Factors Affecting the Competitiveness of Internationally Active Financial Institutions

by Beverly Hirtle

Large internationally active banks and securities firms have responded to the opportunities and challenges of an increasingly competitive global market environment with a wide range of strategies and approaches. A variety of factors—including the development of global financial markets operating across national boundaries, the increased access of foreign competitors to domestic financial markets, and the expanding availability of traditional banking services from nontraditional sources—have acted to alter the competitive environment in which these financial institutions operate. These developments have both changed the character of markets for existing bank products and services and introduced new markets in which banks and securities firms must compete both domestically and internationally. Consequently, the factors that determine competitive success for large financial institutions now reflect the greater degree of international integration characterizing the various markets for bank products and services.

This article examines the factors that appear to affect the competitive position of large, internationally active banks and securities firms. It synthesizes the results of seven studies of bank product markets and a study assessing the competitive performance of banks and securities firms on the basis of conventional quantitative measures. These eight papers were prepared as one part of a Federal Reserve Bank of New York research project evaluating the international competitive position of U.S. financial institutions.[1]

[1]The papers are available in Federal Reserve Bank of New York, *International Competitiveness of U.S. Financial Firms: Products, Markets and Conventional Performance Measures*, May 1991. They are cited individually in the footnotes that follow.

The first half of the article reviews the performance of major financial institutions in the seven separate product markets. Three of these markets—the Eurocredit, swaps, and foreign exchange markets—are essentially international in nature; product attributes and prices differ little across national trading centers. In contrast, the remaining four markets—commercial lending, retail banking, government bonds, and equities—are largely national in character. Analyzing the ability of foreign banks and securities firms to compete successfully in these national markets not only suggests how institutions are able to establish themselves in overseas markets but also provides a measure of the strength of local institutions' domestic franchise.

The review of the seven product markets offers a fairly comprehensive picture of the competitive strengths of banks and securities firms along national and institutional lines. While this approach provides insights about those banks and securities firms that tend to be successful competitors in particular markets, it does not establish a sense of the overall competitive position of institutions across all of their market activities. To meet this last objective, the article evaluates the performance of fifty-one large, internationally active financial institutions by measuring the institutions' return on equity and assets, capitalization, and asset size from the mid-to-late 1980s. This more quantitative approach sheds light on the competitiveness of banks and securities firms as integrated institutions. In addition, it highlights the strengths and weaknesses of the conventional measures of performance on which it relies.

The final section of the article draws on this examination of consolidated competitive performance as well as the review of the seven product markets to identify the characteristics that appear to be associated with competitive success for banks and securities firms. The major finding of this section is the suggestion that banks and securities firms compete most successfully in international markets by building on traditional domestic market strengths. These traditional strengths include the existence of an established customer base, technical expertise and innovative ability resulting from specialization in particular domestic markets, and familiarity with home-country financial and currency markets. The ability of individual financial institutions to translate these attributes into success in the international arena is in turn affected by several conventional factors: the size of the institution may help to determine whether it can take advantage of economies of scale, particularly in information gathering and processing; capitalization may affect the institutions's credit standing; the cost of capital may influence a bank's ability to offer competitive prices for its products and services; and the existence of links across product markets may allow banks to exploit economies of scope in producing a variety of products and services.

The competitive performance of internationally active banks and securities firms

This section reviews competitive conditions in seven product markets to clarify which financial institutions are successful competitors on an international scale. The review primarily focuses on banks and securities firms grouped by national affiliation, but it also considers the competitive strategies taken by different firms in the various markets. The seven product markets discussed are not an exhaustive list of the activities in which internationally active financial institutions participate; rather, they are meant to provide general insights about the characteristics making for competitive success across various international banking markets. The final part of this section takes a more integrated view of these institutions by reviewing a range of conventional quantitative measures of competitive success.

International product markets

In each of the international product markets—the Eurocredit, swaps, and foreign exchange markets—market activities are highly integrated across national trading centers, resulting in little if any differentiation in product attributes or price along national lines. The national affiliation of financial institutions participating in these markets is thus potentially less important than other firm-specific characteristics. These markets come closest to constituting a "level playing field" for institutions from different countries and, as such, provide a means of highlighting the factors associated with competitiveness in a truly international setting.

Eurocredit market[2]

At first glance, the Eurocredit market appears to be a leading example of a truly global financial market. Consisting of the markets for international loans and bonds originated and sold outside of the country of both the borrower and the currency of the issue, the Eurocredit market serves a diverse group of multinational customers conducting transactions in a wide variety of currencies. Borrowers can escape domestic market regulations, restrictions, and taxation; at the same time, international banking competitors can operate on a relatively level playing field. Financial intermediaries are generally free to help any borrower raise capital through bonds or loans denominated in any currency.

Despite the potential for banks and securities firms to participate equally in most sectors of the Eurocredit market, a high degree of segmentation is evident. Different financial institutions specialize in and dominate different sectors of the market, which are often related to their classification (for example, "bank" or "security firm") and nationality.

Nationality appears to be an especially strong factor in the Eurobond sector of the market. In the nondollar bond sector, the nationality of the lead underwriter tends to be strongly correlated with the nationality of the currency, reflecting the importance of ties to home-country investors in placing nondollar issues. In the dollar-denominated bond sector, however, the nationality of the intermediary and that of the bond issuer are strongly correlated. The greater international acceptance of the dollar and the greater ease in placing dollar-denominated issues mean that borrower rather than investor relations are the key to competitiveness in this sector.

Nationality appears to be less important in the Euroloan sector, as reflected in the weaker association between the home-country of the currency and the nationality of both borrowers and lenders. This weaker correlation suggests that it may be easier for an intermediary to overcome national currency preferences among banks when forming an investor base in the Euroloan market. Nevertheless, existing customer relationships appear to play an important role in bringing new borrowers to the market and winning loan mandates. All these links together suggest that a firm can use the comparative advantage of its domestic customer base to gain market share.

In addition to the specialization in various sectors of

[2]The material in this section is based on John M Balder, Jose A Lopez, and Lawrence M Sweet, "Competitiveness in the Eurocredit Market "

the Eurocredit market associated with nationality, there is specialization along institutional lines. Commercial banks dominate the Euroloan market while investment banks and universal banks tend to dominate Eurobonds. This observed segmentation, in spite of the relative freedom of any intermediary to offer any financial service in the Eurocredit market, points to a tendency for firms to rely on their traditional domestic market strengths in the face of intense competition..

This competition has resulted in low profitability. Although little reliable data exist regarding the profitability of a firm's Eurocredit market operations, market withdrawals and reports of losses support the notion of a low-profit market. U.S. securities firms are among the most successful competitors in the Eurobond market, but the market share of U.S. intermediaries has declined since 1983, in part reflecting the decline in issues by U.S. borrowers. An increase in Japanese issues, particularly in the equity-warrant sector, has helped foster a significant increase in the market share of Japanese intermediaries. U.S. and Japanese banks also command the largest market shares in the Euroloan sector.

Swap market[3]

Like the Eurocredit market, the swap market has a strong international focus. The rapid growth of the market during the 1980s has been driven in large part by the expansion of international financial flows and a more volatile interest rate environment. Interest rate and currency swaps are important financial tools used by firms both to reduce the costs of borrowing in overseas and domestic capital markets and to manage the interest rate and currency risk exposures generated by international economic and financial market activity. As such, swaps are denominated in a wide variety of currencies to meet the financing needs of a diverse, multinational customer base.

Although the customer base and product attributes of the swap market underscore its international character, the segregation among swap dealers along both national and institutional lines is significant. The principal swap-dealing firms are commercial banks and securities firms. Institutional and regulatory structures—particularly in the United States, Japan, and, to a lesser extent, the United Kingdom—have traditionally induced securities firms and commercial banks to focus on businesses that give them natural strengths in different types of swaps. The underwriting activity of securities firms, for instance, tends to generate a natural flow of swaps related to bond market financings. In contrast, the strength of commercial banks in the area of interest rate risk management tends to give those institutions an advantage in transactions relating to balance sheet management. As a counterpart to specialization along institutional lines, there is also a tendency for swap dealers to specialize in swaps denominated in their home-country currency, particularly in the nondollar sector. These trends together suggest that competitive success in the swap market continues to be influenced by domestic market factors.

Overall, the strongest competitors in the swap market are large global financial institutions, including U.S. money center banks, U.S. diversified securities firms, and European universal banks. Although virtually all major international commercial banks and securities firms participate in the swap market to some degree, the number that are important competitors is limited. Market share data and surveys of market participants suggest that major competitors number no more than twenty-five.

A study of these major competitors suggests that a variety of firm-specific factors influence competitive success in the swap market. For instance, the size and breadth of an institution's financial market activities appear to be important to the efficient management of risks associated with swap market transactions. Swap portfolio size is important, both because it can reduce the costs of managing interest rate and currency risks and because large market share can put firms in a position to gain superior knowledge of market order flow. Similarly, a presence in a variety of related markets gives dealers access to order flow information and lower transaction costs for instruments used in swap portfolio management. Finally, strong credit standing is essential in the swap market because both parties to a swap are exposed to credit risk.

Foreign exchange market[4]

The foreign exchange market is one of the most important international links between national financial markets. Consisting primarily of the buying and selling of demand deposits in different currencies, the foreign exchange market has grown rapidly and changed significantly during the past few decades. The growth in the market has been spurred by economic developments that have led to large trade imbalances among major economies and thus to significant increases in international capital flows. The impact of these economic developments has in turn been reinforced by advances in technology and the liberalization of financial markets,

[3]The material in this section is based on Robert Aderhold, Ethan Heisler, Ricardo Klainbaum, and Robert Mackintosh, "Competitiveness in the Global Swap Market."

[4]The material in this section is based on Peter S. Holmes, Paul DiLeo, Thaddeus Russell, John R. Dacey, and Kimberly Reynolds, "Competitiveness in the Global Market for Foreign Exchange."

forces that have led to tighter integration of national money and capital markets.

Financial institutions have pursued a variety of strategies in their approach to foreign exchange trading. A number of large dealers, primarily commercial banks, provide a diversified range of foreign exchange services and make markets in many currencies. In contrast, other foreign exchange dealers specialize in transactions involving particular currencies and instruments, offering a more limited range of services. This specialization frequently reflects the institution's overall market strengths, especially the information and experience acquired by participation in both domestic and overseas financial markets. In particular, many dealers are led by their familiarity with both domestic financial markets and the direction of domestic monetary policy to specialize in transactions involving their home-country currency.

Judged by the success of overseas branches and affiliates, U.S. institutions appear to hold a dominant, but perhaps diminishing, position in foreign exchange trading. The trading operations of U.S. multinational banks appear to be among the most profitable relative to other international institutions, both in terms of absolute foreign exchange income and in terms of the share of total operating income derived from foreign exchange activities. U.S. institutions are also rated highly in surveys assessing the global performance of foreign exchange market participants. The overall strong showing of U.S. institutions largely reflects the importance of the dollar as an international reserve currency. Among non-U.S. institutions, Swiss banks are strong performers in terms of the profitability and income derived from their foreign exchange operations, while U.K. institutions are rated highly in foreign exchange market surveys assessing the quality of foreign exchange services.

National product markets

The four national markets for banking products and services—commercial lending, retail banking, government bonds, and equities—are largely independent across national boundaries. Although markets in different countries may offer similar products and services, differences in regulatory structure, financial market sophistication, and traditions governing the relationship between banks and their customers may create significant national differences in the way that the markets function. These national differences can represent a barrier to foreign financial institutions wishing to become successful competitors in overseas financial markets.

The discussion that follows focuses primarily on national markets in the United States, Japan, Germany, and the United Kingdom, although other national markets are also considered. Markets in these four countries reflect a range of market structures, regulatory environments, and customer affiliations that have resulted in domestic banking franchises of varying strengths. Evaluating the ability of foreign banks and securities firms to compete successfully in these markets thus not only helps identify factors that may enable institutions to establish themselves in overseas markets, but also provides a measure of the strength of local institutions' domestic franchise.

Commercial lending markets[5]

Commercial credit, consisting of credit extended by banks to nonfinancial business customers, has historically been the most important component of lending by commercial banks. Commercial credit is used for a variety of purposes, including the financing of working capital, new plant and equipment, and corporate restructurings such as mergers and acquisitions. In recent years, however, alternative sources of nonbank commercial credit such as public debt and credit extended by nonbank financial institutions have become increasingly important in commercial lending markets, particularly in the United States. The existence of these alternative credit sources has changed the competitive environment of several of the national commercial lending markets.

A number of factors affect the competitive position of banks in the U.S., U.K., German, and Japanese commercial lending markets. For instance, the ability of a bank to sustain competitive advantage in loan pricing is strongly influenced by its cost of capital, which includes the cost of debt and equity and takes into account tax effects. A bank with a lower cost of capital can price more aggressively while still earning an acceptable rate of return on the loans in its portfolio. The credit standing of a bank is also an important factor, largely because it affects the institution's ability to serve as a reliable source of standby liquidity. The ability of a bank to continue to extend credit during tight credit periods appears to figure prominently in firms' choice of lender.

In general, aggressive pricing and strong customer relationships seem to be the leading sources of competitive advantage in commercial lending, but their precise importance appears to vary with the national market. Aggressive pricing strategies have been most influential in the United States, where customers are more price sensitive and relationships between banks and corporations appear to be weaker. Customer relationships seem particularly important in the German and Jap-

[5]The material in this section is based on Jonathan T.B. Howe, George Budzeika, Gina G. Riela, and Paula Worthington, "Competitiveness in Commercial Lending Markets."

anese corporate lending markets, in part because of the traditional links between banking and commerce in these economies.

Foreign banks, particularly Japanese banks, have enjoyed considerable success in penetrating the U.S. commercial lending market. The large volume of trade with the United States and the growing presence of foreign-owned firms have provided ample opportunities and a strong customer base for foreign banks operating in the U.S. commercial lending market. In addition, Japanese banks in particular appear to have broad customer bases that include U.S. as well as foreign-affiliated borrowers. Foreign bank penetration in the U.K. commercial lending market is also fairly extensive. In the United Kingdom, the fairly significant degree of foreign penetration into the broader U.K. economy may partly explain the success of foreign banks.

Foreign banks have experienced much less success in the domestic commercial lending markets of Germany and Japan. In these countries, customer relationships with domestic firms are long-established and reinforced by interlocking directorships and mutual ownership. Furthermore, especially in the Japanese market, the presence of foreign-owned businesses is relatively small, limiting the ability of foreign banks to capitalize on home-country customer ties. In addition, with very few exceptions, foreign banks in both the Japanese and German markets have been unable to establish the branch networks that appear to provide domestic banks with lower cost sources of funding. All of these factors have tended to limit the extent to which foreign banks are able to be successful competitors in the German and Japanese commercial lending markets.

Retail banking markets[6]

Retail banking includes the deposit-taking and lending activities that commercial banks conduct for individuals and small businesses. In the retail banking markets of the United States, Japan, the United Kingdom, and Canada, the intensity of competition has increased during the 1980s, furthered by interest rate deregulation and the increased price sensitivity shown by consumers. Technological advances in data processing and electronic equipment have been associated with a continuing reorganization of the production of banking services. The ability of banks to process and deliver multiple retail services on increasingly larger scales appears to be driving this reorganization.

Despite the increased competition in retail banking markets, domestic banks dominate in each of the four countries because of the advantage that domestic banks continue to have over foreign banks in providing retail services. For instance, a strong physical presence appears to be important for full-scale deposit-taking activities. Domestic institutions that have already invested in a substantial branch network thus have an advantage; the "bricks and mortar" costs of achieving such a presence present a significant barrier to new banks, including new foreign banks, seeking to enter a local retail market. In addition, in most markets, it appears that national preference continues to matter, with consumers preferring to transact their retail banking business with domestic institutions.

For foreign banks wishing to enter overseas retail banking markets, niche banking has emerged as a leading competitive strategy. As in other national banking markets, niche strategy in retail banking is frequently designed to capitalize on foreign institutions' domestic market strengths. For instance, some foreign banks pursue a "population niche" strategy and choose to meet the retail banking needs of an identified ethnic or regional customer base—most often, customers with ties to their home-country markets. Alternatively, foreign banks may use a "product niche" strategy by opting to specialize in a limited range of products or attempting to use a single product to create name recognition. The "product niche" strategy has been particularly common among U.S. banks, which have attempted to apply technological advances in the production of retail banking services in the U.S. market to overseas retail markets, with some limited success.

While a strong domestic retail franchise is evident in each of these four national markets, the degree to which domestic banks are able to dominate the local retail market may be weakest in the United States. Restrictive interstate banking rules have hindered U.S. banks from building the national, full-service franchises that have served as deterrents to foreign entry in other national markets. A second factor is the diversity and geographic dispersion of the U.S. population. The existence of immigrant populations yields entry opportunities for foreign banks in certain regional markets, particularly on the east and west coasts. Foreign banks, especially from the United Kingdom and Japan, appear to have identified and targeted certain customer bases and products and filled those niches profitably, although their share of the total U.S. retail banking market is fairly limited.

Government bond markets[7]

The government bond markets in the United States, Japan, and Germany are largely dominated by domestic

[6]The material in this section is based on M Ellen Gaske, Michele S Godfrey, Edward J Rooney, Annaliese J Schneider, and Paula R Worthington, "Competitiveness in Retail Banking Markets"

[7]The material in this section is based on John J Ruocco, Maureen LeBlanc, and Patrick Dignan, "Competitiveness in Government Bond Markets"

financial institutions. While the dominance of domestic firms may be somewhat less in the United States than in Germany and Japan, the strong position of domestic institutions in all three markets is in part an outgrowth of historical practices that limited participation in government bond underwriting to a specified group of domestic banks and securities firms. Although foreign firms currently face the same general regulatory requirements as domestic financial institutions, their penetration into most national government bond markets has been limited.

The limited role of foreign banks and securities firms in the U.S., Japanese, and German government bond markets primarily reflects the competitive advantages accruing to large, established domestic institutions. First, there appear to be significant advantages to operating on a large scale in government bond markets, particularly in gathering and processing information. A large customer base helps ensure that the dealer is active and receiving supply, demand, and price information from all sectors of the market, so that the traders and salespeople are both more knowledgeable and more effective. Even in the most liquid government bond markets, this type of information appears to be critical to success. Second, firms participating in a wide range of financial market activities also appear to have a competitive advantage in government bond markets. Information about financial market conditions and interest rate movements derived from transactions in other markets often can be applied to government bond market activities, generating economies of scope in information processing.

In addition to facing these information-related competitive disadvantages, foreign financial institutions must cope with the difficulties arising from their lack of a natural distribution network and local customer base for the securities. Many foreign firms have attempted to overcome this disadvantage by targeting as likely customers affiliates of firms from their home countries.

Foreign institutions also attempt to distribute government bonds to clients located in their home country and to those located in other foreign countries. The ability of foreign firms to market government securities internationally, however, may be constrained by investor reluctance to purchase foreign government securities. In this sense, then, foreign competitors wishing to enter the U.S. government bond market may face less of a competitive disadvantage than foreign competitors in other markets because of the wider acceptance of dollar-denominated securities outside of the United States.

To offset their inherent disadvantage in government securities distribution, foreign institutions often attempt to attract business by offering better services, a wider array of products, or more innovative products than their domestic counterparts. In some markets, foreign firms may have an advantage in providing innovative products and implementing sophisticated trading strategies originally developed in their home-country government bond markets. The ability of foreign institutions to capitalize on a competitive advantage in these "leading edge" areas, however, is sometimes restrained by the character of the various domestic markets. For example, the absence of a repurchase agreement market or the lack of hedging vehicles and of the ability to sell securities short can hinder the efforts of foreign financial institutions to develop a niche in innovative product offerings.

Equity markets[8]

The national equity markets in the United States, Germany, Japan, and the United Kingdom have distinctive market structures that affect the competitive environment facing both foreign and domestic financial institutions. In the U.S. and U.K. markets, underwriting and brokerage fees are negotiated, leading to stiff competition and a sharp narrowing of intermediary profits in these activities in recent years. In contrast, the Japanese and German equity markets are still characterized by fixed brokerage commissions and strong relationships between customers and individual banks, features that have limited the ability of foreign institutions to gain significant market share.

In each of the four markets, demand for equity services is concentrated among domestic institutional investors, giving large and sophisticated domestic financial institutions a decisive competitive advantage. A study of these firms suggests that large financial institutions may benefit from economies of scale in providing "plain vanilla" equity trading and underwriting. In addition, institutions able to provide a range of sophisticated equity products and services may have an advantage because they can absorb the lack of profitability in "core" underwriting and brokerage areas by engaging in more profitable corollary activities such as derivative products and proprietary trading. As a consequence of these scale and scope economies, a handful of domestic firms dominate trading and underwriting in each of these four markets.

Faced with these circumstances, most foreign institutions attempting to enter local equity markets have pursued one of two alternative strategies, although typically with quite limited success. The first strategy involves establishing market share in a particular population or product niche, most often by trying to build on competitive strengths developed in home-country equity markets. For instance, foreign institutions may cap-

[8]The material in this section is based on Martin Mair, Michael Kaufman, and Steven Saegar, "Competitiveness in Equity Markets."

italize on their existing customer base by specializing in serving investors from their home-country. Alternatively, foreign banks and securities firms may build on technical expertise acquired in domestic markets by providing leading edge products such as derivatives, block and basket trading, trading in overseas markets, mergers and acquisitions, and fund management. For this product niche strategy to succeed, however, foreign entrants must be more expert in these leading edge techniques than domestic institutions, and, in addition, the legal/regulatory environment must permit firms to engage actively in these techniques. Foreign firms making the greatest competitive inroads using this strategy are largely from the United States, with U.K. firms also making a strong showing.

The second strategy used by foreign firms endeavoring to enter a local equity market is to purchase a domestic institution active in that market. This strategy enables foreign firms to buy market share by purchasing existing customer bases and to gain expertise in more sophisticated markets, such as the United States and United Kingdom, where domestic institutions are already using leading edge trading techniques.

Conventional competitive performance measures[9]

This section summarizes the results of a study that uses conventional quantitative performance measures to assess the performance of fifty-one large, internationally active banks and securities firms. The study augments the more descriptive review of the seven product markets by examining the performance of these large financial institutions on a consolidated basis, that is, across all the markets and activities in which they participate. This approach yields insights into the aggregate effects of the competitive strategies pursued by these institutions in individual banking markets.

The study focuses primarily on the performance of seven national groups of institutions across four broad categories: size, profitability, productivity, and capitalization.[10] The study employs return on assets and return on equity as measures of profitability, the levels and growth rates of total assets and revenue as indicators of size, the shareholders' equity and price earnings ratios as measures of capitalization, and the ratio of total revenue to non-interest expense as a gauge of productivity. The data analyzed consist primarily of information from the financial statements of the sample firms for the 1985-89 period. Table 1 lists the fifty-one firms arranged by country, and Table 2 presents a summary of the findings.

As Table 2 indicates, the Japanese bank group's performance appears formidable across most measures, notably those relating to size, growth, and productivity. The Swiss bank group also appears strong, especially in capitalization and profitability. The German bank group turned in a solid performance in many categories, showing strength in growth and profitability. These measures may actually understate the performance of German and Swiss banks, since unreported earnings and hidden reserves at these institutions tend to conceal additional underlying strength in profitability and capitalization. The U.K. banks also showed strength in a few criteria.

The performance of the sample of U.S. banks as a group was uneven, although a few of these firms showed considerable overall strength. By measures such as the shareholders' equity ratio, the U.S. banks performed relatively well, although their showing was only fair in terms of other criteria, including return on assets and return on equity. Large provisions against LDC loans in 1987 and 1989 weakened the performance of U.S. banks across most measures and help explain their mixed performance during the overall 1985-89 period. Although it must be recognized that losses on LDC loans are in fact real losses, the core profitability of U.S. institutions appears to be stronger than indicated by the published numbers for the period under study.

The sample U.S. securities firms as a group generally did not perform as well as their principal overseas counterparts, the "Big Four" Japanese securities houses. The four Japanese firms grew faster than the U.S. firms and also appeared more profitable and better capitalized, although no clear national pattern emerged with regard to size. Again, however, individual U.S. securities firms turned in results that by certain measures rivaled or surpassed those of the Japanese houses.

While this analysis gives a sense of the performance of internationally active banks and securities firms along national lines, any conclusions about the relative performance of national institutions should be drawn with caution. Differences in national accounting practices and standards limit the accuracy of performance comparisons based on reported data. The problem of cross-national comparability of data may be especially acute for German and Swiss banks, but it affects Japanese financial data also. Accounting conventions in some of these countries may have resulted in an understatement of the actual financial strength of financial institutions over the mid-to-late 1980s.

Even if we assume that the data are comparable,

[9]The material in this section is based on J. Andrew Spindler, Jonathan T.B. Howe, Amil K. Petrin, David F. Dedyo, and Brian J. Brown, "The Performance of Internationally Active Banks and Securities Firms Based on Conventional Measures of Competitiveness."

[10]The seven countries are Canada, France, Germany, Japan, Switzerland, the United Kingdom, and the United States.

additional difficulties arise in assessing the implications of the analysis for the overall competitive position of individual firms and national groups The particular statistics chosen to represent the four aspects of competitive performance—size, profitability, productivity, and capitalization—may not be accurate measures in some important respects For instance, use of total assets as a measure of size ignores off-balance sheet activities,

Table 1

Banking Organizations and Securities Firms in Sample

Country	Banks	Total Assets Year-End 1989 (In Millions of Dollars)
Canada	1 Royal Bank of Canada	88,446
	2 Canadian Imperial Bank of Commerce	78,398
	3 Bank of Montreal	64,780
	4 Bank of Nova Scotia	62,251
France	1 Banque Nationale de Paris	231,463
	2 Credit Lyonnais	210,727
	3 Societé Générale	175,787
	4 Banque Paribas	82,164
	5 Banque Indosuez	55,316
Germany	1 Deutsche Bank	198,254
	2 Dresdner Bank	143,866
	3 Commerzbank	111,277
Japan	1 Dai-Ichi Kangyo Bank Ltd	389,134
	2 Sumitomo Bank Ltd	370,516
	3 Fuji Bank Ltd	364,888
	4 Mitsubishi Bank Ltd	362,256
	5 Sanwa Bank Ltd	339,490
	6 Industrial Bank of Japan Ltd	248,730
	7 Bank of Tokyo Ltd	201,827
	8 Long-Term Credit Bank of Japan Ltd	175,351
	9 Mitsubishi Trust and Banking Corp	174,961
	10 Sumitomo Trust and Banking Co Ltd	152,330
	11 Mitsui Trust and Banking Co Ltd	142,097
Switzerland	1 Union Bank of Switzerland	112,503
	2 Swiss Bank Corp	104,487
	3 Credit Suisse	75,885
United Kingdom	1 Barclays PLC	204,874
	2 National Westminster Bank PLC	186,529
	3 Midland Bank PLC	100,303
	4 Lloyds Bank PLC	92,378
	5 S G Warburg Group PLC	21,640
	6 Kleinwort Benson Group PLC	14,234
United States	1 Citicorp	230,643
	2 Chase Manhattan Corp	107,369
	3 BankAmerica Corp	98,764
	4 J P Morgan and Co Inc	88,964
	5 Security Pacific Corp	83,943
	6 Chemical Banking Corp	71,513
	7 Manufacturers Hanover Corp	60,479
	8 Bankers Trust New York Corp	55,659
	9 First Chicago Corp	47,907
	Securities firms	
Japan	1 Daiwa Securities Co, Ltd	44,924
	2 Nomura Securities Co, Ltd	38,989
	3 Nikko Securities Co, Ltd	29,674
	4 Yamaichi Securities Co, Ltd	29,547
United States	1 Salomon Brothers Inc	118,250
	2 Merrill Lynch	63,942
	3 Shearson Lehman	63,548
	4 Goldman Sachs and Co	61,298
	5 Morgan Stanley and Co	53,276
	6 First Boston Corp	46,313

Note Assets of Canadian firms are as of October 31, 1989, and assets of Japanese firms are as of March 31, 1990 which are an important component of the activities of large financial institutions. More importantly, performance in the four categories selected may not tell the full story about firm-level competitiveness. Factors such as technological sophistication and innovative capacity, potentially critical to a firm's future success, have not been taken into account in this analysis because they generally cannot be quantified using standard measures Failing to consider such "human capital" elements may understate the competitive standing of some firms, particularly those whose competitive strategies are formed around providing technically sophisticated products and services. In addition, the balance sheet data used in the study are for the most part retrospective. In many cases, the past performance of these institutions may not be a good indicator of future success

Determinants of competitive success among internationally active banks and securities firms

This section draws on the examination of the consolidated performance of the fifty-one internationally active financial institutions and the review of the seven product markets to identify the characteristics of banks and securities firms that appear to be associated with competitive success As a point of departure, the experience of U S. financial institutions over the mid-to-late 1980s will illustrate the ways that success in individual product markets translates into overall profitability. The factors common to effective competitors in these individual markets can then be identified, providing insight into some of the important qualities that appear to influence competitive success on an international scale.[11]

The performance of U.S. financial institutions

To some extent, the fairly weak performance of U.S. banks and securities firms as gauged by the conventional quantitative measures conflicts with the impression left by the review of the seven product markets That review suggested that U S. banks and securities firms are among the most prominent competitors in international markets such as foreign exchange, Eurocredit, and swaps, and among the most successful entrants in overseas national markets such as government bonds and equities At first glance, this evidence seems hard to reconcile with the reported performance of U.S. banks and securities firms as aggregate financial institutions.

Closer consideration of the product market review

[11]Many of these same issues are addressed—with a somewhat different focus—in "International Competitiveness of U S Financial Firms The Dynamics of Change in the Financial Services Industry," a forthcoming Federal Reserve Bank of New York study This study examines the dynamic forces influencing key sectors and services in financial markets and gives particular attention to economic and technological change

Table 2

Performance Summary of Sample Banks and Securities Firms by Country Group (1985-89)

Banks								Securities Firms	
Performance Measure	United States	Canada	France	Germany	Japan	Switzerland	United Kingdom	United States	Japan
Size									
Total assets†	1 of top 10	0 of top 10	2 of top 10	0 of top 10	6 of top 10	0 of top 10	1 of top 10	Comparable	
Real asset growth†	2 2 (6)	0 5 (7)	3 1 (4)	5 5 (2)	12 6 (1)	3 1 (5)	3 6 (3)	7 0	37 1
Total revenue§	3 of top 10	0 of top 10	2 of top 10	1 of top 10	0 of top 10	0 of top 10	4 of top 10	Comparable	
Real revenue growth‡	4 3 (7)	6 1 (2)	4 3 (6)	5 6 (4)	16 0 (1)	4 9 (5)	5 7 (3)	11 7	22 1
Profitability									
Real return on assets‡	0 08 (7)	0 17 (6)	0 21 (4)	0 24 (3)	0 27 (2)	0 32 (1)	0 20 (5)	0 33	1 83
Real return on equity‡	1 6 (7)	3 5 (6)	9 7 (2)	6 8 (3)	11 5 (1)	5 3 (4)	4 2 (5)	9 7	19 6
Productivity									
Total revenue/ Non-interest expense	1 51 (4)	1 74 (2)	1 46 (5)	1 44 (6)	2 06 (1)	1 36 (7)	1 52 (3)	1 12	2 16
Capitalization									
Shareholders' equity ratio‡	4 8 (4)	4 9 (3)	2 2 (7)	3 6 (5)	2 5 (6)	6 2 (1)	5 1 (2)	3 4	9 6
Price-earnings multiple	8‖ (4)	8‖ (5)	No data	19 (3)	74 (1)	21 (2)	6‖ (6)	9	21

Notes Except where noted, all figures are country group averages for the period 1985-89 Ordinal ranking among the seven national groupings of banks appears in parentheses where appropriate

†Figures are based on ranking of individual banks by total assets at fiscal year-end 1989

‡In percent

§Figures are based on ranking of individual banks by average revenue, 1985-89

‖Average price-earnings multiples of the U S , Canadian, and U K bank groups are calculated from their 1985 and 1986 results only provides some insight into the aggregate performance of U.S. banks and securities firms, however. Although U.S. institutions are strong competitors in a number of markets, their strength is most evident in the three international markets—swaps, foreign exchange, and Eurocredit. Each of these markets is characterized by a high degree of competition, particularly in the core product activities such as basic interest rate and currency swaps, spot currency transactions, and basic Eurocredit facilities, all of which have taken on a commodity-like aspect. The low profitability resulting from this intense competition has led participants in these markets to rely on innovation and product niches in specialized or technically complex instruments.

This strategy has become increasingly difficult to pursue, however. The very intensity of competition that has compelled participants in these markets to adopt a product niche strategy has also resulted in increasingly shorter periods during which any particular bank can realize the gains of an innovative or specialized product. These intense competitive conditions have made it difficult for financial institutions to participate profitably in these markets. Thus, even for those institutions that remain, sizable market share in these activities does not necessarily translate into a high degree of profitability.

This conclusion suggests that the ability of financial institutions to establish and maintain profitability on an aggregate basis may depend in large part on their performance in home-country financial markets. The effectiveness of both foreign banks and securities firms and domestic nonbank competitors in a number of U.S. national banking markets is consistent with the somewhat lackluster consolidated performance of U.S. institutions as gauged by conventional competitiveness measures. The product market review suggests that the domestic franchise of U.S. commercial banks is perhaps the weakest among the national groups considered, an assessment that is borne out by the significant foreign bank presence in U.S. national markets, particularly commercial lending. For a variety of reasons, U.S. bank customers appear to be more price sensitive and less dependent on established banking relationships than customers in many other countries. Thus U.S. commercial banks have been open to competition from nonbank financial institutions as well as foreign banks and securities firms. At the same time, the greater international acceptance of dollar-denominated securities provides foreign financial institutions with a natural customer base, both inside and outside the United States, for activities in U.S. financial markets. Overall, then, U.S. banks and securities firms appear to have a less reliable source of profitability from participation in domestic banking markets than do many institutions from other countries. The relative weakness of the domestic franchise of U.S. institutions may therefore underlie their uneven performance as gauged by conventional quantitative measures of competitiveness.

Building on traditional institutional strengths

The factors that appear to affect the strength of the domestic banking franchise for U.S. commercial banks demonstrate how conditions in home-country national banking markets can shape the international competitive standing of financial institutions. The review of the individual product markets suggests that banks and securities firms compete successfully in international and overseas domestic markets primarily by building on traditional strengths developed in their home-country domestic banking markets. These strengths include particular knowledge of home-country capital and currency markets; specialization in certain categories of financial products and techniques, sometimes as a result of regulation limiting participation in domestic markets to certain types of institutions; and, perhaps most important, the existence of an established customer base, which can both provide access to new markets and serve as a deterrent to competitors wishing to enter existing markets.

Specialization based on domestic market activities

Perhaps the most common means of exploiting a domestic market strength to gain competitive advantage in international and overseas markets is through specialization in international products that are closely related to domestic market activities. For instance, among U.S. financial institutions, participation in the swap market is heavily segmented by institution type: U.S. commercial banks have specialized in swaps related to balance sheet management because of their existing expertise in interest rate risk management, while U.S. investment banks have been more prevalent in the market for swaps related to new security issues. This segmentation clearly mirrors the areas of domestic market specialization that have resulted from regulatory restrictions on financial market participation. Similarly, product specialization in the Eurocredit market has occurred along institutional lines, with commercial banks tending to be the strongest competitors in the Euroloan sector and securities firms tending to be dominant in the Eurobond sector.

There is also a broader sense in which financial institutions have sought competitive advantage in overseas and international markets through product specialization that mirrors strength in domestic markets. Financial institutions from certain countries, most notably the United States and the United Kingdom, have developed a high degree of technical expertise in constructing, managing, and marketing complex financial products and services. This expertise involves both the development of physical capital—primarily computer systems and software—and the development of trained professionals and support staff with both technical and market knowledge.

Banks and securities firms from the United States and the United Kingdom have frequently attempted to exploit these domestic market strengths when entering international and overseas national markets. The technical ability to introduce and develop complex derivative products has given these institutions profitable product niches in markets such as swaps and foreign exchange, where competition in core products and services has greatly reduced profitability. Specialization in complex financial products has also provided a potential entry niche into overseas banking markets such as those in Germany and Japan, where domestic institutions have not traditionally focused on products and services requiring significant technical innovation. Successful utilization of domestic technical strength in overseas markets has been dependent, however, on the ability to develop both customer demand and regulatory approval for complex products and services.

Specialization based on knowledge of home-country markets

The ability to derive a competitive advantage in international markets from knowledge of home-country markets and conditions is perhaps most evident in the foreign exchange and swap markets. Institutions participating in both of these markets show a clear tendency to specialize along home-country currency lines, most likely because of more intimate knowledge of domestic capital markets and economic conditions. This knowledge may give domestic financial institutions an advantage in assessing the factors affecting home-country currency movements and interest rates and thereby create profit opportunities through dealings with customers. Alternatively, specialization in currency by national affiliation may simply arise because customers associate financial institutions with their home-country currencies and turn to those institutions to meet their needs to transact in various currencies.

In either case, specialization along home-currency lines is an effective competitive strategy only to the extent that there is a significant market for transactions in an institution's home currency. Banks and securities firms from a nation whose currency has wider international acceptance may therefore have greater potential to exploit this strategy.

For U.S. banks and securities firms, the status of the dollar as an international reserve currency is thus a source of competitive strength, although closer examination suggests that it may also be a possible cause of weakness. On the one hand, the strong demand for transactions in the dollar and dollar-denominated instruments creates a natural advantage for U.S. financial institutions possessing a presumably greater knowledge of the factors affecting dollar movements and interest rate fluctuations. U.S. institutions have used this advantage to establish strong competitive positions in international markets such as swaps, foreign exchange, and Eurocredit.

On the other hand, the same conditions that give U.S. financial institutions an advantage in international markets may create a relative disadvantage in domestic markets. The wide acceptance of dollar-denominated securities outside of the United States means that foreign institutions wishing to enter U.S. securities markets such as government bonds and equities have a relatively extensive natural distribution base in the form of existing overseas customers. The existence of this distribution base may make it easier for foreign financial institutions to establish themselves in U.S. national markets. To some extent, then, the status of the dollar in international markets may have resulted in a weakening of the domestic franchise of U.S. financial institutions.

Building on an existing customer base

The existence of an established customer base can be an extremely important competitive advantage for financial institutions in both international and overseas domestic markets. On the one hand, strong customer ties can provide a natural clientele for a bank or security firm wishing to enter new markets, enabling the institution to establish a market presence through transactions with existing customers from other markets. On the other hand, an established and secure customer base can also serve to deter potential competitors, both foreign and domestic, from entering existing bank markets. From many perspectives, then, the existence of strong customer ties is a crucial determinant of competitive success.

Banks and securities firms trying to enter both international and overseas national bank markets have looked to their established customers as a ready-made client base for their new activities, with some degree of success. For instance, in the Eurobond market the strong segmentation along national lines results fairly directly from financial institutions' use of existing customer ties to establish a competitive position. In the nondollar sector of the market, banks and securities firms appear to have extended customer ties in home-country markets to form distribution bases for Eurobond issues denominated in their national currencies. In the dollar sector, by contrast, it appears that ties between bond issuers and financial institutions may be key; since dollar-denominated securities have a greater acceptance outside of the United States, the insight and experience gained by banks and securities firms in dealing with borrowers from their home countries seem to be more pivotal than the ability to distribute the bonds. In both cases, however, it is clear that links to existing customers are important determinants of the ability to compete in the Eurobond market.

The importance of ties between financial institutions and their customers is equally clear in the Euroloan market. The history of the Euroloan market during the 1980s indicates that two discrete waves of borrowers have dominated the market—sovereign borrowers in the early 1980s, followed by corporate borrowers seeking merger and acquisition funding in the late 1980s. These developments suggest that the Euroloan market is in some sense a residual credit market, because the ability of intermediaries to "bring" customers to this market appears to be an important determinant of the level of borrowing. In this sense, the association between banks and their borrowing customers is vital, and the ability of a bank to transform existing domestic customers into potential Euroloan borrowers is key to its becoming a successful competitor in this market.

Relationships with domestic customers have also shaped the strategies used by foreign banks and securities firms seeking to enter overseas national markets. In one common approach, institutions adopt a population niche strategy to establish an initial market presence. Frequently, they will target the overseas affiliates of businesses and organizations from their home countries as potential customers. In this situation, strong ties with domestic customers can carry over, giving foreign banks and securities firms a natural, if necessarily limited, clientele in overseas markets.

In a somewhat different sense, a secure customer base can also affect the competitive strategy of banks and securities firms by serving as a deterrent to potential competitors, both foreign and domestic. As noted earlier, when the ties between domestic customers and financial institutions are particularly strong, it can be extremely difficult for competitors to establish a presence in the market. Foreign firms in such an environment face the additional problem of attracting customers who, in the face of custom or through lack of familiarity, may be reluctant to deal with foreign institutions. In this situation, foreign banks and securities firms may be limited, at least in the short run, to dealing exclusively with customers who are themselves affiliated with the financial institution's home country.

A comparison of the commercial lending markets in the United States and the United Kingdom with those in Germany and Japan dramatically illustrates how strong customer ties can affect the ability of foreign financial institutions to establish themselves in overseas national markets. In the U.S. and U.K. markets, the wide range of alternative borrowing sources has left ties between domestic borrowers and lenders relatively weak. Borrowers in these markets appear to be significantly more price sensitive than borrowers in many other national markets. In this environment, foreign banks have had a great deal of success in establishing themselves as significant competitors to domestic institutions.

In the German and Japanese markets, on the other hand, ties between borrowers and lenders are much stronger. Domestic corporate customers and banks typically have extensive and extremely stable financial relationships in which lending plays a central role. The strong customer ties that characterize these relationships have made it very difficult for foreign banks to gain a significant share of commercial lending activity in the Japanese and German markets.

As these examples indicate, a strong and diversified domestic customer base can be a key competitive advantage in both national and international banking markets. Just as financial institutions tend to compete successfully by specializing in particular products based on traditional strengths developed in domestic banking markets, they also appear to compete successfully by cultivating particular domestic customer clienteles. The ability of institutions to parlay the experience and relationships gained in domestic banking markets into a significant presence in overseas and international markets thus appears to be an important criterion for competitive success in the international arena.

Institution-specific characteristics and competitive success

The domestic market strengths that banks and securities firms attempt to exploit in forming competitive strategies are often common to different institutions within the same country. In addition to such national characteristics, however, a variety of institution-specific factors appear to be associated with competitive success. Specifically, the ability of financial institutions to build on domestic market attributes appears to be most strongly associated with factors such as institution size, capitalization, and the cost of capital. The ability to develop and exploit links across product markets also appears to be associated with competitive success for at least some banks and securities firms.

Scale of market operations

In many banking markets, the scale on which financial institutions operate appears to be an important competitive factor. Specifically, in many national and international product markets, banks and securities firms operating on a large scale may be able to produce more efficiently than smaller institutions, particularly in the management of large portfolios of financial instruments and in the gathering and processing of information. Although smaller firms may operate profitably in particular niches of the various bank product markets, these scale economies tend to result in banking markets that are dominated by a relatively few large competitors.

Large-scale operations can contribute to the efficiency of information management in different ways. On a technological level, the fixed costs of maintaining computer systems and developing specialized software and data management techniques will be distributed across a wider base. While such scale economies in "back office" operations may be important, scale economies in information gathering that result from specific market activities, particularly trading and underwriting of various financial instruments, appear to have a more direct link to profitable participation in various banking markets. In markets such as equities, government bonds, Eurocredit, swaps, and foreign exchange, institutions with a large market presence and a broad customer base may be able to assemble information about market conditions more efficiently because they are exposed to a wider range of proposed transactions. Institutions with a smaller market presence, by contrast, may not be able to manage their market activities as profitably because they must invest more time and effort in obtaining this information. Such size-related efficiencies may represent an important strategic advantage, particularly in highly competitive banking markets in which profitability in core activities is minimal.

Capitalization

A second institution-specific element that appears to affect the ability of banks and securities firms to compete in national and international banking markets is capitalization. More strongly capitalized banks may have an advantage because they are viewed as being better able to withstand financial adversity. The credit standing of a financial institution affects its ability to compete in markets for financial products and services primarily by affecting the willingness of potential customers to accept the institution as a counterparty. This effect is particularly prevalent in the swap market, where participants are exposed to large amounts of credit risk. Banks and securities firms that lack strong credit ratings can find it difficult to participate fully in this market because other financial institutions may be reluctant to accept them as counterparties in swaps transactions. This is particularly true for long-dated swaps, where the credit exposure is more significant because of its much longer duration. Thus, strongly capitalized banks and securities firms with high credit ratings have a competitive advantage over those institutions with a less secure capital standing.

Capitalization may also affect the ability of financial institutions to compete in markets where continuity of service is important. For instance, corporate borrowers appear to prefer to borrow from strongly capitalized banks because these institutions are more likely to have continued access to funding sources and thus to be able to lend during tight credit periods. In addition, a relatively weak credit rating can be a substantial disadvantage in competing for large corporate customers, particularly if these customers have higher credit ratings than the banks themselves. In this situation, commercial banks may not be able to offer better assurance of continued funding than the corporate customer can obtain on its own. Strongly capitalized financial institutions thus appear to have a competitive advantage in commercial lending markets, particularly during periods when tight credit conditions are widely anticipated.

Cost of capital

The ability of banks and securities firms to be effective competitors is affected not only by the amount of capital held by specific institutions, but also by the cost of obtaining that capital. In some sense, of course, the two factors are related: individual institutions that are perceived to be more risky will tend to face higher costs of acquiring capital. At a more fundamental level, however, the cost of capital reflects macroeconomic factors such as household savings behavior, the stability of the macroeconomy, the pattern of relationships among banks, corporations, and government, and to some extent, the corporate tax structure.[12] These macroeconomic factors are in general beyond the control of specific institutions or groups of institutions within a national economy. Thus, to a large extent, the cost of capital facing individual financial institutions is a competitive attribute that reflects conditions in their home-country markets.

The cost of capital affects the ability of financial institutions to offer competitive prices on their products and services. The spreads that banks and securities firms earn on their banking activities must be sufficient to generate the required rate of return on the capital used to support those activities. Institutions with high capital costs are therefore at a competitive disadvantage, particularly in markets where acting as a low cost provider of core products and services is an important competitive strategy. The importance of this effect is especially evident in markets such as the U.S. commercial lending market. Japanese financial institutions have been able to penetrate this market and to obtain a

[12]See Steven A. Zimmer and Robert N. McCauley, "Bank Cost of Capital and International Competition," Federal Reserve Bank of New York *Quarterly Review*, vol. 15, no. 3-4 (Winter 1991), pp. 33-59 for a full discussion of the determinants of the cost of capital for banks in six major industrial economies.

significant market share largely because their low capital costs have enabled them to extend credit at lower rates than many U.S. commercial banks facing a significantly higher cost of capital. A cost of capital advantage is thus an important factor in the ability of financial institutions to maintain a continuing presence in highly competitive global and national product markets.

Links across product markets

Banks and securities firms that participate in a range of financial markets may sometimes have a competitive advantage over those institutions that operate in a more limited set of markets. Much of this potential advantage stems from greater efficiency in obtaining and processing information. In much the same way that operation on a large scale within a single market appears to allow banks and securities firms to realize economies of scale in information handling, participation in a range of product markets may enhance the ability of some financial institutions to manage large and diverse portfolios of financial instruments efficiently.

For instance, the profitability of transactions in the swap and Eurocredit markets is determined, at least in part, by accurate knowledge of conditions and movements in a variety of other markets such as foreign exchange and the various national money and credit markets. To the extent that a financial institution is actively involved in these various markets—because of internal foreign exchange operations or through participation in overseas government and corporate bond markets—it may have greater access to the information necessary to price transactions correctly in the swap and Eurocredit markets. Similar advantages may accrue when portfolio positions taken from participation in one market offset positions derived from activities in another market, possibly reducing the expense of hedging the overall position of the institution.

Conclusion

The principal finding of the study is that financial institutions compete internationally primarily by building on the strengths developed in their domestic banking markets. In large measure, banks and securities firms appear to succeed in international and overseas national markets by capitalizing on advantages that reflect the inherent characteristics of their domestic markets.

The characteristics of an institution's home-country market thus appear to be a critical determinant of its overall competitive success. The strength of the domestic banking franchise not only shapes the competitive strategies adopted by banks and securities firms in international and overseas markets, but also appears to anchor the overall financial performance of these institutions. Financial institutions from countries with a strong domestic banking franchise may benefit from a stable source of profitability that appears to sustain their aggregate financial position.

The importance of the domestic franchise is clearly illustrated in the experience of U.S. financial institutions. Although U.S. banks and securities firms have had a great deal of success in obtaining market share in international and overseas financial markets, conventional quantitative measures of aggregate performance show these institutions to be only moderately successful competitors. These two somewhat conflicting assessments can be reconciled by noting that both nonbank firms and foreign banking institutions have made significant inroads in a number of U.S. national financial markets, a development that points to the weakness of the U.S. domestic banking franchise relative to that in other countries. This weakness may in turn underlie the uneven performance of U.S. financial institutions as aggregate entities.

The finding that home-country market conditions continue to play a critical role in the competitive success of large, internationally active financial institutions suggests that the true internationalization of financial and banking markets is incomplete. This impression is even more strongly reinforced by the continued domination of national banking markets by a few large domestic competitors, despite the fact that, in most cases, there is little regulatory or legal differentiation between domestic and foreign financial institutions. Although international markets in particular present many opportunities for competition on a "level playing field," segregation along national and institutional boundaries remains an important force in the competitive environment.