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F. E. BALDERSTON

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THE STRUCTURAL OPTION
FOR THE SAVINGS AND LOAN INDUSTRY*

by

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1. NEW CONDITIONS AND THE SIZE DISTRIBUTION OF S&L FIRMS

Since the mid-1960s, the social bargains that had made the savings and loan industry relatively tranquil in a pattern of steady growth have become more and more frayed. Secular inflation, at first disguised as a series of "credit crunches," took hold and, in fact, has become worldwide. This inflationary process and its monetary-policy antidote compel wider and wider swings in short-term interest rates. Part of the old social bargain for S&Ls, founded on the national desire to pump very large fund flows into residential mortgages, was the presence of implicit (until the mid-1960s) and then explicit politically managed interest rates on deposits in commercial banks and S&Ls, with a differential allowing S&Ls to pay slightly more than banks and thus sustain continued savings inflow under increasingly precarious market conditions.

The New Money-Market Environment

From the 1974 recession on, two forces in the marketplace became strong enough gradually to undo the scheme of politically managed interest rates on savings. First, market rates periodically diverged farther and farther from the statutory interest-rate ceilings. To offset tendencies toward disintermediation, S&Ls themselves began to play a bit in the uncontrolled part of the market by offering free market rates on "jumbo" CDs. The FHLB system fed them advances, but advances that were pegged
in price to the rates prevailing in the agency securities market. The clincher came when the Federal Home Loan Bank Board authorized the six-month Money Market Certificate in 1978. This reversed at one stroke the stretch-out of S&L liabilities that had been achieved through greater use of multi-year accounts, and it tied the short-term savings liabilities of S&Ls conclusively to the short-term money market. Meanwhile, money-market funds came along to offer the individual investor and manager of household cash a convenient alternative to being the victim of a now anachronistic series of rate ceilings. The rise of these funds to an aggregate size of more than $80 billion in total assets by the first quarter of 1980 means that, through this growth, they were siphoning away some of the fund flow available from the household sector. They were also forcing the S&Ls not to retreat from paying market rates for funds, and they thus completed an irreversible shift toward market-determined rates of payment to the saver.

For S&Ls and commercial banks, the increase in total balances of MMCs meant that, by the first quarter of 1980, S&Ls and banks confronted a savings public that was successfully adapting its expectations and its liquid-asset holdings to market realities. The cost of funds to S&Ls had already achieved a common-law marriage with the market before the Deregulation Act made it official in April 1980. While larger savers had already protected themselves through investment shifts, the "plight of the small saver" provided a political counterpoise against any possible efforts to restore the potency of interest-rate ceilings. (From this standpoint, one must interpret as largely empty the attempt of the new executive vice president of the U.S. League of Savings Associations to invoke a "crusade" against rate-freeing actions of the Deregulation Committee, unless these
efforts are really directed toward rebuilding the "housing coalition.")

The run up in short-term interest rates during the first quarter of 1980, meanwhile, pinched off some cash inflow to savings institutions but, equally important, induced a very steep rise in mortgage rates and a very steep decline in mortgage lending volume and in new housing starts. This happened because institutions, fearing future market conditions, turned to money-market investments for safe, short-term placement of what liquid balances they did have on hand.

This episode was, indeed, the grand entrance for the environment of the 1980s. The Deregulation Act only gave it statutory legitimacy. Now, however, there is still to be faced the fundamental question of viability of the financial structure during the transition to more conclusive reliance upon free-market forces.

The Size Distribution of Financial Firms: Outcome of an Economic and Political Process

What are the most relevant historical characteristics of the financial structure as we turn to the question of viability? If we go back far enough, state-by-state chartering and control and a local market orientation of banks and other financial institutions arose from Jacksonian, populist suspicion of "money" interests in the central markets of the young United States. The National Bank Act of 1863 did not alter this basic pattern of localization, nor did the 19th century development of nonbanking financial intermediaries, such as savings and loan associations and mutual savings banks. This large array of small, localized institutions within each part of the financial structure became an active, politically powerful interest group in its own right, even though, with the rise of
very large banks and holding companies, commercial banking in due course became highly concentrated in most metropolitan and regional markets. Large S&Ls also emerged, but they do not dominate the size distribution of S&L firms to the same extent.

The present day number and size distribution of banks and of savings institutions are joint products of: the regulatory framework and business incentives for chartering and branch licensing; the regulations and regulatory attitudes relating to approval of mergers; the presence and use of federally backed supportive institutions (including especially the liquidity providers and the providers of deposit insurance); and the private business incentives of the backers and managers of these institutions. Result: more than 4,000 S&Ls and 13,000 commercial banks, most of them small and heavily reliant on their purely local character. The reforms of the New Deal saved this highly dispersed structure from collapse, but also from consolidation.

Sidney Jones has displayed in a comprehensive and incisive way the more recent history of attempts at financial institution and regulatory reform, from the CED-sponsored Commission on Money and Credit in the early 1960s up to all but the "final" chapter that came with the passage in March 1980 of the Deregulation Act, too late to be included in his book (Jones, 1979). Jones shows how, on each of several occasions, there was an attempt to form a coalition strong enough to enact a "package" of legislative changes that would constitute a new bargain between banks and S&Ls and a more market-efficient mode of operations. And he shows how, on each of these occasions, it was possible to assemble a blocking coalition to frustrate the reform and defeat the package. The
seriousness of the financial crisis in the first quarter of 1980 is demonstrated in the most conclusive way of all by the fact that no blocking coalition could prevent the passage of the Deregulation Act.

The Financial Industries and Their Regulators

An era ended, and a new era began, but we are not prepared for it. The financial structure inherited from the past could be, and was, fairly easily adapted to serve the steady growth conditions of the 1950s and early 1960s. The "housing coalition" (founded in turn on the profound desire of most Americans for home ownership) successfully supported the S&L component of this structure. The market-driven environment of the 1980s will, however, require a new fitting of the financial structure both to market forces and to national goals as expressed in political strength. The housing coalition will very probably lose priority during the 1980s in the political allocation of financial capital (other claimants, such as energy supply and industrial re-fitting for greater productivity, are in the ascendency). Thus, both the historical market foundation for the present size distribution of firms and the political shelter for it have been greatly weakened. It is now necessary to re-examine in a fundamental spirit what is to be done to assure viability to the financial structure for the 1980s.

Market risk already operates on the size distribution of firms. It is instructive to note how market forces will impinge upon and tend to modify the present day market structure even though the regulatory authorities themselves would probably prefer, if they could, to defend the status quo. There are several important signals of market-forced change at the present time.
Market Risks and Current Pressure on the Size Distribution of S&L Firms

One important signal of trouble is the existence of large implicit write-downs in the current market value of assets, because of the rise in the interest-rate structure occasioned by secular inflation. Financial institutions have not been obliged to make immediate reported balance-sheet write-downs when interest-rate increases or increases in the probability of default on loans occurred. For protracted periods in the 1930s, many banks and S&Ls that did not actually fail would have been technically insolvent by hard application of current market tests of the recoverable value of their loan assets, but these high probabilities of default gradually receded for many loans. In 1979 and the first half of 1980, the villain was interest-rate risk rather than default risk; the longer the duration of the asset having a stated interest rate below the current market rate for the expected further life of the asset, the greater the reduction of the present, market-related, value of the asset below its book value. Balance-sheet corrections in the valuation of low-yield portfolios are not immediately required by external auditors or the regulatory authorities unless some triggering event, such as liquidation of the firm, requires accounting adjustments. If the implicit reduction of asset values is temporary, as the temporarily high default risks on loans in the early and mid-1930s proved to be, then the individual firm can attempt to "ride it out," and it is rational for the regulatory authorities to be sympathetic, for the going-concern value of the financial enterprise is usually greater than the liquidation value minus the quite high frictional liquidation costs. But if the entire term structure of interest has shifted for a long time to come to a higher overall position, then
the long-term viability of the financial firm having a high duration of assets is in doubt even if no accounting adjustments are immediately required.

The average cost of funds (deposit liabilities, plus borrowings) is driven up in tandem with the rise in the short-term end of the term structure of rates. The average yield on earning assets is less responsive to the extent that these assets have greater duration than the duration of liabilities. Operating costs other than cost of funds cannot be reduced quickly, and some are in fact forced upward by the same inflationary process that actuates a higher term structure of interest rates. Operating losses then result, for as many quarters as it may take to gradually replace the low-yield assets with newly required assets having higher yields. Low-yield assets also tend to stretch out in average effective duration, because the borrower seeks to retain the low interest rate by postponing repayments and, in the event of resale of the property, by helping the new buyer to assume the existing, low-interest rate loan. The present value of the stream of future low-earnings quarters is low or negative, reducing the imputed net worth of the firm. (Other values also affect true net worth, including the underlying value of the franchise or charter and the value of market reputation or goodwill with transactors on both sides of the intermediation process--both savers and borrowers.)

Maisel and several associates undertook a major study of capital adequacy in the commercial banking firm, and the risk considerations discussed above received searching analysis by several contributors to that study (Maisel, 1979). It is ironic that in 1979-80 the first reaction of the spokesmen for S&L firms and of the regulatory authorities to
signals of reduced earnings capability was to reduce, not to increase, the target net worth level and the required increments to net worth for these firms.

One of the lessons of the bank capital adequacy study was that the adequacy of capital as a buffer against risk must depend not only on the level of profitability from intermediation (which is, after all, a function of the spread between the weighted average yield on assets and the weighted average cost of funds), but on the variability of profits over time. We shall return to this theme later, as the expected variability of earnings in the future is a significant determinant of appropriate market structure for the 1980s.

Problems of balance-sheet adjustment for past problems do not arise when we turn to consideration of earning power on the marginal dollar of cash inflow. The individual financial firm operating a given set of office facilities can attract additional cash inflow from depositors by advertising and otherwise promoting more or by finding additional types of depositors to whom incremental offers of interest payment can be made (e.g., brokered accounts, NOW accounts, and free-market accounts such as jumbo CDs). Under certainty, such a firm would in fact seek to attract additional dollars for asset placement as long as the expected marginal return on some available asset type was greater than the marginal cost of funds plus the other marginal costs of operation. But the real market is replete with uncertainties as to the timing of cash inflows and outflows, the course of future market rates of interest, and the response patterns of various classes of both borrowers from the financial firm and lenders to it. The theoretical rules of marginality are not much
help. Rather, the problem is, in principle, to evaluate:

1. For a particular source and mode of receipt of the incoming dollar:
   (a) the expected cost or payment to the source, E(C)
   (b) the variance of E(C), var C
   (c) the expected duration of that dollar, E(T_m)
   (d) the variance of that duration, var T_m

2. For a particular form of asset placement:
   (a) the expected revenue, E(Y)
   (b) the variance of E(Y), var Y
   (c) the expected duration, E(T_y)
   (d) the variance of T_y, var T_y

If the liability and the asset dollar are of the same duration and variance, they are hedged precisely, and the only remaining issue is to calculate marginal profitability, E(Y) - E(C). In general, of course, incomplete hedges predominate; and the profitability calculation would need to be adjusted for the net risk exposure from differences in duration or in variances.

As there is an array of sources for incoming dollars on the liability side and an array of asset-placement alternatives, the full comparison of "best" marginal opportunities would be a difficult matter. James Van Horne provides a modern treatment of the problem (Van Horne, 1978, especially Chapters 4 and 5).

The most adverse market risk situation would be implied if, for every matched duration of a liability dollar and an asset dollar, the adjusted marginal profitability is low or negative. It would not necessarily be fatal if some matched durations were negative while others were strongly positive, provided that the decision makers in the firm were able to distinguish these cases by correct forecasting and avoid negative net
profitability. However, where the financial firm does not have adequate means of equating its commitments in each duration, then there remains net risk exposure. S&Ls have higher durations of assets than of liabilities historically, and they have net risk from this. Forecasting errors by management occurred in those S&L firms that, in 1979, made loan commitments at historically high mortgage rates only to find that the money market drove their marginal costs of funds up to such unexpectedly high levels that their loan commitments became grossly unprofitable.

Whether the regulatory authorities like it or not, market conditions such as those arising from volatile interest rates and periodic extreme monetary tightness make many financial firms vulnerable. The regulatory authorities can seek to offset this vulnerability by waiving temporarily the required levels of allocation to reserves (which assists low-profit firms, mainly small firms but also mutuals that would have little or no possibility of adding to reserve capital except through retained earnings). Also, the authorities can make it easier, within the limits of their own statutory mandate, for financial firms to manage assets to advantage (e.g., more attractive mortgage instruments, more flexible investment rules), or to attract new types of liabilities so as to gain lower-cost inflows of cash (e.g., NOW accounts, perhaps). The above examples, however, illustrate the problem: greater latitude to management is not enough to overcome a crippling write-down of asset values, and it is not of much use unless the firm's managers have the capacity to compete successfully in the new markets where wider powers would take them (e.g., in offering NOW accounts to attract new liabilities, or offering consumer installment loans to attract new types of assets).
Query: What Would Have Been the Size Distribution of S&L Firms by 1980 if This Policy Management Had Not Occurred Historically?

We may be sure that historical market shelters have enabled many localized firms to survive that would not exist today in the absence of regulatory restraints. For example, in California, where there is statewide branching of S&L firms, both state chartered and federally chartered, sixteen federal S&Ls and twenty-three state-chartered S&Ls (a total of thirty-nine firms) were in the top 200 S&Ls nationwide as of December 31, 1979. Only 140 additional firms existed in California. These large firms, 21.78 percent of the total population of California S&Ls, had 83.3 percent of total S&L assets. Illinois, with a sharply restrictive policy of geographical branching both for commercial banks and S&Ls, presented a very different situation. Of the S&Ls in Illinois, 2.62 percent were in the top 200 and had 30.9 percent of total S&L assets. Even though Illinois is one of the high-asset states ($42.5 billion at year-end 1979), it had only ten big firms and 381 smaller ones—a much larger tail to the size distribution.

If the U.S. size distribution of S&L firms had been a strict photographic enlargement of the California size distribution, there would have been at year-end 1979 a U.S. total of about 900 insured S&Ls instead of over 4,000. One hundred and seventy-nine S&Ls in California account for almost 20 percent of total U.S. S&L assets, and five times this number, or 900, would thus be sufficient to handle total U.S. S&L assets, on a presumption of proportional scale-up of the California pattern.

Had there been free pricing of both assets and liabilities historically, competitive cost pressure would have also been much more severe,
and higher-cost firms would not have survived so readily. While there are some economies of scale available, not all large firms have historically practiced intense cost control. For example, among firms having $250 million or more in total assets at December 31, 1979, the large federal and state-chartered mutual associations had operating costs (excluding interest payments) amounting to 14.62 percent and 14.75 percent of total income in 1979, respectively. The large stock associations had operating costs amounting to 12.29 percent of total income --about 250 basis points less (FHLBB, 1980a).

S&Ls have also been restricted in both their geographical and service markets; they could not cross state lines in their branching (and for most of the industry's history they were strongly discouraged from acquiring savings or originating mortgages across state lines). Avenues of portfolio adjustment were available through purchase of participating interests or whole interests in mortgages already issued. Mortgage portfolios have been much more highly concentrated geographically than would have been the case under less constrained authority to lend and to manage assets, and, thus, are less diversified against local market risks.

While we can only speculate on how the size distribution of financial firms would have evolved historically under unconstrained, free-market conditions, it is also necessary to observe that such a historically evolved free-market size distribution would not necessarily be appropriate as we look ahead to the 1980s. Changes in consumer needs and most business techniques are comparatively gradual, but explosive shifts are occurring in EFT and other payments technologies, and in worldwide money market institutions that are now knit together in nervous union under conditions of secular inflation throughout the free world.
Deregulated Industries and the Size Distribution of Firms

Deregulation of a previously regulated industry invariably puts pressure on firms that become marginal or submarginal under conditions of intensified competition. Thus, the problems and opportunities facing commercial banking and the savings and loan industry have counterparts in the transportation industries--airlines, truck transportation, and perhaps rail transportation--and in other regulated industries. In these financial industries, however, the public authorities are in a real sense directly responsible for entry and for much of the impetus of individual firms' expansion because the regulators exert control by rationing new charters and branch licenses, and by setting the conditions on approval of mergers.

As a result, many existing firms have historically had greater profit potential, for given size and location, than they would have had under freer competition, and the size distribution of firms and the geographical distribution are very different from what could have been presumed to evolve as the size distribution consequent on "natural" market evolution. All this is not a reason for avoiding deregulation, but it does mean that an abrupt change toward reliance on market forces induces unanticipated vulnerability among firms in the industry.

The problem is one of transition and the dynamic path of the deregulated industry. But the transition focuses upon the most politically sensitive of areas: disappearance of firms and apparent or real reduction in the number of market alternatives available to consumers and other users of the industry. Public policy standards and adjustment strategies are needed to guide the transition.
Deregulation of the financial industries illustrates another common problem. Some transitional steps could make it easier for vulnerable firms to survive. For example, efforts could be made to slow the trend toward market-determined, high interest rates on savings accounts. But any such delays would reduce near-term gains to the consumer. Furthermore, such delays would make it more difficult to move toward other public policy objectives. Any softening of the blow to savings and loan associations and other financial institutions would tend to reduce the potency of anti-inflationary monetary policy.

The increased vulnerability of many firms to market forces is accompanied by political vulnerability of the regulated industry if transitional protections are sought. Not only are the "pro-deregulation" advocates philosophically strong, but also the pressures that the regulated industry can mount as a mobilized interest group are likely to produce counter-pressures from other organized interests. The skirmishing between various financial industries in the months subsequent to passage of the Deregulation Act has opened all of them to charges of insensitivity to consumer needs and to deregulation goals. The new market vulnerability of the previously regulated industry is accompanied by increased political vulnerability.

2. THE STRUCTURAL OPTION IN PUBLIC POLICY TOWARD THE FINANCIAL SYSTEM

We may identify four subsystems of operation and regulation of the savings and loan industry, presuming a fixed definition of the industry's boundaries as a set of nonbanking depository institutions that have been obliged to concentrate their assets in residential mortgages. These four subsystems are:
--the market structure subsystem, whereby the regulatory authorities respond to applications of would-be entrants for new charters and of existing firms for branch licenses, and the number and size distribution of firms is thus a joint product of business initiatives, regulatory decisions, and marketplace responses;

--the transactions subsystem, involving asset-side transaction opportunities mainly for mortgage lending, but also for acquisition of other income-earning investments, and liability-side transactions with the savings public and with other borrowing sources;

--the liquidity subsystem, whereby (since the establishment of the Federal Home Loan Bank System in 1932) the savings and loan institution has available a source of liquid borrowing to meet savings withdrawal demands and also (increasingly in recent years), to support liability expansion beyond what the savings markets will deliver at the offered prices; and

--the safety subsystem, the main feature of which is the Federal Savings and Loan Insurance Corporation guaranteeing the safety of principal in savings accounts and, with this governmental promise, essentially eliminating the risk of epidemic withdrawals that could induce collapse of the financial system. In order to limit the risk exposure of FSLIC, however, the regulatory authorities have sought to restrict the risk level in mortgages through mortgage insurance and through underwriting controls, and they have also restricted the choices of S&L managements as to other categories of assets. Finally, the regulatory authorities have set standards for the maintenance of net worth reserves as a first cushion against losses in the individual institution.
Both business initiative and regulatory support and constraint are present in each of these subsystems, and the four subsystems are, of course, related to each other in the ongoing behavior of the industry. (See Balderston, 1966). Looking at the recent history of the proposals for deregulation and the arguments, pro and con, of industry advocates, we can observe that the main focus is the transactions subsystem. The prices and conditions upon which the savings institution can acquire savings liability are one important domain of argument, and "asset powers and flexibility" are the other. Here too, the boundary relations between the S&L industry and commercial banking are adjusted through changes in the types of transactions in which each may engage.

Sheltered local markets and a generally favorable earnings spread in normal times permitted S&Ls to grow and prosper throughout the 1960s and 1970s--the exceptions being the periods of credit stringency. When credit crunches occurred, these conditions and the interest rate ceilings that ordinarily reduced the cost of funds were not sufficient protection for S&Ls, and their disintermediation losses were significant. What had operated as transactions subsystem restraints also smoothed liquidity problems except during these disintermediation interludes.

Intensifying secular inflation eroded these delicate balances. The six-month Money Market Certificate, introduced as an expedient to prevent disintermediation in 1978, soon crumbled the partial stretch-out of savings liability and propelled S&Ls into a stricter short-term market determination of the cost of funds. Money market funds--does it seem possible that those dealing with the general public are less than three years old?--signaled the rising money market sophistication of the
household sector. Federal Reserve actions beginning in October 1979 to hold monetary growth within stricter limits induced remarkable upward gyrations in short-term rates, culminating in the Spring 1980 peak when the prime exceeded 20 percent. The Deregulation Act was the funeral oration, but the system of market shelters had already suffered mortal damage. The S&L industry would be forced from now on to operate in close linkage with the money markets, and it would be forced to survive on those terms. (In view of all this, the preoccupation of the U.S. League of Savings Associations with the Depository Institutions Deregulation Committee (DIDC) as the source of difficulty seems naive.)

Other moves to offset pressures on the S&L industry in recent years also concentrated mainly on the transactions subsystem. The Variable Rate Mortgage (VRM) and later, the Renegotiable Rate Mortgage (RRM) were authorized to reduce the interest rate risks of the lending institution. Greater reliance on secondary mortgage markets and then on such devices as mortgage backed bond issues and pass-through certificates aided transactions turnover and improved liquidity, thus contributing to the liquidity subsystem's effectiveness as well.

Some legislative and regulatory actions have changed the safety subsystem. The insurance limit on savings accounts was raised to $100,000 per account. This, however, should be interpreted as a marketing gesture by the authorities to assist S&Ls in competing for large money placements and to give S&Ls a reassuring theme to advertise. The required allocations to net worth reserves were simplified, and on net balance, reduced. This made the individual S&L's situation easier, because pinched current earnings could not produce the previously required allocations to net worth
reserves at all easily. Adding to reserves by obtaining new equity from outside was a strategem essentially unavailable to the mutual institution (all federally chartered S&Ls and many state-chartered S&Ls). Selling new stock was a device available but unappealing to the guarantee-stock institution under the clouded market conditions associated with reduced earnings and high uncertainty.

Mortgage insurance—first FHA and VA and now, private insurance—may be interpreted as a way of trading reduced default risk in acquired assets for reduced effective yield in loan transactions, and it also, therefore, increases the safety level of the institutions. In recent years, however, default risk has dwindled to very low levels, and the hazards of interest rate fluctuation have loomed much larger. In this context, the chief function of mortgage insurance is to facilitate packaging of mortgages for the secondary market, either through direct sale to FNMA or as an element of the process of pooling loans for the issuance of pass-through certificates or mortgage-backed bonds.

The secondary markets made it possible to connect the traditional transactions subsystem and other subsystems in a new way. New thirty-year loans originated would have a normal mean lifetime of eight to twelve years. Sale of these loans in secondary markets recovers cash much more quickly and makes it possible to support a higher average volume of lending (with, ordinarily, the higher operating profit that more loan originations will generate). Whether operations in the secondary market increase the S&L's safety level is not so clear. The secondary market may have equilibrium current yields on mortgages that embody a correct assessment of future interest rate risk. In this event, the present value of the interest
losses would be subtracted from the book value of the loans sold, and net safety would not be improved.

This brief review of the focus of regulation and institutional development indicates that market structure has not in general been a direct object of policy intervention. There are two possible exceptions: regulatory approaches to branching and merger; and the periodic emphasis on "new asset powers," which was reasserted in the new federal legislation.

The regulatory authorities influence market structure directly by the formal rules they set concerning new charters, branch licenses, and applications for merger. Because of interest rate controls and the sheltered market position of the industry throughout most of the past thirty years, more new entry has been applied for and approved than would have been induced under free market conditions. More branching has occurred than might have been profitable under conditions of free pricing. Less structural consolidation through merger occurred than would have in free market circumstances. On the whole, the direct policies relating to market structure were compatible with a theme of widespread service and not economic efficiency.

The question of "new asset powers" is an element of the political debate over what shape and boundaries each segment of the financial structure should be permitted to have. In this sense, any broadening of asset powers widens the industry boundary and includes more firms as partially overlapping competitors. If there were no regulatory jurisdictions over authorization for each type of permitted product, we would doubtless see something similar to the waves of competitive interpenetration that have occurred in retailing: some eras of greatly widened assortments and
scrambled merchandising, and others of seeking to discover a new focus for specialization and high-volume profitability in a narrow field. As it is, however, each portion of the financial structure seeks defense against invasion by lobbying a concept of service to the public that is favorable to itself, and then seeks broadened powers at other times in order to enlarge its service domain and increase its own profitability.

3. THE STRUCTURAL OPTION IN NATIONAL TERMS

The Condition of Entry

In Bain's classic on market structure, the prospects for a competitive regime in an industry were shown to depend upon two basic factors: the minimum efficient size of plant and firm, and the condition of entry. We have seen already that the regulatory authorities have the power to deny entry of new firms into financial industries. However, the savings and loan regulators in fact have permitted an appreciable number of new firms to enter in most recent years. New charter groups perceived positive incentives for entry, and this implies that they thought it would be profitable to enter. But this in turn might well be true because local market shelters were preserved by the pattern of licensing, so that a new firm (or a branch office, once established) would have a pronounced locational advantage.

Minimum Efficient Size, and Branching

The question of minimum efficient size of S&L firm has been investigated by Spellman (1975 and 1976) and in a series of research papers sponsored by the Office of Economic Research of the Federal Home Loan Bank Board. In one of these papers, Atkinson estimated the production function
for the S&L firm and found that unit costs fell to approximately $250 million in total assets but not beyond that point. Empirical data for this study were taken from the experience of the 1970s (Atkinson, 1978).

The financial firm can employ a policy of branching to achieve greater size, provided that the regulatory authorities are willing to license branches. Cassidy found that (a) branching is positively associated with size, as one would expect; and (b) that, for given size in total assets, the more branches the higher the cost position of the firm (Cassidy, 1978).

Another of the research papers in the FHLBB series examined the availability of financial services in connection with branching policy (M. Kaplan, Edwards, Cassidy, and Scherschel, 1978). Branches of S&L firms are set up mainly to deliver savings services to the public, and the customer frequently obtains borrowing services only from the headquarters. Thus, the authors find that branching results in more depository services on a per capita basis, although they did not find a positive relationship between the level of personal income in any area and the amount of branching.

Assessing the pattern of lending in relation to branching, the investigators find that non-metropolitan S&Ls are net purchasers of mortgages (presumably, buying mortgage paper because they do not find sufficiently attractive lending opportunities for their locally generated funds), but that branching does not account for the net outflow of funds from rural to nonrural areas.

The public policy issue now before us is not fully addressed by the FHLBB papers, for it pertains to the kind of industry structure that will be viable in the 1980s, not the 1970s. Here are some important changes that need interpretation:
1. Consumers are shaking loose from traditional responses to financial alternatives, and local market shelter, accordingly, is fading. (This is likely to reduce the relative advantages of locational convenience and also the relative advantages of the "home town" financial firm.)

2. New technologies are penetrating financial practice fairly rapidly now, after many fits and starts in the 1970s. On-line branch accounting, Automatic Teller Machines (for getting cash by credit card and for other simple transactions), and Electronic Funds Transfer systems are all spreading in use.

3. Sophisticated asset and liability management in the money markets and more complex participation in secondary mortgage markets are forcing new types of decision making and, in some cases, specifically require a higher minimum size of firm. (The smallest economically efficient mortgage backed bond issue is said to be $20 million, and this would have to be drawn from a portfolio of several times that size. Pooling by a group of small firms might permit them to join in this kind of market activity, but there would be a cost of the pooling operation itself.)

**Structural Consolidation: Three Classes of Firms**

We may expect that both voluntary and "supervisory" mergers will increase in any event during the 1980s. If the public authorities consciously choose to utilize the "structural option" or are forced by the gravity of the situation to do so, they will need to identify three classes of firms: the disappearance candidates at one extreme, the nucleus firms for structural consolidation at the other, and the probable survivors that are in
between. Even if no immediate, conscious adoption of the "structural option" is in prospect, it is instructive to see what the characteristics of each class of firm are and what would happen if the process were analogous to conscious management of a far-reaching structural consolidation.

The disappearance candidates are firms that are too precariously positioned in the market and too weak in earnings potential and management to stand a good chance of surviving the tumultuous environment of the financial markets in this decade. Those financial firms that are controlled by large stockholders are likely to volunteer for disappearance through merger if they forecast a loss-ridden future that would mean serious damage to the future value of the equity control. Mutual institutions tend to be less sensitive to this problem, but they too are likely to doubt their future viability if they have portfolio losses and poor operating earnings.

We now turn to discussion of "nucleus" firms.

**"Nucleus" Firms for Structural Change**

As of year-end 1979, 197 savings and loan associations had assets of $500 million or more. If the net is cast wider to include all those having assets of $250 million or more, we find that there were 463 of these with a total of $342 billion in assets at December 31, 1979; 297 were federal S&Ls, 80 were state-chartered mutual S&Ls, and 86 were state-chartered stock S&Ls. The total number of insured S&Ls was 4,039. Thus, depending on where the cut-off point is put, "large" firms in this industry comprised 5 percent or 11 percent of the total population of firms.

Size alone is neither a necessary nor a sufficient condition for status as a potential "nucleus" firm in a possible structural reorganization of the S&L industry. Some quite large firms may be moribund and unwilling
to take on hard problems, and others may themselves be in poor financial condition. Thus, only a subset of the large firms can be counted on to have competent and aggressive management for the 1980s, and to have the financial resources to match their aggressiveness.

Among smaller firms, there are some that could be considered candidates for status as "nucleus" firms. To be candidates, they would need to show evidence of exceptional management competence, and they would have to be able to acquire new reserve capital (for rapid expansion) much more rapidly than they can earn it. As a practical matter, this rules out mutual institutions unless they are aided by FSLIC in the acquisition process.

The "nucleus" firm is a firm that can be counted on to be a survivor in the S&L industry as it undergoes massive structural change and an absorber of firms that cannot meet the conditions of viability for this difficult decade.

We must expect that, no matter what the degree of violence in money markets, mergers and absorptions will have to be approved or even overtly managed by the federal and, to some extent, the state regulatory authorities. The nucleus firms for this process are those having the ability both for market place survival and for winning regulatory consent to their growth. For this process of structural change then, we can divide the population of firms into these nucleus firms, and then into two other classes of firms: those which disappear through merger or liquidation, and those that survive but do not absorb other firms.

The nucleus firm will need to have an ability to manage well in the more complicated and more uncertain environment of the 1980s. The
Depository Institutions Deregulation and Monetary Control Act of 1980 widened both asset and liability powers and authorized such new types of business as the offering of trust services. The technology of fund transfer is changing rapidly (Baxter, Cootner, and Scott, 1977). Change is very likely to be further stimulated by the greater flexibility available under the new Act. Each firm will have the task of evaluating the potential gains to be achieved by moving into each new activity. It will have to invest in the capital equipment (and the market promotion) necessary to undertake the new activity. It will need to acquire the management personnel needed both for the initial implementation and for the efficient conduct of the new activity.

On the liability management side, the list of new potentialities includes the offering of NOW accounts and credit card services. The setting of interest rates on each category of account will become progressively more a management issue as the transitional stages of deregulation occur, and this too will mean that liability management will be an increasingly important matter of evaluating consumer market response and competitive pressures.

Liability management includes debt issue in various forms beyond the attraction and acceptance of deposits: mortgage-backed bonds, pass-through certificate issues, subordinated debentures, and bank borrowings. Most significant of all in total magnitude, after savings account liabilities, is the amount of FHLB advances taken by an S&L: how far to press this opportunity, in timing, amounts, and duration has been a significant strategic question for S&L managements. Economies of scale are present in the typical modes of operation in secondary markets: Bradford has
estimated that the minimum size of a mortgage-backed bond issue for underwriting efficiency is $20 million, and that it takes a total portfolio of several times this size to produce the selected mortgage pool for this purpose (see Bradford, 1980).

Others have guessed that it will take aggregate size approximating $1 billion in total assets to justify the investment in management personnel needed for expert asset and liability management under contemporary market conditions. In addition to any specific scale requirement for a particular alternative, the more sophisticated conditions in secondary markets and the wider range of choices available to managers (including trading in mortgage futures, for example) impose significant new financial planning demands on top management. Judging by the steep earnings declines reported by most large S&Ls (or their holding companies) in the first and second quarters of 1980, most companies, even large ones, had difficulty in adjusting strategy rapidly enough to avoid the impact of rapidly rising short-term money rates.

**Legal Form and the Incentives to be a "Nucleus" Firm**

In the S&L industry both executives and regulators have long engaged in both philosophical and interest group arguments concerning the relative merits of the mutual form of organization and the stock form. In 1933, when the Federal Home Loan Bank Act was passed and federal charters became available for issue, the reformers of the time wrote into legislation the stipulation that these charters would be for the mutual form of organization only. Numerous states set similar restrictions, although some continued to permit the stock form of organization. S&Ls having stock control failed in large numbers during the liquidation of real estate markets in the
1929-33 period, and preference for the mutual form of organization was a more or less natural response at the time.

In more recent years, law and regulation have once again permitted stock charters to be issued by the federal authorities.

The stock form has been viewed historically as making the firm more prone to lending risk, more aggressive in branching, more willing to experiment with new asset and liability powers, more tight-fisted in cost control, and more interested in merger and acquisition. It is also true that the stock form permits the S&L to consider equity issue as a means of increasing net worth reserves. No satisfactory vehicle for this purpose has been available to mutual S&Ls.

Recent history reveals little difference between stock and mutual S&Ls in lending risk, for scheduled item ratios are miniscule for all lenders under the inflationary conditions of the past few years. Control of operating costs does seem to be sharper among large stock S&Ls.

In 1979 state stock S&Ls having total assets of $250 million or more experienced operating expenses (excluding interest payments) amounting to 1.08 percent of year-end total assets, whereas federal S&Ls of the same size range had expense ratios of 1.19 percent to total assets, and state-chartered mutuals had 1.2 percent operating expenses to total assets. These differences—eleven basis points and sixteen basis points, respectively—were in fact greater than the number of basis points of dividends paid as a fraction of total assets. The stock companies thus had greater latitude than the mutuals in 1979 for attracting equity, although the fundamental question for the equity investor in financial firms is, of course, to evaluate longer-term earnings and risk prospects.
As of June 30, 1980 there were 105 stock companies (both state chartered and federally chartered) among the 374 FSLIC-insured S&Ls having total assets of $300 million or more. There is a history of aggressive growth through acquisition among the larger stock companies; while some mutuals have also grown through acquisition, it is ordinarily more difficult for them to do so unless the regulatory authorities want a "supervisory merger" and provide financial assistance. Some incumbent managements of mutual institutions have propensities toward aggressive growth, but it is a question whether the large mutual institutions will be in a good position to serve as nucleus firms, or will be as interested in doing so as will the large stock S&Ls.

How Many Survivor Firms and How Many Absorption Candidates?

So far, non-metropolitan location has provided some shelter to S&Ls from competition in savings markets, because households in non-metropolitan locations are not bombarded with promotion of alternative placements for their liquid assets and because education levels are somewhat lower. At each income level, highly educated consumers are more likely to resort to the stock market--and now, to money market funds. There are approximately 2,000 insured savings and loan associations in non-metropolitan locations, and they have a total of $67 billion in assets. Let us assume, for the moment, that all of these firms can be regarded as survivors. The remaining insured S&Ls are almost 2,000 in number and, as of year-end 1979, had about $500 billion in total assets. Of these, 463 S&Ls were in the size class of $250 million assets or more and accounted altogether for $342 billion in industry assets. Thus, the population of smaller, metropolitan S&Ls, numbering about 1,500 and accounting for about $160 billion in
total assets, may be considered to contain many likely candidates for absorption.

We are not able to consider here any data on portfolio losses, operating earnings difficulties, or net worth reserve positions. Data such as these on every insured S&L are available to the regulatory authorities and could be used to refine estimates of the size and shape of the population of potential absorption candidates. Absent this much better way to go about it, we may display some alternatives.

Table 1 gives an array of possible numbers of firms that might be absorption candidates. The table simply displays what numbers of firms and dollars would be subject to absorption if different percentages of the non-metro and small metro firms were affected. These are not to be interpreted as predictive estimates. The envelope of reasonable possibilities might begin, at the low end, with no non-metro firms and 20 percent of small metro firms absorbed. At the high end, 40 percent of non-metro and 60 percent of metro firms might be affected. Thus, the two plausible endpoints are:

- 20% metro, 0 non-metro: 300 S&Ls and $32 billion assets
- 60% metro, 40% non-metro: 1,700 S&Ls and $122.8 billion assets

Even the low end of the envelope of possibilities would entail severe strains on the negotiating and reorganizing capabilities of "nucleus" firm S&L management if 300 firms had to be absorbed quickly. The regulatory authorities too would be strained to deal with this number of cases and to mobilize the financial resources that might be needed to cope with interfirn shifts of as much as $32 billion, with the needs for FSLIC assistance that such a series of absorptions could well entail.
Table 1

ARRAYS OF POSSIBLE NUMBERS OF ABSORPTION CANDIDATES AMONG S&L FIRMS, AND TOTAL DOLLAR ASSETS OF THESE FIRMS

<table>
<thead>
<tr>
<th>Percent of firms potentially absorbed</th>
<th>Non-metro S&amp;Ls</th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>(2,000 firms, $67 billion)</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Firms $</td>
<td>Firms $</td>
<td>Firms $</td>
<td>Firms $</td>
<td>Firms $</td>
</tr>
<tr>
<td>0%</td>
<td>400 13.4</td>
<td>800 26.8</td>
<td>1200 40.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>300 32</td>
<td>300 32</td>
<td>300 32</td>
<td>300 32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(700) (45.4)</td>
<td>(1100) (61.8)</td>
<td>(1500) (72.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td>600 64</td>
<td>600 64</td>
<td>600 64</td>
<td>600 64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1000) (77.4)</td>
<td>(1400) (90.8)</td>
<td>(1800) (104.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td>900 96</td>
<td>900 96</td>
<td>900 96</td>
<td>900 96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1300) (109.4)</td>
<td>(1700) (122.8)</td>
<td>(2100) (136.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td>1200 128</td>
<td>1200 128</td>
<td>1200 128</td>
<td>1200 128</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1600) (141.4)</td>
<td>(2000) (154.8)</td>
<td>(2400) (168.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The high end of the array of plausible possibilities would imply an emergency period of adjustment in the financial structure. Something of this magnitude could not realistically be accomplished under existing federal law and with existing support institutions and regulatory techniques.

It would be plausible to have an absorption process whereby each nucleus firm absorbed a large number of firms if the nucleus firm had very large net worth reserves and exceptional management capability, and fewer firms if its reserves and management were smaller. Even at the high end of the envelope of plausible possibilities, the nucleus firms of the industry—approximately 400 firms—would have to absorb only an average of four smaller S&Ls. This would not be an intolerable problem for the nucleus firm if the absorbed entities had no unusual accumulations of problem loans or other management difficulties and if the absorptions could be spread over a period of several years.

The regulatory authorities, however, would face serious burdens. First, the number of acquisition cases to be decided each year would be many times the greatest number that has ever been dealt with historically. Second, the authorities have limited sanctions available to them to force prompt settlement of the terms of acquisition. Third, the resources of FSLIC would be strained to provide financial assistance in those instances in which the nucleus firm would not be willing to absorb a firm unless potential losses were shifted to FSLIC. (As Table 1 shows, the upper end of the envelope of possibilities involves 1,700 firms and $122 billion in total assets. Absorption subsidy amounting to only 5 percent of this would amount to $6 billion, which is more than the total current reserves of FSLIC.) Finally, the geographical distribution of potential nucleus
firms differs substantially from that of the candidates for absorption. State boundaries are important both because state regulatory powers would often be involved and because the Federal Home Loan Bank Board has not allowed interstate branching or acquisitions. Its statutory powers in this respect are not immediately circumscribed in the way that the McFadden Act has restrained commercial bank regulators, but the political realities have compelled extreme caution, and interstate branching and acquisition have not, as a practical matter, been capable of consideration.

In the next section, we examine the geographical aspects of the problem of structural consolidation.

4. GEOGRAPHICAL ASPECTS OF STRUCTURAL CONSOLIDATION IN THE S&L INDUSTRY

The FHLBB's Statistical Division has kindly made available to us the size distributions of FSLIC-insured S&Ls, by FHLB district and by state, as of June 30, 1980. An assessment of the geographical aspects of structural consolidation requires comparison of the distribution of nucleus firms relative to that of absorption candidates.

The data are organized to show the size distribution of firms in each FHLB district and each state. Separate size distributions are shown for: all FSLIC-insured S&Ls, federally chartered S&Ls, state-chartered S&Ls, and stock S&Ls, both federal and state together. Thus, questions of incentive toward acquisition and resistance to absorption can also be discussed, to the extent that they are associated with asset size and type of legal organization.

It is necessary to organize the discussion of this section in a slightly different way than before, as the asset size classes have different breakpoints. These classes are (in millions of dollars of total assets):
0-5, 5-10, 10-25, 25-50, 50-75, 75-100, 100-150, 150-200, 200-300, 300-500, 500-1,000, and over 1,000. The number of potential nucleus firms was discussed previously in terms of two alternative minimum asset sizes: firms of more than $500 million in total assets and firms of more than $250 million assets. As of December 31, 1979 there were 473 firms having more than $250 million, and 197 having $500 million or more. As of June 30, 1980, 374 firms had $300 million or more in total assets, and 205 firms had $500 million or more. Changing the size class breakpoint from a minimum of $250 million assets to a minimum of $300 million in total assets reduces by 89 the population of nucleus firms on which we can focus comparative attention in the discussion that follows.

Structural Consolidation by FHLB District: An Illustration of the Process Assuming That All Firms of $300 Million or More Are Nucleus Firms

Under present conditions, merger or branching across state lines even within an FHLB district is not feasible. Such "neighboring state" or "neighboring market" acquisition and branching is the most likely to be initiated first, however, and it is thus of interest to look at the structural consolidation issue as if intra-district merger were feasible. Also, this will illustrate the process and enable us to raise some questions of structural policy by examining fewer numbers than would be required if all fifty states plus the Commonwealth of Puerto Rico had to be considered.

We now proceed to construct a quantitative picture of structural consolidation as if the regulators could manage it systematically by selecting nucleus firms and facilitating absorption of other firms by these nucleus firms. This will show some characteristics of the structural consolidation process, but we emphasize that these are not predictions of
the manner in which the actual, much more complicated, series of decentralized structural adjustments may occur.

Table 2 shows how structural consolidation might work by FHLB district. The first row shows the actual total number of FSLIC-insured firms as of June 30, 1980, and the second row, the number of firms having assets of $300 million or more. We have subtracted the number of large firms from the total number of firms in each district and then divided the remainder by 2 to give crude estimates of the number of absorption candidates. This approximates the high end of the envelope of plausible possibilities in Table 1, which showed 1,700 firms as possible absorption candidates out of approximately 3,600 firms; here, the crude estimates total 1,827 absorption candidates.

Then we assume that, within each FHLB district, each nucleus firm will absorb a number of other firms equal to the U.S. average of absorption candidates per nucleus firm; this number is 4.88, which we have rounded off to 5.0. However, some districts have a residual number of unabsorbed firms, and others have "excess capacity" for absorption of smaller firms. Table 2 shows that eight FHLB districts would have unabsorbed firms under these assumptions: Boston, Cincinnati, Indianapolis, Chicago, Des Moines, Little Rock, and Topeka. The total number of unabsorbed firms is 460. The remaining four districts would have unused absorption capacity: New York, Atlanta, Seattle, and San Francisco. Their total capacity amounts to 444 firms. The totals of surplus and deficit do not quite add to the same sum because of rounding problems in the computations; in principle, these should be exactly equal in view of the way in which the analysis was constructed.
Table 2  
STRUCTURAL CONSOLIDATION BY FHLB DISTRICT;  
surpluses and deficits assuming that all firms of $300 million or more in assets are nucleus firms

<table>
<thead>
<tr>
<th></th>
<th>Boston</th>
<th>New York</th>
<th>Pittsburgh</th>
<th>Atlanta</th>
<th>Cincinnati</th>
<th>Indianapolis</th>
<th>Chicago</th>
<th>Des Moines</th>
<th>Little Rock</th>
<th>Topeka</th>
<th>San Francisco</th>
<th>Seattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total no. firms</td>
<td>117</td>
<td>302</td>
<td>292</td>
<td>673</td>
<td>493</td>
<td>213</td>
<td>490</td>
<td>265</td>
<td>612</td>
<td>220</td>
<td>208</td>
<td>143</td>
</tr>
<tr>
<td>No.big firms ($300 mill.)</td>
<td>5</td>
<td>44</td>
<td>16</td>
<td>79</td>
<td>32</td>
<td>18</td>
<td>33</td>
<td>23</td>
<td>26</td>
<td>19</td>
<td>64</td>
<td>19</td>
</tr>
<tr>
<td>Rest</td>
<td>112</td>
<td>258</td>
<td>276</td>
<td>594</td>
<td>461</td>
<td>195</td>
<td>457</td>
<td>242</td>
<td>586</td>
<td>201</td>
<td>144</td>
<td>124</td>
</tr>
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<td>Absorp.need</td>
<td>56</td>
<td>129</td>
<td>138</td>
<td>297</td>
<td>231</td>
<td>98</td>
<td>229</td>
<td>121</td>
<td>293</td>
<td>101</td>
<td>72</td>
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<td>80</td>
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<td>165</td>
<td>115</td>
<td>130</td>
<td>95</td>
<td>72</td>
<td>62</td>
</tr>
<tr>
<td>No.unabsorb.</td>
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<td>0</td>
<td>58</td>
<td>0</td>
<td>71</td>
<td>8</td>
<td>64</td>
<td>6</td>
<td>163</td>
<td>6</td>
<td>0</td>
<td>0 [407]</td>
</tr>
<tr>
<td>Unused nucl. firms</td>
<td>18</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td>Unused absorp. capacity</td>
<td>90</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>245</td>
<td>30 [460]</td>
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<tr>
<td>Total assets</td>
<td>10.5</td>
<td>52.1</td>
<td>25.6</td>
<td>103.2</td>
<td>49.0</td>
<td>23.6</td>
<td>46.8</td>
<td>29.3</td>
<td>50.2</td>
<td>26.8</td>
<td>121.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Big firms' assets</td>
<td>2.0</td>
<td>29.8</td>
<td>7.3</td>
<td>58.5</td>
<td>21.9</td>
<td>12.1</td>
<td>19.1</td>
<td>17.3</td>
<td>18.7</td>
<td>14.7</td>
<td>108.0</td>
<td>13.9</td>
</tr>
<tr>
<td>Remainder</td>
<td>8.5</td>
<td>22.3</td>
<td>18.3</td>
<td>44.7</td>
<td>27.1</td>
<td>11.5</td>
<td>27.7</td>
<td>12.0</td>
<td>31.5</td>
<td>12.1</td>
<td>13.0</td>
<td>72.1</td>
</tr>
<tr>
<td>Absorp.need</td>
<td>4.3</td>
<td>11.5</td>
<td>9.2</td>
<td>22.4</td>
<td>13.6</td>
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<td>13.9</td>
<td>6.0</td>
<td>15.8</td>
<td>6.1</td>
<td>6.5</td>
<td>6.1</td>
</tr>
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<td>Assets, expand.firms</td>
<td>4.0</td>
<td>41.3</td>
<td>11.2</td>
<td>80.9</td>
<td>31.2</td>
<td>17.4</td>
<td>29.1</td>
<td>23.0</td>
<td>25.7</td>
<td>20.4</td>
<td>114.5</td>
<td>20.0</td>
</tr>
<tr>
<td>Unabsorbed assets</td>
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<td>---</td>
<td>5.3</td>
<td>0</td>
<td>4.3</td>
<td>0.5</td>
<td>3.9</td>
<td>0.3</td>
<td>8.8</td>
<td>0.4</td>
<td>0</td>
<td>0 [25.8]</td>
</tr>
</tbody>
</table>

Notes: 1. Data from FHLBB, Statistical Section. These include all FSLIC-insured associations as of June 30, 1980.  
2. Each nucleus firm is assumed able to absorb five firms.
Of the districts having unabsorbed firms under these assumptions, Chicago, Cincinnati, Indianapolis, and Des Moines are midwestern, and Pittsburgh and Boston are in the aging industrial northeast. Only the Little Rock district, comprising Texas (half the total number of S&Ls in the district) and four other Sun Belt states, has the character of a growth market.

The districts with unused absorption capacity include three that are secular growth markets (Atlanta, Seattle, and San Francisco). The remaining district, New York, has unique attributes as a leading financial center.

Within-district absorption of firms does not accomplish the objective, as Table 2 shows. On the other hand, the districts having unabsorbed firms would not be attractive to nucleus firms.

The pattern shown in Table 2 deserves close scrutiny. It reveals several difficult problems for the formulation and implementation of a public policy toward structural consolidation. Interdistrict mergers and absorptions would no doubt have to be authorized on a reciprocal basis if they were to become feasible at all. But the potential nucleus firms that would have excess absorption capacity are already located in the prime markets. They would not be likely to have an interest in moving into the Midwest and the Northeast, although firms in the latter regions already display a deep interest in expanding into the prime markets. The Northeast and Midwest, also, have historically had somewhat lower lending rates than were available in the expanding housing markets of the Far West. The collapse of market shelters and the increase in cost of funds toward the levels of nationwide money markets have had the most adverse effects upon firms in the Northeast and Midwest. Thus, greater
subsidy would on the average be required to facilitate absorption of a firm of given size in these regions than in the Far West.

A policy of encouraging interdistrict mergers would thus have few friends and sponsors in the regions having unused absorption capacity. The regulatory authorities would also find it necessary to provide subsidies to facilitate interdistrict absorptions in those instances where portfolio losses are present and in which there is little market attraction of the existing offices of firms that are absorption candidates.

While some of the mergers presumed to occur in the calculations underlying Table 2 are intrastate mergers, others would be interstate consolidations.

**Structural Consolidation by FHLB District with $1 Billion-plus Firms as Nuclei**

A possible objection to the illustrative approach above is that many firms having $300 million or more in assets at the present time are not geared up for the tribulations of the 1980s, and that only some smaller number of larger firms should be considered as nucleus firms. Previously, we saw that some analysts judge the minimum firm size to be around $1 billion for adequate participation in the secondary markets. This is sure to be a consideration in the climate of the 1980s.

If we repeat the illustrative approach of structural consolidation by FHLB district but use as the set of nucleus firms only those having $1 billion or more in total assets, the resulting pattern of consolidation is the one shown in Table 3. In this case, we have not changed the number and regional distribution of absorption candidates from that given in the previous illustration. Instead, using this same distribution, we want to
<table>
<thead>
<tr>
<th></th>
<th>Boston</th>
<th>New York</th>
<th>Pittsburgh</th>
<th>Atlanta</th>
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<td>265</td>
<td>612</td>
<td>220</td>
<td>143</td>
<td>208</td>
</tr>
<tr>
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Notes: 1. Data source: Same as Table 2.
2. Each nucleus firm is assumed able to absorb twenty firms.
show the effects of reducing the number of nucleus firms to those having $1 billion or more in total assets. There were ninety such firms nationwide at June 30, 1980. Thus, to absorb 1,800 firms would require acquisition of twenty absorption candidates per nucleus firm, and we have used this ratio to analyze the situation district by district in Table 3. The absorption of twenty firms by one nucleus firm is not a process that could be undertaken with lightning speed. Even the most aggressive growth firms in the industry, choosing their merger partners for ease of absorption and profitability of management, have absorbed an average of only a few firms per year. Thus, Table 3 is presumptively illustrative of a process that would take some years to complete. It could not be done as a quick structural response to a critical emergency unless massive subsidy or risk guarantees were provided to the nucleus firms.

Table 3 shows a considerable similarity of pattern with that of Table 2, in the sense that the same four districts--New York, Atlanta, Seattle, and San Francisco--show that they could absorb all the intradistrict candidates in their districts and still have capacity for further absorptions. The number of unabsorbed firms increases somewhat, from 428 firms to 687 firms.

The most striking change of pattern shown in Table 3, however, is that all of the districts except for Atlanta and San Francisco have fewer than ten nucleus firms according to the new definition of $1 billion assets or more. This eventuates in an intradistrict absorption pattern that would be potentially objectionable in terms of market concentration and antitrust policy. A larger size of nucleus firm is desirable from the standpoint of management depth and sophistication, but the historical structure of
the S&L industry is such that, in most regions, too few firms have a size large enough for the management needs of the 1980s.

Having confined the approach to intradistrict acquisitions, we nevertheless find that in both cases the structural consolidation process would leave substantial amounts of dollar assets unabsorbed. If all firms having assets of $300 million or more were nucleus firms, as in Table 2, the total unabsorbed assets would be $25.8 billion under our assumptions. When the nucleus firms are those having $1 billion or more, a total of $41.5 billion is left unabsorbed. Both of these amounts are computed in a simple and crude way by taking the ratio of unabsorbed firms to the total absorption need in each district and then multiplying this ratio by the total dollars of assets needing to be absorbed. (The reader will recall that the same figure for the latter is used in both illustrative tables, in order to demonstrate comparative effects of a shift in the definition of nucleus firm.)

Structural Consolidation by State

Intrastate mergers and acquisitions have been permitted by the regulatory authorities, whereas the assumed pattern of the previous section, entailing mergers and acquisitions within FHLB districts, involves some interstate mergers. We now analyze the effect of confining mergers to those that can occur within state boundaries. Table 4 shows the consequent pattern on the assumption (identical to that of Table 2) that all firms of $300 million or more in total assets are nucleus firms.

As would be expected, the number of firms that cannot be absorbed is considerably greater when state boundaries restrict merger possibilities. The total number of unabsorbed firms, nationwide, is 645 in this illustration.
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<td>S. Dak.</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>3</td>
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<td>8.7</td>
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<td>Total assets absorbed</td>
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<td>1.6</td>
<td>3.3</td>
<td>1.1</td>
<td>0.9</td>
<td>8.8</td>
<td>1.2</td>
<td>2.5</td>
<td>1.0</td>
<td>1.5</td>
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<tr>
<td>Total assets, expanded firm</td>
<td>1.5</td>
<td>1.7</td>
<td>3.4</td>
<td>0.6</td>
<td>0.7</td>
<td>1.1</td>
<td>0.2</td>
<td>0.3</td>
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<td>DI San Francisco</td>
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<td>No.absorbed (U.S. 5:1)</td>
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<td>64</td>
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<td>6</td>
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<td>4</td>
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<td></td>
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<td></td>
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</tr>
<tr>
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<td>22</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>Total assets ($ bill.)</td>
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<td>0.3</td>
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<td>106.9</td>
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<td>Assets, unabsorbed firm</td>
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<td>0.2</td>
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<td>0.5</td>
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<td></td>
<td>22</td>
<td>645</td>
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<td>Unabsorbed assets, by FHLB district</td>
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<td>1.9</td>
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</table>
(as against 407 in Table 2). The total of unabsorbed assets is $40.9 billion, compared with $25.8 billion in the previous illustrative case. A total of 139 large firms that could serve as nucleus firms is not utilized.

Even the state boundary obstacle to full structural consolidation underestimates the level of difficulty of consolidation at present. We have regarded the insured S&Ls within each state as one population, whereas there are both federal and state charters in all states and, in many states, stock companies as well as mutuals. FSLIC, with the cooperation of state and federal regulators, could arrange purchase of facilities, transfers of assets and liabilities and other elements of consolidation between a stock and a mutual firm, and, in fact, some mergers have previously taken place across jurisdictions. Thus, the pattern of Table 4 could be attainable if all of the cognizant authorities were determined to cooperate. The negotiating and settlement costs of consolidations across jurisdictions would, however, be higher than within the same jurisdiction, and the regulators' burdens of managing structural consolidation would be great.

We have not made a state-by-state table parallel to the case illustrated in Table 3, where the nucleus firms were all those having assets of $1 billion or more. However, the number of such firms in each state is shown in Table 4. We have calculated that with this size of nucleus firm, assuming each could absorb twenty candidates, state-by-state consolidation would leave a total of 960 unabsorbed firms, more than one-half of the absorption need.
5. GUIDELINES FOR PUBLIC POLICY IN STRUCUTRAL CONSOLIDATION

Under current conditions of secular inflation and deregulation, some isolated structural consolidation of the savings and loan industry is already occurring. Firms negotiate mergers they desire to make, and the regulatory authorities are then confronted with applications for approval. In preceding sections of this study we have explored what might be the plausible scope of much more substantial structural change than has occurred in the modern history of the savings and loan business. We have done this by developing illustrative figures for the target amount of consolidation (number of firms that would be candidates for absorption) and then imagining a managed process whereby larger nucleus firms would undertake to acquire the absorption candidates. Having examined the scope of the problem nationally, we then examined in turn the possibility of consolidation by FHLB district, and finally, state by state. The more geographical and jurisdictional restrictions we took account of in this managed process, the greater the number of unabsorbed firms. In effect, we have sought to assess the level of difficulty and the degree of probable incompleteness of structural consolidation under various conditions.

The Federal Home Loan Bank Board, together with the instrumentalities that it administers, has the main responsibilities and powers for facilitating and approving consolidations. It does, however, face important limitations. These begin with the fact of dual jurisdiction, and the state regulatory authorities and the federal must often find ways to cooperate in order to bring about a constructive outcome.

The federal regulators also operate in a constraining political context, in that the industry's lobby and the related housing, residential
construction, and real estate interests bear upon Congress and the Executive Branch. These political pressures are ordinarily constraining upon the regulators, making for delay in actions and increasing the procedural safeguards for regulated firms. Passage of the Deregulation Act was something of a surprise, in view of the "normal" resistance of the parties at interest to loss of market shelters and to change whose consequences are difficult to predict. Having set some of the new rules of the game for the 1980s, the Deregulation Act changes the conditions of viability for savings and loan associations. The size and scope of the transition to a more consolidated structure may be so great as to require new thinking about the public policy guidelines that apply to actions concerning market structure. These pertain to new entry (issuance of new charters), branching of existing firms, and merger. FHLBB also has limited funds available to it for subsidizing consolidation; the reserves of FSLIC are approximately 1 percent of the total assets of insured savings and loan associations. Legally, FHLBB and other regulators are restrained by the due process protections available to regulated firms: FHLBB cannot simply order two firms to merge on terms that it believes reasonable.

**Objectives for Structural Consolidation**

Three public policy objectives should be served in the process of structural consolidation. First, the savings and loan industry has the historic purpose of providing housing finance to all segments of the public, and this objective is buttressed in Congressional mandates and restrictions. Recent broadening of asset and liability powers through provisions of the Deregulation Act has widened this historic purpose to include consumer
financial services more generally, but the basic specialization of the
savings and loan business in housing finance is still its anchor in public
policy.

Second, in its operation, the savings and loan business has to meet
performance criteria of safety, financial viability, and consumer protection.
In fact, some interpret the broadening of asset and liability powers as a
way to enhance the prospects of savings and loan associations for survival
in the financial marketplace and not as a broadening of the general social
purpose of the industry. Our focus upon the public policy option of struc-
tural consolidation is largely actuated by concern for the viability of
many firms in this industry during the transitional decade of the 1980s.

Third, every private sector business in the United States is expected
to satisfy criteria of resource efficiency. In unregulated industries,
a pre-competitive policy is relied on to create the conditions that reward
efficiency. The regulators in regulated industries are supposed to act
on the public's behalf to bring about socially desired outcomes when, for
one reason or another, it is believed that unfettered competition will not
be appropriate. The trend toward deregulation may be seen as an effort to
trade in the direction of more market discipline and less governmental
supervision. The obvious implication is that the standards of a pro-
competitive public policy need to be maintained as a previously regulated
industry adjusts to less regulation. Thus, the usual criteria--market
structure, market performance (both efficiency and progressiveness), and
good business conduct--should be invoked to guide the process of structural
consolidation. [See Almarin Phillips' essay, "Competitive Policy for
Depository Financial Institutions," in Phillips (1975).]
Assessing the Boundaries of Markets for the Determination of the State of Competition

On the lending side of their operations, savings and loan associations have historically had as competitors those commercial banks and insurance companies that chose to engage in mortgage lending, and mortgage banking companies. Historically, also, mortgage markets were geographically constrained; however, the emergence of efficient secondary market institutions has greatly reduced the localization of the supply of housing finance by permitting local lenders to sell their loans in these secondary markets. The remaining extent of mortgage market localization is a matter of controversy, but within each metropolitan and regional market the would-be borrower needs to have access to a reasonable number of active, alternative sources of mortgage credit.

Now that savings and loan associations have wider lending powers, and commercial banks and credit unions also have gained greater asset flexibility, the pro-competitive test could be extended to include the assurance that the would-be borrower has a reasonable number of active alternative lending sources for these types of transactions too. However, savings and loan associations have not been a factor in such areas of consumer finance as automobile installment loans and credit card revolving credits, and it is reasonable to ignore these submarkets in evaluating the current state of competition as a basis for approving or disapproving mergers and consolidations in the immediate future. As savings and loan institutions build up market share in consumer finance, however, it will be increasingly necessary to evaluate the contribution to competitive performance that they make and to consider whether a proposed merger would diminish the intensity of competition.
On the liability side, savings and loan associations have traditionally fought for market share in the consumer savings market, competing with each other, with commercial banks' savings account services, and with such non-institutional attractors of consumer savings as U.S. savings bonds, the stock market, and mutual funds. The remarkable growth of money market funds in the past two years, as a new entrant to the competitive struggle for liquid assets of households, is indicative of the qualitative changes that are now occurring. Historically, savings institutions have emphasized locational convenience as an attraction to consumers, and this has implied the use of a test of local competitive alternatives as a basis for determining what is in the consumer's interest. Present trends imply a decline in the importance of localization in savings markets.

When a market boundary has been established for a particular service the number of competitors in that market can be increased either by entry of a newly established firm or by establishment of a local branch of an existing firm that is headquartered elsewhere. Correspondingly, the bankruptcy of a local firm or closure of a branch office deprives that market of one unit of representation.

The Number of Competitors in Each Market: Firms and Branches

For commercial banks, the McFadden Act and related regulations impose statutory limits at state boundaries to branching, and within such states as Illinois, state law takes the lead in prohibiting the large Chicago banks from branching "down-state." At the other extreme is California, which has permitted state-wide branching both in banking and in the savings and loan business so far as state regulation is concerned. Given that the federal authorities have usually tried to follow parallel branching
policies in each industry to those allowed by state law and regulation, this has meant that national banks and federal savings and loan associations in California have also branched state-wide.

Within each localized market, the competitive issue is: how many separately managed and controlled units of representation are present? Because establishing and maintaining a branch have lower investment and operating costs than establishing and maintaining a single-office, independent financial institution, a given size of market can be profitably occupied by a larger number of branches than independent institutions. Unless the independent institution treats customers in a systematically more favorable way than does the branch of an institution headquartered elsewhere, the presumption is that the competitive alternatives facing the consumer are increased through branching. (See Kaplan, Edwards, and Cassidy, 1978, for validation of this proposition.)

Multi-state Savings and Loan Associations in the Structural Consolidation?

The analysis in previous sections points to several reasons for eliminating explicit or implicit barriers to branching across state lines. Mergers having the effect of branching within the boundaries of each multi-state FHLB district would permit greater mobilization of the capabilities of nucleus firms than would the present within-state branching limitations. Still more likely to assist in the rationalizing of the industry would be to allow branching through merger throughout the United States. As was noted earlier, however, a policy change to permit this in banking and the savings and loan business would have few interest-group friends. The large S&Ls are already centered in the prime markets. The regions needing rationalization and management expertise in the Midwest and the Northeast
are relatively unattractive as markets to be penetrated by the large firms of the South and West, and these firms would scarcely welcome the "invasion" of their already strongly competitive markets by firms elsewhere seeking to survive through expansion.

The regulatory authorities, however, may have to develop an anxious interest in stimulating multi-state expansion by large, well-managed firms as an answer to the problem of absorption of firms that will not be viable in the harsh market environment of the 1980s. One way to stimulate this interest would be to enable these firms to pursue a nation-wide branching strategy with all that this implies as a radical change in the traditional organization of financial industries in the United States. It is worth noting that Sidney Jones, in his comprehensive account of financial reform, observed almost nothing about nation-wide branching.

We emphasize that the barriers against nation-wide branching are political, both legislative and regulatory. They are not barriers resulting from overwhelming difficulty of managing a multi-state financial organization. Financial organizations—large banks in particular—already operate in multiple national markets, and modern communications and management controls can easily support multi-state operation. It would be desirable to weigh the chances of adoption of a multi-state approach, for this would be one way to speed the adaptation of the entire industry.

**Size of the Absorbed Firm and the Absorbing Firm**

Recent merger proposals in the California savings and loan business include several in which the absorbed firm is a very large one, acquired by a still larger S&L firm. Mergers in this as in any industry need to pass the obvious antitrust test of not leading to a diminution of
competition. In addition, however, the analysis in preceding sections of this investigation showed how significant to public policy goals could be the presence of sufficient numbers of nucleus firms. The business motivation for mergers between already large firms within the industry may be quite sound, but the public policy issues are something else to consider. One test of the effect of such mergers is the extent of local market overlaps in the two branch structures. If, as a consequence of merger, there were significantly increased density of market coverage and reduction in the number of alternatives available to local consumers, then there would be doubt about the approvability of the merger from the standpoint of competitive policy. (If the merger is really a "supervisory merger," brought about to replace a moribund or mistake-prone management with greater competence to deal with accumulated portfolio and other risks, the regulatory authorities might face the dilemma of whether to relax the pro-competitive standard in order to get exceptional management competence focused upon the problem firm.)

The public authorities would do well to reach an assessment of the likely minimum size of the nucleus firm in each region of the U.S. and then avoid approving mergers between potential nucleus firms.

Who Are the Eligible Buyers of Absorbed S&L Firms?

A theory underlying restrictive banking legislation is that some types of business are inherently incompatible under the same ownership roof. Banks were excluded from investment underwriting by the statutory reforms enacted in the 1930s. Bank holding companies face extensive restrictions as to the kinds of business in which they may engage. Savings and loan holding companies that own two or more S&Ls as subsidiaries are currently
more restricted under federal law than are single-subsidiary holding companies.

The issues of structural consolidation for the 1980s should, however, include a reappraisal of these restrictions. One may, for example, concede that it would be politically difficult, for the reasons already mentioned, to clear the way toward nation-wide branching of S&Ls and commercial banks. If the region or the single state remains the largest available domain of choice for the moves necessary in structural consolidation, then in certain regions and states there will not be enough nucleus firms within the S&L industry to absorb the likely numbers of firms that are candidates for disappearance. There would be two alternatives in a serious financial shake-out: first, to attempt a rapid build-up of management capability in certain small firms, perhaps through management contract with major firms elsewhere, and then facilitate the growth of these new nucleus firms through acquisitions of disappearance candidates; or, second, permit other financial institutions, such as commercial banks or their holding companies, to acquire S&L firms that need to be absorbed. The first of these approaches would require high front-end subsidy by FSLIC, because the small firm would not have sufficient net worth reserves for the acquisition of other firms unless so assisted. The second alternative is unthinkable to the proponents of political solidarity in the S&L business. Once again, however, both the interest group factions and the public authorities (and their political sponsors) are likely to face some very hard choices in the 1980s. A third alternative, if neither of the above is acceptable, is to liquidate some firms that are not viable; generally speaking, outright liquidation has been expensive to the insurance corporations (it sacrifices going-concern
values, and the management costs are high), and it also means a net reduction of the number of units of service in the market area. Such reductions of service may indeed be necessary if cost conditions change significantly or if markets undergo decline, but otherwise the consumer benefits by having a significant number of market alternatives available.

Should New Charters be Permitted in the Environment of the 1980s?

Two environmental factors are likely to make the conditions of survival for new entrants more difficult in the 1980s than in the two previous decades: interest rate risks will be significant because of the greater volatility of rates and money flows; and, the loss of local market shelters for savings, the greater complexity both of money market and secondary market operation, and the necessity of offering a wider range of financial services will all put a higher priority upon skilled professional management. The first of these factors implies that the regulatory authorities should insist upon large initial capital of the newly established firm, so that it will have an equity cushion against risks and will seek to reach viable size quickly. The second implies a larger minimum size of firm for viable operation.

Unfortunately, the mutual form effectively precludes the assembling of significant initial capital, and it would be prudent therefore to concentrate entry attention upon new firms that can raise substantial amounts of equity capital through sale of stock. One could debate the question of minimum viable size, and it could reasonably vary downward to the extent that market shelters remain because consumers prefer locally controlled financial services or, as in some rural areas, do not perceive money market alternatives as attractive for them.
New entry can be a socially attractive means of providing institutional control to previously underserved or excluded sectors of society. At the same time, the regulatory authorities have a deep obligation to protect the interests of the general public and not to authorize the entry of firms having a high failure probability.

It does appear reasonable for the regulators to concentrate their main attention upon the safety and viability of the industry and, having done so, to leave the questions of equity risk-taking and enterprise formation up to would-be entrants as much as possible. Thus, it would be sensible to set a high initial capital requirement in metropolitan areas and a lower one in rural locations, and then not embargo the entry of new firms that meet these capital conditions and offer reasonable hope of providing competent management.

In 1963-64, the California Savings and Loan Commissioner's office adopted new charter regulations calling for minimum initial capital of $2 million in metropolitan and $1 million in non-metropolitan locations. To survive in the probable environment of the 1980s, new entrants should be required to have initial capital substantially in excess of these amounts.

Alternative Strategies for the Regulatory Authorities: A Control Organization for Managing the Industry Toward Competitively Effective Market Performance, or a Political Manager of a Coalition, Regulated Firms, and Related Interest Groups?

Those involved in financial regulation play several games at once. They are "financial cops," on duty to protect the public from being wronged by financial firms. They develop and enforce regulatory standards that set a framework for business competition among the firms of the regulated
industry. They may serve as spokesmen for the regulated industry and its political coalition, dispensers of its special resources, and, sometimes, managers of the cartel pricing that the regulated firms often desire. The consequences of regulation for the general public are very different, depending upon which of these approaches the regulators emphasize. Also, some of the approaches are incompatible with each other, and it is therefore necessary to make a choice.

For the environment of the 1980s, it is reasonable to presume that the Congress and the Executive Branch will be unable to control secular inflation within tight limits. Volatile interest rates will be the rule rather than the exception. The financial regulators will thus need to set wise limits on what they try to accomplish, the first priority being to work for the competitive viability and effectiveness of the financial structure. Deregulation, as was said earlier in this study, is in part a positive strategy and in part simply a recognition of the impossibility of retaining market shelters that cannot be continued under the conditions of secular inflation.

One basic strategy of financial regulation in the 1980s, therefore, is that the regulators may serve as a control organization to facilitate the competitive survival of the industry under the expected environmental conditions. If this strategy is adopted, certain elements of the strategy logically follow:

1. The regulators must employ a conscious policy of structural consolidation, because this consolidation is necessary to meet free market pressures and the other circumstances of the 1980s that we have discussed. The details and the limits of the consolidation
approach will depend upon the legislated and political conditions that constrain the regulators, and the regulators will need to be forceful advocates of the powers necessary to do the job well if they are to use the consolidation approach.

2. The regulators must avoid price controls. These operate as implicit subsidies to the regulated firms, but they are likely to be unavailing under volatile money market conditions. If they work temporarily they will induce the regulated firms to delay the painful adjustments that firms need to make in their own management and operations.

3. The regulators must facilitate and enhance competition, taking steps that move competitive conditions toward free market determination of the character of transactions and the prices and volumes of activity. In this process, the regulators need to facilitate the development and use of new and better market instruments.

4. The regulators can properly attend to social goals (for example, nondiscrimination in lending and the effort to improve capital flows to inner-city borrowers), but they will need to do so by using methods that are compatible with free market conditions.

5. The regulators must avoid the role of cartel manager.

An alternative strategy is for the regulators to seek political shelter for the entire financial structure or for the savings and loan industry as a component of that structure. This would involve coalition building and vote trading on a major scale, because to accomplish it would require that Congress and the Executive Branch provide massive direct and indirect subsidies to financial firms under the conditions of secular inflation that are expected to prevail. Such political management has
been successful in various sectors of the economy in the past, but the cost of this strategy would be very high under the new environmental conditions and there is a heavy risk that, even if some political battles are won to start such a strategy, the market environment will defeat it.

I believe that the first of these two strategies is the more realistic and practical and that it is more conclusively in the public interest.
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