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TECHNOLOGICAL AND REGULATORY FORCES
IN THE DEVELOPING FUSION OF
FINANCIAL-SERVICES COMPETITION

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ABSTRACT

Product lines of traditionally heterogeneous financial institutions are rapidly fusing into a homogeneous blend. Institutions and market structures are reshaping themselves to lower the cost of serving customer demand for financial services. This paper contends that contemporary adaptations exploit scope economies rooted in technological change and deposit-insurance subsidies to innovative forms of risk-bearing.

As they reorient work flows, financial firms are simultaneously restructuring their organizations to lower net burdens from government regulation. Alternative state and federal regulatory and legislative bodies compete vigorously for the regulatory business of developing institutional hybrids. Evolution of Federal Reserve policy toward "nonbank banks" exemplifies the process.

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TECHNOLOGICAL AND REGULATORY FORCES IN THE DEVELOPING FUSION OF FINANCIAL-SERVICES COMPETITION

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Although the term is applied almost universally to events in the financial-services industry, deregulation has become a misleading catchword for the evolutionary fading away of lines of market cleavage that delimit inherited patterns of competition. Jimmy Durante's signature line, "Everybody wants to get into the act," sums up the landscape of contemporary financial competition. With and without the explicit blessing of specialized financial regulators, deposit institutions, brokerage firms, and insurance companies are feverishly expanding into one another's traditional bailiwick. Providing opportunities for customers to transact these diverse lines of financial business in a single-statement framework is restructuring front-office and back-office work flows. It is turning a growing number of banking lobbies into pinstriped caricatures of Istanbul's famous covered bazaar and back offices into electronic transactions and communications centers.

1. An Introductory Overview

In at least two ways, deregulation misrepresents the nature of the adjustments taking place. First, it locates the impetus for change in the political arena to the exclusion of the economic one. It intimates that exogenous governmental policy decisions are causing nontraditional competitors to enter geographic markets and product lines from which exclusionary laws drafted by clever lawyers had previously shut them out. Such a perspective fails to acknowledge the prior breakdown of the inherited system of exclusionary regulation or to raise the issue of why society might suddenly reveal a preference for abandoning rather than rebuilding legal barriers to entry in the financial-services industry. To analyze these issues, one must focus on scope economies (resources saved by moving from specialized to joint production of individual goods) and on opportunities for

structural arbitrage. By structural arbitrage, I mean adaptive changes in a firm's organizational form designed to lighten its tax and regulatory burdens. In turn, one must recognize that structural arbitrage creates costs and benefits for government officials that require reactive changes in operative tax codes and regulations. Contemporary realignment of federal and state regulatory frameworks is largely a process of competitive reregulation.

The second way that deregulation misleads is in suggesting that the process involves the complete abandonment of regulation rather than its selective and partial relaxation. Talking about deregulation diverts attention from regulations that are being tightened or left unaltered and from reallocations of regulatory authority. Particularly with respect to destabilizing incentives established by deposit-insurance pricing and coverage, unchanged and tightened restrictions play at least as important a role in shaping financial market structures as the particular regulations undergoing relaxation.

Endogeneity of Market Structure. Rationalizations for laws intended to segment interinstitutional competition presume that, while scale economies may be important in finance (so that small firms need to be protected), scope economies are not. Contemporary events and a conjectural reading of cross-section evidence on the jointness and U-shapedness of commercial-bank costs functions (Benston, Berger, Hanweck, and Humphrey, 1983) suggest that both halves of this presumption are wrong. In the financial-services industry scope has always been correlated with firm size, making it hard to isolate the role played by economies of joint production in the growth and profitability of successful firms.

This paper depicts the fusion of financial-services competition as confirming the contestability model of multimarket competition (Baumol, Panzar, and Willig, 1983). Contestability theory maintains that, far from being an exogenous determinant of industry performance, market structure adapts through entry and exit to

permit customer demand to be served at minimum cost. The desegmentation of financial markets involves the expansion of low-cost producers at the expense of high-cost ones.

Regulatory interference slows the rate of adaptation by imposing entry restrictions and corresponding avoidance costs on particular firms. But in a free society in which multiple legislatures and regulatory agencies compete -- under jurisdictions that overlap -- for regulatees, tax receipts, and/or budget funds, authorities can only induce great or long-lasting divergences between the actual and the cost-minimizing market structure when continuing or transition costs associated with structural arbitrage are high.

Implications for Deposit Insurance. In the financial-services industry, any act of regulatory avoidance or reregulation sets into motion two interacting processes (Kane, 1981):

1. Adaptive responses by competing state and overlapping federal regulators (and their supporting political coalitions) to reoptimize their spheres of control by adjusting the rules under which the financial-services game is played;
2. Adaptive responses by various types of financial institutions (including foreign ones) to minimize regulatory burdens by arbitraging differences in applicable regulatory structures.

Because the inherited system of deposit insurance subsidizes unregulated forms of deposit-institution risk-bearing, changes in organizational form and expansions in financial-institution product lines may also arbitrage differences between the price of risk-bearing in capital markets and the 8-1/3 basis-point explicit premium paid for federal deposit insurance (Buser, Chen, and Kane, 1981). Since at least the late 1970s, structural arbitrage has combined with increasing volatility in interest rates to expand FDIC and FSLIC risk exposure faster than these agencies have been

able to reset their conceptions of contingent claims on their resources. The steady expansion of the resulting subsidy to risk-bearing creates a growing need for fundamental reform of deposit-insurance agencies' pricing, coverage, and failure-resolution policies. Although we lack the space to discuss them here, the shifting of deposit-insurance subsidies explains a series of anomalous features in the contemporary pattern of financial-services competition.

2. Exclusionary Rules, Avoidance, and the Cost of Multiproduct Operation

To model the costs of multiproduct operation and of laws meant to enforce product specialization, it is sufficient to focus on quantities of two goods, X_1 and X_2 . (By interpreting X_1 as a vector of $N-1$ outputs, the formulation can easily be generalized to any number of outputs.) Economies of scope exist when the total costs of producing the two goods jointly, $C(X_1, X_2)$, is less than the combined cost, $C_1(X_1) + C_2(X_2)$, of producing the same amounts of each good separately. Economies of scope are economies of joint production. They occur when two outputs share one or more capital or labor inputs in the production process, either directly or through networking. A traditional example concerns unallocable joint costs that occur in constructing and operating a multipurpose dam to produce electricity, flood control, and recreational services. Abstracting from offsetting costs of managerial coordination, a financial intermediary's computer, communications network, and branch-office system should make it cheaper for it to offer standardized deposit, loan, brokerage, and insurance products in combination than a series of specialized producers could produce the same products on a stand-alone basis.

During the last 15 years, technological change (in the form of the computerization of record-keeping and transacting, the robotization of teller functions, and expanding telecommunications links with customers, services, and financial markets) has increased the role of multipurpose capital equipment in producing

financial services. The desirability of spreading the costs of operating this "telemation" equipment across additional product lines underlies the rapid progress toward homogenization of function observed for different types of financial intermediaries. It also explains the attraction of nonfinancial firms (particularly those in data-processing and communications) into financial services.

The Generic Financial-Services Firm. Homogenization in the product lines of formerly specialized financial institutions leads to the concept of the all-purpose financial-services firm: a generic reconceptualization of financial-industry boundaries broad enough to encompass the range of activities being undertaken by contemporary institutional competitors. The financial-services firm (FSF) produces informational and transactional products for a base of customers with whom it has established relationships. Informational products include advice, data-processing, and communications services. Transactional products include execution of trading and payment orders, bidirectional funds rental, and risk-bearing services.

To deliver any financial service, an FSF must exchange information with its customers. Customers and FSFs exchange information by means of information media, which today include: person-to-person exchange, paper evidences (such as loan agreements, checks, and deposit slips); telephonic messages; magnetic entries on striped plastic cards, tapes, or discs; and keyboard-actuated video displays. These media connect the customer with the particular FSF product he wishes to use.

Increasingly, financial services register on and occur through an electronic transactions and record-keeping system. This system employs three kinds of productive processes: (1) techniques for maintaining and communicating with remote data bases; (2) techniques for executing transactions; and (3) techniques for delivering services to customers. Because the first two types of technology are known as back-office technology, the third type is called front-office technology.

Elements of front-office technology confront the customer every day: brick-and-mortar offices, automated teller machines, drive-in teller windows, and home-based electronic equipment such as telephones and computer terminals.

Among the elements that the customer does not see are the complicated interfaces that connect FSFs across the transactions system. Efficient production requires that FSFs belong to networks in which they both compete with and serve one another. With respect to back-office services, competing banks have always shared some resources. Interbank cooperation is exemplified by such developments as regional clearinghouses, check standardization, ATM networks, and loan syndications. At the same time that brokerage firms and correspondent banks act as wholesalers of back-office services to FSF customers, they compete with these customers for front-office business. Federal Reserve Banks play a quadruple role. They not only supply correspondent and communications services to firms they compete against, they are even empowered to regulate their competitors' activities. Moreover, as regulators they compete against other federal agencies and state banking departments.

Costs of Exclusionary Rules. This section states a condition for exclusionary rules to be successful and develops a measure of these rules' social costs. A key component of both equations is $C_{a,r}$, the cost of perfectly circumventing or avoiding a given set of restrictions against multiproduct operation in the most efficient way known at the time. Opportunities for circumvention act as a brake on the welfare burden of regulation, keeping this burden lighter than it would otherwise be.

By construction, $C_{a,r}$ is nonnegative. Avoidance costs may be conceived as the incremental costs of creating an unregulated substitute product or institutional arrangement. Examples include the extra costs of running a zero-balance sweep operation to circumvent the prohibition against paying explicit interest on demand

deposits or the extra costs of offering a prohibited product through a subsidiary corporation or holding-company affiliate. Whether X_1 and X_2 are produced jointly or singly depends on which of the following costs is smaller:

$$C(X_1, X_2) + C_{a,r} \text{ versus } C_1(X_1) + C_2(X_2). \quad (1)$$

This condition confronts only half of the resource waste inherent in effective regulation. The social cost of a regulatory exclusion is the sum of two items: (1) administrative costs of promulgating and enforcing the restriction and (2) the lesser of $C_{a,r}$ and the forfeited economies of scope $[C(X_1) + C(X_2) - C(X_1, X_2)]$.

The Impact of Technological Change. Technological change lowers both components of the lefthand side of condition (1). It increases the role of multipurpose "telemation" equipment in financial-services production and makes it easier for management to coordinate unregulated substitute arrangements such as sweep accounts or the activities of an array of subsidiary firms. Hence, it makes product-line homogenization increasingly likely.

Unless regulators increase administrative and avoidance costs to offset technological change, exclusionary rules would tend to lose their effectiveness. However, the social costs of regulation could rise, fall, or remain the same. We look at constraints that regulatory competition places on the behavior of regulators in Section 3.

This paragraph illustrates numerically how technological change might undermine exclusionary rules. Let us suppose that prior to a change in technology $C(X_1, X_2)$ equalled 8 and $C_{a,r}$ was 3, while $C_1(X_1) + C_2(X_2)$ was 10. Because scope economies of 2 fall short of avoidance costs, the exclusionary rule would succeed and specialized producers would be observed. The social cost of regulation would be the sum of forgone economies of scope (2) and administrative costs (which we arbitrarily assume to be 3). Next, let us assume that innovation drives the costs of joint production to 7 and avoidance costs to 2, without affecting the costs of

specialized operation. This change makes the exclusionary rule unenforceable, because it increases the costs of forgone economies of scope to 3 while reducing avoidance costs to 2. To reduce the burden of regulation, product-line homogenization would develop. If regulator costs remained unchanged at 3, the social costs of regulation would stay at 5, but avoidance costs would now register in place of forgone scope economies.

Scope Economies Are Partly Rooted in the Mispricing of Deposit-Insurance.

Mispricing deposit-insurance guarantees provides an unintended subsidy that reduces an insured institution's exposure to risk in product-line expansions. When brokers and insurers incorporate a deposit institution into their operation and when deposit institutions diversify into brokerage and insurance activities, some of the blessing of deposit insurance extends to these firms' nondepository affiliates. This is because, as a practical matter, it is impossible for deposit-insurance bureaucrats to prevent an insured deposit institution from assisting its troubled affiliates and subsidiaries whenever management perceives such assistance to be in its own best interest (Eisenbeis, 1983a).

Currently federal deposit insurance fully guarantees an institution's deposit accounts up to \$100,000 per distinct combination of accountholders, with accounts held singly and jointly and accounts held in different institutions each afforded a separate insurance status. To exploit the opportunity for individuals to multiply their coverage, funds brokers have developed software and communications facilities that distribute multimillion-dollar concentrations of wealth across individual institutions in \$100,000 pieces. In recent months, such brokers are said to have played a significant role in funneling deposits to seriously troubled banks and thrifts eager to pay a premium rate on \$100,000 CDs.

Deposit-insurance guarantees are supported by explicit premiums of 1/12 of one percent of total (insured and uninsured) deposits booked at domestic offices.

Currently, this premium is rebatable in part for FDIC clients, but not for FSLIC customers.

Because this pattern of explicit pricing is not sensitive to differences in either interest-rate volatility or an FSF's leverage, asset, or affiliated-institution risk, client risk-taking must be regulated directly. It is instructive to view capital-adequacy requirements and back-up regulatory penalties for excessive risk-taking as implicit premiums that agency managers vary to control these and other bureaucratically recognized forms of risk-taking.

Three things are wrong with this coverage and pricing system. First, it is allocationally inefficient: By underpricing risk, it wastes scarce resources. Second, it is distributionally unfair: It overcharges conservatively managed deposit institutions and forces them to stand ready to bail out high-flying competitors. Third, it fosters financial instability: It subsidizes deposit-institution risk-taking most when markets are most volatile and loads the burden for financing this subsidy onto both conservatively managed deposit institutions that are sure to survive any crisis and taxpayers at large. The implicit liability facing surviving institutions is underscored in the still-unresolved failure of a state-insured institution in Lincoln, Nebraska in late 1983. When the state insurance fund was revealed to have only \$2 million to cover \$70 million in guarantees, politicians immediately proposed assessing surviving financial institutions for the difference.

FDIC and FSLIC premium structures subsidize unregulated forms of risk-bearing. They lead dynamically to a continual search for (and expansion of) such new forms of risk-taking as entry into futures markets, investment banking, or insurance underwriting. They also make bureaucratic conceptions of operative categories of deposit-institution risk-taking play the pivotal role in preventing a system breakdown.

Federal deposit insurers would not end up subsidizing risk-taking if they were quick to adapt their regulatory policies to emerging problems (Bierwag and

Kaufman, 1983). But this is merely a counsel of perfection. Unless bureaucratic incentive systems can be made to mimic those of profit-oriented enterprises, this counsel of perfection has no empirical importance. Bureaucrats are inherently slower in responding to changes in interest-rate volatility and other emerging forms of risk than private insurers would be. Politically appointed agency heads typically have short horizons and are sensitive to political constraints that overlay an agency's strictly economic interests in the decisions it makes. This leaves government bureaucracies markedly lower in adaptive efficiency than value-maximizing firms. Given this relative weakness and a financial-services environment changing as rapidly as our own, it is poor public policy to require an agency to follow policies that thrust its adaptive efficiency in protecting its economic interests into a pivotal role. Such an agency spends its energy playing catch-up, much like a sprinter who is habitually late out of the starting blocks or a baseball pitcher who slips persistently behind in the count.

3. Structural Arbitrage and Competitive Reregulation

Through structural arbitrage and the threat or promise of structural arbitrage, value-maximizing managers of U.S. deposit institutions may to a large extent choose the set of laws and the particular regulatory bodies by which they are governed. This is because the set of restrictions applicable to their business operations and the particular agencies assigned to oversee their behavior vary with how they resolve a series of options concerning the institution's structural form.

Structural Options. The broadest set of options concerns the type of charter under which a deposit institution elects to operate. First, it may charter or recharter itself as a commercial bank, a savings-and-loan association (S&L), or a savings bank (MSB). Rechartering may be accomplished by charter conversion or by merging into an institution that already has the desired charter type. Second, each type of charter is available alternately from state or federal authorities. While commer-

cial banks and S&Ls are chartered in all 50 states, MSB charters are available in only 17. Whenever the location of an institution's offices is not predetermined, these options generate a space of as many as 120 ($=2 \times 51 + 18$) different regulatory "micro-climates."

Most of these micro-climates involve multiple regulators and dimensions of additional choice. For example, federally chartered commercial banks (national banks) have the Comptroller of the Currency as their primary regulator, but are subject to additional oversight from the Federal Reserve and the FDIC. Although primarily under the supervision of its state banking department, a state-chartered commercial bank typically subjects itself to federal co-supervision. This occurs whenever it is federally insured, with an even richer regulatory climate coming on line if it chooses to become a member of the Federal Reserve System.¹

Until 1979, all savings banks were state-chartered and insured either by the FDIC, a state insurance fund, or both. Federal charters have gained in popularity since the Garn-St Germain Depository Institutions Act (DIA) of 1982, which permits a converting MSB to retain FDIC insurance. Prior to the DIA, federal savings banks had to be insured by the FSLIC, which meant that a MSB could convert only when the prior insurer(s) and the FSLIC could agree on compensation for shifting the liability associated with the insurance guarantee over to the FSLIC.

Micro-climates for S&Ls are in some respects richer than for MSBs. First, S&Ls have an institutionally specialized federal regulator (the Federal Home Loan Bank Board or FHLBB) and deposit-insurance fund (the FSLIC). In addition, most states have separate agencies regulating banks and S&Ls. Five states also operate insurance funds for state-chartered thrifts (Massachusetts, Maryland, North Carolina, Ohio, and Pennsylvania).

A second variety of option concerns the form of institutional ownership. For managers who elect against seeking a commercial-bank charter, the opportunity

exists to operate under either stockholder or mutual ownership. The outcome of this election affects the incentive structure under which management functions, in that managers of stockholder institutions are subject to SEC disclosure requirements and to possible dismissal in proxy fights and unfriendly takeovers, on the one hand; but are able to work out a rich variety of stock-based compensation schemes or even to participate in leveraged buyouts, on the other. For existing institutions, the conversion option is effectively one-way: from mutual to stock ownership.

For stock firms, the most important option is whether or not to allow the stock to be owned by a holding company (i.e., to interpose a layer of indirect ownership -- a corporate stockholder -- between the deposit institution and its ultimate owners). Deposit-institution holding companies (HCs) are differentially taxed and regulated as compared to deposit institutions themselves. Deposit-institution HCs are subject in some states to additional state regulation and to federal regulation of permissible activities under the Fed or FHLBB. However, under special provisions of federal law, S&L HCs are currently exempted from the layer of FHLBB regulation as long as the HC chooses to own only one S&L. Deposit-institution HCs are also subject to disclosure regulation by the SEC from which deposit institutions themselves are exempt, but HCs may avoid SEC oversight by keeping the HC's value of equity and number of stockholders within legislated limits. Notwithstanding this exposure to incremental regulation, the HC device provides opportunities to circumvent many restrictions on deposit-institution activities. Nonbank affiliates may undertake activities that deposit institutions cannot. Moreover, tax and regulatory burdens even on permissible activities may be lightened in important ways.

A similar set of options exists even for non-HC institutions. This concerns whether or not to use subsidiary corporations (or, in the case of deposit-institution subsidiaries of HCs, affiliated corporations) to operate various lines of deposit-

institution business. Spinning off some product lines may lighten the burden of federal capital-adequacy requirements and, not only circumvent interstate and intrastate restrictions on office locations, but allow individual product lines to be produced in the micro-climate in which they can generate the highest after-tax profit.

Competition Among Legislatures and Regulatory Bodies. Markets for regulatory services should be regarded as nearly as contestable as those of regulatees. This contestability makes applicable laws and the regulatory postures of different authorities partly endogenous. Deposit institutions' structural choices have economic consequences for legislatures and for turf-maximizing regulatory agencies. Their desire to influence the outcomes of regulatee choices leads these bodies to compete for the "regulatory business" of potential clients. This competition gives deposit-institution lobbyists political leverage with which to play authorities off against each other to win regulatory forbearance for circumvention activities and to educe favorable changes in legislation or agency rules.

Competition between overlapping federal and state regulators looks in the short run like wasteful duplication, but leads in the long run to better-adapted regulatory rules. When the opportunity cost of an exclusionary rule rises, pressures develop to soften the rule. It is unlikely that laws meant to hold deposit institutions out of brokerage and insurance activities and brokers and insurance companies out of deposit-institution markets can stand up indefinitely against opportunities to reduce product costs created by growing scope economies. While it is natural for lobbyists from each industry to fight a rearguard political action to delay change, American politics and ideology favor innovation over regulation in many ways. In one way or another, low-cost schemes for producing and distributing products are able to push aside high-cost ones. This is partly because reregulation is a competitive process that responds to economic as well as political forces.

Banks' recent success in winning favorable product-line regulation in Delaware and South Dakota illustrates the process. Legislatures in these states have given specialized subsidiaries of out-of-state HCs long-desired freedoms and powers, particularly with respect to credit-card and insurance operations. Especially if (as I contend) economies of joint production are increasing over time, scope economies give deposit institutions an incentive to probe nationwide for political weak points in exclusionary policies. At the same time, the tax, budget, and employment benefits of winning regulatory refugees from other jurisdictions give bureaucrats and legislatures an incentive to trade in regulatory relaxation.

Similar pressures are fueling the drive for legislation permitting reciprocal interstate banking at least within collections of neighboring states. Limited-reciprocity laws have already passed the Massachusetts, Connecticut, and Rhode Island legislatures, and are actively being considered by state officials in other regions. Maine and New York permit acquisitions by out-of-state banking organizations from any state that grants reciprocal privileges to banks in their state, while Alaska allows virtually unconditional acquisition of existing institutions by out-of-state organizations. Lawsuits have been brought against the limited-reciprocity laws on several grounds, including the claim that the Constitution's interstate-commerce clause precludes states from imposing conditions on interstate entry. But by the time that these suits wend their way fully through the courts, odds are good that either Congress will have already blessed these regional experiments or interstate operation of deposit institutions will (as NOW accounts and remote ATMs were in 1980) prove politically too well-established to be undone.

By realigning its organizational structure, a financial firm can not only reorganize its regulatory environment, it can also create pressure on legislatures and regulators to rewrite the regulations under which it has to play. Competitive reregulation occurs not only among officials in different states, but also between

state and federal officials and between managers of different federal agencies. Regulators try to forestall changes in organizational form that would transfer some or all of their traditional regulatees' business from their dominion to that of another agency. When an agency suffers a cumulative loss of regulatees, it maneuvers both administratively and in the legislative arena to recapture its clientele, usually by lowering the net burden its regulations place on its clients. Federal Reserve (and eventually Congressional) response to the Fed's membership problem of the 1960s and 1970s and the granting of new powers for state-chartered institutions by state banking departments and legislatures in response to the DIDMCA of 1980 exemplify the typical pattern of defensive reaction.

But it must never be forgotten that some regulatory agencies and legislatures have capacities for a punitive retightening of regulations, with the U.S. Congress having the greatest capacity of all. Congress can vote retaliatory preemptions of state laws able to nullify particular legislative and regulatory actions in every state. It can also enact lengthy moratoria that suspend the opportunity to effect particular types of organizational change. With the courts, Congress serves as the final arbiter of disputes over alternative agencies' dominion and power.

Such disputes arise frequently at the federal level, especially between the SEC and banking regulators (e.g., over who should be entitled to regulate brokers of \$100,000 CDs or discount-brokerage subsidiaries of deposit-institution HCs) and between the Federal Reserve and other federal regulators of deposit institutions. In such contests, the Fed has special clout with Congress. This clout grows out of the Fed's responsibilities for macroeconomic stability and its willingness to be scapegoated for unfavorable macroeconomic events. The Bush Task Group's difficulties in dispersing the Fed's existing regulatory authority among more specialized deposit-institution agencies provides renewed evidence of the Fed's special primacy in the arena of financial regulation.

Distressing Implications for Financial Stability and Public Policy Toward the Nonbank Bank. Pre-existing conflicts over regulatory turf have been heightened in the 1980s by cross-industry merger activity and product-line expansion by brokerage, insurance, and deposit firms. The ongoing robotization and electronification of systems for producing and delivering financial services is extending the boundaries of regional competition and sweeping the activities of individual deposit institutions into new states and into the orbits of securities and futures-market regulators and state insurance departments. These same forces are simultaneously thrusting the activities of securities, futures, and insurance firms into the orbits of state and federal deposit-institution regulators.

If the scope economies that are driving financial change did not include subsidies to risk-bearing rooted in the mispricing of risk in federal deposit insurance, structural arbitrage and competitive reregulation would shape up as unambiguously resource-saving activities. However, until federal deposit insurers explicitly price such unregulated risks as those associated with borrower default, asset maturity, balance-sheet leverage, affiliated institutions, and technological change, social welfare is served by regulatory action to limit risk-taking by insured firms. Although this concern justifies authorities' search for ways to constrain and supervise a deposit institution's portfolio positions as well as risky activities undertaken by any holding-company affiliates, it in no way proves the optimality of the particular policies actually adopted.²

In the short run, bureaucratic competition for jurisdiction is leading various state and federal regulators to facilitate forms of structural arbitrage that undermine the inherited system of federal deposit insurance. Although this arbitrage is vastly increasing the risk exposure of the FDIC and FSLIC, political pressures and competition from other regulators have deflected the deposit-insurance agencies from bringing these new risks under administrative control.

Structural arbitrage is a game that may be played by brokers and insurers, too. The existence of patterns for circumventing regulatory restrictions on deposit-institution activities makes deposit institutions more attractive candidates for takeover by nondepository firms. Just as deposit-institution HCs can acquire nondepository firms, nondepository financial institutions (such as Merrill Lynch, Dreyfus Corp., and Prudential Insurance) and even nonfinancial firms (such as Sears Roebuck, J.C. Penney, National Steel, and the Parker Pen Co.) can acquire a stockholder-owned deposit institution. If the acquired firm is a thrift institution or is converted into one, its parent can avoid specialized federal oversight at the holding-company level as long as it meets the definition of a unitary savings-and-loan holding company. If the acquired firm is a bank, spinning off either the demand-deposit or the commercial-loan side of the business makes it possible in principle for the parent firm to elude Fed regulation as a bank HC. The hybrid operation that results is known paradoxically as a "nonbank bank." In terms of the operative definitions of the Bank Holding Company Act, the institution becomes a "nonbank," even though as the holder of a bank charter it may continue to gather time and savings deposits and to have these deposits insured by the FDIC. Moreover, it even seems possible to circumvent restrictions on interstate banking (or at least it seemed possible to the management of Dimension Corp.) by operating a network of limited-service banks in different states.

To some deposit-institution regulators and trade associations, the freedom afforded nonbank banks and unitary S&L HCs represents a glaring pair of loopholes in the legislative fabric of exclusionary regulation (Eisenbeis, 1983b). During 1983, Fed Chairman Volcker, citing a growing threat to the traditional separation of banking from commerce and investment banking, repeatedly urged Congress to pass a temporary moratorium on nondepository acquisitions of deposit institutions and on state and federal actions that allow different types of financial-services firms to expand beyond their traditional lines of business.

Volcker's position on the desirability of separation was not supported by other federal regulators of deposit institutions. Although the Comptroller of the Currency imposed his own moratorium on applications for de novo national-bank charters by securities firms and other nonbanking businesses (extending from April 6, 1983 to at least March 31, 1984), his stated goal was to give Congress time to redraw industry boundaries. His office continued to process pending applications and to permit nondepository firms to acquire existing national banks. In even sharper contrast, the FDIC and FHLBB encouraged their regulatees to undertake various forms of securities activities, with the FHLBB asymmetrically delaying action on applications by brokerage firms and insurance companies to acquire thrifts.

Lack of consensus among federal regulators and among financial-industry trade associations left Congress reluctant to legislate. Congress hates to choose sides in contests in which the social costs and benefits of alternative solutions are highly uncertain. For this reason, Congress appeared willing to permit structural arbitrage to set the future parameters of financial-services competition and to accept any resulting strains on the deposit-insurance system.

Unwilling to accept these same strains, on December 14, 1983 the Federal Reserve Board launched a bold reregulatory counterattack whose ultimate legality remains uncertain. Frustrated by Congressional inaction, the Board unilaterally broadened its interpretation of what activities it holds to be "commercial loans" and "demand deposits" under the Bank Holding Company Act. Its definition of commercial loans now includes sales of federal funds, extension of call loans to brokers, and purchases of commercial paper, certificates of deposit and bankers acceptances, while the category of demand deposits now includes NOW and super-NOW accounts.³ These redefinitions force nonregistered corporate owners of most nonbank banks to confront a pair of nested dilemmas. They must either further

narrow the product lines of their nonbank-bank subsidiary (e.g., by focusing on MMDAs and noncheckable deposit accounts, repurchase agreements, and consumer and mortgage loans) or, within two years, either divest themselves of the nonbank bank or register with the Fed as a bank HC and accept Fed dominion over its activities. Sugaring the pill, the Fed simultaneously added five new powers to the list of permissible activities for nonbanking subsidiaries of bank HCs: issuing money orders; arranging equity financing for real estate; underwriting and dealing in government and specified money-market obligations; providing foreign-exchange advisory services; and performing as a futures commission merchant.

In contrast to the customary regulatory practice of exempting or grandfathering all combinations undertaken under the old rules, the new definitions are retroactive. However, the Fed proposed to permit combinations established before December 10, 1982 to apply for exemptions based on hardship and fairness. The cutoff date coincides with a Board ruling that Dreyfus Corp. would have to register as a bank HC before it acquired a New Jersey bank (a ruling Dreyfus later circumvented by acting under state authority).

These actions increase the expected value and the variance both of the Fed's own administrative costs and of costs for unconventional entrants of circumventing Fed regulation of bank holding companies. If Fed officials were truly confident in the Board's authority to close the nonbank-bank loophole on its own, one must suppose that Chairman Volcker would not have allowed a problem that so obviously distressed him to fester for so long. The most logical way to read the Board's action is as a forcing move designed to make Congress and the federal courts referee the game of HC reregulation. Effectively, the Fed has demanded that Congress and the Courts either sustain or overrule its redefinitions and choice of cutoff date. Unlike Chairman Volcker's polite pleas for legislative action, this public challenge raises constitutional questions that cannot be turned aside. No

matter what the referees finally decide, their merely having the issue under advisement and the threat of additional unilateral action by the Fed promise to reduce for the duration prospective net benefits to brokers and insurers from entering the banking business.

4. Summary

On the TV show, You Bet Your Life, a minister once thanked Groucho Marx for all the joy his work had brought into the world. Without missing a beat, Groucho in turn thanked the minister for all the joy his work had taken out of it. For brokers, insurance companies, and Dimension Corp., Chairman Volcker has taken some of the joy out of the world of finance. The Board's action leaves the opportunity for deposit institutions to enter brokerage and insurance asymmetrically much greater than the opportunity for insurers and brokers to enter banking. If brokers and insurers seek a legislative rebalancing of regulatory subsidies, and come to appreciate the size of deposit-insurance subsidies and their role in lessening the risks of product-line extension by deposit institutions, they may tip the balance of lobbying pressure toward deposit-insurance reform.

As long as scope economies and deposit-insurance subsidies remain substantial, almost "everybody" should still want to get into each other's act. The Fed's redefinition of its regulatory domain temporarily reduces the product-line flexibility of nonbank financial-services firms relative to banks. In raising the costs of interstate and nonbank entry into banking markets and forcing the hand of Congressional and judicial referees, the Fed transformed a routine regulatory price war into a constitutional struggle over the limits of the Fed's power as financial regulator and stabilizer of last resort.

REFERENCES

- Baumol, William, Panzar, John C., and Willig, Robert D., "On the Theory of Perfectly Contestable Markets," Bell Laboratories Discussion Paper No. 268 (June 1983).
- Benston, George J., Berger, Allen N., Hanweck, G.A., and Humphrey, D.B., "Economies of Scale and Scope in Banking," in Proceedings of Conference on Bank Structure and Competition, Chicago: Federal Reserve Bank of Chicago, 1983 (forthcoming).
- Bierwag, Gerald O. and Kaufman, George G., "A Proposal for Federal Deposit Insurance with Risk-Sensitive Premiums," in Proceedings of Conference on Bank Structure and Competitors, Chicago: Federal Reserve Bank of Chicago, 1983 (forthcoming).
- Buser, Stephen, Chen, Andrew H., and Kane, Edward J., "Federal Deposit Insurance, Regulatory Policy, and Optimal Bank Capital," Journal of Finance, 36 (March 1981), pp. 51-60.
- Eisenbeis, Robert A., "Bank Holding Companies and Public Policy," in George J. Benston (ed.), Financial Services: The Changing Institutions and Government Policy, Englewood Cliffs, NJ: Prentice-Hall, Inc. for the American Assembly, 1983(a), pp. 127-155.
- Eisenbeis, Robert A., "Policy Issues Raised by the Expansion of Nonbank Banks," unpublished manuscript, University of North Carolina, Chapel Hill, 1983(b).
- Kane, Edward J., "Accelerating Inflation, Technological Innovation, and the Decreasing Effectiveness of Banking Regulation," Journal of Finance, 36 (May 1981), pp. 355-367.
- Kane, Edward J., "A Six-Point Program for Deposit-Insurance Reform," Housing Finance Review, 2 (July 1983), pp. 269-278.

FOOTNOTES

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¹Only in about three states, may a new bank elect against FDIC insurance and the additional balance-sheet regulation that comes with it. Until universal reserve requirements dictated by Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980 are fully phased in, member banks face higher reserve requirements than nonmembers do.

²Kane (1983) discusses how deposit-insurance subsidies are shifted to selected borrowers and depositors, and suggests a series of reforms ranging from market-value accounting for insured institutions to changes in FDIC and FSLIC risk management, coverages, and pricing. Any subset of the reforms would allow scope economies to be pursued without surrendering control of the aggregate risk to which the FDIC and FSLIC are exposed.

³This act of redefinition recalls the Comptroller's unsuccessful attempt to rule that off-premises ATMs were not legally branch offices whose locations were subject to regulation under existing branch-banking laws.