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Global Patterns of Mergers and Acquisition Activity in the Financial Services Industry

Roy C Smith, Ingo Walter

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Global Patterns of Mergers and Acquisition Activity in the Financial Services Industry

by

Roy C. Smith and Ingo Walter[1]
Stern School of Business
New York University

Abstract

This paper analyzes empirical evidence regarding mergers and acquisitions in the global financial services industry. It examines the global deal-flow during the eleven-year period 1985-95 and generates a global typology of intra- and inter-sectoral M&A transactions among and between banks, insurance companies and securities firms. From these data it identifies financial services as one of the most active industries involved in the global M&A deal-flow. It also identifies the areas of greatest M&A intensity within the world financial services industry. The paper then assesses the motivations for financial services M&A transactions in the context of changed regulatory and competitive factors and evolution in management objectives emphasizing the pursuit of greater operating efficiencies, enhanced economies of scale and scope and greater market power which executives and boards of directors believe has led (or will lead) to increased shareholder value and competitive performance.

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[1] Paper presented at the Conference on Financial Institution Mergers, NYU Salomon Center, October 11, 1996.

1. Introduction

Recent years have seen what is arguably the most intensive period of reorganization in the history of the financial services industry. This has been caused by a decade of institutional failure and underperformance in banking, savings and other types of financial services all around the world. It has been accelerated by enhanced capital market capacity that has encouraged extensive global merger and acquisitions (M&A) activity across a wide spectrum of industry. Failures of institutions in the banking, savings and loan, mortgage and consumer finance, insurance, and securities industries in a number of countries have been the result, directly and indirectly, of extensive deregulation, intensified disintermediation, interest rate volatility and asset deflation, much greater competition for funds and transactions, and in many cases management mistakes. These problems have resulted in extensive intervention (rescues) by regulators and taxpayers, and greater shareholder activism and opportunism at a time of substandard performance on the part of many financial services firms.

Consolidation, especially in U.S. commercial banking, has been considerable—with the number of banks being reduced by one-third from nearly 15,000 to approximately 10,000 over the past decade 1985-95. What is less visible, however, may be the intensity of financial services industry reorganizations relative to the degree of reorganization in other sectors of the economy, and the extensive parallel activity that has taken place in the financial services industries in Europe and Japan for substantially the same reasons.

These events have taken place during a time of far-reaching globalization of capital markets, with greatly increased volumes of financial activity made possible by the need to finance government deficits, technological developments, financial innovation and competitive opportunities. An environment for funding and executing large merger and acquisition transactions developed. As a result, a growing volume of M&A deals developed during the 1980s, some of them hostile, resulting in a significant restructuring of industrial companies in the United States. This wave of activity spread to Europe at the end of the 1980s, making possible transactions that could not have been completed only a few years before. [Walter and Smith, 1990] At the same time, banks and other financial services firms discovered that they were no longer protected from such activity by their regulators—and no longer able to repel takeover attempts effortlessly—so they became subject to much the same market pressures that characterized industry in general. As a result, a world-wide, market-driven period of consolidation and restructuring in financial services began.

Despite market conditions and the critical need for economic restructuring in financial services, however, these developments might not have occurred if two major regulatory developments not taken place at about the same time. The adoption of the BIS accords in 1986 by the central banks of the leading industrial countries provided an approach to assuring safety for banking systems by applying standards of risk-adjusted minimum capital adequacy ratios. This enabled regulators to shift their emphasis from maintaining stability and safety—at whatever cost to efficiency and competitiveness—to higher levels of banking performance and providing adequate

market returns to investors. The second major regulatory shift occurred when the European Union finalized its Second Banking Directive in 1987, which provided for a single banking license for the conduct of business throughout the EU—subject to home country supervision—as well as the acceptance of universal banking principles by all member countries and the ability of non-European firms to participate in the new marketplace through an EU-licensed subsidiary subject to reciprocity understandings. These developments in Europe accelerated regulatory shifts towards universal banking in the United States and Japan as well, and creating both strategic difficulties and strategic opportunities for many. [Smith, 1993; Saunders & Walter, 1995; Smith & Walter, 1997].

2. Industrial Restructuring Though Mergers and Acquisitions

During the eleven years from 1985 through 1995, more than $4.5 trillion in M&A transactions were completed.[2] This total comprised approximately 58,000 reported transactions in the United States, Europe and the rest of the world, and represented the largest nominal volume of M&A transactions in history—although probably not the largest relative to global economic activity. About 47% of the value of the 1985-95 transactions-flow was accounted for entirely in the United States, which had experienced three prior merger booms in the Twentieth Century. Another 14% of the deal-flow was accounted for by cross-border transactions in which one party was from the United States, usually the seller. And 39% of the transactions by value (46% by number of deals) were entirely outside the United States (i.e., neither

[2] Data for this paper is from the merger and acquisition database of Securities Data Corporation.

buyer nor seller were U.S.-based companies). During this eleven-year period, the total volume of global transactions increased four-fold (in dollar-value terms). However, the non-U.S. component grew over ten-fold, reflecting the fact that Europe, in particular, was experiencing its first major M&A boom as a result of a variety of factors including extensive deregulation and increased competition in the EU as a result of the Single Market Act, improved capital market capacity, privatizations, global convergence of attitudes regarding corporate governance, performance and shareholder value, and increasing know-how and ease of execution of corporate restructurings through market-driven M&A transactions. [Walter & Smith, 1990; Smith, 1993] The relevant data are contained in Exhibit 1.

Insert Exhibit 1 here

During the eleven year period 1985-1995, firms in the financial service industry[3] participated extensively in M&A transactions, accounting for more than 44% of the total and aggregating almost $2 trillion in announced values.[4] They represented 42% of the U.S. domestic total and almost half of the total transaction volume outside the United States.

In the United States, financial services was the most active industry in terms of sellers, and second by buyers of all sectors involved in M&A transactions during the

[3] The SDC financial services "industry" grouping includes commercial banks and bank holding companies; savings institutions; credit institutions; real estate, mortgage bankers and brokers; investment and commodity firms; dealers and exchanges; insurance companies; and other financial organizations.

[4] The data are for completed transactions only, recorded at their date of announcement.

Exhibit 1
Completed Global M&A Transactions
1985-1995
($ billions - thousands of transactions)

	1985		1995		11 Years 1985-1995	
	$ Value (%)	# (%)	$ Value (%)	# (%)	$ Value (%)	# (%)
US Domestic						
All Industries	192.5 (82.5)	0.8 (72.7)	389.2 (46.9)	6.5 (40.1)	2,129.1 (47.3)	24.2 (41.9)
All Financial Services	*47.9 (82.3)*	0.7 (77.7)	196.5 (49.9)	2.5 (41.7)	904.3 (46.1)	17.1 (45.1)
US Cross-Border						
All Industries	15.7 (6.8)	0.1 (0.9)	109.6 (13.2)	1.8 (1.1)	618.8 (13.8)	6.4 (11.1)
All Financial Services	*6.3 (10.8)*	0.1 (8.6)	20.1 (5.1)	0.3 (5.0)	271.6 (13.9)	2.8 (7.4)
Non-US						
All Industries	24.8 (10.7)	0.2 (1.8)	330.4 (39.8)	7.9 (48.8)	1,751.1 (38.9)	27.2 (47.0)
All Financial Services	*4.0 (6.9)*	0.1 (8.6)	176.9 (45.0)	3.2 (53.3)	785.1 (40.0)	18.0 (47.5)
Total						
All Industries	233.0 (100.0)	1.1 (100.0)	829.2 (100.0)	16.2 (100.0)	4,499.0 (100.0)	57.8 (100.0)
All Financial Services	*58.2 (100.0)*	0.9 (100.0)	393.5 (100.0)	6.0 (100.0)	1,961.0 (100.0)	37.9 (100.0)

ata: Securities Data Corporation. Author calculations.

period. In Europe, it was the second most active industry in terms of both buyers and sellers. In short, the intensity of financial services M&A transactions increased significantly, especially outside the United States. Mergers were big during the past decade, and financial services mergers were a major reason why.

Exhibit 2 provides a summary geographic profile of global M&A activity in the financial services sector during this period.

Insert Exhibit 2 here

These data still do not include some of the world's largest banking mergers, such as Bank of Tokyo and Mitsubishi Bank, Chemical Bank and Chase Manhattan, and First Interstate and Wells Fargo in the United States, or Banque Indosuez and Credit Agricole in France—all of which occurred after the end of 1995.

3. The Dynamics of M&A Activity in Financial Services

Strategic restructuring in the financial services industry may reflect many different types of transactions, each of which represents a different approach. First, domestic banks may acquire other domestic banks—such as the aforementioned Chemical Bank acquisition of Chase Manhattan in the United States and Mitsubishi Bank's combination with Bank of Tokyo, or Credit Suisse's acquisition of Swiss Volksbank. Or the emphasis could be on acquiring a foreign bank through a cross-border M&A deal such as the Hong Kong and Shanghai Banking Corporation's acquisition of Midland Bank of the U.K. The same intra-sector domestic or cross-border acquisitions may occur in insurance, such as the French AXA group's

Exhibit 2

Intensity of Financial Services M&A Activity

Dollar Value of Financial Services Industry as a %	**1985**	**1995**	**11 Years**
U.S. domestic as percent of global total	24.9	41.6	40.6
U.S. cross-border as percent of global total	15.9	78.3	49.4
Non-U.S. as percent of global total	16.1	52.1	42.8
Financial Services as percent of global M&A activity	25.0	50.7	42.1

Data: Securities Data Corporation

acquisition of a controlling interest in Equitable Life in the United States. Or it may occur in the securities industry, as developed domestically in a major way after a spate of deregulation during the 1970s in the U.S. and during the 1980s in the U.K.—and more recently on a cross-border basis in the case of Merrill Lynch's 1995 takeover of Smith New Court in London. Finally, cross-sector domestic or foreign acquisitions may take place bi-directionally between banks and insurance companies, banks and securities firms, or securities firms and insurance companies. Recent examples include Swiss Bank Corporation's acquisition of S.G. Warburg & Co., Internationale Nederlanden Groep's acquisition of Barings PLC, and Travelers Group's acquisitions of Smith Barney and Shearson Lehman Brothers.

These transactions are generally motivated by strategic considerations, and sometimes the strategy proves to be unsuccessful. When this turns out to be the case, divestitures take place. Among the more prominent of these are included American Express' sale of its Trade Development Bank and the Shearson Lehman businesses, and General Electric's sale of Kidder Peabody.

Financial Services Subgroups

Financial services M&A activities involve an array of industry subgroups and are carried out in many countries and across borders. We have separated the deal-flow associated with just three groups—commercial banking, securities, and insurance —from the global financial services industry M&A totals. Together, these three subgroups represented over 25% of the total value of M&A transactions during 1985-

1995.[5] Exhibit 3 presents the composition of the transactions from this sample, and demonstrates the predominance of transactions in the banking sector, where industry consolidation has been pervasive.

Insert Exhibit 3 here

Intra-sector Transactions. During the eleven-year period, there were $417 billion of completed M&A transactions in this sample. Of these transactions, 59.5% represented banks acquiring other banks (average transaction size, $51.2 million), with about 60% of the activity occurring in the United States. The second largest component was insurance companies acquiring other insurance companies (average deal size $95 million) comprising 22.8% of the total. Intra-banking and intra-insurance deals therefore accounted for more than 80% of all transactions for these three financial services industry segments—presumably reflecting the relative size of the two groups. Probably for the same reason, transactions among securities broker-dealers were small by comparison, representing only 3.5% of the total (average deal size $26.3 million). Almost 70% of the value of transactions within the securities industry occurred in the United States and the United Kingdom, the only countries with significant numbers of independent broker-dealers.

Cross-border intra-sector transactions were concentrated in foreign acquisitions of U.S. and U.K. banks, German and British acquisitions of insurance companies abroad, and foreign purchases of U.K merchant banks. Banks acquiring foreign

[5]The database captures all announced and completed deals.

Exhibit 3
Selected Financial Services M&A Deal-Flow, 1985-1995
($ millions and number of transactions)

	Target Institutions			
Acquiring Institution	**Commercial Banks**	**Securities Firms**	**Insurance Cos.**	**Total Buyers**
Commercial Banks	306,331 (5,416)	15,934 (331)	15,329 (137)	337,594 (5,884)
Securities Firms	8,047 (139)	19,772 (629)	5,462 (49)	33,281 (817)
Insurance Cos.	17,322 (137)	4,421 (100)	107,151 (1,337)	128,894 (1,573)
Total Sellers	331,700 (5,691)	40,127 (1,060)	127,942 (1,523)	499,769 (8,274)

Data: Securities Data Corporation.

insurance companies occurred mainly in emerging market countries, especially as part of the debt-for-equity swap transactions that occurred in the 1980s.

Inter-sector transactions. In terms of inter-sector deal-flow, the largest transaction volume was between banks and insurance companies, representing 7.2% of the total. Almost all of these transactions were in Europe, where banking/insurance combinations are permitted (they are not in the United States and Japan). There were slightly more insurance company purchases of banks (125 deals valued at $16 billion, averaging $128 million in size) than banks purchasing insurance companies (110 transactions valued at $14 billion, averaging $127 million in size). There were, however, 298 bank purchases of securities firms, mostly in advanced countries (valued at $12 billion, averaging $40.3 million in size) and 128 transactions representing securities firms buying banks ($7.7 billion, averaging $60.2 million in size), mostly in emerging- market countries and often involving control groups acquiring state-owned banks that were privatized.

Partial stakes and alliances. The data also reveal that about 15% of the M&A deal-flow involved partial ownership stakes (as opposed to 100% control), mainly in emerging market countries. This pattern reflects a long-standing practice in banking to participate in "strategic alliances," although for larger institutions such alliances have usually been unrewarding and have usually been unwound after a time. Nonetheless, the data indicate that 68% of the deals where banks acquired stakes in insurance companies and 53% of the deals where banks acquired stakes in securities firms involved partial control. In the case of securities firms acquiring banks, partial

stakes represented 70% of the deal-flow.

Hostile deals. The data also indicate a relatively minor role in financial service transactions of hostile deals—that is, deals which (however they eventually end-up) were initially met by a non-friendly response from the board of directors of the target institution. Altogether, about 9% of the intra-bank deals were hostile in 1985-1995, with almost all of this volume originating in the United States and France. Since 1994, however, hostile attempts have made noteworthy appearances in the Unites States (Wells Fargo and First Interstate, for example). Also, banks and insurance companies that were thought to be underperforming by key shareholders have triggered pressures to merge. For example, Chase Manhattan was under shareholder pressure prior to merging with Chemical Bank, and Kemper fought off GE Capital before being acquired by Zurich Insurance. Hostile activity has even appeared in one of the most unlikely places of all, Switzerland, where a dissident shareholder attempted to change the board of directors of the Union Bank of Switzerland. This effort was ultimately unsuccessful, but close enough to extract a number of important concessions.

The share of hostile transactions within the insurance sector was only 16%, but over 42% of that deal-flow involved partial ownership positions. Within the securities industry, 32% of the deals were hostile and 40% involved partial ownership positions.

Overall, it appears that, for the most part, the role of hostile transactions in the financial services sector is quite limited, while the role of partial stakes is quite high, as compared with global M&A transactions in the non-financial sector. [Smith and Walter, 1997] This may be partially explained by the role of regulatory approvals in

this sector, the importance of human resources who may well leave in the event of a hostile takeover, and the perceived value of strategic alliances cemented by stakeholdings in achieving management objectives without attaining full control.

4. Driving Forces

Some of our earlier work has helped us understand the motivations for underlying global M&A activity in the past. An analysis of the merger boom in the United States in the 1980s, together with the three prior merger booms earlier in the century [Smith, 1990] indicates that while no single cause for surges in M&A activity has been identified, merger booms do tend to develop during times when four conditions apply: (1) there are significant changes in government regulatory or economic policies; (2) There is solid economic or technological rationale for the restructuring; (3) Companies are undervalued relative to their replacement values; and (4) Strong "bull" markets exist in which transactions can be financed.

Boom conditions in Europe. Our analysis of the early days of the first-ever merger boom in Europe [Smith & Walter, 1990] indicates that all of these conditions applied after the middle 1980s. It was clear that the passage of the EU's Single Market Act and a more market-oriented economic philosophy—reflected in significant changes in government economic policies—was likely to increase competition within most European industries and require all companies to rethink their overall competitive effectiveness, their strategic objectives, and their exposure to risk. This corporate repositioning was a strong motivation, in many cases, for rapid reorganizations through the markets. And as financial market depth increased, corporations began to

rely on it for restructuring purposes. For their part, having been reorganized in many cases by regulatory changes in the mid-1980s, the markets were able to supply the financial capacity needed to make the M&A transactions possible.

Special conditions in financial services. Among all of the industries in the U.S. and Europe that have undergone restructuring during the past decade, the financial services sector has been clearly in the lead. In addition to the factors mentioned above, the industry has experienced several important developments not shared by nonfinancial industries:

- **Major financial losses were incurred in banking and insurance all around the world** from asset-liability mismatching, and adverse credit exposures on loan positions that had grown rapidly as a result of intensified competition and gaps in risk-management capability. A significant part of these losses can be attributed to out-of-date management attempting to cope with a surge of unusually aggressive rivalry among banks during a period of high interest rate volatility. The carnage was especially severe in those countries in which the banks boldly attempted to stake-out market leadership positions for the future and failed (Japan, the United States, the United Kingdom, France, and Scandinavia). One consequence was that large part of national banking systems had to be rescued or reorganized in order to save them, and this resulted in major management changes and strategic rethinking.

- **A massive shift in wholesale finance from bank-based to market-based financing facilities** as capital markets grew and became deeper and more efficient on a globalized basis, and as bank lending became increasingly uncompetitive. Many key business areas in banks and insurance became obsolete.

- **Increased competition for deposits from nonbanking suppliers** such as mutual funds, even as many banks remained in the grip of out-of-date regulatory constraints that did not apply to the new competitors.

- **Rapidly changing technology** that increased the speed of product and process innovation and stimulated the willingness of traditional clients to shop around.

- **Regulatory conditions blocked important financial institutions from responding** in a timely or preemptive way to the many changes in their business. Besides applying entry and operating restrictions to foreign-based players, many regulators tolerated a certain amount of anti-competitive or cartel-like behavior on the part of domestic institutions. For years regulators understood that a well-protected industry may not be efficient from the standpoint of the customer, but it tends to be a safe industry, and therefore not a problem for the regulators. Thus they were reluctant to change things if making banks more competitive also meant they might be riskier. Still, in time the regulatory blanket was lifted and replaced by new regimes that were more sympathetic to enhanced competitive performance, but also tougher on performance that was not up to solvency standards. For at least a decade, what banks in particular could do and not do was in continuous state of change.

Induced strategic changes. In response to these conditions, many banks adopted strategic changes designed to meet them. These were both offensive and defensive in character. Among the offensive strategies were those of several U.S. banks such as Bank of America, Nationsbank, Wells Fargo, First Union, BancOne and Key Bank, which relied on superior management to be able to realize significant market-share opportunities by rapidly increasing their size and reach. Two American banks, JP Morgan and Bankers Trust, sold branches or reconfigured their business in order to become specialists in wholesale finance, securities and risk management. Still others, like Citibank, streamlined themselves to focus on consumer finance. Many peripheral activities were hived-off in the process. In Canada, the major banks all acquired securities firms. Other offensive strategies were seen in Europe where large banks such as Crédit Lyonnais strove to gain the leading market share in the new, integrated European banking market by acquiring banks in other countries—ultimately with little success and at enormous cost to the French taxpayer. Some banks preferred

strategic alliances or minority ownership positions with banks in other countries, such as Santander-Royal Bank of Scotland and Dresdner Bank-BNP. Other banks, like Deutsche Bank, Swiss Bank Corp., UBS, the Dutch banking-insurance group ING as well as Dresdner Bank focused on cross-border acquisitions in non-lending sectors such as securities and asset management, especially in the U.K. where all but two major merchant banks and brokers have been sold or linked to foreign firms seeking to build up their capital market activities..

Insurance attracted several banks as well, especially Deutsche Bank (which started its own life insurance subsidiary) and Lloyds Bank of the U.K. Internationale Nederlanden Groep (ING) was created out of the merger of a large insurance company with the third largest commercial bank and the postal savings system, and has since acquired Baring Brothers in the U.K. The Travelers Group in the U.S., once a premier insurance company, was aggressively remade by new management into a financial services holding company specializing in insurance, asset management and securities brokerage.

Other strategies have been more defensive in nature, and emphasized profit and market-share protection by increasing the size of the franchise and the capital base, more than creating new revenues from different activities or client groups. Among these were the aforementioned mergers that appeared in the United States, the Netherlands, Finland, Italy, Sweden, Switzerland, and perhaps most recently and visibly in Japan, where some of the world's largest banks (Mitsubishi Tokyo, Dai-Ichi Kangyo, Sakura, Asahi) have been assembled by merger, apparently at the suggestion

or encouragement of the Ministry of Finance. In the United States, domestic banking merger transactions were motivated by mainly cost-cutting (profit enhancing) opportunities and a belief in economies of scale, and elsewhere by the massing-together of branches, customers and capital so as to create an impregnable force in the home market.

Speed of change. We now know that not all of these strategies—especially those based on acquisitions—have been successful in the financial services sector. But the changes in the financial services industry were so considerable during this period that virtually all of the major institutions adjusted their strategies as a result. The virtue of change by acquisition was usually the speed with which it could be done, as compared to a much slower do-it-yourself approach. Part of the appeal of speed lay in the public relations component. Management could persuade others that motion was progress, and wait for the market to reward the motion—if not ultimately the strategy.

Synergies and economies. Economies of scope and scale may be significantly restrained by regulatory restrictions in a particular market, indicating the importance of the impact of competitive distortions on horizontal integration. Within this context, various motivations have been identified as to why financial services firms engage in M&A transactions. [Hawawini and Swary, 1990] These include:

- **Accessing information and proprietary technologies** (know-how) in possession of by the target firm.
- **Increasing market power** by raising market share to widen cost-price margins, including the ability to carry out large transactions that otherwise would require participation by other firms.

- **Reduce unit costs** and increase operating efficiency by eliminating redundant facilities and personnel, as well as improve the quality of management, including hostile takeovers to improve incumbent under-performing management.

- **Achieve economies of scale** by creating a combined institution of larger size capable of achieving lower unit-costs of producing financial services.

- **Achieve economies of scope**, or synergies with the target firm.

- **Achieve diversification** and greater earnings stability.

- **Achieve certain tax benefits.**

- **Satisfy management's goals**, when its hubris and self aggrandizement may be driven by a utility function that is quite different from that of shareholders.

Not every M&A transaction is motivated by all of these factors, but most are motivated by some. Whether or not these objectives are realized, and over how long a time-period, determines whether or not an individual transaction eventually succeeds from the perspective of shareholder value.

5. Achievement of Economies of Scale and Scope

From a strategic perspective, one of the main reasons for M&A activity in the financial services industry is capturing significant economies of scale and scope, both domestically and internationally. Whether such economies exist in financial services—a question that is at the heart of strategic and regulatory discussions about optimum firm size and structure in the financial services sector—can be approached by comparing the performance of large and diverse firms with smaller and more narrowly-focused ones.

Economies of scale. In an information- and distribution-intensive industry with

high fixed costs, such as financial services, there should be ample potential for scale economies—as well as for diseconomies attributable to administrative overhead, agency problems and other cost factors once very large size is reached.

Economies of scope. As in the case of economies of scale, there should be ample potential for economies and diseconomies of scope in the financial services sector, which may arise either through supply- or demand-side linkages.

On the supply side, they relate to cost savings through sharing of overheads and improving technology through joint production of similar services, with diseconomies arising from such factors as inertia and lack of responsiveness and creativity that may come with increased firm size and bureaucratization, "turf" and profit-attribution conflicts that increase costs or erode product quality in meeting client needs, or cultural differences across the organization that inhibit seamless delivery of a broad range of financial services.

On the demand side, economies of scope (cross-selling) arise when the all-in cost to the buyer of multiple financial services from a single supplier—including the price of the service, plus information, search, monitoring, contracting and other transaction costs—is less than the costs of purchasing them from separate suppliers by virtue of lower non-price costs. Demand-related diseconomies of scope could arise through conflicts of interest encountered by the multi-product financial firm that may cause it to act against the interests of the client in sale of one service in order to facilitate sale of another, or information disclosure considered inimical to the client's interests.

Empirical findings. Individually or in combination, economies (diseconomies) of scale and scope may be passed along to the buyer in the form of lower (higher) prices resulting in a gain (loss) of market share, or absorbed by the supplier to increase (decrease) profitability. They should be directly observable in cost functions of suppliers and aggregate performance measures. Studies of scale and scope economies in financial services are unusually problematic. The nature of the empirical tests used, the form of the cost function, the existence of unique optimum output levels, and the optimizing behavior of financial firms all present conceptual difficulties. Limited availability and conformity of data present empirical problems. And the conclusions of any study that has detected (or failed to detect) economies of scale and/or scope in a sample selection of financial institutions does not necessarily have general applicability.

Estimated banking cost functions form the basis most empirical tests of economies of scope and scale in financial services. Past empirical studies of this subject have included Benston [1982], Berger [1987], Fields & Murphy [1989], Gillian et al. [1984], Goldstein [1987], Kim [1986] Kolari & Zardhooki [1987], Lawrence [1989], Mester [1987, 1990], Murray & White [1983], Noulas et al [1990], Shaffer [1988], and Yoshika & Nakajima [1987]. In 14 of the 19 studies, economies of scale were found to apply, at least to very small banks. Only one study, focusing on Canadian insurance agencies [Kellner & Mathewson, 1983] actually rejected the proposition that scale economies exist. Various studies found the point of increasing marginal costs to be anywhere between $25 million and $60 billion in assets. Most

concluded that the point of inflection was well below $100 million in asset size. Most also concluded that some diseconomies of scope are found across all banks.

A more recent study [Saunders and Walter, 1994) presents two sets of empirical tests on data taken from the world's 200 largest banks during the 1980s. First, evidence is found—using data from the 1980s—that very large banks have grown more slowly than the smaller among the large banks. Second, positive economies of scale and negative-cost (supply-side) economies of scope appear to have been the rule for large banks.

In most national markets for financial services, suppliers have shown a tendency towards oligopoly but are prevented from developing into full monopolies. Internationally, there are relatively few cases where foreign-based financial institutions have made significant inroads into domestic markets. This suggests that gains to scale may be fully utilized in domestic markets, but may be prevented from being utilized in international markets. By looking only at the large banks across many countries, full utilization of economies of scale seems not to have been exploited in the past. If this is true, considerable consolidation of banking worldwide may follow international liberalization of markets for financial services. Such consolidation, in turn, may be limited by diseconomies of scale which, empirical evidence suggests, set in among the largest of the large banks.

With regard to diseconomies of scope found in the empirical research, the 1980s was a period during which institutions wishing to diversify away from purely commercial banking activities incurred considerable costs in expanding the range of

their activities, either by acquisition or otherwise. If this diversification effort involved significant sunk costs—while expenses on the accounting statements during the period under study—to effect future penetration of fee-earning service markets, then we would expect to see particularly strong evidence of diseconomies of scale in non-interest-related activities and diseconomies of scope between lending and non-interest-related activities reversed in future periods. If the banks' investment in staff, training, and systems bear returns in future periods commensurate with these expenditures—and if those banks that offer non-traditional banking services unprofitably retreat from the field—then neutrality or positive economies of scope may well exist.

It is also reasonable to conclude that some demand-related scope economies are realizable. Hence, if there are zero supply diseconomies of scope (as there appear to be for the large banks included in empirical studies) one would expect demand-related economies of scope to dominate. Several authors have found very large disparities in efficiency among banks of similar size—difference in so-called x-efficiency—suggesting that the way banks are run is far more important that their size or the selection of businesses that they pursue. [Berger, Hancock and Humphrey, 1993; and Berger, Hunter and Timme, 1993]

Pricing factors. A healthy bank typically will be acquired at a premium above its book (or liquidation) value. The premium reflects the value of the goodwill of the franchise being acquired and other intangibles. But it also represents the value to the acquirer of the opportunity to manage the acquired business, and the opportunity to realize potential economies of scale and scope. Presumably the acquired institution

would be managed differently so as to create the incremental value needed to reimburse the shareholder of the acquiring institution for the willingness to pay the premium in the first place. Adding new customers, offering more services, eliminating redundancies and lowering costs can accomplish this, although to do so often means sudden layoffs of large numbers of personnel, an action that is not possible in all countries. Historically, bank acquisitions have occurred at price to book value ratios of about 2.0, sometimes as high as 3.0 or even more. In eight of the eleven years of our study, however, the average price to book ratio for the U.S. banking industry acquisitions was lower than 2.0, averaging 1.5 and ranging from 1.1 in 1990 and 1.8 in 1985. In two years, the price to book ratio exceeded 2.0—in 1986 it was 2.8 and in 1993 in was 3.2. Price does matter, although perhaps it matters more to economists and shareholders than to managers of the acquiring institutions. However strategically attractive, at the wrong price an acquisition will fail to accomplish its objectives.

Shareholder responses. If a strategic change does not produce economies of scale and/or scope or greater x-efficiency—reflected in greater profits for the same assets and/or greater penetration of the market—then what is its value? Avoiding an acquisition attempt from a better-managed suitor who will pay a premium price for the enterprise does not seem as acceptable today to shareholders as it did in the past. In a world of more open and efficient markets for shares in financial institutions, shareholders increasingly tend to have the final say about the future of enterprises. They will buy or sell shares based on what they think about plans and capabilities of

firms and their managements. Today, at least in the United States, shareholders have been rewarding acquirers and those being acquired alike. Those attempting bold new actions are being rewarded, although some may be seen to fail in the future and lose their investors' support.

6. Conclusions

The global financial services industry has been buffeted by changes emanating from powerful internal and external forces over the past decade, and is reacting by reorganization, consolidation and streamlining. Much of the transformation of the industry is occurring in the M&A market, which permits major strategic plans to be initiated and executed quickly. The intensity of the transformation is greatest in the United States, where the markets are reasonably efficient and pressures for change from shareholder groups can be strong. But parallel activity is clearly visible as well in most OECD countries—even in Japan, which traditionally had a low level of M&A transactions, and in certain emerging market countries. During the eleven-year period under study—and continuing since—the global financial services industry has been in the grip of a global mergers and acquisition boom which is likely to continue for some time to come. The task of reorganizing twenty or thirty thousand banks around the world is a formidable one that will require years. As financial markets become still more "seamless," the M&A data presented here may well be just the beginning. Furthermore, some of the evidence from the past, such as the limited role of hostile transactions and the extensive role of minority stakeholdings, are likely to evolve rather differently in the future

What is less clear is the structures into which the industry will ultimately itself. Competitive considerations are dominant for now, and financial services firms know they must change significantly to become more competitive, sell out to someone else if they cannot, or gradually wither away. Major banking, securities and insurance franchises worry about being displaced by competition from outside their specific sector or by powerful new entrants from abroad. They also know they must achieve returns on their capital that are fully consistent with the risks they run and at least equal to returns available elsewhere in the economy for comparable risks. Various strategies have thus emerged, both offensive and defensive, specialized and universal, cross-sectoral and global. All of them seek economies of scale and of scope that may be hard to find given contradictory and incomplete empirical evidence as to how prevalent they actually are. In any case, strategy isn't everything. Implementation is at least as important.

There are less defensible reasons for M&A transactions in the financial services industry as well, some of which may eventually place firms in conflict with shareholders (e.g., aggressive overbidding), antitrust authorities, and bank regulators. As abuses occur, however, countervailing regulatory or corporate-governance actions tend to develop. Managers ignore these countervailing actions at their own peril. Equally important will be the market's reaction to those whose strategies succeed and those whose don't.

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