

# **Strategies in Banking and Financial Services Firms: A Survey**

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## **Abstract**

This survey paper reviews the basic parameters of strategic positioning and execution in multi-functional financial services firms. We begin with a model of financial intermediation between end-users of the financial system as a way of locating specific financial intermediation functions. Shifts in intermediation shares are superimposed on this flow-of-funds profile, focusing on their implications for alternative business models available to financial institutions. The next section of the paper links the structural story to a normative strategic positioning matrix, which combines standard structure-conduct-performance precepts with the potential realization of scale, scope, x-efficiency, market-power, transaction- and information-cost dimensions, as well as imbedded risk exposures and conflicts of interest. The final section of the paper considers the value of natural hedges incorporated into multifunctional business platforms against the accompanying potential for a conglomerate discount in the share price. JEL G2, F23, L23. Keywords: Financial services. Banking. Strategic positioning. Strategic execution.

Few industries have encountered as much 'strategic turbulence' in recent years as the financial services sector. In response to far-reaching regulatory and technological change, together with important shifts in client behavior and the de facto globalization of specific financial functions, the organizational structure of the industry has been profoundly displaced and there remains a great deal of uncertainty about the nature of any future equilibrium in the industry's contours. This paper assesses the factors that appear to be driving the structural reconfiguration of the financial services sector, broadly defined, and

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the structural consequences. We then examine the strategic options that are open to financial firms in responding to -- and anticipating -- structural change, and the factors that seem to drive competitive performance with respect to market share and profitability.

## **Financial Intermediation Dynamics**

The central component of any model of a modern financial system is the nature of the conduits through which the financial assets of the ultimate savers flow -through to the liabilities of the ultimate users of finance, both within and between national economies. [Smith and Walter, 2003] This involves alternative and competing modes of financial intermediation, or 'contracting', between counterparties in financial transactions. A guide to thinking about financial contracting and the role of financial institutions and markets is summarised in Exhibit 1.<sup>1</sup> The diagram depicts the financial process (flow-of-funds) among the different sectors of the economy in terms of underlying environmental and regulatory determinants or drivers as well as the generic advantages needed to profit from three primary linkages:

- Fully intermediated financial flows. Savings (the ultimate sources of funds in financial systems) may be held in the form of deposits or alternative types of claims issued by commercial banks, savings organisations, insurance companies or other types of financial institutions that finance themselves by placing their liabilities directly with the general public. Financial institutions ultimately use these funds to purchase assets issued by non-financial entities such as households, firms and governments.
- Investment banking and securitized intermediation. Savings may be allocated directly or indirectly via fiduciaries and collective investment vehicles, to the purchase of securities publicly issued and sold by various public- and private- sector organizations in the domestic and international financial markets.
- Direct-connect mechanisms between ultimate borrowers and lenders. Savings surpluses may be allocated to borrowers through various kinds of direct-sale mechanisms, such as private placements, usually involving fiduciaries as

intermediaries.

Ultimate users of funds comprise the same three segments of the economy — the household or consumer sector, the business sector and the government sector.

- Consumers may finance purchases by means of personal loans from banks or by loans secured by purchased assets (hire-purchase or installment loans). These may appear on the asset side of the balance sheets of credit institutions for the duration of the respective loan contracts on a revolving basis, or they may be sold off into the financial market in the form various kinds of securities backed by consumer credit receivables.
- Corporations may borrow from banks in the form of unsecured or asset-backed straight or revolving credit facilities and/or may sell debt obligations (for example commercial paper, receivables financing, fixed-income securities of various types) or equities directly into the financial market.
- Governments may likewise borrow from credit institutions (sovereign borrowing) or issue securities directly.

Borrowers such as corporations and governments also have the possibility of privately issuing and placing their obligations with institutional investors, thereby circumventing both credit institutions and the public debt and equity markets. Consumer debt can also be repackaged as asset-backed securities and sold privately to institutional investors.

In the first mode of financial contracting in Exhibit 1, depositors buy the 'secondary' financial claims or liabilities issued by credit institutions, and benefit from liquidity, convenience, and safety through the ability of financial institutions to diversify risk and improve credit quality by means of professional management and monitoring of their holdings of primary financial claims (both debt and equity). Savers can choose from among a set of standardized contracts and receive payments services and interest.

In the second mode of financial intermediation in Exhibit 1, investors can select their own portfolios of financial assets directly from among the publicly issued debt and

equity instruments on offer. This may provide a broader range of options than standardized bank contracts, and permit the larger investors to tailor portfolios more closely to their objectives while still achieving acceptable liquidity through rapid and cheap execution of trades – aided by linkages with banks and other financial institutions that are part of the domestic payments mechanism. Investors may also choose to have their portfolios professionally managed, for a fee, through various types of mutual funds and pension funds – designated in Exhibit 1 as collective investment vehicles.

In the third mode of financial intermediation, institutional investors buy large blocks of privately issued securities. In doing so, they often face a liquidity penalty – due to the absence or limited availability of a liquid secondary market – for which they are rewarded by a higher yield. On the other hand, directly placed securities can be specifically ‘tailored’ to more closely match issuer and investor requirements than can publicly issued securities. Market and regulatory developments (such as SEC Rule 144A in the US) have added to the liquidity of some direct-placement markets.

Value to ultimate savers and investors, inherent in the financial processes described here, accrues in the form of a combination of yield, safety and liquidity. Value to ultimate users of funds accrues in the form of a combination of financing cost, transactions cost, flexibility and liquidity. This value can be enhanced through credit backstops, guarantees and derivative instruments such as forward rate agreements, caps, collars, futures and options. Furthermore, markets can be linked functionally and geographically, both domestically and internationally. Functional linkages permit bank receivables, for example, to be repackaged and sold to nonbank securities investors. Privately placed securities, once they have been seasoned, may be able to be sold in public markets. Geographic linkages

make it possible for savers and issuers to gain incremental benefits in foreign and offshore markets, thereby enhancing liquidity and yield or reducing transaction costs.

### **Shifts in Intermediary Market Shares**

Developments over the past several decades in intermediation processes and institutional design both across time and geography are striking. In the United States 'commercial banks' – institutions that accept deposits from the public and make commercial loans – have seen their market share of domestic financial flows between end-users of the financial system decline from about 75 per cent in the 1950s to under 25 per cent today. In Europe the change has been much less dramatic, and the share of financial flows running through the balance sheets of banks continues to be well over 60 per cent– but declining nonetheless. And in Japan as well as much of the rest of Asia, banks continue to control in excess of 70 per cent of financial intermediation flows. Most emerging market countries cluster at the highly intermediated end of the spectrum, but in many of these economies there is also factual evidence of declining market shares of traditional banking intermediaries. Classic banking functionality, in short, has been in long-term decline more or less worldwide.

Where has all the money gone? Disintermediation as well as financial innovation and expanding global linkages have redirected financial flows through the securities markets. Exhibit 2 shows developments in the United States from 1970 to 2000, highlighting the extent of commercial bank market share losses and institutional investor gains. While this may be an extreme case, even in highly intermediated financial disintermediation of the core deposit gathering and commercial lending functions of banks

has been significant.

Ultimate savers increasingly use the fixed-income and equity markets directly and through fiduciaries which, through vastly improved technology, are able to provide substantially the same functionality as classic banking relationships – immediate access to liquidity, transparency, safety, and so on – coupled to a higher rate of return. The one thing they cannot guarantee is settlement at par, which in the case of transactions balances (for example money market mutual funds) is mitigated by portfolio constraints mandating high-quality, short maturity financial instruments. Ultimate users of funds have benefited from enhanced access to financial markets across a broad spectrum of maturity and credit quality using conventional and structured financial instruments. Although market access and financing cost normally depend on the current state of the market, credit and liquidity backstops can be easily provided.

At the same time, a broad spectrum of derivatives overlays the markets, making it possible to tailor financial products to the needs of end-users with increasing granularity, further expanding the availability and reducing the cost of financing on the one hand and promoting portfolio optimization on the other. And as the end-users have themselves been forced to become more performance-oriented in the presence of much greater transparency and competitive pressures, it has become increasingly difficult to justify departures from highly disciplined financial behavior on the part of corporations, public authorities and institutional investors.

In the process, two important and related differences are encountered in this generic financial-flow transformation. Intermediation shifts in the first place, from book-value to market-value accounting and in the second place from more intensively regulated to less

intensively regulated channels, generally requiring less oversight and less capital. Both have clear implications for the efficiency properties of financial systems and for their transparency, safety and soundness. Regulatory focus in this context has migrated from institutions to markets.

### **Consequences for Institutional Competitive Advantage**

The basic microeconomics of financial intermediation have, to a significant extent, been reflected in the process of financial sector reconfiguration summarized in Exhibit 3.

In retail financial services, extensive banking overcapacity in some countries has led to substantial consolidation. Excess retail production and distribution capacity has been slimmed-down in ways that usually releases redundant labour and capital. In some cases this process is retarded by large-scale involvement of public-sector institutions and cooperatives that operate under less rigorous financial discipline. Also at the retail level, commercial banking activity has been linked strategically to retail brokerage, retail insurance (especially life insurance) and retail asset management through mutual funds, retirement products and private-client relationships. Sometimes this linkage process has occurred selectively and sometimes using simultaneous multi-links coupled to aggressive cross-selling efforts. At the same time, relatively small and focused firms have sometimes continued to prosper in each of the retail businesses, especially where they have been able to provide superior service or client proximity while taking advantage of outsourcing and strategic alliances where appropriate.

In wholesale financial services similar links have emerged. Wholesale commercial banking activities such as syndicated lending and project financing has often been shifted

toward a greater investment banking focus, while investment banking firms have placed growing emphasis on developing institutional asset management businesses in part to benefit from vertical integration and in part to gain some degree of stability in a notoriously volatile industry.<sup>2</sup>

Exhibit 4 shows the global volume of financial services restructuring through merger and acquisitions activity from 1986 through 2002 – roughly two-thirds of which occurred in the banking sector, one quarter in insurance and the remainder in asset management and investment banking.

It seems clear, from a structural perspective, that a broad array of financial services firms may perform one or more of the roles identified in Exhibit 1 – commercial banks, savings banks, postal savings institutions, savings cooperatives, credit unions, securities firms (full-service firms and various kinds of specialists), mutual funds, insurance companies, finance companies, finance subsidiaries of industrial companies, and others. Members of each strategic group compete with each other, as well as with members of other strategic groups. Assuming it is allowed to do so, each organization elects to operate in one or more of the financial channels according to its own competitive advantages. Institutional evolution therefore depends on how these comparative advantages evolve, and whether regulation permits them to drive institutional structure. In some countries commercial banks, for example, have had to 'go with the flow' and develop competitive asset management, origination, advisory, trading and risk management capabilities under constant pressure from other banks and, most intensively, from other types of financial services firms.

Industrial economics suggests that structural forms of competitive firms in any



sector, or between sectors, should follow the dictates of institutional comparative advantage. If there are significant economies of scale that can be exploited, it will be reflected in firm size. If there are significant economies of scope, either with respect to costs or revenues (cross-selling), then that will be reflected in the range of activities in which the dominant firms are engaged. If important linkages can be exploited across geographies or client segments, then this too will be reflected in the breadth and geographic scope of the most successful firms.

### **A Simple Strategic Schematic**

Exhibit 5 is a depiction of the market for financial services as a matrix of clients, products and geographies. [Walter, 1988] Financial firms clearly will want to allocate available financial, human and technological resources to those cells (market segments) in the matrix that promise to throw-off the highest risk-adjusted returns.<sup>3</sup> In order to do this, they will have to appropriately attribute costs, returns and risks to specific cells in the matrix. And the cells themselves have to be linked-together in a way that maximizes what practitioners and analysts commonly call “synergies.”

- Client-driven linkages exist when a financial institution serving a particular client or client-group can, as a result, supply financial services either to the same client or to another client in the same group more efficiently in the same or different geographies. Risk-mitigation results from spreading exposures across clients, along with greater earnings stability to the extent that income streams from different clients or client-segments are not perfectly correlated.
- Product-driven linkages exist when an institution can supply a particular financial service in a more competitive manner because it is already producing the same or a similar financial service in different client or arena dimensions. Here again, there is risk mitigation to the extent that net revenue streams from different products are not perfectly correlated.

- Geographic linkages are important when an institution can service a particular client or supply a particular service more efficiently in one geography as a result of having an active presence in another geography. Once more, the risk profile of the firm may be improved to the extent that business is spread across different currencies, macroeconomic and interest-rate environments.

To extract maximum returns from the market matrix, firms need to understand the competitive dynamics of specific segments as well as, the costs and the risks imbedded in the overall portfolio of activities. Especially challenging is the task of optimizing the linkages between the cells to maximize potential joint cost and revenue economies, as discussed below. Firms that do this well can be considered to have a high degree of “strategic integrity” and should have a market capitalization that exceeds their stand-alone value of their constituent businesses.

## **Economies and Diseconomies of Scale**

Whether economies or diseconomies of scale exist in financial services has been at the heart of strategic and regulatory discussions about optimum firm size in the financial services industry. Are larger firms associated with increased scale economies and hence profitability and shareholder value? Can increased average size of firms create a more efficient financial sector? Answers are not easy to find, because they have to isolate the impact of pure size of the production unit as a whole from all of the other revenue and cost impacts of size, discussed below.

In an information- and transactions-intensive industry with frequently high fixed costs such as financial services, there should be ample potential for scale economies. However, the potential for diseconomies of scale attributable to disproportionate increases in administrative overhead, management of complexity, agency problems and other cost

factors could also occur in very large financial services firms. If economies of scale prevail, increased size will help create financial efficiency and shareholder value. If diseconomies prevail, both will be destroyed. Scale-effects should be directly observable in cost functions of financial services firms and in aggregate performance measures.

Many studies of economies of scale have been undertaken in the banking, insurance and securities industries over the years -- see Saunders [2000] for a survey. Unfortunately, examinations of both scale and scope economies in financial services are unusually problematic. The nature of the empirical tests used, the form of the cost functions, the existence of unique optimum output levels, and the optimizing behavior of financial firms all present difficulties. Limited availability and conformity of data present serious empirical issues. And the conclusions of any study that has detected (or failed to detect) economies of scale and/or scope in a sample of financial institutions does not necessarily have general applicability. Nevertheless, the impact on the operating economics (production functions) of financial firms is so important that available empirical evidence is central to the whole argument.

Estimated cost functions form the basis most of the available empirical tests. Virtually all of them have found that economies of scale are achieved with increases in size among small commercial banks (below \$100 million in asset size). A few studies have shown that scale economies may also exist in banks falling into the \$100 million to \$5 billion range. There is very little evidence so far of scale economies in the case of banks larger than \$5 billion. More recently, there is some scattered evidence of scale-related cost gains for banks up to \$25 billion in asset size. [Berger and Mester, 1997] But according to a survey of all empirical studies of economies of scale through 1998, there was no evidence

of such economies among very large banks. Berger, Demsetz and Strahan [1998] and Berger, Hunter, and Timme [1993] found the relationship between size and average cost to be U-shaped. This suggests that small banks can benefit from economies of scale, but that large banks seem to suffer from diseconomies of scale, resulting in higher average costs as they increase in size. The consensus seems to be that scale economies and diseconomies generally do not result in more than about 5% difference in unit costs. Inability to find major economies of scale among large financial services firms is also true of insurance companies [Cummins and Zi, 1998] and broker-dealers [Goldberg, Hanweck, Keenan and Young, 1991]. Lang and Wetzel [1998] found diseconomies of scale in both banking and securities services among German universal banks.

Except for the very smallest among banks and nonbank financial firms, scale economies seem likely to have relatively little bearing on competitive performance. This is particularly true since smaller institutions are sometimes linked-together in cooperatives or other structures that allow harvesting available economies of scale centrally, or are specialists in specific market-segments in Exhibit 2 that are not particularly sensitive to relatively small cost differences that seem to be associated with economies of scale in the financial services industry. A basic problem is that most of the available empirical studies focus entirely on firm-wide scale economies when the really important scale issues are encountered at the level of individual businesses.

There is ample evidence, for example, that economies of scale are significant for operating economies and competitive performance in areas such as global custody, processing of mass-market credit card transactions and institutional asset management. Economies of scale may be far less important in other areas such as private banking and

M&A advisory services. Unfortunately, empirical data on cost functions that would permit identification of economies of scale at the product level are generally proprietary, and therefore unavailable. Disturbingly, it seems reasonable that a scale-driven strategy may make a great deal of sense in specific areas of financial activity even in the absence of evidence that there is very much to be gained at the firm-wide level. Still, the notion that there are some lines of activity that clearly benefit from scale economies while at the same time observations of firm-wide economies of scale are empirically elusive, suggests that there must be numerous lines of activity (or combinations) where diseconomies of scale exist.

### **Cost Economies of Scope**

Beyond pure scale-effects, are there cost reductions to be achieved by selling a broader rather than narrower range of products? Cost economies of scope mean that the joint production of two or more products or services is accomplished more cheaply than producing them separately. “Global” scope economies become evident on the cost side when the total cost of producing all products is less than producing them individually, while “activity-specific” economies consider the joint production of particular pairs or clusters of financial services. Cost economies of scope can be harvested through the sharing of IT platforms and other overheads, information and monitoring costs, and the like. Information, for example, can be reused and thereby avoid cost duplication, facilitate creativity in developing solutions to client problems, and leverage client-specific knowledge. [Stefanadis, 2002]. On the other hand, cost diseconomies of scope may arise from such factors as inertia and lack of responsiveness and creativity that may come with

increased firm breadth, complexity and bureaucratization, as well as "turf" and profit-attribution conflicts that increase costs or erode product quality in meeting client needs, or serious cultural differences across the organizational "silos" that inhibit seamless delivery of a broad range of financial services.

Like economies of scale, cost-related scope economies should be directly observable in cost functions of financial services suppliers and in aggregate performance measures. Most empirical studies have failed to find significant cost-economies of scope in the banking, insurance or securities industries [Saunders 2000]. They suggest that some cost-diseconomies of scope are encountered when firms in the financial services sector add new product-ranges to their portfolios. Saunders and Walter [1994], for example, found negative cost, economies of scope among the world's 200 largest banks – as the product range widens, unit-costs seem to go up, although not dramatically so.

However, the period covered by many of these studies involve firms that were shifting away from a pure focus on banking or insurance, and may thus have incurred considerable front-end costs in expanding the range of their activities. If these outlays were expensed in accounting statements during the period under study, then one might expect to see evidence of diseconomies of scope reversed in future periods. The evidence on cost-economies of scope so far remains inconclusive.

## **Operating Efficiencies**

Besides economies of scale and cost-economies scope, financial firms of roughly the same size and providing roughly the same range of services can have very different cost levels per unit of output. There is ample evidence that such performance differences exist,

for example, in comparisons of cost-to-income ratios among banks, insurance companies, and investment firms of comparable size. The reasons involve differences in production functions reflecting, efficiency and effectiveness in the use of labor and capital, sourcing and application of available technology, and acquisition of inputs, organizational design, compensation and incentive systems – i.e., in just plain better or worse management. These are what economists call X-efficiencies.

A number of studies have found rather large disparities in cost structures among banks of similar size, suggesting that the way banks are run is more important than their size or the selection of businesses that they pursue. [Berger, Hancock and Humphrey, 1993; Berger, Hunter and Timme, 1993] The consensus of studies conducted in the United States seems to be that average unit costs in the banking industry lie some 20% above “best practice” firms producing the same range and volume of services, with most of the difference attributable to operating economies rather than differences in the cost of funds. [Akhavain, Berger and Humphrey, 1997] Siems [1996] found that the greater the overlap in branch networks, the higher the abnormal equity returns in U.S. bank mergers, while no such abnormal returns are associated with other factors like regional concentration ratios – suggesting that shareholder value gains in many of the US banking mergers of the 1990s were associated more with increases in X-efficiency than with reductions in competition. If true, this is good news for smaller firms, since the quality of management seems to be far more important in driving costs than raw size or scope. Of course, if very large institutions are systematically better managed than smaller ones (which may be difficult to document in the real world of financial services) then there may be a link between firm size and X-efficiency.

It is also possible that very large organizations may be more capable of the massive and “lumpy” capital outlays required to install and maintain the most efficient information-technology and transactions-processing infrastructures. [Walter 2004] If extremely high recurring technology spend-levels results in greater X-efficiency, then large financial services firms will tend to benefit in competition with smaller ones. Smaller firms will then have to rely on pooling and outsourcing, if feasible.

In banking M&A studies, Berger and Humphrey [1992b] found that acquiring banks tend to be significantly more efficient than the acquired banks, suggesting that the acquirer may potentially improve the X-efficiency of the target. Akhavein, Berger, and Humphrey [1997] found mega-mergers between US banks increase returns by improving efficiency rather than increasing prices, suggesting also that acquiring banks use acquisitions as an occasion to improve efficiency within their own organizations. Houston and Ryngaert [1994] and DeLong [2001b] found that the market rewards mergers where geographic overlap exists between acquirer and target, presumably due to expected X-efficiency gains.

### **Revenue Economies of Scope**

On the revenue side, economies of scope attributable to cross-selling arise when the all-in cost to the buyer of multiple financial services from a single supplier is less than the cost of purchasing them from separate suppliers. This includes the cost of the services themselves plus information, search, monitoring, contracting and other costs. And firms that are diversified into several types of activities or several geographic areas in addition tend to have more contact points with clients. Revenue-diseconomies of scope could arise from management complexities and conflicts associated with greater breadth.



Some evidence on revenue economies of scope come from historical studies. Kroszner and Rajan [1994] found that U.S. bank affiliates typically underwrote better performing securities than specialized investment banks during the 1920s, when US commercial banks were permitted to have securities affiliates. Perhaps commercial banks obtained knowledge about firms contemplating selling securities through the deposit and borrowing history of the firm. If so, they could then select the best risks to bring to market. Likewise, Puri [1996] found that securities underwritten by commercial banks generated higher prices than similar securities underwritten by investment banks; this suggests lower *ex ante* risk for those underwritten by commercial banks.

Most empirical studies of cross-selling are based on survey data, and are therefore difficult to generalize. Regarding wholesale commercial and investment banking services, for example, one issue is whether companies are more likely to award M&A work to banks that are also willing lenders, or whether the two services are separable – so that companies go to the firms with the perceived best M&A capabilities (probably investment banking houses) for advice and to others (presumably the major commercial banks) for loans. This sometimes called “mixed bundling,” meaning that the price of one service (e.g., commercial lending) is dependent on the client also taking another service (e.g., M&A advice or securities underwriting), although the search for immediate scope-driven revenue gains may have led to some disastrous lending by commercial banks in the energy and telecoms sectors in recent years.

However, it is at the retail level that the bulk of the revenue economies of scope are likely to materialize, since the search costs and contracting costs of retail customers are likely to be higher than for corporate customers. There is limited US evidence on retail

cross-selling due to the regulatory restraints in place until 1999, and evidence from Europe, where universal banking and multifunctional financial conglomerates have always been part of the landscape, is mainly case-based and suggests highly variable outcomes as to the efficacy of *bancassurance* or *Allfinanz*.

In any case, the future may see some very different retail business models in which clients take advantage of user-friendly home interfaces to access Webservice platforms which allow real-time linkages to multiple financial services vendors. For the client, it could combine the “feel” of single-source purchasing with access to best-in-class vendors – the client “cross-purchases” rather than being “cross-sold.” Absent the need for continuous financial advice, such a business model could reduce information costs, transactions costs and contracting costs while at the same time providing client-driven open-architecture access to the universe of competing vendors. Advice could be built into the model by suppliers who find a way to incorporate the advisory function into their downlinks, or through independent financial advisers. If in the future such models of retail financial services delivery take hold in the market, then some of the rationale for cross-selling and revenue economies of scope could become obsolete.

Despite an almost total lack of hard empirical evidence, revenue economies of scope may indeed exist at both the wholesale and retail level. But they are likely to be very specific to the types of services provided and the types of clients served. So revenue-related scope economies are clearly linked to a firm’s specific strategic positioning across clients, products and geographies depicted in Exhibit 2. Even if cross-selling potential exists, the devil is in the details – mainly in the design of incentives and organizational structures to ensure that it actually occurs. And these incentives have to be extremely granular and

compatible with employee real-world behavior. Without them, no amount of management pressure and exhortation to cross-sell is likely to achieve its objectives.

Network economies associated with multifunctional financial firms may be considered a special type of demand-side economy of scope. [Economides, 1995] Like telecommunications, relationships with end-users of financial services represent a network structure wherein additional client linkages add value to existing clients by increasing the feasibility or reducing the cost of accessing them. So-called “network externalities” tend to increase with the absolute size of the network itself. Every client link to the firm potentially “complements” every other one and potentially adds value through either one-way or two-way exchanges. The size of network benefits depends on technical compatibility and coordination in time and location, which universal banks and financial conglomerates may be in a position to provide. And networks tend to be self-reinforcing in that they require a minimum critical mass and tend to grow in dominance as they increase in size, thus precluding perfect competition in network-driven businesses. This characteristic may be evident in activities such as securities clearance and settlement, global custody, funds transfer and international cash management, and may to lock-in clients insofar as switching-costs tend to be relatively high.

What little empirical evidence there is suggests that revenue-economies of scope seem to exist for specific combinations of products in the realm of commercial and investment banking, as well as insurance and asset management. Empirical evidence concerning the existence of certain product-specific revenue economies of scope is beginning to materialize. For example, Yu [2001] showed that share prices of US financial conglomerates as well as specialists responded favorably when the Financial Services

Modernization Act of 1999 was announced. The study found that the market reacted most favorably for the shares of large securities firms, large insurance companies, and bank holding companies already engaged in some securities businesses (those with Section 20 subsidiaries allowing limited investment banking activities). The study suggested that the market expected gains from product diversification possibly arising from cross-product synergies. Another study by Lown et al. (2000) similarly found that both commercial and investment bank stocks rose on announcement by President Clinton on October 22, 1999 that passage of the Gramm Leach Bliley Act was imminent.

### **Market Concentration and Leadership**

In addition to the strategic search for operating economies and revenue synergies, financial services firms will also seek to dominate markets in order to extract economic returns. This often referred to as economies of “size” as opposed to classic economies of “scale,” and can convey distinct competitive advantages that are reflected in either business volume or margins, or both.

Market power allows banks to charge more (monopoly benefits) or pay less (monopsony benefits). Indeed, many national markets for financial services have shown a distinct tendency towards oligopoly. Supporters argue that high levels of market concentration are necessary in order to provide a viable competitive platform. Without convincing evidence of scale economies or other size-related efficiency gains, opponents argue that monopolistic market structures serve mainly to extract rents from consumers or users of financial services and redistribute them to shareholders, cross-subsidize other areas of activity, invest in wasteful projects, or reduce pressures for cost-containment.

Indeed, it is a puzzle why managers of financial services firms often seem to believe that the end-game in their industry's competitive structure is the emergence of a few firms in gentlemanly competition with nice sustainable margins, whereas in the real world such an outcome can easily trigger public policy reaction leading to breaks-ups and spin-offs in order to restore more vigorous competition. Particularly in a critical economic sector that is easily politicized such as financial services, a regulatory response to "excessive" concentration is a virtual certainty despite sometimes furious lobbying to the contrary. In the case of Canada, for example, regulators prevented two megamergers in late 1998 that would have reduced the number of major financial firms from five to three with a retail market share of perhaps 90% between them. Regulators blocked the deals despite arguments by management that major US financial services firms operating in Canada under the rules of the North American Free Trade Agreement (NAFTA) would provide the necessary competitive pressure to prevent exploitation of monopoly power.

Financial services market structures differ substantially as measured, for example, by the Herfindahl-Hirshman index. This metric of competitive structure is the sum of the squared market shares ( $H = \sum s^2$ ), where  $0 < H < 10,000$  and market shares are measured for example, by deposits, by assets, or other indicators of market share.  $H$  rises as the number of competitor declines, and as market-share concentration increases among a given number of competitors. Empirically, higher values of  $H$  tend to be associated with higher degrees of pricing power, price-cost margins, and returns on equity across a broad range of industries. For example, despite very substantial consolidation in recent years within perhaps the most concentrated segment of the financial services industry, wholesale banking and capital markets activities, there is little evidence of market power. With some 80% of the

combined value of global fixed-income and equity underwriting, loan syndications and M&A mandates captured by the top-ten firms, the Herfindahl-Hirshman index was still only 698 in 2002. This suggests a ruthlessly competitive market structure in most of these businesses, which is reflected in the returns to investors who own shares in the principal players in the industry – in fact, there has been a long-term erosion of return on capital invested in the wholesale banking industry. [Smith and Walter, 2003]

Another example is asset management, where the top firms comprise a mixture of European, American and Japanese asset managers and at the same time a mixture of banks, broker-dealers, independent fund management companies and insurance companies. Although market definitions clearly have to be drawn more precisely, at least on a global level asset management seems to be among the most contestable in the entire financial services industry, with a Herfindahl-Hirshman index of 540 among the top-40 firms in terms of assets under management. And it shows very few signs of increasing concentration in recent years.

In short, although monopoly power created through mergers and acquisitions in the financial services industry can produce market conditions that allow firms to reallocate gains from clients to themselves, such conditions are not easy to achieve or to sustain. Sometimes new players – even relatively small entrants – penetrate the market and destroy oligopolistic pricing structures. Or there are good substitutes available from other types of financial services firms and consumers are willing to shop around. Vigorous competition (and low Herfindahl-Hirshman indexes) seems to be maintained even after intensive M&A activity in most cases as a consequence of relatively even distributions of market shares among the leading firms in many financial services businesses.

Berger and Hannan [1996] found that loan rates were higher and deposit rates were lower when banks operated in concentrated markets. These increased revenues, however, did not result in higher profits – instead, the study showed evidence consistent with higher cost structures in such banks than their counterparts in less concentrated markets.

Akhavein, Berger, and Humphrey [1997] found that banks which merge charge more for loans and pay less on deposits *before* they merge than other large banks -- banks that merged charged 17 basis points more for loans than the average large bank prior to merging. After the merger, however, this difference fell to about 10 basis points. This suggests that merging banks do not tend to take advantage of their increased market power. The authors contend that antitrust policy is effective in preventing mergers that would create market power problems. Siems [1996] reached a similar conclusion. In a study of 19 bank megamergers (partners valued over \$500 million) in 1995, he rejected the market power hypothesis although he found that in-market mergers create positive value for both the acquirer and the target upon announcement. There was no relationship between the resulting abnormal returns and the change in the Herfindahl-Hirshman index. Still, concentration seems to affect prices. Beatty, Santomero, and Smirlock [1987] found that the higher the market concentration of the banking industry in a given region, the higher the premium paid to acquire a bank in that area.

### **Proprietary Information and Imbedded Human Capital**

One argument in favor of large, diverse financial services industry is that internal information flows are substantially better and involve lower costs than external information flows in the market that are accessible by more narrowly focused firms. Consequently a

firm that is present in a broad range of financial markets, functions and geographies can find proprietary and client-driven trading and structuring opportunities that smaller and narrower firms cannot.

A second argument has to do with technical know-how. Significant areas of financial services – particularly wholesale banking and asset management – have become the realm of highly specialized expertise which can be reflected in both market share and price-effects. In recent years, large numbers of financial boutiques have been acquired by major banks, insurance companies, securities firms and asset managers for precisely this purpose, and anecdotal evidence suggests that in many cases these acquisitions have been shareholder-value enhancing for the buyer.

Closely aligned is the human capital argument. Technical skills and entrepreneurial behavior are embodied in people, and people can and do move. Parts of the financial services industry have become notorious for the mobility of talent to the point of “free-agency,” and people or teams of people sometimes regard themselves as “firms within firms.”

There are no empirical studies of these issues, although there is no question about their importance. Many financial services represent specialist businesses that are conducted by specialists meeting specialist client requirements. Knowhow embodied in people is clearly mobile, and the key is to provide a platform that is sufficiently incentive compatible to make the most of it. It seems unclear whether size or breadth has much to do with this.



## **Diversification, Credit Quality and Financial Stability**

Greater diversification of earnings attributable to multiple products, client-groups and geographies is often deemed to create more stable, safer, and ultimately more valuable financial institutions. The lower the correlations among the cash flows from the firm's various activities, the greater the benefits of diversification. The consequences should include higher credit quality and higher debt ratings (lower bankruptcy risk), therefore lower costs of financing than those faced by narrower, more focused firms, while greater earnings stability should bolster stock prices. In combination, these effects should reduce the cost of capital and enhance profitability.

It has also been argued that shares of universal banks and financial conglomerates embody substantial franchise value due to their conglomerate nature and importance in national economies. Demsetz, Saldenber and Strahan [1996] suggest this guaranteed franchise value serves to inhibit extraordinary risk-taking. They find substantial evidence that the higher a bank's franchise value, the more prudent management tends to be. Such firms should therefore serve shareholder interests, as well as stability of the financial system – and the concerns of its regulators – with a strong focus on risk management, as opposed to financial firms with little to lose. This conclusion is, however, at variance with the observed, massive losses incurred by financial conglomerates universal banks in recent years in credit exposures to highly leveraged firms and special-purpose entities, real estate lending and emerging market transactions.

Studies that test risk reduction often look at how hypothetical combinations could have reduced risk using actual industry data. In an early study, Santomero and Chung

[1992] found that bank holding companies which existed from 1985 to 1989 could have reduced their probability of failure had they been permitted to diversify into insurance and securities. Of the ten combinations the authors examined, the best combination is the bank holding company linking to both insurance and securities firms. The only combination that would have increased the probability of bankruptcy over a stand-alone bank holding company is one encompassing a large securities firm. Boyd, Graham, and Hewitt [1993] tested whether hypothetical mergers between bank holding companies and non-banking financial firms decrease risk. In their sample of data from 1971 to 1987, they found that mergers between bank holding companies and insurance firms could have reduced risk while mergers between bank holding companies and securities firms or real estate firms could have increased risk. Saunders and Walter [1994] carried out a series of simulated mergers between US banks, securities firms and insurance companies in order to test the stability of earnings of the pro-forma “merged” firm as opposed to separate institutions.

The opportunity-set of potential mergers between existing firms and the risk-characteristics of each possible combination were examined. The findings suggest that there are indeed potential risk-reduction gains from diversification in multi-activity financial services organizations, and that these increase with the number of activities undertaken. The main risk-reduction gains appear to arise from combining commercial banking with insurance activities, rather than with securities activities.

### **Too-Big-to-Fail Guarantees**

Given the unacceptable systemic consequences of institutional collapse, large financial services firms that surpass a given threshold will be bailed-out by taxpayers. In

the United States, this policy became explicit in 1984 when the Comptroller of the Currency testified to Congress that 11 banks were so important that they would not be permitted to fail. [O'Hara and Shaw, 1990] It was clearly present in the savings and loan collapses around that time. In other countries the same policy tends to exist, and seems to cover even more of the local financial system. [US General Accounting Office, 1991] There were numerous examples in France, Switzerland, Norway, Sweden, Finland, and Japan during the 1990s. Implicit too-big-to-fail (TBTF) guarantees create a potentially important public subsidy for major financial firms.

TBTF support was arguably extended to non-bank financial firms in the rescue of Long-term Capital Management, Inc. in 1998, brokered by the Federal Reserve (despite the fact that a credible private restructuring offer was on the table) on the basis that the firm's failure could cause systemic damage to the global financial system. The same argument was made by JP Morgan in 1996 about the global copper market and one of its then-dominant traders, Sumitomo. Morgan suggested that collapse of the copper market could have serious systemic effects. The speed with which the central banks and regulatory authorities reacted to that crisis signaled the possibility of safety-net support of the copper market in light of major banks' massive exposures in highly complex structured credits to the industry. And there were even mutterings of systemic effects in the collapse of Enron in 2001. Most of the time such arguments are self-serving nonsense, but in a political environment under crisis conditions they could help throw a safety net sufficiently broad to limit damage to shareholders of exposed banks or other financial firms.

It is generally accepted that the larger the bank, the more likely it is to be covered under TBTF support. O'Hara and Shaw [1990] detailed the benefits of TBTF status:

Without state assurances, uninsured depositors and other liability holders demand a risk premium. When a bank is not permitted to fail, the risk premium is no longer necessary. Furthermore, banks covered under the policy have an incentive to increase their risk in order to enjoy higher equity returns. Kane [2000] investigated the possibility that large banks enjoy access to the TBTF guarantees in a study of merger-effects, although he did not distinguish between the stock market reaction to increased TBTF guarantees or the likelihood of increased profitability. He suggested further study to determine whether acquiring banks increase their leverage, uninsured liabilities, non-performing loans and other risk exposures, all of which would suggest that they are taking advantage of TBTF guarantees.

One problem with the TBTF argument is to determine precisely when a financial institution becomes too big to fail. Citicorp was already the largest bank holding company in the United States before it merged with Travelers in 1998. Therefore, the TBTF argument may be a matter of degree. That is, the benefits of becoming larger may be marginal if a firm already enjoys TBTF status.

### **Conflicts of Interest**

Potential conflicts of interest are a fact of life in financial intermediation. Under perfect competition and in the absence of asymmetric information, exploitation of conflicts of interest cannot rationally take place. Consequently, the necessary and sufficient conditions for agency costs associated with conflict of interest exploitation center on market and information imperfections. Arguably, the bigger and broader the financial intermediaries, the greater the agency problems associated with conflict-of-interest exploitation. It follows

that efforts to address the issue through improved transparency and market discipline are central to creating viable solutions to a problem that repeatedly seems to shake public confidence in financial markets.

In recent years, the role of banks, securities firms, insurance companies and asset managers in alleged conflict-of-interest-exploitation – involving a broad array of abusive retail market practices, in acting simultaneously as principals and intermediaries, in facilitating various corporate abuses, and in misusing private information – suggests that the underlying market imperfections are present even in highly developed financial systems. Certainly the prominence of conflict-of-interest problems so soon after the passage of the US Gramm-Leach-Bliley Act of 1999, which removed some of the key structural barriers to conflict exploitation built into the US regulatory system for some 66 years, seems to have surprised many observers.<sup>4</sup>

Moreover, recent evidence suggests that the collective decision process in the management of major financial firms impairs pinpointing responsible individuals, and that criminal indictment of entire firms runs the risk of adverse systemic effects. Monetary penalties and negotiated settlements neither admitting nor denying guilt seem to have emerged as the principal external mechanisms to address conflict of interest exploitation. Market discipline operating through the share price may, under appropriate corporate governance, represent an important additional line of defense.

There are essentially two types of conflicts of interest confronting firms in the financial services industry under market imperfections. [Walter, 2003b]

*Type 1* - Conflicts between a firm's own economic interests and the interests of its clients, usually reflected in the extraction of rents or mispriced transfer of risk. In addition to direct firm-client conflicts, indirect conflicts of interest could involve

collusion between the firm and a fiduciary acting as agent for the ultimate clients.<sup>5</sup>

*Type 2* - Conflicts of interest between a firm's clients, or between types of clients, which place the firm in a position of favoring one at the expense of another.<sup>6</sup> They may arise either in interprofessional activities carried out in *wholesale*

financial markets or in activities involving *retail* clients. The distinction between these two market "domains" is important because of the key role of information and transactions costs, which differ dramatically between the two broad types of market participants. Their vulnerability to conflict-exploitation differs accordingly, and measures designed to remedy the problem in one domain may be inappropriate in the other. In addition there are what we shall term "transition" conflicts of interest, which run between the two domains – and whose impact can be particularly troublesome. In the following sections, we enumerate the principal conflicts of interest encountered in financial services firms arranged by *type* and by *domain* (see Exhibit 6).

In wholesale financial markets involving professional transaction counterparties, corporations and sophisticated institutional investors, the asymmetric information and competitive conditions necessary for conflicts of interest to be exploited are arguably of relatively limited importance. *Caveat emptor* and limited fiduciary obligations rule in a game that all parties fully understand. Nevertheless, several types of conflicts of interest seem to arise. Asymmetric information is intuitively a much more important driver of conflict-of-interest exploitation in retail financial services than in interprofessional wholesale financial markets. Retail issues all appear to involve Type 1 conflicts, setting the interests of the financial firm against those of its clients. Conflicts of interest between the *wholesale* and *retail* domains – characterized by very different information asymmetries – can be either Type 1 or Type 2, and sometimes both at the same time.

All else equal, it is likely that the broader the activity-range of financial firms in the presence of imperfect information, (1) the greater the probability that the firm will encounter potential conflicts of interest, (2) the higher will be the potential agency costs facing clients, and (3) the more difficult and costly will be the internal and external safeguards necessary to prevent conflict exploitation. If true, competitive consequences associated with conflict-exploitation can offset the realization of economies of scope in financial services firms. Scope economies are intended to generate benefits on the demand side through cross-selling (revenue synergies) and on the supply side through more efficient use of the firm's business infrastructure (cost synergies). As a result of conflict exploitation the firm may initially enjoy revenue and profitability gains at the expense of clients. Subsequent adverse legal, regulatory and reputational consequences – along with the managerial and operational cost of complexity – can be considered diseconomies of scope.

The potential for conflict-of-interest exploitation in financial firms can be depicted in a matrix such as Exhibit 7. The matrix lists on each axis the main types of retail and wholesale financial services, as well as infrastructure services such as clearance, settlement and custody. Cells in the matrix represent potential conflicts of interest. Some of these conflicts are basically intractable, and remediation may require changes in organizational structure. Others can be managed by appropriate changes in incentives, functional separation of business lines, or internal compliance initiatives. Still others may not be sufficiently serious to worry about. And in some cases it is difficult to imagine conflicts of interest arising at all.

For example, in Exhibit 2 cell D is unlikely to encompass activities that pose serious conflicts of interest. Others cells, such as C, have traditionally been ring-fenced using

internal compliance systems. Still others such as B and E can be handled by assuring adequate transparency. But there are some, such as A, which have created major difficulties in particular circumstances (such as advising on a hostile takeover when the target is a banking client), and for which easy answers seem elusive.

## **Conglomerate Discount**

It is often argued that the shares of multi-product firms and business conglomerates tend to trade at prices lower than shares of more narrowly-focused firms (all else equal). There are two basic reasons why this “conglomerate discount” is alleged to exist.

First, it is argued that, on the whole, conglomerates tend to use capital inefficiently. It is argued that the potential benefits of diversification against the potential costs that include greater management discretion to engage in value-reducing projects, cross-subsidization of marginal or loss-making projects that drain resources from healthy businesses, misalignments in incentives between central and divisional managers, and the like. For a sample of U.S. corporations during the period 1986-91, Berger and Ofek [1995] demonstrated an average value-loss in multi-product firms on the order of 13-15%, as compared to the stand-alone values of the constituent businesses. The bulk of value-erosion in conglomerates was attributed by the authors to over-investment in marginally profitable activities and cross-subsidization. This value-loss was smaller in cases where the multi-product firms were active in closely-allied activities within the same industrial sector. In other empirical work, John and Ofek [1995] showed that asset sales by corporations result in significantly improved shareholder returns on the remaining capital employed, both as a result of greater focus in the enterprise and value-gains through high prices paid by asset



buyers. The evidence suggests that the internal capital market within conglomerates functions less efficiently than the external capital market.

Such empirical findings across broad ranges of industry may well apply to diverse activities carried out by financial firms as well. If retail banking and wholesale banking and P&C insurance are evolving into highly-specialized, performance-driven businesses, for example, one may ask whether the kinds of conglomerate discounts found in industrial firms may not also apply to financial conglomerate structures -- especially if centralized decision-making is becoming increasingly irrelevant to the requirements of the specific businesses.

A second possible source of a possible conglomerate discount is that investors in shares of conglomerates find it difficult to “take a view” and add pure sectoral exposures to their portfolios. Investors may want to avoid such stocks in their efforts to construct efficient asset-allocation profiles. This is especially true of performance-driven managers of institutional equity portfolios who are under pressure to outperform cohorts or equity indexes. Why would a fund manager want to invest in yet another (closed-end) fund in the form of a conglomerate – one that may be active in retail banking, wholesale commercial banking, middle-market lending private banking, corporate finance, trading, investment banking, asset management insurance and perhaps other businesses as well?

Both the capital-misallocation effect and the portfolio-selection effect may weaken investor demand for shares of universal banks and financial conglomerates, lower their equity prices, and produce a higher cost of capital than if the conglomerate discount were absent. This higher cost of capital would have a bearing on the competitive performance and profitability of the enterprise. It may wholly or partially offset some of the

aforementioned benefits of conglomeration, such as greater stability and lower bankruptcy risk through diversification across business lines.

## Conclusions

From a shareholder perspective, all of the pluses and minuses of size and breadth among financial services firms can be captured in a simple valuation formula:

$$NPV_f = \sum_{t=0}^n \frac{E(R_t) - E(C_t)}{(1 + i_t + \alpha_t)^t}$$

$NPV_f$  denotes the risk-adjusted discounted present value of a firm's after-tax earnings,  $E(R_t)$  represents the expected future revenues of the firm,  $E(C_t)$  represents expected future operating costs including charges to earnings for restructurings, loss provisions and taxes. The net expected returns in the numerator are then discounted to the present using a risk-free rate  $i_t$  and a composite risk adjustment  $\alpha_t$  -- which captures the variance of expected net future returns resulting from credit risk, market risk, operational risk, and reputation risk, and at the same time captures the correlations between such risks associated with the firm's various activities.

Strategic initiatives in financial firms increase shareholder value if they generate:

(1) Top-line gains which show up as increases in  $E(R_t)$  due for example to market-extension, increased market share, wider profit margins or successful cross-selling; (2) Bottom-line gains related to lower costs due to economies of scale or improved operating efficiency -- reduced  $E(C_t)$  -- usually reflected in improved cost-to-income ratios, as well as better tax efficiency; or (3) Reductions in risk associated with improved risk management or diversification of the firm across business streams, client segments or geographies whose revenue contributions are imperfectly correlated and therefore reduce the composite  $\alpha_t$ .

Assessing the potential effects of size and scope in financial services firms is as straightforward in concept as it is difficult to calibrate in practice. The positives include economies of scale, improvements in operating efficiency (including the impact of technology), cost economies of scope, revenue economies of scope, impact on market structure and pricing power, improved financial stability through diversification of revenue streams, improvements in the attraction and retention of human capital, and possibly TBTF support. The negatives include diseconomies of scale, higher operating costs due to increased size and complexity, diseconomies of scope on either the cost or revenue sides (or both), the impact of possible conflicts of interest on the franchise value of the firm, and a possible conglomerate discount in the share price. Bigger and broader is sometimes better, sometimes not. It all depends.

The evidence so far suggests rather limited prospects for firm-wide cost economies of scale and scope among major financial services firms in terms of overall cost structures, although they certainly exist in specific lines of activity. Operating economies (X-efficiency) seems to be the principal determinant of observed differences in cost levels among banks and nonbank financial institutions. Revenue-economies of scope through cross-selling may well exist, but they are likely to apply very differently to specific client segments and product lines. Conflicts of interest can pose major risks for shareholders of multifunctional financial firms, which may materialize in civil or even criminal litigation and losses in franchise value. There is plenty of evidence that diversification across uncorrelated business streams promotes stability, although unexpected correlation spikes (as between insurance and investment banking) may arise from time to time.

Exhibit 8 shows the most valuable financial services in the North America, Europe

and the rest of the world in terms of market capitalization. Two observations could be made. First, the largest by whatever measures are used in the major industry segments are not necessarily the most valuable. Indeed, rank correlations between size and market value are low. And second, both lists are highly diverse. Generalists and specialists co-habitate at the top of the financial services league tables in both regions of the world. Both observations suggest that the key is in “how” things are done rather than “what” is done. While the burden of proof tends fall on bigger and broader firms, a few cases like Citigroup show diverse businesses subject to unrelenting pressure to sweat the equity by a demanding corporate owner insisting on market dominance together with benchmark attention of service quality, cost control and risk control, can produce superior returns and that it can be done on a sustained basis

In a way, the absence of clear signs of “strategic dominance” – generalists gaining the upper hand over specialists or the other way round – is encouraging. Any number can play, and there are no magic formulas. The devil remains in the details, and there is a premium on plain old good management. From a systemic perspective as well, diversity in the financial system is probably a good thing, as firms competing across strategic groups as well as within them put a premium on both efficiency in financial allocation and innovation in the evolution of financial products and processes.

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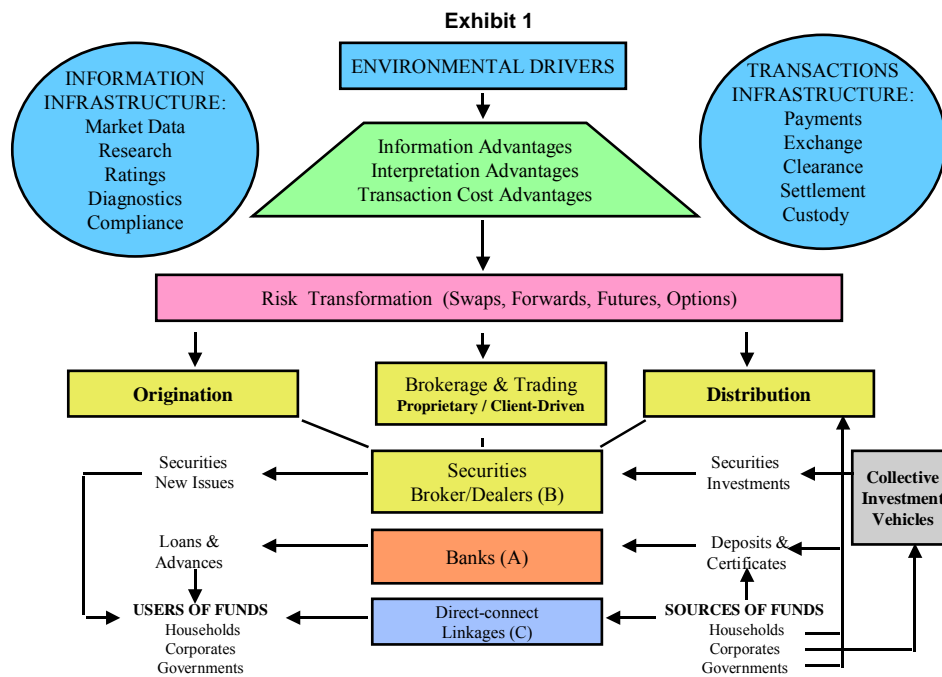
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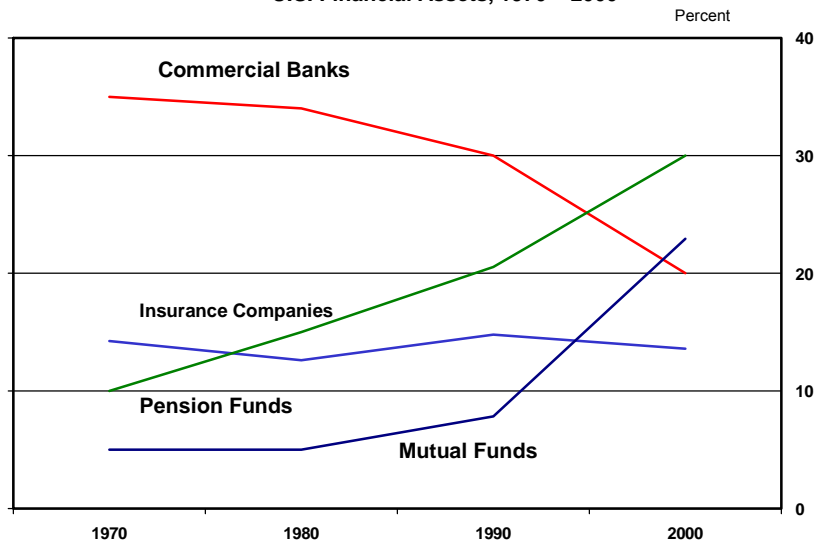
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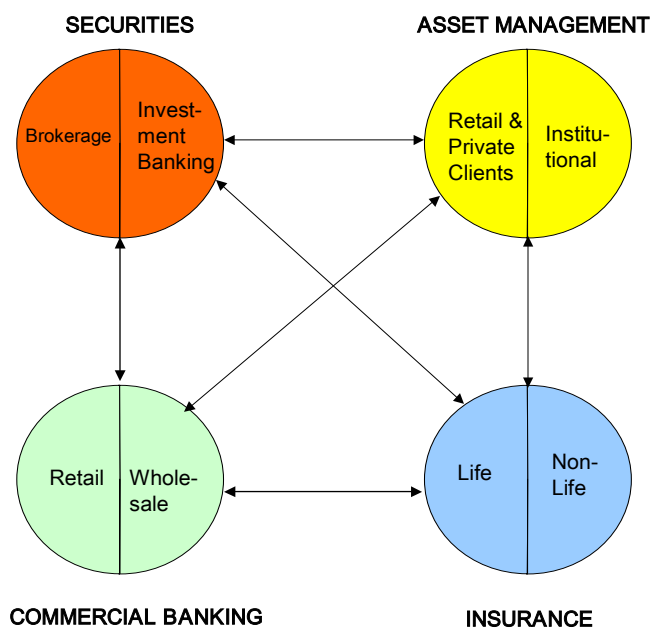
Source: Roy C. Smith and Ingo Walter, *Global Banking* (New York: Oxford University Press, 1997).

**Exhibit 2**  
**U.S. Financial Assets, 1970 – 2000**

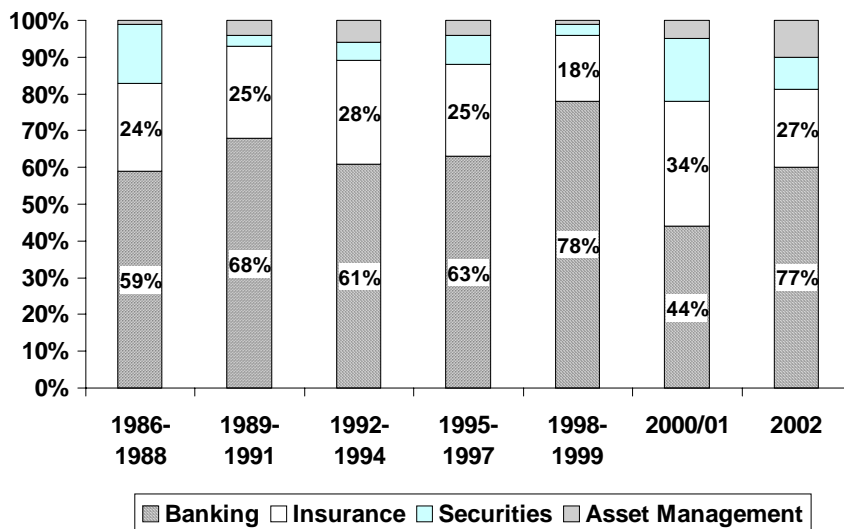


Source: Federal Reserve

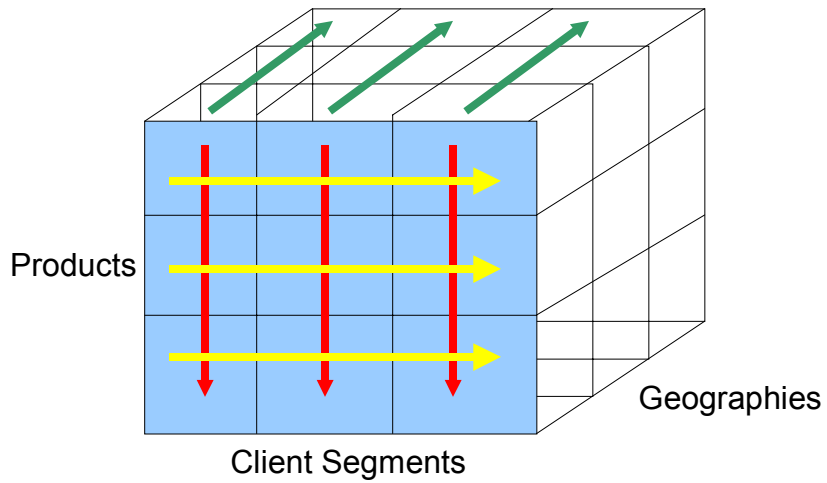
**Exhibit 3**  
Multifunctional Financial Linkages



**Exhibit 4**  
Worldwide Financial Services Merger Volume, 1986-2002



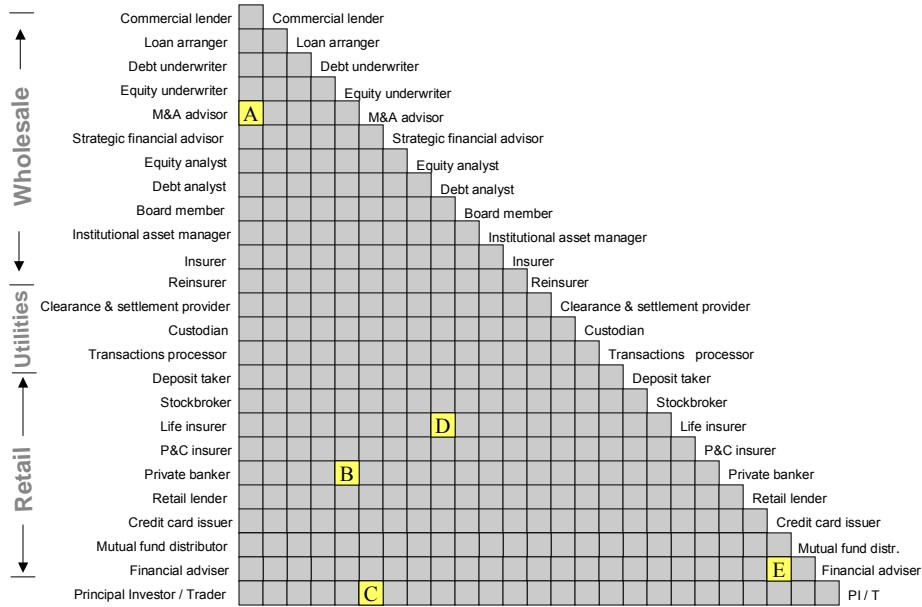
**Exhibit 5**  
**Product-Specific, Client-Specific and Geographic Strategic Linkages**



**Exhibit 6**  
**A Conflict of Interest Taxonomy**

<b>Wholesale Domain</b>	<b>Domain-Transition Issues</b>	<b>Retail Domain</b>
<p><b>Type-1 - Firm-client conflicts</b></p> <ul style="list-style-type: none"> <li>• Principal transactions.</li> <li>• Tying</li> <li>• Misuse of fiduciary role</li> <li>• Board interlocks.</li> <li>• Investor loans</li> <li>• Self-dealing</li> <li>• Front-running</li> </ul> <p><b>Type-2 - Inter-client conflicts</b></p> <ul style="list-style-type: none"> <li>• Misuse of private information</li> <li>• Client interest incompatibility</li> </ul>	<p><b>Type-1 - Firm-client conflicts.</b></p> <ul style="list-style-type: none"> <li>• Suitability</li> <li>• Stuffing</li> <li>• Conflicted research</li> <li>• Spinning</li> <li>• Late trading and market timing</li> <li>• Laddering</li> <li>• Shifting bankruptcy risk</li> </ul>	<p><b>Type-1 - Firm-client conflicts</b></p> <ul style="list-style-type: none"> <li>• Biased client advice</li> <li>• Involuntary cross-selling</li> <li>• Churning</li> <li>• Inappropriate margin lending</li> <li>• Failure to execute</li> <li>• Misleading disclosure and reporting</li> <li>• Violation of privacy</li> </ul>

**Exhibit 7**  
**Indicative Matrix of Potential Conflicts of Interest**



**Exhibit 8**  
**Global Financial Services Firms Ranked by Market Value**  
**September 30, 2002**

UNITED STATES		EUROPE		REST OF WORLD	
Citigroup	150.1	HSBC plc	95.7	Mitsubishi Tokyo	41.9
AIG	142.8	RBS Group plc	54.6	Sumitomo	31.5
GE Capital*	99.3	UBS AG	52.1	NAB	27.9
Berkshire Hathaway	97.4	Lloyds TSB plc	41.2	Nomura	25.7
Bank of America	95.9	Barclays plc	39.6	UFJ	23.3
Wells Fargo	81.8	HBOS Group plc	34.9	Royal Bank	22.4
Wachovia	44.9	BNP Paribas	29.1	Mizuho	22.0
BancOne	43.8	Deutsche Bank AG	28.2	Commonwealth	20.4
American Express	41.4	ING Group	27.6	ANZ	14.4
JP Morgan Chase	37.9	Grupo Santander	24.3	Scotiabank	14.2
Morgan Stanley	37.1	BBVA	23.8	Westpac	13.3
Fifth Third Bancorp	36.7	Crédit Suisse	23.3	Kookmin (Korea)	11.6
US Bancorp	35.6	Unicredito Italiano	22.5	Bank of Montreal	11.4
Goldman Sachs	31.8	Allianz AG	22.2	Toronto Dominion	11.2
Washington Mutual	30.4	Munich Re	18.8	CIBC	9.3

\*Earnings volatility-adjusted GECS contribution to GE multiplied by GE market capitalization. Data: Bloomberg.

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## Notes

<sup>1</sup> For an early version, see Walter (1988)..

<sup>2</sup> The regulatory playing-field on which financial-sector reconfiguration has take place has seen substantial convergence, notably with the phasing-out of Article 65 of the Japan Financial Law and passage of the US Gramm-Leach-Bliley Act in 1999, both of which allow strategic interpenetration of the four major activities comprising financial services depicted in Exhibit 6 that was severely restricted before.

<sup>3</sup> Much of the following discussion relies on Walter [2004].

<sup>4</sup> Public accounting firms and law firms have been the subject of serious conflict of interest allegations as well, but are considered here as part of the market infrastructure, as opposed to serving as direct participants in the financial intermediation function.

<sup>5</sup> An example would be collusion between financial firms and pension trustees to the ultimate detriment of pension beneficiaries. Cases involving Orange County, California derivatives exposures and “pay to play” municipal bond scandals involving the State of Massachusetts come to mind. See Smith and Walter [1997] Here the solutions would seem to involve writing better contracts between the clients and their agents through reform of state and local political processes.

<sup>6</sup>Firm behavior that systematically favors corporate clients over retail investors in the presence of asymmetric information is a prominent example of this type of conflict.