> The main distinctions are that agencies may lend funds but cannot accept deposits (although they do accept credit balances, which for many purposes are the functional equivalent of deposits);<sup>30</sup> branches may accept deposits, make loans, and are an integral part of their parent bank, with lending limits and deposit support based on the resources of their parent banks; and subsidiaries are separately incorporated U.S. banks with lending limits and deposit support derived from their own capital.<sup>31</sup>

The data in Table 4 indicate that the institutional structure of foreign bank operations in the United States has undergone substantial change since late 1972. In late 1972, agencies were the most important single form of operation with total standard assets nearly  $1\frac{1}{2}$  times as large as branches and subsidiary commercial banks combined. As of May 1977, branches had become the largest single form of operation with total standard assets of \$20.3 billion, and subsidiary commercial banks with total standard assets of \$13.1 billion were almost as large as the agencies.

The decline in the importance of agencies can be traced to three specific factors: (1) the relatively slow growth in the activities of the Canadian agencies which were established and active in the United States well before 1972;<sup>32</sup> (2) the extremely rapid growth since 1972 of the branches and subsidiaries of European banks which for the most part had not been very active in the United States prior to 1972; and (3) a shift in emphasis by Japanese banks from the agency to the branch and subsidiary form of operations.

<sup>28</sup>These two important institutional characteristics are discussed together because of the preferences (or requirements) of banks from specific countries for particular institutional structures.

<sup>29</sup>For a more complete treatment of the characteristics of the different institutional forms see the references cited in footnote 3.

<sup>30</sup>In California, however, an agency, subject to the approval of the Superintendent of Banks, may accept deposits from foreign sources.

<sup>31</sup>The legal responsibility for a subsidiary commercial bank is limited to the parent bank's investment. However, to protect their reputations in international markets, parent banks often extend support to their subsidiaries for which they are not legally liable.

<sup>32</sup>Canadian banks are limited to the agency form of operation in New York State, since New York State law requires reciprocal treatment for New York State banks as a condition for permitting a foreign bank to operate a branch in New York.

Table 4

Selected Balance Sheet Characteristics of  
U.S. Offices of Foreign Banks, by Type of Institution and Country of Parent  
(in millions of dollars)

	Agencies			Branches			Subsidiary Commercial Banks		
	Nov. 1972	Nov. 1974	May 1977	Nov. 1972	Nov. 1974	May 1977	Nov. 1972	Nov. 1974	May 1977
<u>All Countries</u>									
Standard Banking Assets	9,959	17,776	15,693	3,283	8,218	20,284	3,747	8,606	13,117
Loans and Credits	5,691	10,965	8,745	1,466	3,978	8,848	2,140	4,528	7,589
C & I Loans	5,585	10,651	8,211	1,259	3,662	7,935	1,417	2,450	4,111
Deposits and Credit Balances	794	2,030	2,520	2,024	3,533	10,230	2,884	6,472	10,720
Number of Institutions	(50)	(70)	(95)	(26)	(50)	(81)	(25)	(29)	(34)
<u>Japan</u>									
Standard Banking Assets	6,857	12,573	9,918	---	832	3,658	1,914	2,817	5,116
Loans and Credits	4,580	8,598	6,055	---	693	2,875	1,179	1,747	2,990
C & I Loans	4,549	8,520	5,977	---	693	2,798	833	1,201	1,798
Deposits and Credit Balances	387	1,362	1,458	---	71	995	1,477	2,103	4,072
Number of Institutions	(21)	(28)	(28)	(1)	(5)	(14)	(6)	(7)	(10)
<u>Canada</u>									
Standard Banking Assets	2,617	3,959	3,115	244	372	670	339	492	664
Loans and Credits	956	1,986	1,733	223	334	563	159	284	408
C & I Loans	882	1,791	1,496	147	206	443	69	148	200
Deposits and Credit Balances	200	330	292	449	324	644	283	370	510
Number of Institutions	(9)	(11)	(12)	(4)	(6)	(6)	(8)	(8)	(8)
<u>Europe</u>									
Standard Banking Assets	252	810	1,525	2,493	5,991	14,419	1,348	4,914	6,785
Loans and Credits	65	226	546	979	2,350	4,653	721	2,248	3,884
C & I Loans	62	218	518	887	2,194	4,105	484	987	1,929
Deposits and Credit Balances	139	147	305	1,232	2,654	7,735	1,012	3,743	5,597
Number of Institutions	(11)	(14)	(22)	(13)	(29)	(44)	(9)	(11)	(12)
<u>Rest of World</u>									
Standard Banking Assets	234	424	1,135	502	1,023	1,537	---	---	551
Loans and Credits	95	155	412	255	610	757	---	---	306
C & I Loans	92	122	219	216	569	589	---	---	185
Deposits and Credit Balances	68	191	464	303	484	856	---	---	541
Number of Institutions	(9)	(17)	(33)	(8)	(10)	(17)	(2)	(3)	(4)

Quantitatively, the growth of the major European banks through branches and subsidiaries has been the most important factor. In many cases these European banks have had business relationships with European subsidiaries of U.S. companies. As shown in Table 5, between November 1972 and May 1977 total standard assets of the U.S. offices of European banks more than quadrupled to \$22.7 billion, and during that same period their deposits and credit balances increased from \$2.4 billion to \$13.7 billion. The European banks' share in total standard banking assets of all foreign banks increased from 24 percent to 46 percent, and they accounted for 63 percent of the increase in total deposits at all offices of foreign banks in the United States. Of their total deposit growth of \$11.3 billion, \$4.6 billion, or about two-fifths, was from foreign customers.

The ability of the European banks to expand their deposit-taking activities from both domestic and foreign sources is related to the fact that these offices, although relatively new, tend to be branches of the largest banks from the major industrial countries whose names are well-known in the United States and abroad. In some cases the deposit growth has reflected an attempt by these institutions to develop a retail-oriented business in the United States, in part through the major acquisitions noted earlier. Finally, the major European countries of the home offices of these banks offer reciprocal treatment to American banks so that banks from these countries are not limited to nondeposit-taking institutions by reciprocity statutes in New York and Illinois.

The shift in the organizational preference of the Japanese banks is related to four developments: (1) a desire to compete for CDs and other deposit sources in the United States; (2) the growth through acquisition and expansion in their retail activities, particularly in California; (3) the improved capital position of some of the major Japanese banks, which has resulted in part from the appreciation of the yen and which has reduced the constraint of their lending limits; and (4) a desire to have a branch in New York State as a result of the proposed International Banking Act.<sup>33</sup>

In sum, the major structural changes in foreign bank activities in the United States are largely the result of the growth and deposit orientation of European banks, the changing character of the Japanese banks, and the slow growth in the U.S. offices of Canadian banks.

## *2. Operations by State*

Foreign banks entering the United States have overwhelmingly elected to operate in New York, California, or Illinois. Although several other states permit foreign banks to operate, these three states have been most attractive because of their international trade and money-market orientation. Since November 1972 the New York share of total standard assets of foreign banks has declined from 71 percent to 68 percent, but its continued preponderance reflects the importance of the New York money market, and the fact that many major corporations have their national and international headquarters in New York.

<sup>33</sup>That Act was passed by the House of Representatives in 1976 and required either a branch or subsidiary presence in a state for a bank to elect that state as its home state.



Table 5  
Shares of Different Parent Countries  
in the Total U.S. Activities of Foreign Banks

	November 1972		November 1974		May 1977		Percentage Increase November 1972- May 1977
	Amount (\$ mill.)	Share (percent)	Amount (\$ mill.)	Share (percent)	Amount (\$ mill.)	Share (percent)	
<u>All Countries<sup>a</sup></u>							
Standard Banking Assets	16,989	100.0	34,590	100.0	49,094	100.0	189
Loans and Credits	9,298	100.0	19,481	100.0	25,182	100.0	171
C & I Loans	8,261	100.0	16,763	100.0	20,257	100.0	145
Deposits and Credit Balances	5,702	100.0	12,035	100.0	23,464	100.0	312
<u>Japan<sup>a</sup></u>							
Standard Banking Assets	8,814	51.9	16,222	46.9	18,692	38.1	112
Loans and Credits	5,768	62.0	11,038	56.7	11,920	47.3	107
C & I Loans	5,390	65.2	10,414	62.1	10,572	52.2	96
Deposits and Credit Balances	1,904	33.4	3,536	29.4	6,525	27.8	243
<u>Canada</u>							
Standard Banking Assets	3,200	18.8	4,824	13.9	4,449	9.1	39
Loans and Credits	1,338	14.4	2,604	13.4	2,705	10.7	102
C & I Loans	1,098	13.3	2,145	12.8	2,139	10.6	95
Deposits and Credit Balances	931	16.3	1,024	8.5	1,432	6.1	55
<u>Europe<sup>a</sup></u>							
Standard Banking Assets	4,092	24.1	11,715	33.9	22,729	46.3	455
Loans and Credits	1,764	19.0	4,824	24.8	9,083	36.1	415
C & I Loans	1,432	17.3	3,399	20.3	6,553	32.3	358
Deposits and Credit Balances	2,383	41.8	6,544	54.4	13,637	58.1	472
<u>Rest of World</u>							
Standard Banking Assets	883	5.2	1,830	5.3	3,223	6.6	265
Loans and Credits	428	4.6	1,016	5.2	1,474	5.9	244
C & I Loans	340	4.1	806	4.8	993	4.9	192
Deposits and Credit Balances	484	8.5	931	7.7	1,861	7.9	285
<u>Number of U.S. Offices</u>							
Total	101	100.0	149	100.0	210	100.0	108
Japan	28	27.7	40	26.8	52	24.8	86
Canada	21	20.8	25	16.8	26	12.4	24
Europe	33	32.7	54	36.2	78	37.1	136
Rest of World	19	18.8	30	20.1	54	25.7	184

<sup>a</sup>Excludes New York State Investment Companies and foreign bank-owned Agreement Corporations.  
Note: Details may not add to totals due to rounding.

The data in Table 6 relate the growth in the activities of foreign banks to the weekly reporting banks in the three major states. The data indicate that in all three states the deposit and lending activities of foreign banks have been expanding more rapidly than the weekly reporting banks, their primary competitors. In New York State, for example, foreign banks currently have C and I loans equal to 37 percent of the C and I loans of the weekly reporting banks located in New York, while in California the foreign banks' C and I loans are equal to 31 percent of the large domestic banks' C and I loans. Clearly foreign banks are a significant factor in commercial and industrial lending in these two states. In Illinois, foreign bank C and I loan activity has expanded rapidly compared to the weekly reporting banks, but remains relatively small because Illinois law did not permit entry by branches of foreign banks until 1973.

Foreign bank offices in all three states have also expanded their deposit bases relative to those of the weekly reporting banks. Although still relatively small compared to the weekly reporting banks, it is interesting to note that in all three states the rate of foreign banks' deposit growth has been faster than the rate of growth of either their standard assets or their total loans and credits, so that in all three states foreign banks are funding an *increasing* proportion of their lending activities with deposits.

### 3. Multi-state Activities

With few exceptions, U.S. banks are prohibited from operating banking facilities in more than one state. By contrast, foreign banks can operate banking facilities in more than one state because they are not subject to either the provisions of the National Banking Act prohibiting multi-state banking by national banks or to provisions of state law prohibiting entry by banks chartered in other states. In view of this opportunity, many foreign banks have elected to operate banking facilities in more than one state.

Table 7 presents data on the growth and extent of multi-state banking by foreign banks in the United States. As of May 1977, 50 foreign banks operated banking facilities in two or more states, and on that date the total assets of offices of foreign banks outside their principal state (defined using a total assets criterion) were \$19.7 billion; their total loans and credits were \$8.7 billion, and deposits and credit balances were \$6.0 billion. Between November 1972 and May 1977 the figures for these categories more than tripled.

The utilization of the multi-state networks of the foreign banks varies from institution to institution. The multi-state option has permitted foreign banks to tailor their institutional form to the environment in the particular states; for example, a foreign bank might operate a money-market agency or branch in New York and a subsidiary bank offering state-wide retail services in California.

In general there is coordination and planning among U.S. offices, although each office is usually considered an independent profit center and is "charged" an internally determined interest rate for funds received from

Table 6  
 Comparison of Selected Balance-Sheet Items  
 for U.S. Offices of Foreign Banks and Weekly Reporting  
 U.S. Banks by State  
 (in millions of dollars)

	New York <sup>a</sup>			California			Illinois		
	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks	U.S. Offices of Foreign Banks	Weekly Reporting Banks	Foreign as Percent of Weekly Reporting Banks
<u>Standard Banking Assets</u>									
November 1972	12,983	96,139	13.5	3,679	59,493	6.2	33	25,112	0.1
November 1974	25,764	127,758	20.2	8,314	76,376	10.9	426	37,582	1.1
May 1977	34,286	128,009	26.8	11,774	84,396	14.0	1,702	38,407	4.4
<u>Loans and Credits</u>									
November 1972	6,537	53,372	12.2	2,508	35,557	7.1	16	14,430	0.1
November 1974	12,411	79,059	15.7	5,850	48,526	12.1	282	24,441	1.2
May 1977	15,217	62,522	24.3	7,770	48,413	16.0	1,043	21,053	5.0
<u>Commercial and Industrial Loans</u>									
November 1972	6,208	28,952	21.4	1,977	13,212	15.0	15	7,878	0.2
November 1974	11,248	43,876	25.6	4,350	18,856	23.1	255	14,747	1.7
May 1977	13,124	35,622	36.8	5,147	16,847	30.6	967	11,340	8.5
<u>Deposits and Credit Balances</u>									
November 1972	3,339	68,963	4.8	1,736	50,486	3.4	5	19,009	b
November 1974	7,824	86,351	9.1	3,594	62,354	5.8	158	25,345	0.6
May 1977	15,100	79,797	18.9	6,605	70,136	9.4	757	24,649	3.1

<sup>a</sup>Excludes New York State Investment Companies.

<sup>b</sup>Notifiable.

Table 7

Multi-state Activities of Foreign Banks in the United States<sup>1</sup>

	November 1972	November 1974	May 1977
Number of U.S. banking facilities operated by foreign banks	100	147	209
Number of foreign parents operating these U.S. banking facilities <sup>2</sup>	52	69	96
Foreign parents operating U.S. banking facilities in only 1 state	29	37	46
Foreign parents operating U.S. banking facilities in 2 states	20	17	27
Foreign parents operating U.S. banking facilities in 3 or more states	3	15	23
Number of foreign parents operating banking facilities over \$500 million in 2 or more states	2	9	8
Balance sheet data for U.S. operations of foreign banks in nonprincipal state <sup>3</sup> (in millions of dollars)			
Total Assets	5,539	14,342	19,698
Loans and Credits	2,479	6,623	8,687
Deposits and Credit Balances	1,298	2,761	5,969

<sup>1</sup>Excludes offices in Puerto Rico and U.S. Virgin Islands.<sup>2</sup>Consortia such as European-American counted as a single parent organization.<sup>3</sup>Defined using a total asset criterion.

other related offices in the United States and abroad.<sup>34</sup> Loans arranged at a specific office are usually placed on the books of that office, although in some cases a subsidiary bank with a limit on its ability to lend to a single borrower may pass on the excess of a large loan to its related agency or branch.

It has sometimes been argued that multi-state banking by U.S. offices of foreign banks is analogous to multi-state banking conducted by major U.S. banks through their "out-of-state" Edge Corporations, and that it is equitable to permit foreign banks to operate in more than one state because they are not permitted to own Edge Corporations. However, the data in Table 8 suggest that the analogy between multi-state banking of foreign banks and the activities of out-of-state Edge Corporations is not very close. As of June 1977 the total loans and credits of the out-of-state Edge Corporations were only \$1.6 billion, and their deposits amounted to only \$1.4 billion. In terms of total activity, these institutions are highly concentrated in New York because they provide non-New York banks with access to New York money and foreign exchange markets.

The lack of similarity between Edge Corporations and multi-state activities of foreign banks, and the relatively small size of the deposit and lending activities of the Edge Corporations, result in large part from the statutory provisions that limit Edge Corporations to conducting international activities while U.S. offices of foreign banks are free to compete for domestic business.<sup>35</sup> In recognition of this difference and to implement a policy of comparable treatment for the U.S. offices of foreign banks, the Federal Reserve has proposed that in the future multi-state agencies of foreign banks be limited to powers that are similar to federally chartered Edge Corporations.<sup>36</sup>

Out-of-state Edge Corporations are, of course, not the only facilities by which U.S. banking organizations operate on a nationwide basis. Loan production offices and bank holding company affiliates, such as finance companies, are ways that U.S. banking organizations can compete nationwide. However, a banking facility is the only place where a U.S. bank can accept deposits and extend large amounts of credit. Since the option of

<sup>34</sup> Japanese agencies in California borrow large amounts of funds and advance them to related offices in New York because liabilities to directly related institutions are exempt from the New York State requirement that foreign banks maintain assets equal to 108 percent of their liabilities.

<sup>35</sup>Section 25(a) of the Federal Reserve Act states explicitly: "No corporation organized under this section shall carry on any part of its business in the United States except such as, in the judgment of the Board of Governors of the Federal Reserve System, *shall be incidental to its international or foreign business.*" (emphasis added).

<sup>36</sup>Statement of Stephen S. Gardner, Vice-Chairman, Board of Governors of the Federal Reserve System, U.S., Congress, House, Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions, Supervision, Regulation and Insurance, *International Banking Act of 1977, Hearings...* on H.R. 7325... July 12-19, 1977, pp. 36-41.

Table 8

The Activities of "Out-of-State" Edge Corporations\*  
(in millions of dollars)

	Total:		New York			Others		
	Nov. 1972	Nov. 1974	Nov. 1972	Nov. 1974	June 1977	Nov. 1972	Nov. 1974	June 1977
Total Assets	3,348	8,313	2,982	6,834	6,560	366	1,479	1,913
Total Loans and Credits	849	1,442	689	959	1,009	160	483	630
Total Deposits and Credit Balances	638	1,042	519	601	773	119	442	676
Memorandum: Number of Corporations	38	55	20	22	22	18	33	35

\*Corporation whose parent bank is domiciled in another state.  
Note: Details may not add to totals due to rounding.

nationwide representative offices or loan production facilities is available to foreign banks, and since under the Bank Holding Company Act their parent organizations can invest in the same range of nonbanking activities as domestic bank holding companies, it appears that the ability to offer deposit and loan services from banking offices in more than one state gives foreign banks an important advantage over domestic banks.

### III. *Conclusion*

This paper has analyzed the rapid growth in the U.S. activities of foreign banks and their impact on major U.S. banking centers. The size and rapid growth of these activities makes it increasingly apparent that the U.S. offices of foreign banks have expanded to such an extent that they have an important impact on national money and credit markets and on the international transactions of the United States, as well as on the competitive environment affecting the profitability and growth of individual banking organizations in the United States.

It is, of course, difficult to predict the future activities of these institutions. However, the size of domestic U.S. banking and capital markets and the opportunities presented by these markets suggest that many foreign banks will continue to expand their U.S. activities, although the pace of this expansion will no doubt slow down somewhat from the extremely rapid pace of expansion in recent years. While in the past regulation of foreign bank activity in the United States has been largely a matter of state jurisdiction, the expansion of this activity and its impact on macroeconomic magnitudes will continue to stimulate debate over the appropriate Federal regulatory and supervisory policy that would afford foreign banks in the United States the same range of opportunities and subject them to the same restrictions as domestic banks.

### Appendix

#### *A Micro-Analytic Analysis of the U.S. Activities of Foreign Banks*

As noted in the body of this paper, the aggregate figures on the activity of the U.S. offices of foreign banks conceal considerable diversity in their operations. This appendix quantifies some of that diversity by computing some simple statistical measures for particular balance-sheet categories, and compares the diversity of operations among U.S. offices of foreign banks with the diversity of operations of the weekly reporting banks. This appendix also uses regression analysis to analyze some of the cross-sectional variation in balance-sheet structure for the U.S. offices of foreign banks as of May 1977.<sup>37</sup>

##### *A. Selected balance-sheet categories*

The major asset categories analyzed include: loans, which are divided into C & I loans (domestic and foreign) and other loans, and money-market assets. As noted in the paper, C & I loans have become increasingly

<sup>37</sup>The results in this appendix are preliminary.

important in foreign banks' portfolio. Other loans, which are less important at foreign banks, tend to reflect involvement in retail-oriented banking business. The major liability categories include deposits and other nonbank borrowings, money-market liabilities, and liabilities due to related institutions abroad. It is often useful to examine the latter two categories on a net basis since foreign banks have large placements and liabilities in domestic money-markets, and large due-to and due-from accounts with their foreign affiliates. Each dependent variable is scaled by total assets since the purpose is to explain variation in balance-sheet structure and not absolute amounts.

#### *B. Structure and Diversity of Activity*

Table A-1 presents the mean, standard deviation, and coefficient of variation for each of these variables for: (a) the U.S. offices of foreign banks;<sup>38</sup> and (b) the weekly reporting banks.<sup>39</sup> Because of the diversity of their parent organizations and because the foreign banks' U.S. activities represent a relatively small proportion of their total business, the U.S. offices of foreign banks would be expected to display more variation than the weekly reporting banks.

Weekly reporting banks have higher average ratios of total loans to total assets and non-C and I loans to assets, while the foreign banks have higher average ratios of C and I loans and money-market assets.<sup>40</sup> For each characteristic the coefficient of variation (the ratio of the standard deviation to the mean) is substantially higher for the foreign banks (except for money-market assets where it is only slightly higher), confirming the greater diversity of their activities.

On the liability side, the foreign banks have a higher average ratio of money-market liabilities to total assets, and the weekly reporters have a higher average ratio of deposit liabilities to total assets. Again the coefficients of variation are substantially higher for the foreign banks, emphasizing the diversity in their funding structure.<sup>41</sup>

Table A-2 presents similar statistics for two groups of the foreign institutions: (1) agencies and branches; and (2) subsidiary commercial banks. In almost all characteristics, the mean ratio for the subsidiary commercial banks lies between the mean for the agencies and branches and

<sup>38</sup> Foreign bank-owned agencies, branches and subsidiary commercial banks are included in these figures; foreign bank-owned agreement corporations and New York State investment companies are excluded.

<sup>39</sup> The four foreign bank-owned subsidiary commercial banks that report weekly to the Federal Reserve have been excluded from the weekly reporter figures.

<sup>40</sup> The mean figures for both groups represent unweighted averages.

<sup>41</sup> The statistics shown in Table A-1 were also computed for comparable balance-sheet categories for (a) all foreign branches of U.S. banks, (b) branches of U.S. banks in the United Kingdom, and (c) branches of U.S. banks in Nassau and the Cayman Islands. They indicated that, in general, the extent of diversity among foreign branches of U.S. banks is closer to that for the U.S. offices of foreign banks than to that of the weekly reporting banks.



Table A-1  
 Descriptive Statistics for  
 Weekly Reporting Banks and U.S. Offices of  
 Foreign Banks for Selected Variables, May 1977

Variable (x)	Weekly Reporting Banks (312 observations)			U. S. Offices of Foreign Banks* (207 observations)		
	Mean $\bar{x}$	Standard Deviation $s_x$	Coefficient of Variation $s_x/\bar{x}$	Mean $\bar{x}$	Standard Deviation $s_x$	Coefficient of Variation $s_x/\bar{x}$
Asset categories as a fraction of total assets:						
loans	.51	.10	.19	.41	.27	.66
C & I loans	.19	.06	.34	.35	.27	.77
other loans	.32	.09	.29	.07	.12	1.79
money-market assets	.05	.05	.95	.23	.24	1.05
Gross liability categories as a fraction of total assets:						
deposits	.75	.11	.15	.29	.28	.95
money-market liabilities	.13	.08	.66	.25	.27	1.09
due to foreign directly related institutions	..b/	..b/	..b/	.26	.27	1.03
Net liabilities categories as a fraction of total assets:						
net money-market liabilities	.07	.07	..a/	.02	.38	..a/
net due to foreign directly related institutions	..b/	..b/	..b/	.17	.29	..a/
Total assets (\$ billions)	1.75	3.81	2.21	.32	.49	1.51

\* Agencies, branches and subsidiary commercial banks.

<sup>a</sup>Not computed because misleading statistic for net figures.

<sup>b</sup>Not available.

Note: Figures have been rounded.

the mean for the weekly reporting banks. In addition, the coefficient of variation for the subsidiary commercial banks, in almost all balance-sheet categories, is considerably smaller than the coefficient of variation for the agencies and branches and much larger than that for the weekly reporting banks. Thus, although the balance-sheet structure of the subsidiary banks appears closer to the weekly reporting banks, the element of foreign ownership results in a different and more diverse structure for the subsidiaries than for the large domestic commercial banks.

*B. A simple linear regression model*

A more complete model is being developed to explain the variation in allocation of assets, including the interaction between asset structure and sources of funding for the foreign banks using pooled cross-section and time-series data. The present analysis simply investigates some of the institutional hypotheses suggested by the aggregate data on a micro-level by applying linear regression analysis to cross-sectional data. The analysis investigates the effects of size and of specific sources of funds on allocation of assets. All of the results should be considered preliminary.

For the regression analysis, the U.S. offices of foreign banks have been divided into the two groups shown in Table A-2: (1) agencies and branches; and (2) subsidiary banks. This partitioning was performed because different structural relationships are to be expected. The economic rationale is that in many cases the foreign-owned subsidiary commercial banks function more like domestic U.S. commercial banks, whereas agencies and branches are more likely to serve specialized functions for their parent bank.

The regression equations represent an attempt to "sort out" the various institutional factors that might be expected to influence the balance-sheet structure of the agencies and branches, as well as the effect of size. For these estimates, the selected balance-sheet ratios are assumed to be influenced by the home country, whether the institution is the parent bank's only U.S. banking office, whether the institution is located in New York State, and size as measured by total assets.

The country of the parent institution is a relevant variable, since banks from a particular country are often motivated by the same factors in establishing U.S. offices, and as noted in the body of the paper, there have been clear differences in overall activity by parent country over time that might be reflected in cross-section data. The country-of-parent variable may reflect a wide variety of factors specific to a particular country, including the average length of time banks from that country have been operating in the United States, relative exchange rates and interest rates in that country and the United States, and the size and growth of trade and investment flows between that country and the United States.

Whether an individual office is the parent bank's only U.S. office is expected to have opposite effects on the importance of loans and money-market assets in an institution's portfolio. If a foreign bank has only one institution in the United States, it would be expected to specialize in

Table A-2  
 Descriptive Statistics for Two Groups of  
 Foreign Banking Institutions in the United States  
 for Selected Variables, May 1977

Variable (x)	Agencies and Branches (173 observations)			Subsidiary Commercial Banks (34 observations)		
	Mean $\bar{x}$	Standard Deviation $s_x$	Coefficient of Variation $s_x/\bar{x}$	Mean $\bar{x}$	Standard Deviation $s_x$	Coefficient of Variation $s_x/\bar{x}$
Asset categories as a fraction of total assets:						
loans	.41	.29	.70	.45	.21	.47
C & I loans	.36	.28	.78	.29	.17	.58
domestic	.26	.25	.96	.25	.16	.66
foreign	.10	.16	1.60	.05	.07	1.42
other loans	.05	.10	2.15	.16	.15	.90
money-market assets	.25	.25	1.03	.14	.13	.92
Gross liability categories as a fraction of total assets:						
deposits	.22	.24	1.07	.65	.19	.29
money-market liabilities	.28	.29	1.03	.10	.08	.82
due to foreign directly related institutions	.30	.27	.89	.04	.08	1.96
Net liability categories as a fraction of total assets:						
net money-market liabilities	.04	.41	..a/	.04	.17	..a/
net due to foreign directly related institutions	.20	.31	..a/	.01	.06	..a/
Total assets (\$ billions)	.30	.44	1.48	.45	.65	1.46

<sup>a</sup>Not computed because misleading statistic for net figures.

Note: Figures have been rounded.

Table A-3  
 Agencies and Branches: Correlation Matrix for Selected Balance-Sheet Ratios  
 (all variables as a fraction of total assets)

	Loans	Money-market Assets	Deposit Liabilities	Money-market Liabilities
<u>Assets</u>				
Money-market assets	-.57			
<u>Gross Liabilities</u>				
Deposit liabilities	.03	.01		
Money-market liabilities	.02	-.13	-.36	
Liabilities to foreign directly related institutions	-.06	.14	-.29	-.48

money-market activities rather than lending activities. Institutions that are part of multi-office U.S. operations of a foreign bank would be likely to be more heavily involved in lending activities, reflecting the broader base of their operations and their wider contacts with loan customers.

The only independent variable derived from the balance sheet itself is absolute size, measured by total assets of an individual institution. The size variable was first assumed to have an effect independent of parent country, and later the effect of a size variable dependent on parent country was tested. This latter estimation was based on the assumption that that size has a different effect on structure of institutions from different countries.<sup>42</sup>

Since New York is the major financial center of the United States, it is expected that location in New York will influence balance-sheet structure, particularly the extent of involvement in money-market activities. There is, however, a strong positive correlation between location in New York and total assets and a strong negative correlation between location in New York and the existence of other offices. Therefore, New York location was not used as an independent variable in conjunction with the size and multi-office variables.<sup>43</sup>

Table A-4 presents regression results for all agencies and branches based on the hypothesis that the variation in each balance-sheet ratio can be explained by parent country, whether or not the reporter is part of a multi-office family, and size. The major country groupings are the same as those used in the body of the paper: namely, Europe, Canada, Japan and Rest of World. Dummy variables have been created for the four country groups, and the existence of a related office in another state. The coefficients for the country variables are simply the individual intercepts for institutions from that country.

The ratio of total loans to total assets is the dependent variable in the first equation. The individual intercepts for Canada and Japan — countries whose banks have been operating in the United States for the longest time — are highest and not significantly different from each other. The European banks, the relatively fast growing newcomers, have the next highest intercept. Banks from the other countries, in large part from the developing countries, have the lowest coefficient, suggesting that these institutions may lack both the resource base for lending and established contacts with multinational firms. As expected, other things being equal, the ratio of loans to total assets tends to be higher when banks are part of

<sup>42</sup>For the cross-section sample used here, estimating a coefficient for total assets specific to each country group did not indicate significant differences in the effect of size among the country groups.

<sup>43</sup>Separate equations were estimated for New York agencies and branches to examine the effect of location in New York, but there does not appear to be any pattern of particular interest. As would be expected, the other office variable is insignificant and the impact of size is smaller.

Table A-4

Agencies and Branches: OLS Estimates for Selected Balance-Sheet Ratios\*

Dependent variable (as a fraction of total assets)	Europe	Canada	Japan	Rest of World	Other Offices	Total Assets (\$ billion)	DF	R <sup>2</sup>
$\frac{\text{Assets}}{\text{Loans}}$	.38 (7.67)	.51 (7.05)	.57 (10.05)	.22 (4.77)	.10 (2.05)	-.20 (-4.49)	167	.25
C & I Loans	.33 (6.82)	.39 (5.44)	.55 (9.84)	.17 (3.60)	.09 (2.04)	-.18 (-4.03)	167	.27
Domestic C & I Loans	.22 (5.02)	.33 (5.16)	.42 (8.55)	.08 (1.90)	.10 (2.37)	-.16 (-4.07)	167	.29
Money-market assets	.43 (9.72)	.19 (2.93)	.17 (3.33)	.37 (8.85)	-.14 (-3.27)	.09 (2.19)	167	.25
$\frac{\text{Sources of funds}}{\text{Net money-market liabilities}}$	-.19 (-2.70)	-.04 (-0.40)	.30 (3.77)	-.16 (-2.46)	.16 (2.44)	-.14 (-2.11)	167	.27
Net liabilities to foreign directly related institutions	.41 (6.83)	.29 (3.26)	.26 (3.73)	.30 (5.31)	-.15 (-2.72)	-.02 (-.34)	167	.09

\* The t-ratio is shown in parentheses below each coefficient.

multi-office U.S. operations. Results generally similar to the results for total loans were obtained in the equations for both the C and I loan and domestic C and I loan ratios.

Increased size, as measured by total assets, tends to *reduce* the ratio of loans to total assets, and conversely, increased size tends to *increase* the ratio of money-market to total assets, the dependent variable in the fourth equation shown in Table A-4. For the money-market to total assets ratio, the intercepts for the European and rest-of-the-world institutions, which are not significantly different, are higher than the intercepts for the Canadian and Japanese institutions, which are also not significantly different from each other. As expected, the other office variable has a negative coefficient; in other words, institutions that are the only U.S. office of their parent have a higher proportion of money-market assets.

Insofar as sources of funds are concerned, the equation for net money-market liabilities suggests that, other things equal, Japanese institutions tend to be net borrowers and European institutions tend to be net placers in the domestic money market. Other things equal, increased size tends to make an office a net placer of funds in the domestic money market, while being part of multi-office U.S. operations tends to make an office a net borrower. The ability to explain the variation in net liabilities due to directly related institutions was notably poorer. The country intercepts were positive but not significantly different, and variation in this category was insensitive to institution size. The equation suggests that institutions that are part of multi-office operations and have, therefore, a broader funding base in the United States, rely less heavily on advances from their parent.<sup>44</sup>

Table A-5 shows results (for all agencies and branches) when the ratio of net liabilities due to parent to total assets is added to the set of independent variables.<sup>45</sup> Since advances from their parents are often an important source of funds for the U.S. offices of foreign banks, relative reliance on these funds may have an impact on the distribution of their assets. The net advances from foreign directly related institutions variable has a positive impact on the selected asset categories shown in the table; the impact is about twice as great for the loan categories as for money-market assets, suggesting that institutions which bring in funds from their

<sup>44</sup>One statistical difficulty with the estimates should be noted; specifically, there is a problem of simultaneous equation bias, since total assets and the ratio of particular asset categories to total assets are not determined independently. Consequently, the error term could be correlated with total assets, which violates one of the assumptions of ordinary least squares.

<sup>45</sup>Since this variable nets out assets due from directly related institutions, which is a component of total assets, the scope for simultaneous equations bias is greater than in the previous equations.

Table A-5  
 Agencies and Branches: OLS Estimates for Selected Asset Ratios\*

Dependent variable (as a fraction of total assets)	Agencies and Branches						Total Assets (\$ billion)	Net Liabilities to foreign directly related institutions (as a fraction of total assets)	DF	R <sup>2</sup>
	Europe	Canada	Japan	Rest of World	Other Offices					
Loans	.30 (5.52)	.46 (6.25)	.52 (9.04)	.17 (3.36)	.13 (2.68)	-.20 (-4.52)	.19 (3.06)	166	.29	
C & I Loans	.27 (5.04)	.35 (4.78)	.51 (8.94)	.13 (2.50)	.12 (2.50)	-.18 (-4.02)	.14 (2.30)	166	.29	
Domestic C & I Loans	.15 (3.20)	.28 (4.41)	.38 (7.59)	.03 (.70)	.12 (2.96)	-.16 (-4.08)	.16 (2.87)	166	.32	
Money-market assets	.40 (7.96)	.17 (2.51)	.15 (2.83)	.35 (7.68)	-.12 (-2.92)	.09 (2.23)	.08 (1.39)	166	.26	

\* The t-ratio is shown in parentheses below each coefficient.



parents tend, all other things equal, to have a greater proportion of loans than money-market assets in their portfolios.<sup>46</sup> For all asset categories, the addition of this variable to the set of independent variables lowers all of the country intercepts somewhat compared with the results in Table A-4, since the new equation has captured the positive impact of advances from their parents. The relative country differences and the effects of size remain the same.

No results are shown for subsidiary commercial banks. The sets of independent variables used here could not successfully explain variation in their balance-sheet ratios. This tends to confirm, in a negative way, that their operations are more similar to those of domestic banks than those of the agencies and branches.

<sup>46</sup>Causality may, of course, run in the other direction if institutions with large loan demand request funding from their parent institutions because of difficulties raising funds in domestic markets.

## Discussion

### Richard E. Caves\*

Terrell and Key have provided us with a useful exploratory analysis of the balance sheets of foreign banks' operations in the United States, shedding light on various questions about their motives and the effects of their presence. The behavior described by their data invites interpretation by the armchair analyst. My aim is to relate multinational banking operations in the United States to our knowledge about foreign direct investment in nonfinancial industries. Can the models of foreign investment that have shown predictive power in the nonfinancial sector perform effectively in explaining the evidence cast up by Terrell and Key? If so, what implications result for the further development of multinational banking?

The following model has proved fruitful for explaining the behavior of the manufacturing enterprise that acquires production facilities in foreign markets to produce goods similar to those it makes and sells in its home market.<sup>1</sup> We start from the observation that the enterprise investing in an alien national market is disadvantaged by the very fact of its alien status and resulting lack of familiarity with the economic characteristics, laws, customs, etc. of the foreign market. For it to make a foreign investment in the face of these difficulties, it must hold some intangible asset that yields potential profits for it in the foreign market, and that can be exploited more profitably via foreign investment than by any other method (such as exporting its goods to the foreign market, or entering into a licensing agreement with a local producer). That asset is likely to be some market-oriented skill wrapped up in a trademark, an ability to design and adapt the product to the market's needs, or some proprietary form of marketing-related managerial skill or stock of information. This model correctly predicts that the most foreign investment will occur in industries producing differentiated consumer goods subject to elaborate marketing requirements, or in industries making producer goods which must be tailored to the customer's needs.

This model can be adapted to explain the occurrence of multinational banking. The relevant intangible asset of the potentially multinational bank lies in its established goodwill relations with large commercial and

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<sup>1</sup>See R.E. Caves, "International Corporations: The Industrial Economics of Foreign Investments," *Economica*, 38 (February 1971), 1-27.

industrial customers who are its borrowers and depositors in its home market. For its large steady customers, the bank's package of services amounts to a differentiated product. At a given set of bank charges (interest rates, compensating-balance requirements, etc.), they find its services preferable to those of competing banks, or they would incur transactions costs in making a major switch to another bank. Also, the bank itself possesses a stock of knowledge about the major customer and his business that is valuable and costly to acquire. If a significant number of the bank's steady customers operate in foreign markets and must have their banking needs serviced locally, the bank can maximize the returns to this goodwill by following its major customers abroad. My impression is that the evidence in Terrell's and Key's paper conforms to this model and several of its corollaries.

1. They find that the assets of foreign banking offices in the United States run more to commercial and industrial loans than do those of domestic weekly reporting banks, and that these commercial and industrial customers are often multinational businesses — either domiciled in the foreign bank's home country or U.S. firms with subsidiaries in that country which have dealt extensively with the bank's parent. That prediction flows directly from the explanatory model sketched above. Foreign banking offices should have smaller proportions of assets representing purely domestic business, for which they have no general advantage at competing against domestic banks.

2. The model predicts that foreign investment by banks will flow outward from all countries that are important domiciles of nonfinancial multinational companies, and that multinational banks would "cross-haul" between pairs of major industrial countries, banks in A invading B's market and vice versa. This cross-hauling is also predicted by the product differentiation that the model indicates for the market in banking services. It suggests that the market for banking services would not be perfectly competitive, and that profitable opportunities would exist for entry into a national banking market for a foreign bank that holds established goodwill with a sufficient number of potential customers.

3. The model implies that foreign banks would move into the U.S. market following an inflow of nonfinancial foreign investment in the United States. There thus may be some connection between the increased inflow of nonfinancial investment here since the devaluation of the dollar in 1971 and the inflow of European banks. Consistent with the model, the banks' influx may also be related to the increased borrowing abroad by U.S. multinationals and their foreign subsidiaries during the 1960s, in response to U.S. balance-of-payments policies. This borrowing may have forged the goodwill links that now give foreign offices a crack at the business of the U.S. parents.

4. I suggested that the differentiated goodwill asset of the foreign banks is associated with net lending transactions with large commercial and industrial customers, and not with the net collection of deposits (say, to service loan customers in their home markets). Consistent with that

proposition is the finding of Terrell and Key that a high ratio of commercial and industrial loans to money-market assets is associated with a high level of liabilities to related institutions abroad. That is, the more success a foreign office has in finding customers for commercial and industrial loans, the more funds does it bring in from its foreign parent to supply this demand.

5. The model is consistent with multinational banking serving as a method of arbitraging funds between national capital markets, but it implies that such movements would not be the core of the activity of a foreign banking office. This arbitrage does appear in Terrell's and Key's statistics: Japanese banks are net borrowers in the U.S. money market and European banks are net placers — a pattern one would expect from casual knowledge of the tightness of their domestic funds markets. But these movements, as predicted, do not account for enormous proportions of their activities.

6. The model of the multinational enterprise predicts many differences between the subsidiary and an otherwise similar firm that operates in a single national market. One of these is a greater diversity in the structure of the subsidiary's activities (asset and liability structure, in the case of a bank), because the subsidiary functions as a component of its parent's strategy for maximizing global profits, and thus will complement the parent's activities in other national markets. Consistent with this prediction, Terrell and Key report a greater variability of the asset and liability structures of foreign banking offices than of the weekly reporting banks. The special-purpose branches and agencies naturally show more variability than the general-purpose subsidiaries.

7. The model predicts that the multinational bank enters the U.S. banking market on the basis of its goodwill assets with large commercial and industrial customers. However, if it succeeds initially, it is likely to mature into a pattern of activity more nearly resembling those found most profitable by its large domestic competitors. It should look less different from them as it grows older. Terrell and Key document this process in the foreign offices' decreasing reliance on foreign liabilities and gravitation (if permitted by their legal forms) to a liability structure more closely resembling those of their domestic competitors. This shift is evident in the greater shares of deposits being captured by the foreign offices in their principal state markets.

8. A multinational company can be viewed as a multiplant firm that happens to find some of its plants separated by national boundaries. That is, the advantages of the multinational company may to some extent be simply those of the multiplant firm over the single-plant firm. In the case of banking, nonprice competition in the capture of deposits is a factor contributing to the profitability of branch operations. The retail activities of foreign banks' subsidiaries in the United States can be expected to fill the role of pursuing deposit liabilities, and Terrell and Key correspondingly show that banks with multistate operations are less dependent on liabilities to related foreign institutions than are single-state foreign banks. That is, multiunit operations increase self-sufficiency in attracting deposit liabilities.

9. The explanation of multinational bank operations offered here neglects portfolio balancing and the spreading of foreign-exchange risks as a motive for foreign investment by banks, although it has been advanced as a motive for foreign investment generally.<sup>2</sup> If risk-spreading plays a significant role, the net position of the foreign offices in money-market assets should be associated with the worldwide management of exchange-rate and "country" risk by its parent. Terrell and Key note the importance of money-market assets to the foreign offices and suggest that they take preference over Euro-dollar placements because of the lack of "country risk." It might be better to regard them in the larger context of the foreign parent banks' risk management, although the distinction cannot be tested with the data we now have at hand.

I have argued that multinational banking fits rather well into an established model of foreign direct investment originally devised for non-financial multinational companies. My purpose has been not so much to argue the universal validity of that model as to suggest that multinational banking can be usefully thought of as a process of market competition among banking institutions. Because the model does display some explanatory power, however, it is useful to draw out its implications. It identifies foreign investment in banking as a form of market rivalry in an imperfectly competitive market, and thus the increased competition mentioned by Terrell and Key is an expected outcome. It indicates that the international arbitrage of liquid funds from easy-money countries to tight-money countries is not a necessary function for explaining multinational banking; multinational banks are likely to lubricate international capital flows, but such general arbitrage is not vital for their existence. Finally, the model indicates that cross-hauling of multinational banking operations is a natural phenomenon, likely to intensify as long as similar interpenetration continues in nonfinancial markets. Governments (such as Canada) which sharply restrict entry by foreign banks are therefore likely to find themselves under increased pressure for fair reciprocal treatment.

<sup>2</sup>By R.Z. Aliber in *The International Corporation*, ed. Charles P. Kindleberger (Cambridge: M.I.T. Press, 1970), Chapter 1.