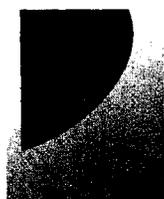


Globalization in the financial services industry

The pace has been most rapid at the wholesale, bank-to-bank and bank-to-multinational level; at the retail customer level, globalization will soon quicken, particularly in Europe.

Christine Pavel and John N. McElravey



Globalization can be defined as the act or state of becoming worldwide in scope or application. Apart from this geographical application, globalization can also be defined as becoming universal. For the financial services industry, this second meaning implies both a harmonization of rules and a reduction of barriers that will allow for the free flow of capital and permit all firms to compete in all markets.

This article looks at how global the financial services industry already is, and will likely become, by examining the nature and trends of globalization in the industry. It will also draw lessons from global nonfinancial industries and from recent geographic expansion of banking firms within the United States.

Financial globalization is being driven by advances in data processing and telecommunications, liberalization of restrictions on cross-border capital flows, deregulation of domestic capital markets, and greater competition among these markets for a share of the world's trading volume. It is growing rapidly, but primarily at the intermediary, rather than the customer, level. Its effects are felt at the customer level mainly because prices and interest rates are influenced by worldwide economic and financial conditions, rather than because direct customer access to suppliers has increased. However, globalization at the customer level will soon become apparent, at least in Europe after 1992, when European Community banking firms will be allowed to cross national borders.

Trends in other industries and lessons from interstate banking in the United States suggest that as financial globalization progresses, financial services will become more integrated, more competitive, and more concentrated. Also, firms that survive will become more efficient, and consumers of financial services will benefit considerably. Reciprocity is likely to be an important factor for those countries not already part of a regional compact, as it has been for interstate banking to proceed in the United States.

International commercial banking

The international banking market consists of the foreign sector of domestic banking markets and the unregulated offshore markets. It has undergone important structural changes over the last decade.

Like domestic banking, international banking involves lending and deposit taking. The primary distinction between the two types of banking lies in their customer bases. Since 1982, international lending and deposit taking have both been growing at roughly 15 percent annually. At year-end 1988, foreign loans and foreign liabilities at the world's banks each totalled more than \$5 trillion. The extent, nature, and growth of international banking, however, are not the same in all countries.

When she wrote this article, Christine Pavel was an economist at the Federal Reserve Bank of Chicago. She is now an assistant vice president at Citicorp North America Inc. John N. McElravey is an associate economist at the Federal Reserve Bank of Chicago.

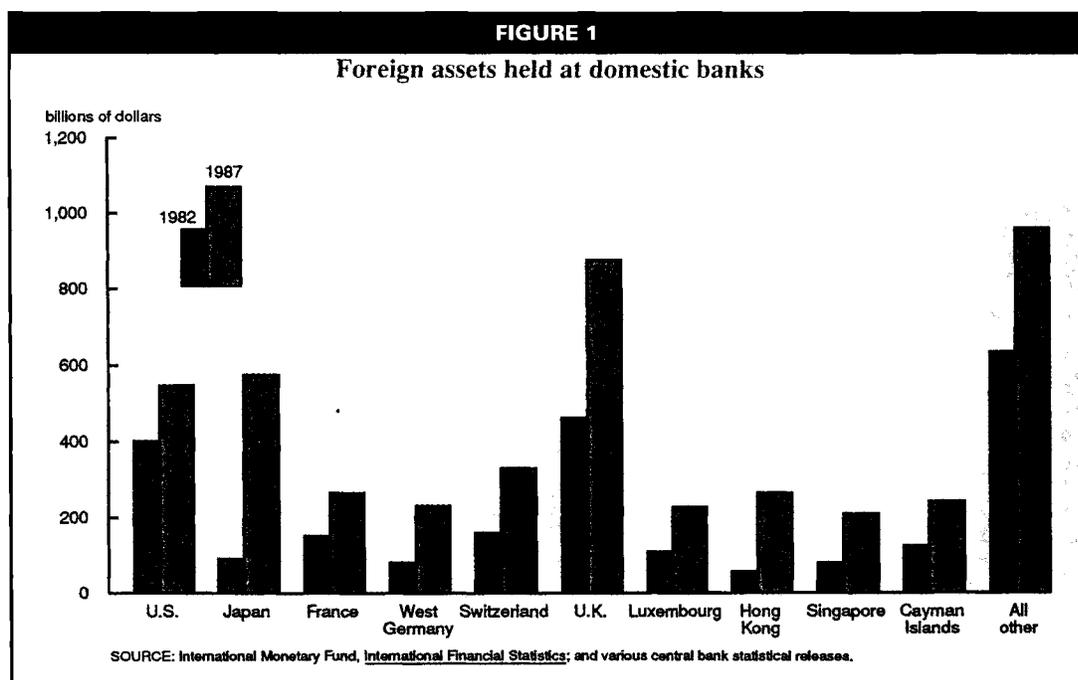
Figures 1 and 2 show the ten countries whose banks have the largest shares of foreign banking assets and liabilities. Combined, these ten countries account for nearly three-quarters of all foreign assets and liabilities. Nearly half of all foreign banking assets and liabilities are held by banks in the United Kingdom, Japan, the United States, and Switzerland, up from 47 percent in 1982. This increase is almost entirely due to the meteoric rise in foreign lending by Japanese banks.

Perhaps the most notable event in international banking has been the rapid growth of Japanese banks. This extraordinary growth can be traced to deregulation in Japan, as well as to its banks' high market capitalization, the country's high savings rate, and its large current account surplus. Japanese foreign exchange controls and restrictions on capital outflows were removed in 1980. This allowed the banks' industrial customers to go directly to the capital markets for financing. The loss of some of their best customers, along with deposit rate deregulation and stiffer competition from other types of institutions, reduced profits.¹ To improve their profitability and to service Japanese nonfinancial firms that had expanded overseas, Japanese banks moved into new markets abroad. While a large part of the business of Japanese banks abroad is with

Japanese firms, Japanese banks have been very successful lending to foreign industrial firms because of a competitive advantage conferred by a more favorable regulatory environment. Japan's capital requirements have been relatively easy, allowing banks to hold assets at 25 to 30 times book capital.² Japan's share of all foreign assets and liabilities rose from 4 percent in 1982 to more than 14 percent in 1988, surpassing the U.S. and second only to the U.K.

While many banks have significant international operations, only a few are truly international in scope. More than one-half of the total banking assets and liabilities in Switzerland, nearly one-half of total banking assets and liabilities in the United Kingdom, and over one-quarter of total banking assets and liabilities in France are foreign. In contrast, less than 25 percent of the balance sheets of German, Japanese, and U.S. banks consist of foreign assets and liabilities.

The United Kingdom and Switzerland have long been international financial centers. For more than 100 years Swiss bankers have been raising loans for foreigners. The largest Swiss banks, in fact, try to maintain a 50-50 split between their foreign and domestic assets for strategic and marketing reasons.³ Deregulation, or the lack of regulation in some cases,



and the restructuring of the British financial system have made London a powerful international financial center. More than half of all banking institutions in the U.K. are foreign-owned, and 59 percent of all assets of banks in the U.K. are denominated in foreign currency.⁴

At the aggregate level, the proportion of bank assets that are claims on foreigners is roughly equivalent to the proportion of liabilities that are claims of foreigners. This is not true of individual countries. Some countries' banks lend more to foreigners than they borrow from them. Foreign assets of German banks are almost twice the size of foreign liabilities, and Swiss banks hold about 34 percent more foreign assets than liabilities. For banks in these countries, the combination of international orientation and their country's high domestic saving rates makes them strong net lenders. Banks in the United States, Japan, and France, however, have more foreign liabilities than foreign assets, although in each case the difference is less than 5 percent.

U.S. banks have not always been net foreign borrowers. In 1982, foreign deposits at U.S. banks accounted for less than 13 percent of total liabilities, while foreign assets accounted for over 20 percent of total assets. Foreign deposits at U.S. banks have more than doubled over the 1982-87 period, growing far

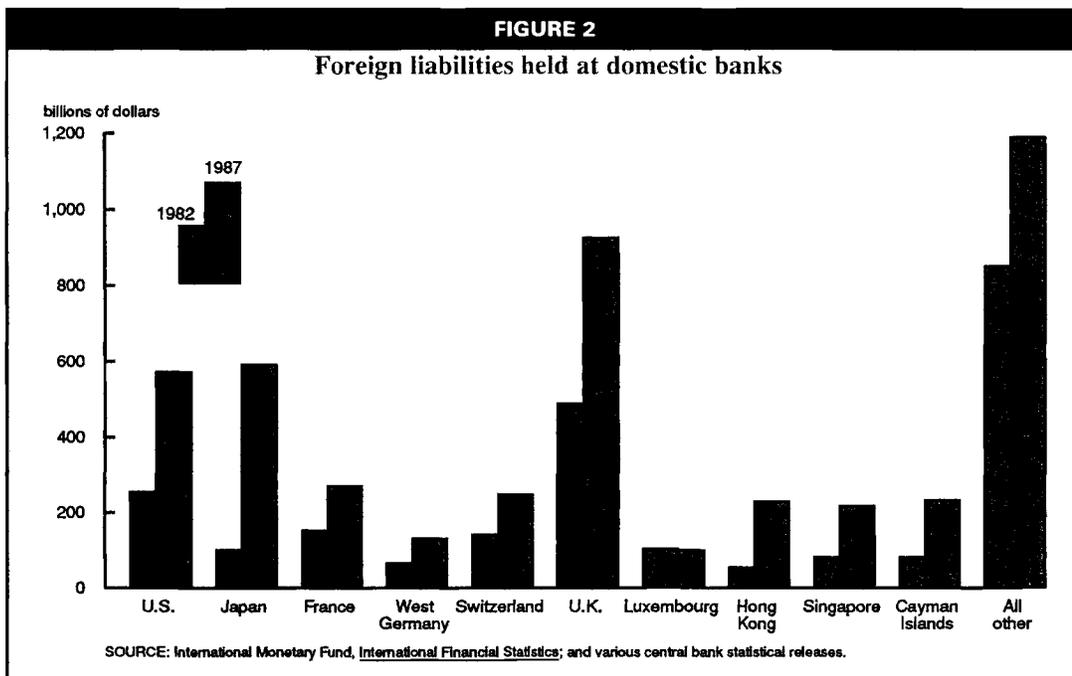
more rapidly than domestic deposits. Foreign assets increased only 37 percent over that time and more slowly than domestic assets. This is due largely to the reduction in LDC lending and to the writing down of LDC loans by U.S. banks.

Foreign deposit growth also outpaced domestic deposit growth at Japanese banks. In 1982, foreign deposits accounted for 9 percent of total liabilities, and by 1987, they accounted for 18 percent. Similarly Japanese banks booked foreign assets about twice as fast as domestic assets over the 1982-87 period.

Offshore banking centers

A considerable portion of international banking activity occurs in unregulated offshore banking centers commonly known as the Euro-markets.⁵ The Euromarkets, unlike the domestic markets, are virtually free of regulation. Euromarkets consist of Eurocurrency deposits, Eurobonds, and Euro-commercial paper. Eurocurrency deposits are bank deposits denominated in a foreign currency, and account for 86 percent of banks' foreign-owned deposits.

The development of Eurocurrency deposits marked the inauguration of the Euromarket in the mid-1950s. Eurocurrency deposits grew at a moderate rate until the mid-1960s when they began to grow more rapidly.⁶ At that



time, the U.S. government imposed severe controls on the movement of capital, which “deflected a substantial amount of borrowing demand to the young Eurodollar market.”⁷ These U.S. capital controls were dismantled in 1974, but the oil crisis of the 1970s helped to fuel the continued growth of the Eurocurrency market. The U.S. oil embargo made oil-exporting countries fearful of placing their funds in domestic branches of U.S. banks. In the late 1970s and early 1980s, high interest rates bolstered the growth of Eurocurrency deposits, which are free of interest-rate ceilings and not subject to reserve requirements or deposit insurance premiums. From 1975 to 1980, Eurocurrency deposits grew over threefold.

Since 1980, Eurocurrency deposits have continued to grow quite rapidly, reaching a gross value of \$4.5 trillion outstanding in 1987 and a net value of nearly \$2.6 trillion (net of interbank claims). Eurodollar deposits, however, have not grown as rapidly. During the early 1980s, Eurodollars represented over 80 percent of all Eurocurrency deposits outstanding, but by 1987, they represented only 66 percent (see Figure 3). The declining importance of Eurodollar deposits can be explained, at least partially, by the decline in the cost of holding noninterest-bearing reserves against domestic deposits in the United States.⁸

Many Eurocenters have developed throughout the world. They have developed where local governments allow them to thrive, i.e., where regulation is favorable to offshore

markets. Consequently, some countries with relatively small domestic financial markets, such as the Bahamas, have become important Eurocenters. Similarly, some countries with major domestic financial markets have no or very small offshore markets. In the United States, for example, the offshore market was prohibited until 1981 when International Banking Facilities (IBFs) were authorized.

Japan did not permit an offshore market to develop until late in 1986. Until then the “Asian dollar” market consisted primarily of the Eurocenters of Singapore, Bahrain, and Hong Kong. Now Japan’s offshore market is about \$400 billion in size, over twice as large as the U.S. offshore market, but still smaller than that in the United Kingdom.⁹

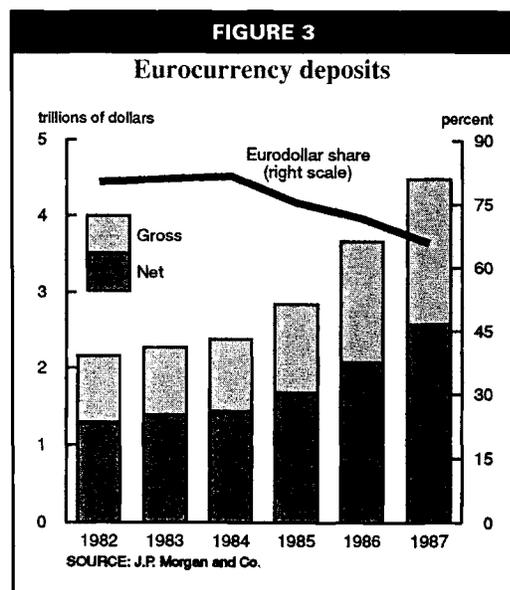
The interbank market

The international lending activities of most banks, aside from the money centers, are concentrated heavily in the area of providing a variety of credit facilities to banks in other countries. Consequently, a large proportion of banks’ foreign assets and liabilities are claims on or claims of foreign banks. Eighty percent of all foreign assets are claims on other banks.¹⁰ This ratio varies somewhat by country; however, since 1982, it has been increasing for all the major industrialized countries.

Similarly, nearly 80 percent of all banks’ foreign liabilities are claims of other banks.¹¹ In Japan, 99 percent of all foreign liabilities at banks are deposits of foreign banks. Swiss banks are the exception, where only 28 percent of foreign liabilities are claims of banks.

The Swiss have a long history of providing banking services directly to foreign corporate and individual customers, which explains their relatively low proportion of interbank claims. A favorable legal and regulatory climate aided the development of a system that caters to foreigners, especially those wishing to shelter income from taxes. Confidentiality is recognized as a right of the bank customer, and stiff penalties can be imposed on bank officials who violate that right. In effect, no information about a client can be given to any third party.¹²

Since a very large portion of foreign deposits are Eurocurrency deposits, it is no surprise that about half of all Eurocurrency deposits are interbank claims. Eurocurrency



deposits are frequently re-lent to other, often smaller, banks in the interbank market.¹³

The Japanese have become very large borrowers in the interbank market in response to domestic restrictions on prices and volumes of certain activities. Japanese banks operating overseas have been funding their activities by borrowing domestically (from nonresidents) in one market (e.g., the U.K.), and lending the funds through the interbank market to affiliates in other countries (e.g., the U.S.).¹⁴

Foreign exchange trading

Foreign exchange (forex) trading is another important international banking activity. Informal estimates place daily foreign exchange trading at \$400 billion.¹⁵ Like the loan markets, forex markets are primarily interbank markets. The primary players involved in the United States are the large money center and regional commercial banks, Edge Act corporations, and U.S. branches and agencies of foreign banks. Forex trading also involves some large nonbank financial firms, primarily large investment banks and foreign exchange brokers. However, according to the Federal Reserve Bank of New York's *U.S. Foreign Exchange Market Survey* for April 1989, 82 percent of the forex trading volume of banks was with other banks. Foreign exchange trading in New York grew at about 40 percent annually since 1986 to reach more than \$130 billion by April 1989. In contrast, foreign trade (imports plus exports) has been growing at only about 6 percent annually since 1982 (3 percent on an inflation-adjusted basis).

The German mark is the most actively traded currency, followed by the Japanese yen, British pound, Swiss franc, and Canadian dollar. Since 1986, however, the German mark has lost some ground to the Japanese yen and the Swiss franc.¹⁶

The explosion of forex trading can, at least partly, be explained by the high rate of growth in cross-border financial transactions. Capital and foreign exchange controls were reduced or eliminated in a number of countries during the 1980s.

An international banking presence

There are several ways that commercial banks engage in international banking activities—through representative offices, agencies, foreign branches, and foreign sub-

sidary banks and affiliates. In addition, in the United States, commercial banks may operate International Banking Facilities (IBFs) and Edge Act corporations, which unlike the other means, do not involve a physical presence abroad. The primary difference among these types of foreign offices centers on how customer needs are met (often because of regulation). For example, agencies of foreign banks are essentially branches that cannot accept deposits from the general public, while branches, as well as subsidiary banks, can offer a full range of banking services.

U.S. branches and agencies of foreign banks devote well over half of their assets to loans, about the same proportion as the domestic offices of U.S. commercial banks. U.S. commercial banks, however, hold a much larger proportion of their assets in securities and a much smaller proportion in customer's liability on acceptances.¹⁷ This latter situation reflects the international trade financings of U.S. foreign offices.

U.S. offices of foreign banks compete with domestic banks primarily in commercial lending and, to a lesser extent, in real estate lending.¹⁸ However, a significant portion of the commercial loans held at U.S. offices of foreign banks were purchased from U.S. banks, rather than originated by the foreign offices themselves.¹⁹

Both U.S. offices of foreign banks and domestic offices of U.S. commercial banks primarily fund their operations with deposits of individuals, partnerships and corporations (IPC).²⁰ Offices of foreign banks currently gather 23 percent of these deposits from foreigners, and nearly all of these deposits are of the nontransaction type.

The presence of foreign banks in the United States has been increasing. The ratio of foreign offices to domestic offices in the United States has increased from 2.8 percent in 1981 to 4.4 percent in 1987. Similarly, the ratio of assets of foreign banking offices in the United States to assets of U.S. domestic banks has increased over 5 percentage points since 1981 to nearly 21 percent in 1987.²¹

The presence of U.S. banks abroad, however, has been falling since 1985. At that time, U.S. banks operated nearly 1,000 foreign branches.²² Similarly, the number of U.S. banks with foreign branches peaked at 163 in 1982 and began to fall in 1986. By 1988, the

number of banks with foreign branches had fallen to 147. On an inflation-adjusted basis, total assets of foreign branches of U.S. banks fell 12 percent since 1983 to \$506 billion in 1988. The number of IBFs and Edge Act Corporations has also been waning. Edge Acts numbered 146 in 1984 and were down to 112 by 1988.²³ This retrenchment reflects the lessening attractiveness of foreign operations as losses on LDC loans have mounted.

Implications of Europe after 1992

The presence of foreign banking firms in European domestic markets will likely increase over the next few years as the 12 European Community states become, at least economically, a "United States of Europe." The EC plans to issue a single license that will allow banks to expand their networks throughout the Community, governed by their home country's regulations.²⁴

Since banking powers will be determined by the rules of the home country, banks from countries with more liberal banking laws operating in countries with more restrictive banking laws will have an advantage over their domestic competitors. Consequently, the most efficient form of banking will prevail. Countries with more fragmented banking systems will need to liberalize for their banks to compete with banks from countries with universal banking.

While reciprocity will not be important for nations within the EC, it will be an issue for banks from countries outside the EC, especially those from Japan and the U.S. As financial services companies in Europe begin to operate with fewer restrictions, there will be competitive pressure on the U.S. and Japan to remove the barriers between commercial and investment banking. To be most efficient, firms operating in various markets want similar powers in each market. The EC, as previously noted, solved this problem with a Community banking license. Thus, the EC's efforts at regulatory harmonization may hasten the demise of Glass-Steagall in the U.S. and Article 65 in Japan.²⁵

The implications for European banking will be similar to the experience in the United States following the introduction of interstate banking in the early to mid-1980s. Since that time, the U.S. commercial banking industry has been consolidating on nationwide, re-

gional, and statewide bases through mergers and acquisitions. Acquiring firms tend to be large, profitable organizations with expertise in operating geographically dispersed networks, while targets tend to be smaller, although still relatively large firms, in attractive banking markets. Large, poorly-capitalized firms will also find themselves to be potential takeover targets.

What these lessons imply for Europe in 1992 is that the largest and strongest organizations with the managerial talent to operate a geographically dispersed organization will become Europe-wide firms, while smaller firms will have a more regional focus and others will survive as niche players. In addition, just as different state laws have slowed the process of nationwide banking in the United States, language and cultural barriers will slow the process in Europe as well. The overall result of a more globally integrated financial sector in Europe, and elsewhere, will be that the organizations that survive will be more efficient, and customers will be better served. Also, it is very likely that the 1992 experience will improve European banks' ability to compete outside of Europe.

Size is not, and will not be, a sufficient ingredient for survival. In general, firms in protected industries, such as airlines, tend to be inefficient. Large banking organizations based in states with restrictive branching and multibank holding company laws tended to be less efficient than their peers in states that allow branches and, therefore, more competition. In addition, commercial banking organizations that operated in unit banking states had little expertise in operating a decentralized organization, and tended to focus primarily on large commercial customers. Consequently, these banking firms have not acquired banks far from home.

The process of consolidation has already begun within European countries and within Europe as firms prepare for a single European banking market. Unlike the United States' experience of outright mergers and acquisitions, however, the European experience centers on forming "partnerships." Partnerships have been formed Europe-wide, even though the most recent directive on commercial banking permits branching, because of the difficulties in managing an organization that spans

several cultures and languages. Apparently, financial services firms want to get their feet wet first, rather than plunge into European banking and risk drowning before 1992 arrives. But also, until regulations among countries become more uniform, partnerships and joint ventures allow financial firms to arbitrage regulations.

The formation of partnerships and joint ventures is not only a European phenomenon. Indeed, U.S. firms have entered into such agreements with European and Japanese companies. For example, Wells Fargo and Nikko Securities have formed a joint venture to operate a global investment management firm, and Merrill Lynch and Société Générale are discussing a partnership to develop a French asset-backed securities market.

The experience of nonfinancial firms suggests that this arrangement can be a good way to establish an international presence. For example, in 1984, Toyota and General Motors entered into a joint manufacturing venture in California. Through this venture, the Japanese were able to acquaint themselves with American workers and suppliers before opening their own plants in the U.S. Since then, Toyota has opened two more manufacturing plants on its own in North America, and there is speculation in the auto industry that they will buy GM's share of the joint venture once the agreement ends in 1996.²⁶

Another case of international expansion through joint ventures can be found in the petroleum industry. Oil companies from some oil-producing countries have been quite active in recent years buying stakes in refining and marketing operations in the United States and Europe. These acquisitions give producers an outlet for their crude in important retail markets, and refiners get a reliable source. Saudi Arabia purchased a 50 percent stake in Texaco's eastern and Gulf Coast refining and marketing operations in November 1988. The state-owned oil companies from Kuwait and Venezuela have joint ventures with European oil companies as well.²⁷ If joint ventures between financial services firms are as successful as nonfinancial ones have been, then global financial integration will benefit.

International securities markets

International securities include securities that are issued outside the issuer's home coun-

try. Some of these securities trade on foreign exchanges. Issuance and trading of international securities have grown considerably since 1986, as has the amount of such securities outstanding.

Greater demand for international financing is stimulating important changes in financial markets, especially in Europe. Regulations and procedures designed to shield domestic markets from foreign competition are gradually being dismantled. London's position as an international market was strengthened by the lack of sophistication of many other European markets. Greater demand for equity financing in Europe has been encouraged by private companies, and by governments privatizing large public-sector corporations. These measures to deregulate and, therefore, improve the efficiency, regulatory organizations, and settlement procedures are a response to competition from other markets, and the explosion of securities trading in the 1980s.²⁸

It is estimated that the world bond markets at the end of 1988 consisted of about \$9.8 trillion of publicly issued bonds outstanding, a nearly \$2 trillion increase since 1986.²⁹ At year-end 1988, two-thirds of all bonds outstanding were obligations of central governments, their agencies, and state and local governments. This figure varies considerably across countries. Over two-thirds of bonds denominated in the U.S. dollar and the Japanese yen are government obligations, but less than one-third of bonds denominated in the German mark are government obligations, and only 10 percent of bonds denominated in the Swiss franc represent government debt.³⁰

The international bond market includes foreign bonds, Eurobonds, and Euro-commercial paper. Foreign bonds are bonds issued in a foreign country and denominated in that country's currency. Eurobonds are long-term bonds issued and sold outside the country of the currency in which they are denominated. Similarly, Euro-commercial paper is a short-term debt instrument that is issued and sold outside the country of the currency in which it is denominated.

The Japanese are the biggest issuers of Eurobonds because it is easier and cheaper than issuing corporate bonds in Japan. Japanese companies issued 21 percent of all Eu-

robonds in 1988.³¹ Ministry of Finance (MOF) regulations and the underwriting oligopoly of the four largest Japanese securities firms keep the issuance cost in the domestic bond market higher than in the Euromarket. The ministry would like to bring this bond market activity back to Japan, so it has been slowly liberalizing the rules for issuing yen bonds and samurai bonds (yen bonds issued by foreigners in Japan). So far, the impact of these changes has been small.³²

International bonds accounted for almost 10 percent of bonds outstanding at the end of 1988 and over three-quarters are denominated in the U.S. dollar, Japanese yen, German mark and U.K. sterling (see Figure 4). These countries represent four of the largest economies and financial markets in the world.

The importance of international bond markets has increased considerably for many countries. As Table 1 shows, international bonds account for nearly half of all bonds denominated in the Swiss franc and over one-third of all bonds denominated in the Australian dollar. International bonds account for over 21 percent of bonds denominated in the British pound, up dramatically from less than 1 percent in 1980. The rise in importance of international bonds for these currencies can, at

least in part, be explained by the budget surpluses in the countries in which these currencies are denominated and, therefore, the slower growth in the debt obligations of these countries' governments.

The value of world equity markets, at \$9.6 trillion in 1988, is about equal to the value of world bond markets. Three countries—the United States, Japan, and the United Kingdom—account for three quarters of the total capitalization on world equity markets, and they account for nearly half of the 15,000 equity issues listed on the world's stock exchanges (see Figure 5).

American, Japanese, and British equity markets are the largest and most active. American and British markets are very open to foreign investors, but significant barriers to foreign competitors still exist in Japan.

Stocks have, historically, played a relatively minor role in corporate financing in many European countries. Various regulatory and traditional barriers to entry made these bourses financial backwaters. The stock exchanges in Switzerland, West Germany, France, and Italy have only recently taken steps to modernize in order to compete against exchanges in the U.S. and the U.K. It was estimated that about 20 percent of daily trad-

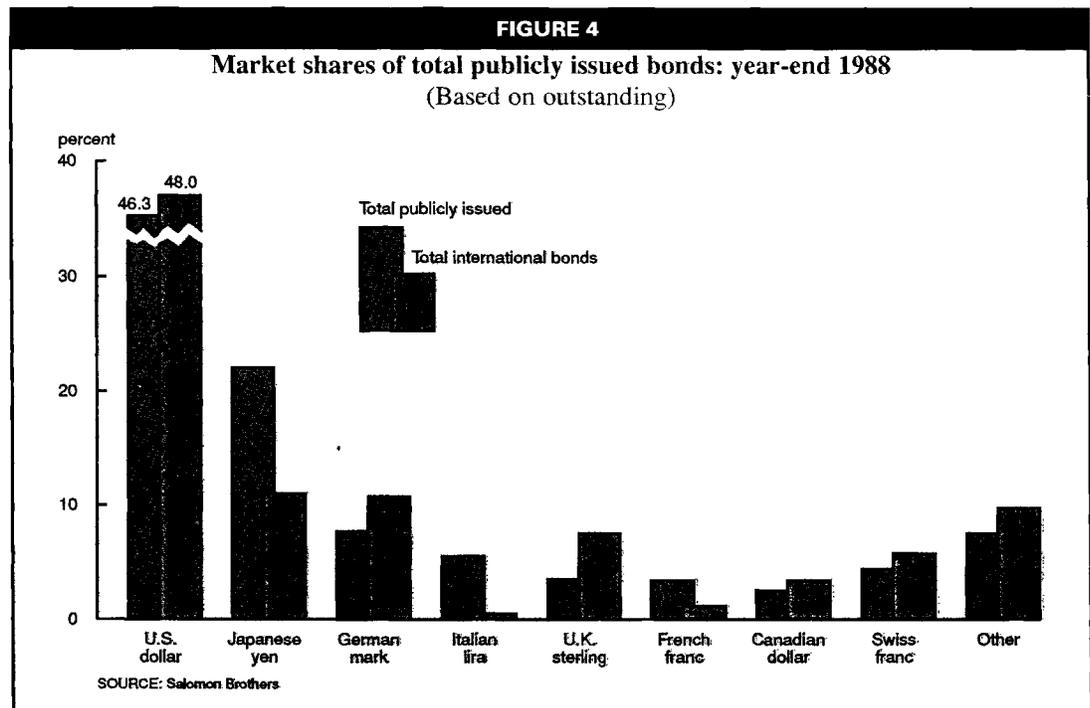


TABLE 1**International shares of the world's major bond markets**

(Percent based on outstanding)

	1980	1985	1988
U.S. dollar	4.4	8.8	10.5
Japanese yen	1.6	3.2	5.0
German mark	12.6	11.2	14.2
U.K. sterling	0.9	9.4	21.3
Canadian dollar	3.1	5.5	13.7
Swiss franc	27.3	42.3	49.2
Australian dollar	n.a.	9.5	36.2

SOURCE: Salomon Brothers

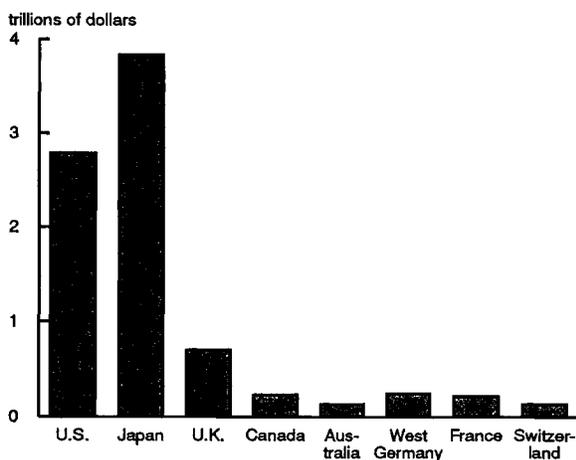
ing in French equities was done in London in 1988.³³ French regulators hope that their improvements will lure some of that trading back to Paris.

West German equity markets, until recently, provided a good illustration of the kinds of barriers that keep stock exchanges small, inefficient, and illiquid. Access to the stock exchange was effectively controlled by the largest banks, which have a monopoly on brokerage. Under this arrangement, small firms were kept from issuing equity, thus remaining captive loan clients. Large German

firms have traditionally relied more heavily on bank credit and bonds than on equity to finance growth. The integration of banking and commerce in Germany has contributed to this reliance. German banks, "through their equity holdings, exert significant ownership control over industrial firms."³⁴

The fragmented structure of the West German system, which consists of eight independent exchanges each with its own interests, also helped check development. Over the last several years, though, rivalries between the exchanges have been somewhat buried, and they have been working to improve their integration and cooperation. One way is through computer links between exchanges to facilitate trading. A transaction that cannot be executed immediately at one of the smaller exchanges can be forwarded to Frankfurt to be completed. Overall, German liberalization efforts have been moderately successful, adding about 90 new companies to the stock exchange between 1984 and 1988.³⁵

Active institutional investors, such as pension funds, which have a major position in the U.S. markets, have no tradition in the German equity market. Billions of marks in pension funds are on the balance sheets of German companies, treated as long-term loans from employees.³⁶ Freeing these funds in a deregulated and restructured market could have a profound effect on Germany's domestic equity markets.

FIGURE 5**World equity markets**
(Market capitalization—1988)

SOURCE: Salomon Brothers

Issuance of international securities

The issuance of international securities was mixed in 1988. Issuance of international bonds was relatively strong, while issuance of international equities, at \$7.7 billion in 1988, was off considerably from 1987, but almost triple 1985 issuance.³⁷

The contraction of international equities was driven by investors, and reflects their caution. Following the stock market crash in October 1987, portfolio managers reportedly focussed, and have continued to focus, on low-risk assets and on domestic issues.³⁸ Lower volatility of share prices on the world's major

exchanges, however, would likely aid a rebound in the appetite for and in the issuance of international equities.

Some important structural changes took place in international financial markets between 1985 and 1987. A sharp increase in issuance for the U.K. translated into substantially greater market share of international equity issuance, from 3.7 percent in 1985 to 33.0 percent in 1987. This increased share of international activity reflects the deregulation and restructuring of the London markets that occurred in the fall of 1986, improving their place as an international marketplace for securities. Even with the retrenchment in 1988, London maintained its leading role, with twice the issuance of second-place U.S.³⁹

Over this same three-year period, Switzerland's international equity issuance translated into a substantially smaller market share, falling from 40.7 percent to 6.0 percent. This sharp decline in market share, from undisputed leader to fourth, reveals Switzerland's failure to keep pace with deregulation in other countries. For years, a cartel system dominated by its three big banks has set prices and practices in the stock markets. It is only recently that competition from markets abroad has forced the cartel to liberalize its system.⁴⁰

In contrast to the international equities markets, issuance of international bonds was very strong in 1988, following a sharp contraction in 1987 entirely due to a 25.5 percent decline in Eurobond issuance.⁴¹ Eurobonds account for about 80 percent of international bond issues, and nearly two-thirds of all international issues are denominated in three currencies—the U.S. dollar, Swiss franc, and the Deutschemark. Nearly 60 percent of international bonds are issued by borrowers in Japan, the United Kingdom, the United States, France, Canada, and Germany.

The long-time importance of the United States and the U.S. dollar in the international bond market has been dwindling. In 1985, 54 percent of all Eurobonds were denominated in U.S. dollars, but by 1988 only 42 percent were in U.S. dollars.

Similarly, U.S. borrowers issued 24 percent of all international bonds in 1985, but issued only 8 percent in 1988. The impetus behind this decline lies in part with the investors who prefer low-risk securities and are

leery of U.S. bonds because of the perceived increase in "event risk" associated with restructurings and leveraged buyouts. Also, no doubt, developments such as the adoption of Rule 415 by the Securities and Exchange Commission (shelf registration) have encouraged U.S. firms to issue domestic securities by making it less costly to do so.

Trading in international securities

The United States is a major center of international securities trading. Foreign transactions in U.S. markets exceed U.S. transactions in foreign markets by a ratio of almost 7 to 1. This is a result of several factors. The United States has the largest and most developed securities markets in the world. U.S. equity markets are virtually free of controls on foreign involvement. SEC regulations on disclosure dissipate much uncertainty concerning the issuers of publicly listed securities in the United States while less, or inadequate, regulation in other countries makes investments more risky in those foreign markets. The market for U.S. Treasury securities has also been very attractive to foreign investors. In fact, large purchases of these securities by the Japanese have helped finance the U.S. government budget deficit.

Both foreign transactions in U.S. markets and U.S. transactions in foreign markets have been increasing at a very rapid pace. Foreign transactions in U.S. equity securities in U.S. markets plus such transactions in foreign equities in U.S. markets grew at almost 50 percent annually to exceed \$670 billion in 1987.⁴² Foreign transactions in U.S. stocks on U.S. equity markets have been increasing faster than domestic transactions; in 1988, foreign transactions accounted for 13 percent of the value of transactions on U.S. markets, up from 10 percent in 1986 (see Table 2).

Foreign transactions have increased in securities markets abroad as well; however, they have not, in general, kept pace with domestic trading. Consequently, foreign transactions as a percentage of all transactions has declined over the 1986-88 period for Japan, Canada, Germany, and the United Kingdom. Nevertheless, transactions by U.S. residents in foreign equity markets were estimated at about \$188 billion in 1987, nearly 12 times as much as in 1982.⁴³

TABLE 2		
Foreign transactions in domestic equity markets: Share of domestic trading (Percent of total volume)		
	1985	1988
Japan	8.7	6.5
Canada	29.5	21.6
Germany	29.9	8.7
U.S.	9.7	13.1
U.K.	37.3	20.8
France	38.0	43.5
Switzerland	4.6	6.3

SOURCE: Salomon Brothers

Foreign transactions in U.S. bonds and foreign bonds in U.S. markets in 1988 increased to more than 13 times their 1982 level (see Figure 6). This trading boom was fueled mainly by growth in transactions for U.S. Treasury bonds, which accounted for about 84 percent of total foreign bond transactions in 1988, up from 63 percent in 1982. These transactions in U.S. Treasury bonds accounted for almost three-quarters of all foreign securities transactions in U.S. markets in 1988.

Bond transactions in other countries by nonresidents also increased dramatically. In Germany, for example, the value of such transactions increased by 300 percent over the

1985-88 period and now account for over half of the value of all transactions in German bond markets.⁴⁴ Foreign bond transactions by U.S. residents reached an estimated \$380 billion in 1987, six times greater than the 1982 figure.

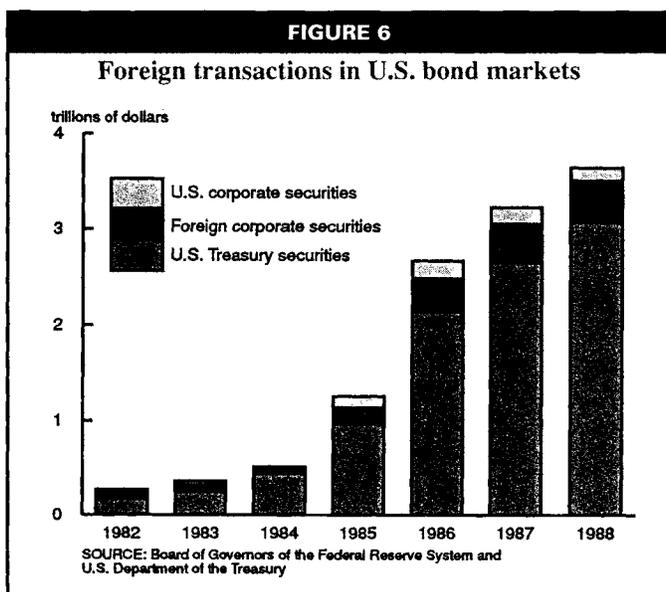
Derivative products

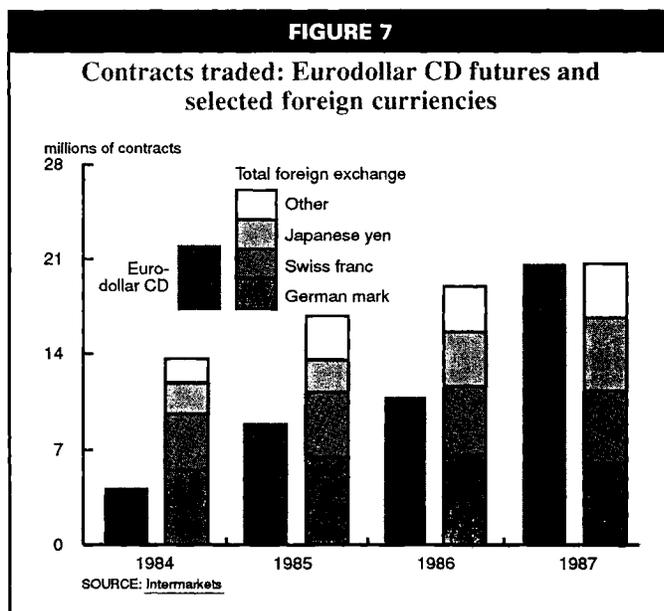
Globalization has affected derivative financial products in two ways. First, it has spurred the creation and rapid growth of internationally-related financial products, such as Eurodollar futures and options and foreign currency futures and options as well as futures and options on domestic securities that trade globally, such as U.S. Treasury securities. Trading hours on some U.S. futures and options exchanges have been expanded to support cross-border trading of underlying assets, such as Treasury securities. Second, globalization has led to the establishment of futures and options exchanges worldwide. Once the exclusive domain of U.S. markets, especially in Chicago, financial derivative products are now traded in significant volumes throughout Europe and Asia.

The number of futures contracts on Eurodollar CDs and on foreign currencies as well as the number of open positions has increased rapidly (see Figure 7). The number of futures contracts on Eurodollar CDs traded worldwide increased almost 70 percent annually since 1983 to reach over 25 million in 1988. This compares with a 20 to 25 percent annual

growth rate for Eurodollars.⁴⁵ Similarly, nearly 40 million futures and options contracts on various foreign currencies were traded worldwide in 1988, up from 14 million in 1983. This growth rate is roughly equivalent to that of forex trading.

The rapid increase in the volume of trading of internationally-linked futures and options contracts has largely benefited U.S. exchanges, which are the largest and sometimes the only exchanges where such products are traded. Nevertheless, the share of exchange traded futures and options volume commanded by the U.S. exchanges has dropped from 98 percent in 1983 to about 80 percent in 1988.





These 18 percentage points were primarily lost to European and Japanese exchanges.

In the past four years, 20 new exchanges have been established, bringing the total to 72.⁴⁶ Many of these new exchanges are in Europe. In addition, foreign membership at many exchanges is considerable. For example, over two-thirds of LIFFE's (London International Financial Futures Exchange) membership is based outside of the United Kingdom.⁴⁷

Two notable additions to futures and options trading are Switzerland and West Germany. The Swiss Options and Financial Futures Exchange (SOFFEX) was established in March 1988, and is the world's first fully-automated, computer-based exchange.⁴⁸ SOFFEX trades index options on the Swiss Market Index, which consists of 24 stocks traded on the three main stock exchanges in Geneva, Zurich, and Basle. Critics of the system contend that there is a lack of liquidity on the underlying stocks, thus limiting its effectiveness. Swiss banks control brokerage and can match trades internally with their own clients. This leaves a small amount for open trading on the exchange.⁴⁹

The Germans will begin trading futures and options in 1990. The exchange will trade bond and stock-index futures, and options on 14 high-turnover German stocks. Trading will be executed entirely by computer, as on its Swiss counterpart. The main reason the government approved the new exchange was com-

petition from London for business that the Germans felt should be in Frankfurt. LIFFE began trading futures on West German government bonds in September 1988, and, as of year-end 1989, it was the second most active contract on the exchange, trading about 20,000 contracts daily. It has been estimated that anywhere from 30 to 70 percent of this London-based trading is accounted for by the German business community.⁵⁰

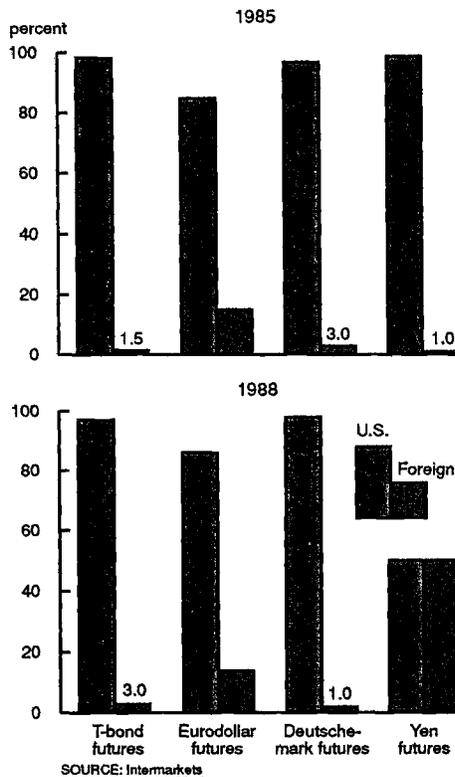
When an exchange is established, its product line usually includes a domestic government bond contract, a stock index futures contract, and, sometimes, a domestic/foreign currency futures or option contract.

Therefore, the number of contracts listed on foreign exchanges that compete with contracts on U.S. exchanges is small relative to the number of contracts traded throughout the world.

The U.S. exchanges' most formidable competitors are LIFFE and SIMEX (Singapore International Monetary Exchange). LIFFE competes with U.S. exchanges for trading volume in U.S. Treasury bond futures and options and in Eurodollar futures and options. SIMEX also competes for trading volume in Eurodollar futures as well as in Deutschmark and Japanese yen futures. But the SIMEX contracts are also complements to U.S. contracts in that a contract opened on the U.S. (Singapore) exchange can be closed on the Singapore (U.S.) exchange.

As shown in Figure 8, LIFFE commands less than 3 percent of trading volume in T-bond futures and options and Eurodollar options. Similarly, less than 3 percent of all Deutschmark futures trading occurs on SIMEX. LIFFE and SIMEX, however, are much more significant competitors for Eurodollar futures volume. SIMEX accounts for 7.5 percent of trading volume and LIFFE accounts for 6.5 percent.

Furthermore, in only three years, SIMEX managed to capture over 50 percent of the annual trading volume in the yen futures contract. The relatively greater success of SIMEX with the yen contract reflects the importance

FIGURE 8**World competition for futures contracts**
(Market share of world volume)

of trading in the same time zone as one side of a foreign exchange transaction. In June 1989, a yen/dollar futures contract was launched in Tokyo, along with a Eurodollar contract. The experience of SIMEX suggests that the yen contract will attract market share away from SIMEX rather than from the CME because Singapore and Tokyo are in the same time zone. The above experiences suggest that once deutschemark futures begin trading on the German exchange, some proportion now traded in London will move to Germany.

24-hour trading

True 24-hour trading exists in only a few markets, and is most valuable for assets whose investors span several time zones. Major currencies are traded around the clock in at least seven major money centers. Precious metals, especially gold bullion, and oil, which trade in New York, London and Singapore, are traded 24 hours a day. U.S. Treasury bonds are traded around the clock as well, but overseas markets are thin. Twenty percent of the busi-

ness at the French futures exchange in Paris (Matif) is conducted outside of normal trading hours, indicating how important the extended hours can be.⁵¹

To a lesser extent, stocks of about 200 major multinational firms are traded in foreign markets as well as in their domestic markets, but foreign trading volume does not compare with that in domestic markets. One reason is that most information about a firm is revealed while domestic markets are open.

In preparation for the increase in round-the-clock trading and due to perceived competition from foreign exchanges, the National Association of Securities Dealers, the Chicago Mercantile Exchange, and the Chicago Board of Trade have made plans to extend their normal trading hours through computerized systems. The New York Stock Exchange is considering trading stocks electronically outside of normal trading hours, and the Cincinnati Stock Exchange and the CBOE are planning 24-hour electronic trading systems. The trading hours for foreign currency options on the Philadelphia Stock Exchange begin at 7:45 a.m. (Eastern Standard Time) to encompass more of the London business day.

International investment banking

As financial markets become more globally integrated, foreign investment banks are attempting to play larger roles in domestic markets. Overall, they are meeting with mixed results.

Foreign investment banks in the United States

Foreign-based investment banks have made some inroads into U.S. domestic capital markets. For the first time, two foreign firms ranked among the top ten advisers for U.S. mergers and acquisitions in the first quarter of 1989. Kleinwort Benson and S.G. Warburg, ranked sixth and seventh, respectively, according to the value of deals.⁵² They placed ahead of Merrill Lynch and Kidder Peabody. No Japanese firms ranked among the top M&A advisers, although Fuji Bank of Japan has an ownership interest in Kleinwort Benson.

The Japanese are making a concerted effort to penetrate the U.S. investment banking market, but they have met with little success. The Big Four—Nomura Securities, Daiwa Securities, Nikko Securities, and Yamaichi

Securities Company—expanded in the United States in the mid-1980s, but have scaled back personnel due to unprofitable U.S. operations. Two of the Big Four—Nomura and Yamachi—have been trying to model their U.S. operations as identifiable Wall Street companies, and not just subsidiaries of Tokyo firms, by their appointment of Americans to head their U.S. operations. Nomura's strengths have been its primary dealership in U.S. government securities and U.S. stock trading unit, primarily for Japanese purchase. Nomura's weaknesses, however, are its lack of financial product development and its trading skills.

The Japanese have been more successful in U.S. derivative markets. In April 1988, Nikko Securities became the first Japanese securities firm to acquire a clearing membership at the Chicago Board of Trade (CBOT). Since then, fifteen others have joined the CBOT. The Chicago Mercantile Exchange (CME) has seventeen Japanese companies as members. Nikko, Daiwa, and Yamaichi are members of both the CBOT and CME. Recently, Nomura announced a cooperative agreement with Refco, one of the world's largest futures merchants. Consummation of the deal will assist Nomura in learning futures trading.

U.S. investment banks' activities abroad

Merger and acquisition activity has been slowing in the United States, prompting Wall Street firms to look to foreign markets. According to a 1988 survey, U.S. firms accounted for slightly more than half of all cross-border merger and acquisition activity. The most active U.S. investment banks were Shearson Lehman Hutton (57 deals), Goldman Sachs (46), and First Boston (34).⁵³

U.S. investment banks represented about 12 percent of all mergers and acquisitions for European clients in 1988. The most active U.S. firms in this category were Security Pacific Group (37 deals), Shearson Lehman Hutton (26), and Goldman Sachs (22). Security Pacific has acquired two foreign investment banks, one Canadian and one British.⁵⁴

U.S. firms expect to find some business in Asia as well. The newly formed investment bank, Wasserstein Perella, for example, recently dispatched merger and acquisition

teams to Japan to set up the Tokyo joint venture, Nomura Wasserstein Perella.

In the area of securities underwriting, U.S. firms are quite strong. Seven of the top ten underwriters of debt and equity securities worldwide are U.S. firms; however, only three U.S. firms rank among the top underwriters of non-U.S. securities. Merrill Lynch was the top underwriter of all debt and equity offerings worldwide during the first half of 1989.⁵⁵

The strength of U.S. firms abroad lies primarily in Europe. Foreign securities firms in Tokyo have found it difficult to establish themselves. Thirty-six of the 51 Tokyo branches of foreign securities houses lost a total of \$164 million for the six months ending March 1989.⁵⁶ As a result of these losses, many foreign firms have cut back their Tokyo operations, concentrating on a particular product or service. Twenty-two out of the 115 Tokyo stock exchange members are foreign firms. Another 29 foreign securities houses have opened branch offices in Tokyo. Nevertheless, the Big Four dominate the Tokyo exchange, accounting for almost 50 percent of daily business. The foreign firms account for only 4.5 percent of this daily business.⁵⁷

Three American investment banks, Salomon Brothers, Merrill Lynch, and First Boston, have been able to develop profitable operations in the Tokyo market. All three American firms attribute their success in part to a well-trained staff, and to hiring Japanese college graduates to fill positions. Salomon posted a \$53.6 million pretax profit as of March 31, 1989. It also made a \$300 million capital infusion, which has helped to make Salomon a challenger to the Big Four in bond trading.⁵⁸

The U.S. government has been pressuring for greater access for U.S. firms to Japanese capital markets since 1984. For instance, Japanese government securities are predominantly sold through closed syndicates, in which foreign firms account for only about 8 percent of the total. Change has been slower than foreign investment banks and governments would like, but some progress has been made. The Japanese sold 40 percent of its 10-year bonds at an open auction in April 1989.⁵⁹

Conclusion

Financial markets and financial services are becoming more globally integrated. As businesses expand into new markets around the

world, there is greater demand for financing to follow them. All major areas of international finance have grown far more rapidly than foreign trade in recent years. Trading of securities in U.S. markets by nonresidents, trading volume of foreign currency futures and options, and foreign exchange trading have been growing at 40 percent or more a year. This rapid growth of international financial transactions reflects the growth in cross-border capital flows.

The major markets for domestic as well as international financial services are the United States, Japan, and the United Kingdom, although it is beginning to make more sense to talk about the dominant markets as the United States, Japan, and Europe. The reduction of regulatory barriers and harmonization of rules among countries have allowed more firms to compete in more markets around the world. These markets are also competing against each other for a share of the world's trading volume.

Today, a very large part of financial globalization involves financial intermediaries dealing with other, foreign, financial interme-

diaries. Consequently, prices in one market are affected by conditions in other markets, but, with a few exceptions, of which commercial lending is the most notable, customers do not have direct access to more suppliers. Again, this could change as Europe moves toward economic and financial unification.

Lessons from industries such as automobiles and petroleum, as well as lessons from geographic expansion in the United States, indicate that the financial services industry will become more consolidated, with firms from a handful of countries garnering substantial market share. International joint ventures will be common and often precursors to outright acquisitions. For smaller firms to survive as global competitors, they will have to find and service a market niche.

As the financial services industry and financial markets become more globally integrated, the most efficient and best organized firms will prevail. Also, countries with the most efficient—but not necessarily the least—regulation will become the world's major international financial centers.

FOOTNOTES

¹“Japanese Finance,” Survey, *The Economist*, December 10, 1988, pp. 3 and 10.

²Ibid.

³Thomas H. Hanley, et. al., “The Swiss Banks: Universal Banks Poised to Prosper as Global Deregulation Unfolds,” *Salomon Brothers Stock Research*, June 1986.

⁴See David T. Llewellyn, *Competition, Diversification, and Structural Change in the British Financial System*, 1989, unpublished xerox, p. 1.

⁵Christopher M. Korth, “International Financial Markets,” in William H. Baughn and Donald R. Mandich, eds., *The International Banking Handbook*, Dow Jones-Irwin, 1983, pp. 9-13.

⁶During the Cold War, the U.S. dollar was the only universally accepted currency, and the Russians wanted to maintain their international reserves in dollars, but not at American banks for fear that the U.S. government might freeze the funds. Therefore, the Russians found some British, French and German banks that would accept deposits in dollars. See Korth, p. 11.

⁷Christopher M. Korth, “The Eurocurrency Markets,” in Baughn and Mandich, p. 26.

⁸Herbert L. Baer and Christine A. Pavel, “Does regulation drive innovation?,” *Economic Perspectives*, Vol. 12, No. 2, March/April 1988, pp. 3-15, Federal Reserve Bank of Chicago.

⁹“Japanese banking booms offshore,” *The Economist*, November 26, 1988, p. 87.

¹⁰*International Financial Statistics*, International Monetary Fund, various years.

¹¹Ibid.

¹²This does not apply in criminal cases, bankruptcy, or debt collection. The disclosure of secret information to foreign authorities is not allowed, unless provided for in an international treaty. In such a case, which is an exception, the foreign authorities could obtain only the information available to Swiss authorities under similar circumstances. See Peat, Marwick, Mitchell & Co., *Banking in Switzerland*, 1979, pp. 35-6.

¹³Eurobanks have specific rates at which they are prepared either to borrow or lend Eurofunds. In London, this rate is known as LIBOR (the London Interbank Offer Rate). LIBOR dominates the Eurocurrency market.

¹⁴Henry S. Terrell, Robert S. Dohner, and Barbara R. Lowrey, “The Activities of Japanese Banks in the United

Kingdom and in the United States, 1980-88," *Federal Reserve Bulletin*, February 1990, p. 43.

¹⁵Michael R. Sesit and Craig Torres, "What if They Traded All Day and Nobody Came?," *Wall Street Journal*, June 14, 1989, p. C1.

¹⁶*U.S. Foreign Exchange Market Survey*, Federal Reserve Bank of New York, April 1989, pp. 5-7.

¹⁷"Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks," Table 4.30, *Federal Reserve Bulletin*, June 1989, Board of Governors of the Federal Reserve System; and *Annual Statistical Digest*, Board of Governors of the Federal Reserve System, Table 68.

¹⁸*Ibid.*

¹⁹*Senior Loan Officer Opinion Survey on Bank Lending Practices for August 1989*, Board of Governors of the Federal Reserve System.

²⁰See footnote 17.

²¹*Annual Report*, Board of Governors of the Federal Reserve System, Banking Supervision and Regulation Section, various years; authors' calculations from Report of Condition and Income tapes, Board of Governors of the Federal Reserve System, various years.

²²*Ibid.*

²³*Ibid.*

²⁴"European banking: Cheque list," *The Economist*, June 24, 1989, pp. 74-5.

²⁵The Glass-Steagall Act is the law that separates commercial banking from investment banking in the U.S. Article 65 is its Japanese equivalent.

²⁶James B. Treece, with John Hoerr, "Shaking Up Detroit," *Business Week*, August 14, 1989, pp. 74-80.

²⁷*Standard and Poor's Oil Industry Survey*, August 3, 1989, p. 26.

²⁸"European Stock Exchanges," *A supplement to Euromoney*, August 1987, pp. 2-5.

²⁹Rosario Benvides, "How Big is the World Bond Market?—1989 Update" *International Bond Markets*, Salomon Brothers, June 24, 1989.

³⁰*Ibid.*

³¹"Look east, young Eurobond," *The Economist*, September 16, 1989, pp. 83-4; "Japanese paper fills the void," *A supplement to Euromoney*, March 1989, p. 2.

³²See *The Economist*, Sept. 16, 1989, pp. 83-4.

³³"La grande boum," *The Economist*, October 1, 1988, pp. 83-4.

³⁴Christine M. Cumming and Lawrence M. Sweet, "Financial Structure of the G-7 Countries: How Does the United

States Compare?," Federal Reserve Bank of New York, *Quarterly Review*, Winter 1987/88, pp. 15-16.

³⁵"Sweeping away Frankfurt's old-fashioned habits," *The Economist*, January 28, 1989, pp. 73-4.

³⁶*Ibid.*

³⁷*Financial Market Trends*, OECD, February 1989, pp.85-6.

³⁸*Ibid.*

³⁹*Ibid.*

⁴⁰"A smooth run for Switzerland's big banks," *The Economist*, June 17, 1989, pp. 87-8.

⁴¹*World Financial Markets*, J.P. Morgan & Co., November 29, 1988.

⁴²"Foreign Transactions in Securities," Table 3.24, *Federal Reserve Bulletin*, June 1989, Board of Governors of the Federal Reserve System.

⁴³*Ibid.*

⁴⁴Various central bank statistical releases.

⁴⁵The underlying instrument is worth \$1 million.

⁴⁶"US exchanges fight for market share," *A supplement to Euromoney*, July 1989, p. 9.

⁴⁷Elizabeth R. Thagard, "London's Jump," *Intermarkets*, May 1989, p. 22.

⁴⁸See *A supplement to Euromoney*, August 1987, p. 28.

⁴⁹Ginger Szala, "Financial walls tumble for German investors," *Futures*, January 1990, p. 44.

⁵⁰*Ibid.*, p. 42.

⁵¹See Thagard, p. 23.

⁵²Ted Weissberg, "Wall Street Seeks Global Merger Market: IDD's First-quarter M&A Rankings," *Investment Dealers Digest*, May 8, 1989, pp. 17-21.

⁵³"The World Champions of M&A," *Euromoney*, February 1989, pp. 96-102.

⁵⁴*Ibid.*

⁵⁵Philip Maher, "Merrill Lynch Holds on to Top International Spot," *Investment Dealers Digest*, July 10, 1989, pp. 23-25.

⁵⁶"Japan proving tough for foreign brokerage," *Chicago Tribune*, September 11, 1989, section 4, pp. 1-2

⁵⁷*Ibid.*

⁵⁸*Ibid.*

⁵⁹*Ibid.*