

DEREGULATION: PERSPECTIVES OF ECONOMIST/REGULATORS

HEARING BEFORE THE JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES ONE HUNDRED FIRST CONGRESS FIRST SESSION

OCTOBER 19, 1989

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

27-109

WASHINGTON : 1990

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

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[Created pursuant to sec. 5(a) of Public Law 304, 79th Cong.]

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DEREGULATION: PERSPECTIVES OF ECONOMIST/REGULATORS

THURSDAY, OCTOBER 19, 1989

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room 2359, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton, Solarz, Snowe, and Upton.

Also present: Joseph J. Minarik, executive director; and Chad Stone and Chris Frenze, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. The Joint Economic Committee will come to order.

The committee has held a number of hearings inquiring into the role of government policy in promoting economic growth and productivity in the American economy.

Today's hearing focuses on the extent to which we can rely on the marketplace to achieve these objectives by examining whether we have benefited from the deregulation of several important U.S. industries that took place in the late 1970's and the early 1980's.

We are fortunate to have three distinguished witnesses with both academic training as economists and the practical experience as regulators to give us their perspective on deregulation.

Alfred Kahn is the former Chairman of the Civil Aeronautics Board; Darius Gaskins is the former Chairman of the Interstate Commerce Commission; and Lawrence J. White is a former member of the Federal Home Loan Bank Board.

Gentlemen, you each have prepared statements. Those statements, of course, will be entered into the record in full, and we ask you to summarize those statements for us now if you would before we turn to questions. We are very pleased to have you with us.

Mr. Kahn, why don't we begin with you and just move across the table.

STATEMENT OF ALFRED E. KAHN, FORMER CHAIRMAN, CIVIL AERONAUTICS BOARD

Mr. KAHN. Thank you, Mr. Chairman.

I'm delighted to be here and especially not to have to explain away double-digit inflation rates.

There are really two major points I make and try to support in my prepared statement and I think I can summarize them briefly but they are very important.

The first is that competition works. Wherever freely competitive markets are feasible, even if they work very imperfectly, they are likely to be far superior to direct government regulation.

That's why we deregulated the airlines, the trucks, the railroads, the stock exchange brokerage business, and oil and gas and parts of the telephone business and even parts of financial institutions. Those deregulations have been successful. Not problem free, of course, but successful.

That takes me to my second point and I want to emphasize this even more because in view of my work on airline deregulation I'm regarded as kind of a guru of laissez-faire. The Government has a vital, continuing regulatory role to play to preserve competition, to remedy its imperfections. I know some people who favored deregulation of the airlines, the trucks, and the rest of it did so because they think government has nothing to do, does nothing well, and the less of it the better. That is emphatically not my view.

And I believe the experience we've had with deregulation and some of the major problems that have arisen, some very severe—I'm thinking of the S&L fiasco, for example—have arisen precisely because government—and especially the Federal Government—has been grossly derelict in fulfilling those responsibilities. I spell these arguments out to some extent in my prepared statement and will review the supporting evidence very, very quickly.

The sudden removal of 40- to 45-year encrustations and rigid restrictions on competition in industries like these, like the airlines and trucking, predictably resulted in a great deal of turmoil. That was inevitable and I have no apologies for it. The important thing is that underneath that turmoil competition has been producing most of the results that we expected it to produce. Striking reductions in average price in airlines, in trucking, in rail, in long distance telephoning, a greatly expanded variety of price and service offerings available to customers. Think of telecommunications, for example. Or financial markets. Think of brokerage, discount brokerage being available.

The ability of shippers—this is a less obvious one but particularly important—the ability of shippers to enter into long-term contracts with railroads and truckers, which they couldn't do under regulation. Shippers say that has been a major factor making it possible for them to adopt just in time systems of inventory control. You can't have just in time inventory control without assurances of just in time transportation and long-term contracts to provide it.

We've had marked increases in productivity without a sacrifice of safety. Accident rates are markedly down in both airlines and trucking. We clearly do not need thorough going economic regulation to ensure whatever level of safety we're willing to pay for.

The evidence on the quality of service is very complicated and I can't really summarize it adequately. In many, many ways quality has improved. I mentioned the railroad and the trucking case, the diversity of financial instruments available, telecommunications. But there's no doubt that there's a negative side of it and in the

airline case it has been clearly increases in congestion and delays, a deterioration in the quality of the air flying experience.

Now in large measure that has been a success of deregulation. The response of travelers to the availability of discount fares—2 months ago, which is the latest month for which I have figures—90 percent of all travel was at discount fares and the average discount was 65 percent. It clearly brought travel within the means of families with modest means. But it has been also the result of a massive failure of the Government to respond to the increased demand by expanding airport capacity and air traffic control capacity and to price access to those scarce facilities, whether by auctioning them or by variable landing fees, to price them rationally. If we were to price land in downtown Washington as stupidly as we price access to Washington National Airport, you can be sure we would have terrible congestion in downtown Washington and delays there. Those defects on the part of the Government, along with the reconcentration of the airline industry that people are very much worried about, and the possibility that some travelers, though a minority, may be exploited, returns me to my second major point which is the failure of the Government to do its part.

The Federal Government particularly, as I say, has been derelict in fulfilling responsibilities that we never intended to relieve it of, to fund the FAA adequately for safety regulation, to supply the requisite air traffic control and airport capacity, to enforce the antitrust laws, and in other ways to help preserve competition.

I call your attention to the bill recently introduced by Senators Danforth and McCain which seems to me a very—I'm not endorsing it in all details, but a far too-long delayed demand for policies that would help competition work better in these industries.

The S&L case that I've mentioned is a dramatic demonstration of the fact that deregulation cannot mean merely firing our police forces and I'm happy to be able to leave the elaboration of that to my good friend, Larry White.

The deregulation movement of the last 50 years has been part of a rediscovery all over the world of the superiority of a free market economy. It would be ironic if just as countries elsewhere have been discovering this fact that we were to retreat into governmentally administered protectionism and cartelization.

On the other hand, my last sentence, it would be equally foolish to confuse economic deregulation with total laissez-faire. The Government continues to have an essential and very important role to play.

Thank you very much.

[The prepared statement of Mr. Kahn follows:]

PREPARED STATEMENT OF ALFRED E. KAHN*

Economic regulation is so complex a phenomenon, taking so many forms and practiced in such an enormous variety of contexts, it is very difficult to generalize about it without doing violence to those complexities.

Considering that the antitrust laws, the statutes protecting consumers against deception, the food and drug and environmental protection laws, regulations to protect the public health and safety, the heavy taxes on alcohol and cigarettes, zoning controls are all forms of economic regulation, it obviously makes no sense whatever to declare oneself as favoring or opposing regulation, as a general proposition.

At a very general level, most economists--indeed, most Americans--would, however, agree with the following propositions:

- Wherever free competitive markets will work reasonably well, even if quite imperfectly, they are superior to direct government regulation as a method of organizing and controlling economic activity.
- Often, however, competitive markets are highly imperfect--where, for example, consumers cannot without government assistance be adequately protected from the adverse consequences of their ignorance; or where the actions of consumers and producers, in following their own interest, impose unacceptably high costs on others; or where the pursuit of self-interest by private parties, unconstrained by antitrust laws, results in suppressing or precluding competition. In such cases government intervention of one kind or another may be necessary in order to produce a superior result--indeed, in an important sense, in order to preserve competition or make it a more effective servant of the public interest.

Even if we confine our attention to the regulation of specific industries, it becomes clear that we have adopted such interventions for a variety of reasons--in some cases because it appeared that they were most efficiently organized as monopolies and consumers had therefore to be protected from monopolistic exploitation; in others because of a belief that unconstrained competition would be excessively intense and therefore destructive of the quality, continuity, reliability and safety of the services; in other cases

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in order to promote universal availability of service, quite possibly by holding the price to some users below cost.

Many of these economic regulations, more narrowly defined, have had one common element: they have tended to operate not simply by supplementing competition that would otherwise be inadequate, but by supplanting and suppressing it--by restricting competitive entry, and placing limits on the ability of sellers to cut prices--that is to say, imposing floors under prices as well as ceilings above them. In consequence, the principal defenders of regulation in these circumstances have been the regulated companies themselves and their unions.

The essence of the deregulation we have experienced during the last 15 years in industries as widely different as stock exchange brokerage, cable television, airlines, trucking, the railroads, financial markets, and even such traditional public utilities as telecommunications, the generation and distribution of electricity and the transmission and distribution of natural gas has consisted, therefore, in relaxing or removing governmental barriers to competitive entry and competitive pricing.

In these circumstances, it should not be surprising that immediately following upon deregulation some 150 new airlines were certificated; that the number of ICC-certificated truckers increased from some 18,000 to 37,000; that in the first year of bus deregulation, licenses were issued to some 2,000 new enterprises; that airlines and truckers began to invade one another's markets on a wholesale basis; that a wide variety of manufacturers began to offer all sorts of equipment--answering machines, cordless telephones, switchboards--for attachment to the telephone company access lines at customers' premises; that there are today literally hundreds of competing suppliers of long-distance telephone services; that you may now obtain residential mortgages at K-Mart, hold the equivalent of checking accounts at Merrill Lynch, obtain discount brokerage services at savings banks, and credit card service and insurance from Sears, Roebuck; that banks, industrial corporations, real estate companies, railroads and oil pipeline companies all now are in the communications business; that there are now more business telephones linked, in the first instance, to their own private switches than to the local telephone companies;

that large customers are shopping all over the country and buying their own natural gas in the field, or electricity from suppliers outside their traditional franchise territories; that more than two-thirds of the gas the interstate lines now carry is gas that has been purchased and sold by other parties; and that there are now thousands of non-utility company suppliers of electric power.

Nor should it be surprising that the result of this letting down of regulatory barriers has been a great deal of turmoil, as new ventures have been organized, some of them prospering, others failing; as suppliers have used their new-found freedom to compete in price and the proliferation of service offerings, often in a confusing variety of ways; as companies have invaded one others' markets, producing greatly increased insecurity for their owners, managers and workers, and a great deal of shaking down, in the form of bankruptcies, departures and mergers.

All that could have been predicted, although certainly not in specific detail: regulated industries are far more tidy, predictable and stable than competitive ones, and especially ones suddenly opened to competition after decades of governmental cartelization. Competition is inherently less predictable and more turbulent. Indeed, it is precisely because no regulator can predict or prescribe the most efficient organization of an industry, or the ideal range of its offerings and prices--let alone force companies to be efficient, progressive and innovative--that we prefer leaving these results to be determined and compelled by competition, wherever that form of economic organization and discipline is even remotely possible.

What can we say about the extent to which the competition released by the deregulations of the 1970s and early 1980s has fulfilled the expectations of the deregulators?

It is of course extremely difficult to generalize about so complicated an experience, in such a great variety of industries.

At the same time, while there certainly have been problems--which I will try to describe and appraise as fairly and fully as possible--just as there are imperfections in the performance of industries that we have never regulated, most economists would, I am

confident, agree that the competition unleashed by deregulation has done most of the good things we expected of it.

Let me review the evidence, necessarily impressionistically but as fairly as I can, of the principal dimensions of industry performance: the level of average prices; the structure of prices--that is to say, the prices to various categories of customers; the availability of a variety of price and service options; productivity; and the quality and safety of service.

The level of price

While we cannot of course know with certainty how prices would have behaved had we not deregulated these industries, I believe there can be no quarrel with the general proposition that competition has produced striking reductions in average price. In the case of the airlines, while some 15 percent of passenger miles were traveled under discount fares back in 1976--the last year before the Civil Aeronautics Board began to adopt a more permissive attitude toward discounting--last year that figure was 91 percent of all travel, and the average discount was 63 percent. In August of this year, the latest month for which the data are available, those figures were 90 percent and more than 65 percent, respectively. A reasonable estimate is that travelers in total have as a result have enjoyed savings upwards of \$10 billion a year. (I promise to return to the less fortunate travelers, accounting for some 10 percent of all passenger miles, who paid the full coach fare.)

Professor Nancy Rose, at MIT, has found similar results in trucking and the railroads.

The structure of prices

Again, as was clearly to be expected and again as a general proposition, prices for the various categories of service have been forced by competition into closer conformity with the respective costs of providing them. Airline fares have gone down more in long-haul than in short-haul markets, because fares under regulation gave inadequate recognition to the tendency of costs per mile to go down with distance; in dense than in thin markets, in reflection of the economies of the larger planes that can be used in the former than in the latter; in vacation than in business markets, reflecting

the ability of carriers to use the largest planes and to fill them fully; and, above all, average yields have come much more closely to reflect the differences in the cost of providing service on peak than at times when large numbers of seats would otherwise fly out empty.

Trucks and railroads, similarly, have been freed by deregulation to charge lower rates for back hauls, when a large portion of their capacity would otherwise be unused, than for front hauls.

Between the end of 1983 and this year, the average price of long-distance calling has gone down some 50 percent in real terms, while the price for basic residential service has gone up approximately 23 percent more rapidly than the Consumer Price Index, reflecting the fact that under regulation the former service was forced to subsidize the latter.

In some cases the effects of these changes on income distribution would be generally applauded, in others it might be regarded as unfortunate. The very sharp and extensive discounting of airline fares for travelers who can make their reservations weeks in advance and/or stay over a weekend has clearly brought air travel within the reach of the great majority of Americans of modest means; the people who pay the higher fares have been for the most part business travelers, in congested markets at peak times. In contrast, the 20 to 25 percent increase in the price of basic residential telephone service, accompanied by a sharp decline in the cost of long-distance calling--as well as the availability of a constantly increasing array of sophisticated services--has probably been beneficial mainly to business users (and, through them, their customers) and relatively well-to-do families, and injurious to families of very modest means (except in rural areas, where more of the calling is probably long-distance). At the same time the great majority of states now offer some form of special assistance to low-income subscribers; and the proportion of households with telephone service has continued to creep upward: in 1940 this ratio was 37 percent; in November of 1983, just before the AT&T breakup, it was 91.4; in March of this year the figure was 93.0 percent.

Price discrimination

An important exception to the general tendency for the structure of prices to move into closer conformity with the structure of costs has been a tendency for price discrimination to become more marked than before. Competition is, for obvious reasons, more feasible and therefore more effective in dense markets than in thin ones. The so-called yield management that the leading airlines have learned to practice with increasing effectiveness involves a very substantial element of discrimination--making it increasingly difficult for non-discretionary travelers to avail themselves of discounts, and raising the unrestricted fares a minority of them (only about 10 percent of all travelers) pay to a point some 60 percent higher in real terms than it was before deregulation. This increase evidently reflects also a very substantial amount of monopoly power--a problem to which I will return. Similarly, deregulation has given the railroads wider latitude to vary markups above direct costs, depending upon what their various traffics will bear--subject only to the authority of the Interstate Commerce Commission to impose ceilings when rates to captive shippers exceed 180 percent of those costs.

Discriminatory pricing seems undeniably unfair--travelers are often outraged to find themselves charged many times as much for a short trip on a less competitive route than for longer ones; but the economist recognizes that very often such discrimination results in much greater efficiency and benefits for everyone--even for the customers paying the higher prices. In airlines, the deeply discounted fares to discretionary travelers have filled seats that would otherwise have gone empty, and helped make possible the more frequent scheduling that is particularly valuable to the business traveler. And the railroads could not cover their total costs, including the many billions of dollars that they have laid out in recent years to rehabilitate their trackage and modernize their equipment, from which all shippers have benefitted, if they were not able to take advantage of their ability to charge some shippers higher markups above direct costs than others--that is to say, to discriminate, in economic terms.

The variety of price and service offerings

Deregulation has clearly resulted in customers being offered a greatly increased variety of price and quality options. While People Express, with its separate charges for barebones transportation, baggage handling and meals, is gone, travelers willing to make their commitments in advance or to fly off-peak can find bargains, while business travelers who need to be able to make reservations on short notice and travel between congested airports at peak travel times pay correspondingly higher fares. Investors who want only to buy and sell securities can obtain simple brokerage at discount rates; others who want the full range of investment and advisory services pay correspondingly more. The telephone companies compete vigorously with private networks and private switchboards in offering an ever-increasing variety of customized communications and computing services; and residential customers can purchase all kinds of telephones, answering and telecopying machines, with a wide range of choice among competing suppliers.

And it is only since deregulation that shippers have been able to enter into long-term contracts for rail or truck transportation--which they have been doing on a sharply increasing scale--giving them assurances about the future course of charges. The opportunity to incorporate in the contracts rewards and penalties, depending upon the quality of the service they receive, is said to have been a major factor making it possible for manufacturers and distributors to adopt the just-in-time systems of inventory control, which have brought savings estimated in the tens of billions of dollars a year. just-in-time inventory systems obviously require assurances of just-in-time delivery.

Productivity

Removal of the pervasive regulatory restrictions on operating certificates--stipulating precisely what routes airlines or truckers were permitted to serve and traverse and what kinds of traffic they were and were not permitted to handle--and the greatly intensified pressures of competition have made possible enormous improvements in efficiency and exerted powerful pressures on the companies to achieve them. The hub and spoke airline operations that have become so widespread since deregulation are a striking example: the ability of carriers to funnel traffic, at regular intervals during the day, from each of

their spokes, via their hubs on to their routes radiating outward, has not only permitted them to use larger planes, at higher load factors, but has also made it possible for them to offer travelers in the various cities they serve a far greater range of destinations than would otherwise have been possible. The failure of the airline industry to have achieved these economies under regulation is an eloquent testimonial to the inefficiency of centralized government planning and to the superiority of unconstrained profit-seeking in free markets, under the pressures of competition.

In addition, the increased freedom of both airlines and trucks to vary their effective charges from one moment to the next, from one route to another, and as between peak and off-peak or front-haul and back-haul has made possible a fuller use of their equipment and substantial savings in cost, which the pressures of competition have forced them to pass on to their customers.

The effectiveness of these competitive pressures to modernize facilities, improve service and increase productivity are equally manifest in the telephone business: witness the multi-billion dollar outlays of the telephone companies to digitalize their switches and deploy fiber optic transmission.

The quality of service

One central part of the rationale for regulation of many of these industries was the fear that unrestricted competition would be destructive of the quality, continuity, reliability and even the safety of their operations.

The experience of the last decade or so demonstrates that there is no need for thoroughgoing economic regulation and cartelization to ensure whatever level of safety we are willing to pay for. Airline accident rates have continued their secular decline, averaging some 35 to 40 percent below pre-deregulation levels during the last decade; in the case of trucking, the comparable ratio seems to be about 20 percent. Moreover, by taking large numbers of travelers out of their cars and putting them in planes, the low airfares consequent on deregulation have probably saved several times as many lives each year as the total lost in airplane accidents.

It is not possible to dismiss the possibility, however, that the intensified competition unleashed by deregulation may have induced airline companies to operate on narrower margins of safety, which may one day catch up with us if we do nothing about it. New trucking companies apparently have poorer than average safety records; and many owner-operators tend to flout regulatory limitations on consecutive hours of driving and requirements of maintenance of their equipment. The consensus of experts seems to be, however, that the answer to these possible dangers is intensified enforcement of those regulations. A recent study by the California Highway and Public Utilities Departments provided striking corroboration of this view: it found a very clear inverse relationship between the number of random highway inspections, on the one side, and trucking accident rates on the other; when the former went up, accident rates went down; when inspections went down, accident rates went up.

It seems generally acknowledged, similarly, that the Federal government has during the 1980s been derelict--primarily, it appears, because of budgetary constraints--in its responsibility to ensure adequate staffing and budgets for the Federal Aviation Administration for the performance of its safety inspection and air traffic control functions; in my view, there is a strong case for taking these functions out of the regular Federal Budget and having them financed directly by user charges.

In the case of the railroads, deregulation has helped improve the companies' financial condition, and so helped them make major investments in track modernization and improvement, which have in turn very substantially reduced safety hazards from poorly maintained tracks.

There are so many other dimensions of service quality, and the record differs so from one industry to another, generalization is difficult. So far as telephone service is concerned, there is no substantial evidence of any deterioration--except perhaps for the first transitional years after the breakup of the Bell System, and, as I have already observed, the proliferation of ever more versatile service offerings has clearly entailed a very important increase in quality. The same is true of financial markets. And I have already alluded to the improved service resulting from the ability of shippers now to enter

into long-term contracts with railroads and trucking companies; the availability of inter-modal shipping options has likewise increased greatly.

In the case of the airlines, first, thanks largely to the subsidized Essential Air Services Program, virtually no town that enjoyed a minimum level of certificated service before deregulation has lost it. Mention is often made of hundreds of towns losing service since deregulation, but hundreds did so under regulation as well: in both cases, it was unregulated or uncertificated service.

Further, so far as service to small towns is concerned, the average number of weekly departures from towns in all size categories has increased very sharply--not surprisingly, in view of the enormous increase in traffic. Small towns have tended to lose service by jets, but that service was always comparatively uneconomic, and it became even more so with the increases in fuel prices beginning in the mid-1970s.

The evidence on trucking service to small towns, about which so much concern was expressed by the opponents of deregulation, is unequivocal. I am aware of several surveys of shippers during the last decade; their results are consistent: the majority of respondents report no substantial change in the quality of service, but among those that do report a change, anywhere from three to eight times as many say they have experienced an improvement as complain of a deterioration.

On the other hand, there has clearly been an increase in congestion, delays and, in general, a deterioration in the quality of the air flying experience. In large part, this has clearly been a consequence of the success of deregulation: it has offered travelers and potential travelers a new option of deeply discounted fares for service less expensive to provide--in fuller planes, with tighter seating, and a lower ratio of ticket agents and flight attendants to passengers. Their response was so enthusiastic, it has taxed the capacity of our airports and our air traffic control systems.

As I pointed out publicly on more than one occasion when I was Chairman of the Civil Aeronautics Board, it is the responsibility of government to respond to the increased demand for those facilities that our deregulatory efforts were generating, by expanding capacity--a matter at least as much of introducing modern electronic technologies

(the FAA, I am informed, has more vacuum tubes than any other institution in the world) as of adding concrete--and by pricing access to those scarce facilities--whether by auctioning them or by variable landing fees--at levels reflecting the wide variation in their scarcity value from one time and place to another. One of the most frustrating--indeed infuriating--failures in this respect has been the resistance of the Department of Transportation to such rational pricing: the most recent manifestation was its decision requiring the Massachusetts Airport Authority to withdraw its altered landing fees for Boston's Logan Airport, on the basis of the ridiculous reasoning that roughly equivalent landing charges for small aircraft as for large ones is objectionably discriminatory, because it means much higher charges per passenger on the former than the latter. One does not have to be an economist to recognize that when two passengers on a corporate jet, landing at Washington National Airport or Logan at times of congestion, take up space that could be otherwise used, with reduced delay, by a plane with 250 passengers, the true economic cost imposed by the former, on a per passenger basis, is indeed 125 times as great as by the latter. (On the other hand, the Logan fees had the serious defect of not reflecting the considerable variations in those costs between peak and offpeak times of day and days of the week.)

The last time I looked, landing fees at Washington National Airport were a uniform 56.9 cents a thousand pounds. My charter operator tells me that translates into \$2.75 to \$6.00 per landing, depending on the size of the planes he uses. Suppose we were to price equally valuable and scarce real estate in downtown Washington at, say, 57 cents a square foot: would we be surprised to find long queues of willing buyers, and severe congestion?

Reconcentration and monopoly

One of the concerns expressed by the opponents of deregulation was that the competition that might be expected to follow it would prove to be only temporary--that in time the larger operators would succeed in driving out the smaller ones, and the result would be unregulated monopoly.

In some measure this has indeed happened, in both the airlines and less-than-truckload trucking: most of the new price-cutting entrants have disappeared, and the initial deconcentration of these industries, under the flood of new entrants, has been reversed, with the result that the industries are today more concentrated at the national level than they were before deregulation.

Moreover, the discipline over pricing by these surviving giants that we had hoped would be exerted by the possibility of entry by lower-cost, price-cutting competitors has proved to be disappointing. Most of us failed to foresee the many ways in which the dominant carriers would be enabled to weaken or eliminate that threat by their preferential access to gates at the airports they dominate; their successful use of frequent flyer programs; their control of computerized reservation systems; their offer of the richest menu of flights in and out of the hubs they dominate, feeding passengers from one to the other; their offer of override commissions to travel agents for steering travelers to their flights; their increasing facility at offering very deeply discounted fares--far below the levels that even much lower-cost carriers like People Express could offer on a uniform basis--and the failure of the Federal government to enforce the antitrust laws vigorously against competition-suppressing mergers, predatory price cuts, and the exertion of competitive advantages such as the ones I have listed.

Only a few weeks ago, both the House and Senate Aviation Subcommittees evinced deep concern about the consequent apparent increase in monopoly power over traffic beginning or terminating at hub airports dominated by one or two carriers. While, for example, 90 percent or so of all passenger miles are at fares discounted so deeply as to have produced a 25 percent or so reduction in average yields per mile, in real terms, since 1976, the 10 percent or so of total mileage at the unrestricted coach fares has been subjected to an average increase of more than 60 percent in real terms--to levels, it appears, far higher than would have been permitted under regulation.

This is not to say that monopoly is now the typical condition in the industry. On the contrary, the airline and trucking industries are indisputably far more competitive today than they were under regulation. And while concentration at the national level

now exceeds prederegulation levels, the average number of competitors per route has increased substantially--in markets of all sizes--thanks to the freedom of the major carriers to invade one another's territories. The same seems to have been true of less-than-truckload trucking.

On the other hand, of course, we no longer have price ceilings to protect the minority of travelers from exploitation. (I use that term with some hesitation, because it is by no means clear that the unrestricted fares, however much they have increased, exceed the stand-alone costs of serving the travelers who pay them; nor is it clear to what extent the price discrimination to which these non-discretionary travelers are subject may be compensated for by improved convenience of scheduling--a dimension of service of particular importance to them.

What, if anything, should the government be doing about this situation? There are three possibilities.

The first is to do nothing: we put up with a lot of imperfections of competition in industries that we would not think of regulating; and since the airline industry is far more competitive than it was and the benefits of competition have been so widely distributed, it would by no means be ridiculous to conclude that the situation requires no remedy.

Second, however, the government has clearly been severely derelict in fulfilling responsibilities of which it was never the intention of deregulation to relieve it--to fund the FAA adequately for safety regulation, to supply the requisite airport and air traffic control capacity and price access to them rationally, to enforce the antitrust laws and in other ways help preserve competition--for example, by preventing mergers between competitors or potential competitors, attacking apparently predatory competition, and the like. The bill recently introduced by Senators Danforth and McCain represents, I believe, a far-too-long delayed demand for policies of this kind.

Finally, however, I cannot in principle reject the reimposition of price ceilings to protect travelers in situations in which it appears they are susceptible to monopolistic exploitation and the restoration of more effective competition seems infeasible. Such an

intervention would be wholly in keeping with the captive shippers provision of the Staggers Act, which in other respects deregulated the railroads, and the continued regulation by public utility commissions of the telephone, electric and gas industries, even though these too have in varying degrees been opened to competition and deregulated.

Consideration of the second and third alternatives returns me to the central point of this testimony, which I emphasized at the very outset. The curse of our public discourse is our tendency to think and argue in slogans and shibboleths. Time and again, I have seen proposals such as the ones embodied in the Danforth/McCain bill characterized as "reregulation": "Aren't you simply arguing for a return of regulation?" reporters constantly ask me when I point out that the government has not been fulfilling its responsibilities toward the airline industry.

The answer must be "yes, in a sense, enforcement of the antitrust laws could be regarded as a form of regulation, and so could protecting travelers from deceptive advertising or setting landing fees--whether efficiently or inefficiently. But that blanket characterization obscures the critical distinction between government interventions intended to make the free competitive market work better and regulations that supplant it and substitute centralized planning--a distinction that communists in Poland and China understand, so why don't you?"

We have had a dramatic demonstration, in the failures of the savings and loan institutions in recent years, of the proposition that deregulation does not and must not mean firing our police forces. Those massive failures were clearly the consequence of our having removed the regulatory ceilings on interest rates and relaxed the restrictions on the kinds of lending and investment activities in which those institutions were permitted to engage. What we failed to recognize, however, was that the removal of these restrictions, while retaining the Federal insurance of their deposits, constituted an open invitation to the kind of reckless lending and outright speculation that produced the present debacle. So long as the government guaranteed their deposits, institutions whose assets may have been worth far less than their liabilities--that is, institutions that were effectively insolvent--could nevertheless continue to attract deposits by offering higher interest rates,

and engage in additional risky investments--if not actual fraud: if those ventures proved successful, the owners could not only remain in business but make a large profit; if they failed, it would be the Federal Savings and Loan Deposit Insurance Corporation that would be left holding the bag--as indeed it has been.

We failed to recognize, in short, that deregulation, particularly in the presence of deposit insurance, enormously increased the necessity for vigilant bank examination, the enforcement of capital requirements sufficient to provide a cushion against losses, the setting of Federal deposit insurance premiums that would have varied with the riskiness of the lending and investing activities of the insured institutions, and a readiness to close down S&Ls that were effectively insolvent.

The deregulation movement of the last 15 years or so has been part of the rediscovery all over the world of the superiority of a free market economy. It would be sadly ironic if, just as countries all over the world have been discovering this fact, we were to retreat into governmentally-administered protectionism and cartelization.

On the other hand, it would be equally foolish to confuse economic deregulation with total laissez-faire. The government continues to have an essential and very large role to play.

Representative HAMILTON. Thank you, Mr. Kahn.
Mr. Gaskins, please proceed.

**STATEMENT OF DARIUS W. GASKINS, JR., FORMER CHAIRMAN,
INTERSTATE COMMERCE COMMISSION**

Mr. GASKINS. In my prepared statement I comment only on trucking and railroads and I will concentrate my remarks in that area.

An overview of what happened is that the Government essentially did the right thing in 1981 and deregulated the trucking industry and the railroad industry.

I know that there are people that are skeptical about whether the Government can do the right thing from time to time, but in my experience, if I were grading their paper for what happened in 1981, I'd have to give them a solid A for the passage of the Staggers Act and the Motor Carrier Act because those pieces of legislation have turned out to work extremely well in stimulating competition in those industries and benefiting the economy as a whole.

Turning first to trucking deregulation, there were not hard economic questions involved in deregulation of the trucking industry. It was pretty obvious to most objective individuals that there was no real reason for the barriers to entry and collective ratemaking authorized under the statutes.

So there were not tough economic issues. There were tough political issues. It was clear that the Teamsters who dominated the less-than-truckload sector of the industry had a lot to lose in deregulation and the American Trucking Association, certain portions of it, had a lot to lose through deregulation. So there was a lot of political opposition, but the administration was firm. The Congress was quite thoughtful and in the end, as I said, did the right thing.

The results have been quite extraordinary. Rates have declined substantially. Consumers have benefited substantially by lower prices and innovative services being offered. The structure of the industry has changed pretty dramatically. We found an enormous upswing in entry between 1980 and 1986. We went from 37,000 carriers to 75,000 carriers in that timeframe, so the number of participants in the market doubled. At the same time, we had a very large number of failures. We had over 1,000 trucking firms who went out of business and this in contrast to the decades before when having a certificate to operate a trucking company was like having an insurance policy. There were no failures because the regulatory process protected your interest. So we had a dramatic change in the structure. We have a whole new animal that's appeared on the scene in the trucking industry called a super-truckload carrier. An example of this is J.B. Hunt who went from essentially zero operations in 1980 to over \$600 million in revenues at the present time, and he and his compatriots are the most competitive force in the transportation industry today and they literally could not have grown or flourished without the freedom of deregulation. At this point they seem to be the most effective competitor out there.

Rates have declined. One of the justifications given at the time of discussion of the Motor Carrier Act was that rate bureaus were

necessary because tariffs were so complicated there was no way anybody could understand them without the tender loving care of the rate bureau personnel but we found that lo and behold under deregulation that every one of the major carriers has developed innovative computer systems that provide updated rate information for their customers that turn out to be far more accessible and an improvement over the old tariff structures. So there's been a dramatic innovation in that area.

The labor market has clearly become more competitive. Some observers have estimated that the Teamsters' concessions in terms of wage levels have been in excess of \$1 billion a year because of the force of new competition in the trucking industry.

The LTL sector remains heavily unionized and has actually increased its concentration, but it has not ended up in higher rates. Right now, in 1989, we're in the midst of a rate war out there between the LTL carriers who have maintained largely Teamster operations. There are fewer of them, but without the rate bureau activity they have not been able to maintain their rate structure at an elevated level.

In terms of unfinished business with respect to the trucking industry, the act was pretty complete and it covered most of the ground. There were only a few things that we missed and two things that it would have been nice to do if we had been smart enough or clever enough at the time.

One is that there are some pension plans, multiemployer pension plans, that create barriers to exit. Some companies stay in business because they are faced with huge pension liability if they exit and that has caused some distress in the industry because you have some inefficient carriers that hang on longer than they should. Given the nature of the act, it would have been appropriate to fix that at the time we passed the act.

Further, State regulations still inhibit free and competitive trucking in this country. The State of Texas where I lived 5 years is notorious for its limits on entry that serve to prevent people from coming into the business and raise rates well above a competitive level. Unfortunately, nothing was done directly about State regulation of the trucking industry and we are still paying a price for that oversight.

We turn to railroads and we have a somewhat different situation. There were hard economic questions associated with the deregulation of railroads because railroads have clearly on the surface some market power. They have shippers who are highly dependent on a single railroad and the concern for over 100 years with respect to regulation of railroads was how do you protect captive shippers from monopoly power of the railroads?

There were, on the other hand, another series of hard questions. We had a railroad system that was basically in failure mode. We had three bankrupt carriers, one liquidation, the Rock Island. Half of the Milwaukee system was disappearing and Conrail was a ward of the state. We really didn't have any good alternatives. We had tried subsidization. That did not do enough. We had tried some partial deregulation in the 1970's and that had not sufficed, and deregulation, according to the Staggers Act, literally was the only alternative that seemed to be available.

Interestingly enough, the parties involved in deregulation at that time had dramatically different views about what was going to happen. The railroads felt that the reason they weren't making any money was because the ICC was preventing them from raising their rates effectively. They anticipated that after the Staggers Act they were going to raise their rates and get to be prosperous because of higher rates. It turns out they were dead wrong because the Staggers Act not only gave them new freedom to raise rates but it also took away their collective ratemaking authority and created more competitive circumstances. The railroads surprising enough spent the 1980's not raising rates but cutting costs because the new competitive forces unleashed in their industry and the competitive forces of the newly deregulated trucking industry compounded to put them under tremendous cost pressure. The story of the railroads in the 1980's was an industry that improved their economics by cutting costs rather than by raising rates.

There have been significant changes in the structure of the railroad industry. The act authorized, in fact stimulated mergers by requiring the Commission to approve them expeditiously. The result was a whole series of large mergers which dramatically increased the concentration of the industry and led to rationalization.

As I said, the rates surprising enough declined for most of the 1980's. Service innovations were evident across the board. But the cost reductions were the most predominant feature. Employment went from half a million people to 270,000 among the largest carriers and it's still declining. Abandonments accelerated. Short lines were created where railroads sold their branch lines to new entrepreneurs and created entry in an industry which hadn't seen new entry for decades.

Unfortunately, when we looked at the Staggers Act in 1980, we didn't look at some of the fundamental problems. We didn't look at the fundamental problems because, for example, the railroads believed that their only problem was they couldn't raise rates fast enough. The fundamental problems were not their inability to raise rates. The fundamental problems were that they had substantial cost burdens not borne by the rest of American industry. They have a labor law which is quite archaic and serves to protect the status quo. They have a railroad retirement system which is very onerous and much more expensive than Social Security and they have liability law for compensating injured workers which is much more expensive—in fact, 10 times as expensive as normal workmen's compensation. And those cost burdens exist today and they haven't gone away and if we have another major recession it's my prediction that we're going to see some railroad failures and we will see those railroad failures because the fundamental problem, the unnecessary cost borne by the railroads, have not been eliminated.

But in the short run at least, since 1980, the railroads have done very well. They've more than doubled their return on capital and they have become much more competitive.

Let me just add—and this is not in my prepared statement—I have sort of a unique perspective. I worked for the railroads for 7 years after deregulation. I worked for the Burlington Northern Railroad. So I got the unique situation trying to live in this envi-

ronment that I had something to do with creating and I must tell you, the day-to-day workings of the railroads in the 1980's are dramatically different than they were 10 or 20 years ago. Ask anybody that participates in that industry—a shipper, any employee of a railroad, anybody that knows anything about railroads, they behave differently today than they did 10 years ago. If you ask them why they behave differently, they will say it's deregulation. It freed them to do things that they didn't think about doing before, that they didn't think were possible, things they thought they had to go to the ICC for permission for they are now doing on a regular basis.

The Burlington Northern, for example, sells its grain transportation in a futures market, which just blows the mind of the traditionalist. They are experimenting with using satellites to tell them where their trains are so they can provide accurate information to their customers about the time of shipments and provide safer operations.

Innovation is breaking out all over in this industry and it permeates everything everyone does. So from the grassroots level, deregulation of the railroad industry has been tremendously successful.

My conclusion is that, at least in these two instances, deregulation has worked very well. It's a pity that we were not able to look at some fundamental issues when we did it, that we missed the opportunity to do something about State regulation of trucking, that we missed the opportunity to do something about the unnecessary cost burdens of the railroad industry. But all in all, the Federal Government did a very significant thing by the deregulation of trucking and rail transportation.

Thank you.

[The prepared statement of Mr. Gaskins follows:]

PREPARED STATEMENT OF DARIUS W. GASKINS, JR.

Thank you for the opportunity to testify today on what we have learned from deregulation of the nation's surface transportation industries.

Let me begin by emphasizing that the deregulation of the trucking and rail industries has been very successful. Our economy is today much more efficient and more competitive in the global context because of the legislation passed in 1980.

In my statement I attempt to explore why we deregulated freight transportation, how we deregulated, what the results were, and what lessons and unfinished business remain.

RAIL DEREGULATION¹

THE CRISIS

The rail industry in 1980 was truly in dire straits. The Government had poured \$4 billion into Conrail, the relic of the Penn-Central bankruptcy with no real evidence yet of financial viability. The Rock Island Railroad, no longer a "mighty fine line," had lingered in service only through the injection of \$80 million of direct federal aid. The Milwaukee Road had ceased service west of Miles City.

The railroads were bitter about their treatment under I.C.E. regulation. The combination of drawn out rate cases and accelerating inflation had hampered their profitability throughout the 1970's. Their attempt to rationalize the systems through line abandonments and mergers had been frustrated by regulatory delay and adverse I.C.C. rulings.

The natural tendency of any regulatory body to procrastinate when facing controversy had prevented the industry from reducing excess capacity as they lost market share to the truck, airline, and barge

competitors. Between 1920 and 1980 the railroads' share of freight volume had fallen from 75% to 37%, and their share of Intercity passenger service has plummeted from 77% to 4%. Much of this loss of business was due to new technology, air transportation, and heavy government subsidy of competing modes through the development of U.S. waterways and the interstate highway system.

Another major factor contributing to the railroads' loss of market was the administrative and regulatory barriers to rate and service innovations in rapidly changing markets. The lethargy of rail rate decision making, the ability of any participant in a joint rate movement to block changes and the I.C.C.'s ill-advised opposition to new technology all hindered railroad competitiveness.

Many of the problems caused by regulation had been recognized and supposedly remedied in the 1973 3-R Act and the 4-R Act of 1976. The rate making freedom promised by the 4-R Act was emasculated by the I.C.C.'s implementation. The subsidies provided by both pieces of legislation were clearly not sufficient and the financial and physical condition of the railroads continued to decline.

Shippers were appalled by the deteriorating physical condition and service of the railroads. Horror stories abounded about lost rail cars and damaged goods. The territory served by Conrail remained highly rail dependent, and there was tremendous apprehension about ultimate loss of all rail service. It had already happened to Rock Island and Milwaukee shippers. At the same time shippers were concerned about who was going to pay for the rehabilitation and preservation of rail service. Both the 3-R and 4-R Acts had attempted to shift those costs to the U.S. taxpayers.

Those shippers who felt most rail-dependent, i.e., coal and grain shippers, were active participants in I.C.C. rate making cases arguing against undue burdens on their ox. Shippers and rail-dependent

communities were predominately successful in slowing the abandonment of rail service.

Railroad unions had been active in railroad regulation particularly in opposing all abandonments and most mergers. They had helped pass recent legislation to subsidize railroads. Their efforts to preserve jobs were understandable since railroad employment had fallen from 1,350,000 in 1947 to less than 500,000 in 1980. The liquidation of the Rock Island and Milwaukee shocked union leadership, and they actively pursuing some alternative to further railroad liquidation.

The financial and physical condition of the railroads were precarious. In spite of the aforementioned lay-offs and government subsidies, the return on railroad industry investment averaged less than 2% during the 1970's. Derailments were increasing on many roads and abandonment applications approvals were rising rapidly.

The Federal government was deeply frustrated by its inability to resolve the rail crisis. It was clear that the taxpayers were not going to bail out the railroads. One observer had estimated nationalization of the rail system would have cost \$100 billion. Prior legislative solutions had fallen well short. Recent deregulation of the trucking industry promised increased competition from that mode. It was obvious that substantial changes were needed.

THE SOLUTION: THE STAGGERS ACT

The rail crisis directly drove the legislative process which produced the Staggers Act signed into law in October 1980. The main feature of the Staggers Act were:

- 1) language instructing the I.C.C. to emphasize revenue adequacy for railroads;

- 2) procedures which allowed automatic, timely pass through of cost increases;
- 3) specific language authorizing long-term contracts between railroads and shippers;
- 4) elimination of regulatory review of all rates below a threshold based on revenues to costs;
- 5) expedited procedures and deadlines for mergers and procedures;
- 6) elimination of collective rate-making except for discussing joint-line movements;
- 7) procedure for the elimination of all regulatory control over services where there was substantial non-rail competition.

The Staggers Act was based on the stated premise that the rail industry was no longer a dominant monopoly requiring broad I.C.C. regulation. It shifted to depend on competition stimulated by less collective rate-making to protect shippers.

The railroads were elated by the pricing freedoms granted in the Act. They rushed to merge their properties taking advantage of the newly stated transportation policy and procedural deadlines in the Staggers Act. The railroads filed petitions to deregulate intermodal traffic, export coal, and box-car traffic.

The I.C.C. tended to favor railroads in the maximum rate cases that were decided in the first few years after the Act's passage.

These initial tendencies were soon tempered as rates rose, railroads' financial conditions improved and the regulatory pendulum swung. Eight

years later, we see a pattern that is surely a surprise for some, or all, of the players in 1980.

THE RESULTS (1981-1988)

The freight hauled by railroads increased strongly from 1981 to 1988, rising by 14.3% as measured in ton-miles. Actual tons increased by approximately 7% and the average length of haul increased by as much. The biggest increase came in the most competitive area--trailer and container traffic. The overall gain in volume is particularly significant given that industrial productions and GNP averaged only 3% growth from 1981-1983, and there were significant changes in the industrial mix of the American economy that decreased the demand for railroad freight. The rise of imports, lower per-capita consumption of bulk commodities, the decline of smoke-stack industries, emphasis on "just in time" inventory levels and increased truck competition--all attenuated railroad opportunities.

Contrary to the railroads' expectations, rising rates did not solve their revenue inadequacy. Improved financial performance came primarily from cost reductions and lower taxes.

Revenue per ton rose in 1982 and then declined every year since then. Between 1981 and 1988 rates adjusted for inflation fell a total of 35%. The I.C.C. ruled against the railroads in several important cases involving maximum rates and proposed exemptions from regulation.

One of the most significant I.C.C. decisions allowed a new rail entrant into the Powder River Basin to haul coal to midwestern utilities. The direct consequences of that action lowered the incumbent BNSF revenues by \$500 million in the form of lower rates and diverted coal movements. New competition was a major factor in lowering rail rates throughout the post-Staggers era.

The railroads responded to lower revenues and more competition by dramatically reducing costs. Rationalization of the work force resulted in a 44% reduction in employees of the Class I railroads. Labor costs declined by only 9% as major increases in wages and benefits mitigated lower head counts. Fuel prices declined, but more significantly conservation resulted in 25% more output per gallon of fuel. Loss and damages payments declined by 50% over this time period.

The railroads substantially rationalized their property by one of two means: the abandonment of lines and the sale of parts of their railroads to new operators. The trackage operated by Class I railroads shrunk by over 16% from 1981 to 1988.

The creation of new shortlines and regional railroads was a very significant development. Over half of the trackage given up by Class I railroads was sold to these new entrants. In most cases the new railroad achieved a dramatically more competitive labor agreement. Locally based management and enthusiastic work forces have made most of the new operations surprisingly successful. For example, the seven short-lines created by Burlington Northern increased the traffic on average by 20% in the first two years of operation.

Railroad unions vehemently opposed these transactions and through a series of court rulings have essentially brought the short-line sales to a halt.

The railroads dramatically improved their utilization of both rail cars and locomotives. The fleet of rail cars declined by 26% and locomotives by 28% while volume hauled increased by 14%. The new pricing freedom certainly permitted better use of economic incentives to drive efficient asset utilization. It is surprising that many of the steps that generated these efficiencies such as increased unit trains, pooling of equipment, and new backhauls could have been done pre-Staggers.

The culmination of all these expense reductions led to an overall reduction in expenses per ton-mile of 38% which pulled expenses down slightly faster than revenues declined. Return on investment in the railroads improved significantly after the Staggers Act. In the past two years return on investment has averaged 5% as contrasted to the 2% return of the 1970's. More significantly several railroads are on the verge of being declared revenue adequate (a return on investment of 11.7%) by the I.C.C.

The general view of shippers is that railroad service has improved during this time period. The physical plants of most railroads is in better shape today than in 1981. Many of the new technologies such as stack-trains, Roadrailer and Automatic Car Identification, as well as marketing innovations such as Q-trains, Expeditors, and reload operations are driven by service competition.

The railroads through contracts and dialogue have built partnerships with their customers that were unimaginable under the old adversarial regulatory system.

Truck lines have become customers and partners as well as competitors. The rail-truck reload operations have bought new competitive service and rates to formerly "captive" shippers. Providing intercity line haul for the LTL segment of the trucking industry is one of the fastest growing markets for the railroads.

UNFINISHED BUSINESS

The better financial and service performance should not blind us to the long-run dilemma faced by the railroad. They are still in relative decline. Their share of the intercity freight market has continued to decline. Capital has been withdrawn from the industry, and employment is still falling. Shippers still perceive truck transportation to be a superior, albeit more expensive service.

Unfortunately, the Staggers Act did not directly address certain fundamental problems of the rail industry. These problems are all related to legislation passed decades ago which creates cost burdens for railroads, not borne by their competitors or other U.S. industries.

The three areas of primary concern are the labor law controlling wage and benefit negotiations, the railroads mandated retirement system and the law governing compensation for injured workers.

The procedures of the Railway Labor Act (1926) tend to protect the status quo. The ability to have secondary picketing eliminates self-help and means that labor disputes are ultimately decided by Congress. During the 1980's trucking wages and benefits rose only moderately while rail wages and benefits sky-rocketed with wages up 40% and benefit costs up 99%. Just as significant is the difficulty in eliminating inefficient work practices through labor negotiations. Overstaffing because of inefficient work rules costs the industry approximately \$2 billion each year.

The railroads' retirement system is a disaster. It is a pay-as-you-go system like Social Security, but there are three beneficiaries for each worker paying into the system (a system which pays more generous benefits than Social Security). The result is that in 1988, the railroads paid \$6,250 more for the typical worker than if they have been under Social Security. If rail employment declines further, the extra burden per employee will increase accordingly.

Railroads pay through their tort-based compensation system ten times as much for injured workers as the amount paid by American industry for each employee under Workers' Compensation. The increase in awards in liability cases is driving up total costs even as the number of injuries declines. The railroads paid more than \$1 billion for injured workers in 1988, a large portion of which went to lawyers and expert witnesses. It is

Ironically that there was little discussion of these special cost burdens during the passage of the Staggers Act. The railroads probably ignored these ominous trends, because they believed new rate freedom would allow them to pass through rising costs to their customers. The competitive consequences of both rail and truck deregulation surprised many people. In any event, these extraordinary costs imposed by archaic statutes should be addressed.

TRUCKING DEREGULATION

TRUCKING DEREGULATION: THE PROBLEM

The impetus for trucking deregulation grew less out of an identifiable financial crisis like that of railroads in the 1970's than out of an enormous frustration with the visible impediments to better service and pricing which were so obviously a product of regulation. The trucking industry was not headed into bankruptcy nor were shippers being driven out of business wholesale by trucking regulation. The costs that trucking regulation imposed on the economy were indeed enormous, but they spread across the huge array of products that moved by truck and across the entire shipper and consuming public.

The crisis that the regulatory apparatus encountered was twofold: first, a growing recognition on the part of many shippers of the direct cost savings possible by dismantling the regulatory restrictions on service and pricing in the trucking industry and second, the degree to which those restrictions and their business consequences were highly visible to the users of the trucking industry. Those many occasions where trucking companies were forbidden by regulators to carry packaged foods to Ohio but permitted to carry it in raw form to Indiana frustrated the users of the national trucking system and made far more visible the large but highly

dispersed costs of these regulatory impediments. In addition, even trucking companies who supported the regulatory restrictions on competition when they worked to their benefit, quite often fought to free themselves from specific restrictions barring them from the additional routes and services they wished to provide. Thus, perhaps unwittingly, they contributed to the pressure for reform.

The same analysis applies to the industry's ratemaking mechanisms under regulation. The substantial declines in pricing power within the trucking industry following deregulation made clear that the system tended to push rates higher than normal competitive levels, imposing an unwarranted cost burden on shippers and consumers. It is unlikely shippers recognized the true magnitude of the potential transportation savings prior to deregulation: few predicted either the magnitude or the persistence of the rate discounting that appeared in the trucking industry following reform. But most were aware that the regulatory structure permitted truckers to collectively discuss and set rates, an act counter to the anti-trust laws under which they all had to conduct their own businesses.

THE SOLUTION: ADMINISTRATIVE AND LEGISLATIVE REFORM

The political response to both the overall pressure from shippers for greater freedom in the pricing and provision of all trucking services and the push for specific liberalizations--additional routes, commodities and contracts--by individual truckers was a two step process. In the late 1970's the ICC using its administrative authority began to ease entry into markets, especially for truckload haulers. This first step was followed a second and far broader response--the enactment of the Motor Carrier Reform of 1980 by the Congress. The act made three fundamental reforms: it--

(1) greatly eased entry into (and even more importantly expansion within) the industry by focusing regulatory entry barriers on safety leaving economics to the participants themselves,

(2) granted much greater pricing freedom to carriers both in terms of general tariffs (including a zone of reasonableness) and privately negotiated contracts,

(3) placed new restrictions on the collective pricing activities permitted the carriers within the rate bureaus.

THE RESULTS

The trucking reforms sparked six specific reactions within the industry and its customer base. There was no real chronological sequence; these emerged more or less at the same time in a truly interactive process.

First, deregulation set off structural changes within the industry that continue to this day. Both less-than-truckload and truckload carriers quickly exercised their ability to expand geographic markets and service. Along with new entrants, this expansion brought an explosion of new service (and hence heightened competition) into the industry. This competition also began to change the internal structure of the industry. Truckers accelerated their push toward specialization seeking greater efficiency. For example, most LTL carriers have dropped TL operations to focus on smaller shipment sizes. Indeed, in most instances they have even begun to serve regional LTL markets with smaller, separate LTL subsidiaries utilizing different operating methods and labor agreements.

An equally visible structural change is the number of business failures within the industry. While still a remarkably fragmented and highly competitive industry, the competitive pressures loosed by deregulation have permitted shippers to make choices among motor carriers. Some have not passed the test of competition as shippers have chosen the services offered by other carriers. Fortunately, that choice has been left not to regulators but to the customers themselves.

Second, vigorous price competition became the order of the day in all segments of the trucking industry. Indeed since deregulation, the LTL sector which prior to the reforms had the greatest degree of pricing power and stability has been characterized by significant bouts of rate discounting. This price competition has been so intense that following real price increases both before and in the first several years after deregulation, trucking rates have shown little change in real terms over the past five years despite the prolonged growth in the economy over this period. As of today, the LTL sector of the industry is engaged in yet another round of rate weakness. Overall, industry trade association data shows aggregate truck rates have lagged inflation since deregulation (i.e. shown real declines). This highly competitive pricing is even more remarkable when one considers that approximately 1000 or more registered motor carriers have exited the industry in each of the last seven years as shippers have chosen to utilize competing companies--a sign of the inherently competitive nature of the industry in the post deregulation era.

Third, deregulation has also spawned a leap in pricing innovation within the trucking industry. Under regulation virtually all major LTL carriers were tied to the costing and pricing mechanisms developed collectively within the rate bureaus. Now roughly nine years after deregulation virtually every major LTL carrier not only has independent means for assessing the costs of serving specific shippers or lanes but also independent means, such as zip code based tariffs, for pricing their services. Other innovations such as multiple shipment rate differentials, national account customer tariffs and even on-screen auctions for loads have become embedded in the industry's practice permitting a tailoring of pricing and service to specific markets that was impossible prior to enactment of the trucking reforms.

Fourth, deregulation has not only made the trucking companies themselves more competitive, it has also introduced more competition into the labor market. Denied the ability to use the regulatory structure to simply pass along wage increases, organized labor and management have in most

of the contract cycles since deregulation produced contracts in line or even under the then current rate of inflation. In addition, the entry freedoms have permitted the founding or rapid expansion of trucking companies with non-traditional labor agreements usually stressing productivity enhancing and profit sharing provisions.

UNFINISHED BUSINESS

In my view, trucking deregulation is working well. The competitive process is creating powerful incentives for carriers to seek greater efficiencies, additional innovations and higher shipper acceptance. The rate bureaus remain in existence even though their raison d'être remains in conflict with both the competitive goals of deregulation and perhaps just as importantly the move by major LTL carriers to determine their own pricing actions. Eliminating the bureaus would be consistent with the drive for more competitive, responsive trucking markets. Another item left undone is the issue of multi-employer pension liabilities. This problem has hampered rational exit decisions, a process which imposes costs on trucking companies, the trucking industry and the economy. It continues to merit attention. Finally, inconsistent economic regulation of trucking by the states remains a burden on both the industry and its users.

LESSONS

The most obvious lesson from deregulation of surface transportation is that it has been a tremendous success for the nation as a whole. Estimates of the total savings to the economy range from 5 to 50 billion dollars. The railroad industry is in substantially better physical and financial shape today than in 1980. The trucking industry has saved billions of dollars through more efficient operations allowed and stimulated by deregulation.

There are more general lessons from our deregulatory experience. One of these lessons is that it is extremely hard to forecast the future. The benefits to consumers from deregulation exceeded our fondest dreams. The railroads industry has become more competitive than most observers thought possible. Railroads had to spend the 1980's not raising rates, but cutting costs. Unionized labor's bargaining position eroded faster and further than anticipated. Long-term contracts are a double-edged sword. Rising concentration in LTL trucking did not dictate higher rates.

Our inability to forecast the future leads me to the conclusion that we should concentrate on fundamental problems in regulatory reform rather than attempt minor adjustments in response to current problems. The attempts to reform rail regulation in the 1970's fell well short. We missed an opportunity to address the railroads' unique cost burdens in 1980. We should have addressed pension fund liability problems in truck deregulation. State restrictions on intrastate operations are still a significant burden on trucking transportation.

Finally my experiences as a regulator convince me that we should be extremely skeptical of purely economic regulation. The market works pretty well particularly compared to our experience with the regulation of rates and entry/exit in surface transportation.

Endnotes

1. Many of the statistics cited below were drawn from The U.S. Freight Railroads: Recent Trends and Future Prospects by Richard E. Briggs of the Association of American Railroads, May 24, 1989.

TABLE 1

Comparison of Railroad Employee Costs to General Inflation

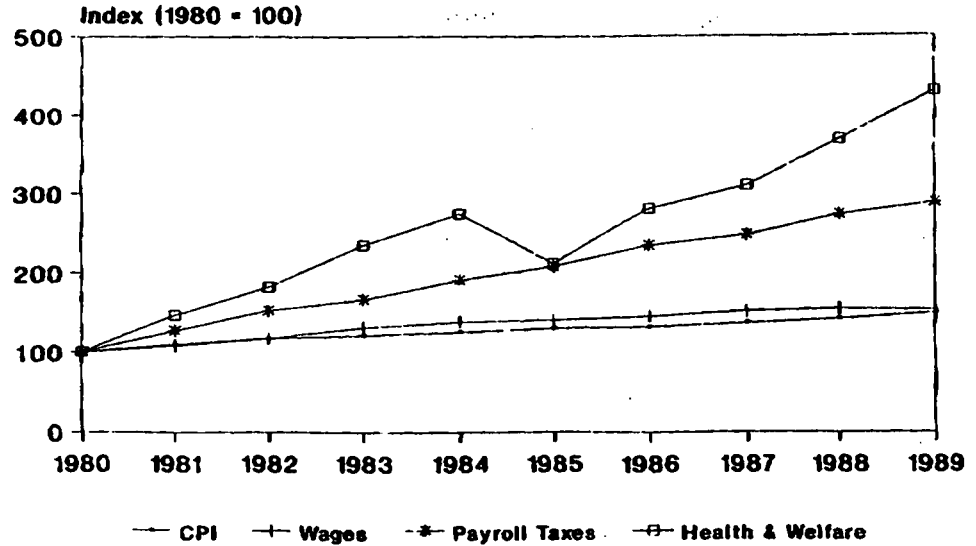
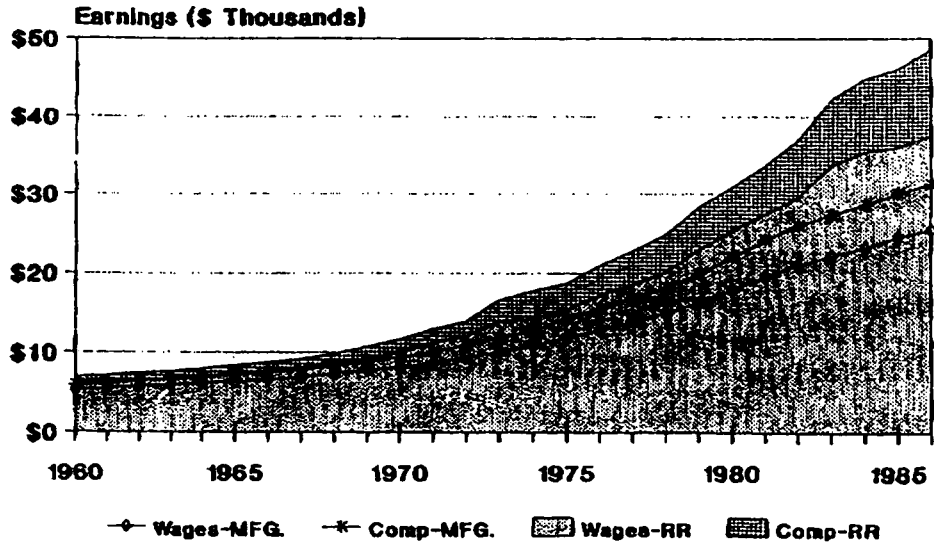


TABLE 2

Comparison Yearly Earnings for Non-Supervisory Workers



Source: Dept. of Commerce

TABLE 3

Estimates of Elements of 1989 Average Annual Compensation Per Employee
85 Classes of Operating and Nonoperating Union Employees a/
Class I Freight Railroads
(Based on estimated average mid-month count for year)

Items of Compensation (1)	Annual \$ Per Employee (2)	% of Total Rail Comp- ensation (incl. FELA) (3)
PAYROLL		
1. Straight time (incl. overmile pay)	\$ 28,108	51.2%
2. Overtime (total)	2,498	4.5
3. Time off with pay, constructive allowances and arbitrations	6,188	11.3
4. Total PAYROLL	\$ 36,797	67.0%
INSURANCE PROGRAMS		
5. Health and life	\$ 4,692	8.6%
6. Early retirement health	286	.5
7. Dental	279	.5
8. Supplemental sickness	122	.2
9. Off-track vehicle	0	b/
10. Total INSURANCE PROGRAMS	\$ 5,385	9.8%
PAYROLL TAXES		
11. Tier I	\$ 2,654	4.9%
12. Tier II	6,155	9.4
13. Supplemental annuity	663	1.2
14. RUIA	678	1.2
15. Repayment tax	339	.6
16. Total PAYROLL TAXES	\$ 9,489	17.3%
FELA		
17. Total FELA	\$ 3,258	5.9%
18. TOTAL RAILROAD COMPENSATION	\$ 54,910	100.0%

a/ 85 Classes exclude 3 classes of marine and dining car employees but include 3 classes of dispatchers and yardmasters.

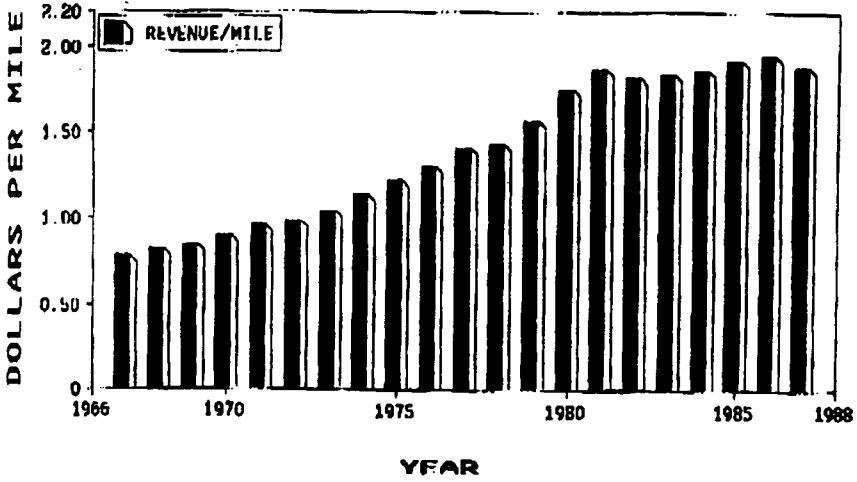
b/ Less than .05%

SOURCE: 1987 data from individual railroads, railroad labor agreements and ICC monthly rail employment reports; FELA amount from AAR.

9/7/89

1 - BLUE-2

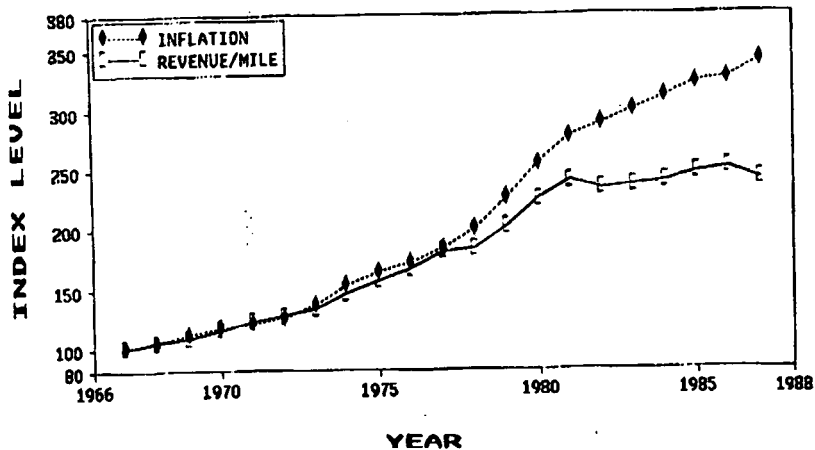
TABLE 4

REVENUE PER MILE
ALL CARRIERS - 1967-1987

Source: American Trucking Association

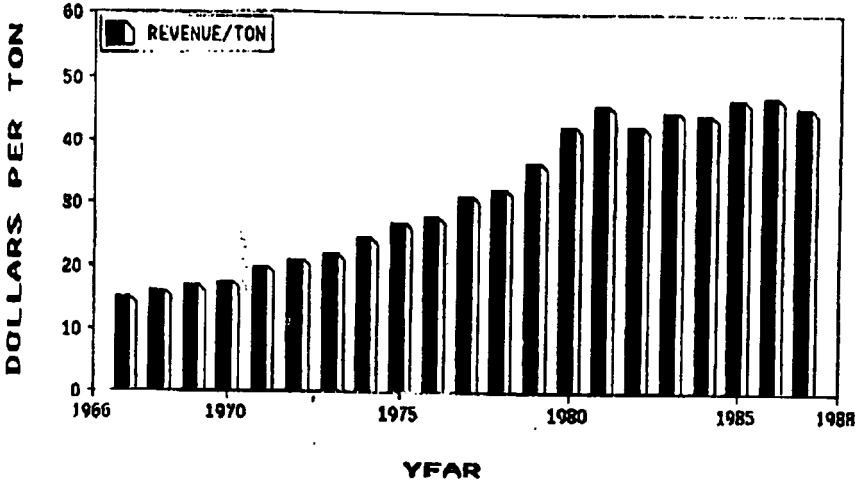
TABLE 5

REVENUE PER MILE VERSUS INFLATION
INDICES WITH 1967 = 100



Source: American Trucking Association

TABLE 6

REVENUE PER TON
A.L. CARRIERS - 1967-1987

Source: American Trucking Association

Representative HAMILTON. Thank you, Mr. Gaskins.
Mr. White, please proceed.

**STATEMENT OF LAWRENCE J. WHITE, FORMER MEMBER,
FEDERAL HOME LOAN BANK BOARD**

Mr. WHITE. Thank you, Mr. Chairman.

I'm pleased to be here this morning and honored to have this opportunity to address this important set of questions.

From November 1986 until August 1989, I was one of the three board members of the Federal Home Loan Bank Board. This 33-month period was the time during which the full horror of the insolvencies of hundreds of savings and loans, or thrifts as they are frequently referred to, came to be fully realized. It was also a period during which major reform of the thrift regulatory system was initiated by the Federal Home Loan Bank Board, continuing the efforts of the board that had started in the previous 2 years. These reforms were vital, but they were too late to avoid the financial debacle of these hundreds of savings and loans, which also dragged—in the end—the FSLIC, the insuring agency, and the Federal Home Loan Bank Board with it.

Also, unfortunately, the reforms are still inadequate and much more needs to be done.

This was also a period during which a start was made in cleaning up the financial mess that had been created by these hundreds of insolvent savings and loans. During this period we closed down hundreds of them. Some were closed through liquidation; for most we found new owners, new capital, and new management to reopen them under new auspices. This cleanup, which is continuing, will be extremely costly, but it is unavoidable because it is simply the making good of the Federal Government insurance obligations to insured depositors.

We now know that the origins of this debacle lay in the economic deregulation of the savings and loan industry in the early 1980's. This economic deregulation took place without the necessary accompaniment of stepped up safety and soundness regulation. This distinction between economic regulation and safety and soundness regulation, which Fred Kahn mentioned a few minutes ago, is vital to understanding the nature of the S&L debacle. We got economic deregulation, which was basically sensible. It should have been done. But it created new opportunities for risk-taking, new capabilities for thrifts to fund that risk-taking through insured deposits, and there were heightened incentives at that time for hundreds of thrifts to undertake this risk-taking—to grab these risk opportunities—because of the losses that they had experienced in the early 1980's.

So this economic deregulation, which was sensible, needed to be accompanied by stepped-up safety and soundness regulation. And, tragically, this was not done at the time. In fact, there were some perverse Federal regulatory actions at that time that actually weakened the existing safety and soundness regulatory system—at just the wrong time.

Further, the effects of these errors of commission and omission unfortunately were compounded by the decline in the price of oil

and its effect on the economy and real estate values, especially in the southwest. They were also compounded by changes in the tax laws and, finally, by unfortunate timing in the moving of the regional regulatory headquarters for the southwest from Little Rock to Dallas.

As I indicated before, the regulatory system has reacted and has been greatly strengthened since the early 1980's, but more must be done; and this more applies to bank regulation as well as savings and loan regulation. Unfortunately, the legislation that was recently passed by the Congress and signed by President Bush, the Financial Institutions Reform, Recovery and Enforcement Act of 1989, or FIRREA as it's referred to, travels only a short distance of the necessary road of regulatory reform.

The first and most important reform is to change the information system that is available to bank and thrift regulators. This must be greatly improved. By information system, I mean the accounting and reporting system used by banks and thrifts today. Normally, if somebody utters the word "accounting" in polite company, people's eyes glaze over. They think of individuals in green eyeshades, they think of "bean counters." But accounting is an information system. It is the crucial information system for bank and thrift regulation, and it is sadly defective.

It is defective because it is a backward looking system that largely looks at historical costs rather than looking at current market value. But only current market value protects the insurance fund and provides the necessary information for the regulator. Nothing else will do. We desperately need current market value accounting. Without this reform, bank and thrift regulators will be constantly at a disadvantage, and the bank and thrift insurance funds will be exposed constantly to far greater risk than they need be.

Second, we need higher and risk-based net worth or capital standards for banks and thrifts. Net worth is like a deductible in a normal automobile or home insurance policy. It protects the insurer. The larger the level of net worth, the greater the level of protection.

FIRREA does move in the right direction on this point, and the bank and thrift regulators on their own have been moving in the proper direction on this point. But net worth, if it's going to be a proper protection for the insurer, needs to be measured according to market value, not according to historical value. And, unfortunately, FIRREA ignores this crucial difference and, if anything, moves in the wrong direction on market value accounting.

Third, we need to have risk-based deposit insurance premiums to replace the current flat-rate premium structure. It is absurd—I can think of no better word—it is absurd that the deposit insurance system ignores risk in charging premiums. No private insurer would think to ignore risk, but our deposit insurance system does. If nothing else, the insurance premium structure should be such as to allow lower premiums for banks and thrifts that operate with more net worth, because the net worth is a greater protection for the insurance fund.

Every automobile insurance company in the land will give you a lower rate on your auto insurance if you take out a larger deducti-

ble. At an absolute minimum that principle out to apply to our deposit insurance system as well.

Fourth, the powers of the regulators to take control of banks or thrifts that are sliding downhill—but are not yet insolvent—need to be strengthened. Waiting for insolvency means waiting too long, because the cost to the insurance fund will surely be great.

These, Mr. Chairman, are the lessons that must be learned from the savings and loan debacle. They are costly lessons indeed, but they are vital.

Thank you very much for the opportunity.

[The prepared statement of Mr. White follows:]

PREPARED STATEMENT OF LAWRENCE J. WHITE

THE PROBLEMS OF THE FSLIC: A FORMER POLICY MAKER'S VIEW

Lawrence J. White*

Abstract

The massive insolvency of the FSLIC has created a public policy crisis of major proportions. This paper provides a framework for understanding the basic problems of deposit insurance, explores the origins of the current crisis, describes the regulatory response, and discusses the fundamental reforms that must still be undertaken.

THE PROBLEMS OF THE FSLIC: A FORMER POLICY MAKER'S VIEW

Lawrence J. White*

.... the intention [of DIDMCA and the Garn-St Germaine Act] is to allow thrifts, in particular, to diversify their portfolios in order to reduce their (and, ultimately, the FSLIC's) exposure to interest rate risk. However, use of these powers may at the same time increase thrift and [FSLIC] exposure to default risk. While the balance of advantage has been judged in favor of deregulation at this time, that balance may not always be so. (Garcia et al, 1983, p.29)

I. INTRODUCTION

The large-scale insolvencies of hundreds of savings and loan associations (thrifts) and the consequent massive insolvency of the Federal Savings and Loan Insurance Corporation (FSLIC) have created a public policy crisis of major proportions. The Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) calls for tens of billions of dollars of general Treasury revenues, as well as substantial sums from the remaining healthy thrifts, to cover the insolvency shortfalls; it will also substantially restructure the organizational design and details of thrift regulation.

This paper will provide a framework for understanding the basic problems of deposit insurance, explore the origins of the current crisis, describe the regulatory response, and discuss the fundamental reforms that are still necessary.¹

II. A FRAMEWORK

To understand the problems of deposit insurance, a simple accounting framework is quite useful. Table 1 shows a healthy thrift. Its assets are the loans or investments that it makes. Its fixed liabilities are the deposits that it takes in; they are insured (up to \$100,000 per insured deposit) by the deposit insurer. (For the present, I will assume that the values shown in the table are current market values; this is a point to which I will return below.) If the value of the assets exceeds the value of the fixed liabilities, the net worth or capital of the thrift is positive. This net worth is, in essence, the owners' stake in the enterprise.

Let us now suppose that the thrift's assets decline substantially in value, as in Table 2. Because the value of the fixed liabilities has not changed, the thrift is now insolvent. The owners' stake has been wiped out, and the deposit insurer is liable for the shortfall—the thrift's negative net worth.

A number of important insights can be gained from this simple framework. First, even a healthy thrift is thinly capitalized when compared to the typical manufacturing firm.² The healthy thrift's 8% ratio of net worth to assets can be restated as a 11.5-to-one debt (deposits) to equity (net worth) ratio. By contrast, the typical manufacturing corporation has a debt to equity ratio of one-to-one or two- to-one. The thrift's high leverage ratio means that comparatively small percentage changes in the value of its assets can mean large percentage changes in the value of its net worth—up or down.

Second, because thrift owners operate in a legal system promising limited liability—as is true for the equity holders in any corporation, they are not liable for any obligations beyond their initial investment in the enterprise— they effectively have a put option vis-a-vis the fixed liability holders, who would otherwise be the depositors. But, because the deposit insurer has promised insured depositors that they will remain whole in the event of insolvency, it is the deposit insurer (and any uninsured depositors and other creditors) who are exposed to the exercise of the put option: In the event of insolvency the thrift owners can put the company to the deposit insurer at no further cost to themselves. The value of this put option to the thrift owners (and its negative value to the deposit insurer) increases under the following circumstances:

- (a) an increase in the variance of the returns on the thrift's assets;
- (b) a decrease in the thrift's net worth, so long as net worth is positive; the value of the put reaches a maximum, other things being equal, at zero net worth;
- (c) an increase in the deposit insurer's inability or unwillingness to monitor and control (either through incentives or through command-and-control regulation) risk-taking by the thrift; and
- (d) an increase in the deposit insurer's inability or unwillingness to remove the owners from control and from their ownership rights after the thrift has become insolvent.³

Also, since the insured depositors have been promised that they will remain whole, they have little incentive (other than to avoid transactions costs) to worry about the riskiness of the investments that their deposits are funding. That worry is the deposit insurer's.

Third, as the complement to the second point, the deposit insurer should be greatly concerned about monitoring and limiting risk-taking by thrifts and about the net worth levels of thrifts. It stands in the shoes of the depositors and has the same concerns about a thrift's risk-taking (and other revenue draining activities) as do the debt holders vis-a-vis the management of a normal limited liability corporation.⁴ Risk-sensitive premiums for deposit insurance would be one important way to encourage less risk-taking by thrifts; but the deposit insurance laws mandate flat-rate premiums⁵ that are insensitive to risk. With less room for the use of incentives, the deposit insurer must rely more on command-and-control regulation.

With respect to net worth, the deposit insurer should treat the net worth of a thrift much like a deductible in a standard insurance policy: The greater is the thrift's net worth, the greater is the direct protection for the insurance fund, since more of the thrift owners' resources must be exhausted before the insurance fund is tapped; also, a larger net worth reduces the thrift owners' incentives to take risks, as well as generally inducing greater care (e.g., in underwriting loans or in avoiding rules violations that could lead to penalties). In essence, it reduces moral hazard behavior. The net worth measure that matters, of course, is derived from the market values of the thrift's assets and liabilities (and of any off-balance-sheet items), and the deposit insurer's monitoring and regulatory enforcement should be keyed to market value information.

Fourth, once a thrift has become insolvent, the deposit insurer's costs of dealing with the problem will be roughly equal to the thrift's negative net worth, regardless of the method of disposal chosen. In the terms of the example in Table 2, if the thrift is liquidated, the deposit insurer pays \$92 to depositors and can expect to receive \$60 from the proceeds of liquidation, for a net loss of \$32; if the deposit insurer can find an acquirer for the thrift, the acquirer will require roughly \$32 in payment (cash or equivalent assets) from the deposit insurer to make up for the asset shortfall.⁶ (The acquirer will, of course, be expected to invest an appropriate amount of its money in the thrift, so as to achieve a suitable net worth level.)

Fifth, any accounting framework that fails promptly to reflect changes in the market values of assets and liabilities—especially changes that cause the market value of net worth to decrease—are likely to place the deposit insurer at greater risk. Unfortunately, the standard accounting framework that is used does not generally reflect market value changes. Though the deposit insurer can try to compensate for imperfect information by increasing the level of direct command-and-control regulation, such efforts, at best, create inefficiencies and, at worst, still leave the deposit insurer exposed to greater risk.

Sixth, the deposit insurer further needs to know about possible *future* changes in the market values of a thrift's existing assets and liabilities. The effects of interest rate changes on long-lived assets or liabilities is an obvious example. But the static accounting framework—even a market value framework—does not provide this dynamic information. Instead, the deposit insurer would have to ask for the results of simulations of interest rate changes.⁷

We now turn to a discussion of the historical origins of the deposit insurer's difficulties.

III. THE ORIGINS OF THE PROBLEM

In the wake of the failures of thousands of thrifts in the 1929-1933 period, the Congress established for the first time a comprehensive system for regulating and insuring thrifts. The Federal Home Loan Bank Board, established in 1932 to supervise the lending of low-cost funds to thrifts (so as to facilitate the latter's provision of low-cost housing finance), was given extensive chartering and regulatory powers over thrifts in 1933. The insurance of deposits (for federally chartered thrifts and also for state chartered thrifts) was added in 1934, with creation of the FSLIC as part of the Bank Board, and along with the insurance function came further regulatory powers.⁸ The thrift industry itself was expected to be narrowly focused on making long-term, fixed rate home mortgage loans, holding them in portfolio, and financing these loans primarily by taking in savings deposits (and also through advances from the Federal Home Loan Bank System).

For the next forty-five years the thrift industry enjoyed a relatively prosperous and trouble-free existence. Rates of return on net worth were comparable to those earned by commercial banks, and insolvency failures were comparatively infrequent. Mortgage loans historically have had very low default rates, so these loans were a relatively safe investment instrument. Relatively few thrifts failed or caused a financial drain on the FSLIC, as is indicated by Table 3.

Thrifts (and the FSLIC) were, however, exposed to interest rate risk, since thrifts were borrowing short and lending long. Though a few states permitted their state chartered thrifts to make adjustable rate mortgages, most did not, and federally-chartered thrifts were not allowed to do so. Perforce, thrifts were forced to lend at fixed, long-term rates. No comparable set of regulations forced them to take in largely short-term deposits; but no incentives or regulations existed to induce them to accept mainly long-term deposits so as to match more closely the maturities of their liabilities with their assets. Thrifts were thus not discouraged from taking on interest rate risk, and virtually all did.

Until the mid 1960s interest rates remained stable enough so that the thrifts' interest rate bets did not create problems. In 1965 and 1966, however, interest rates rose, and thrifts were squeezed: Their income from their portfolio of long-term, fixed rate

mortgages (made in earlier years, at lower interest rates) remained unchanged, while their interest costs on their short-term deposits rose. The Congress' solution, in September 1966, was to extend regulatory interest rate ceilings on deposits ("Regulation Q"), previously applicable only to commercial banks, to cover thrifts as well. For the next decade and a half, the interest rates that banks and thrifts could pay on deposits of most sizes and maturities were structured so as to restrict severely competition among and between banks and thrifts.⁹ Since most depositors had few alternatives,¹⁰ this Congressional patch for the thrifts' interest rate problems worked—for a while.

In the late 1970s, however, interest rates again rose, even more dramatically than a decade earlier, and ceilings on deposit interest rates could no longer solve the thrifts' interest rate problems, because depositors now had a good alternative: money market mutual funds. Many thrifts experienced large losses, and the thrift industry in aggregate ran losses in 1981 and 1982, eroding its aggregate book value net worth substantially. The industry in 1980 had an aggregate ratio of tangible net worth¹¹ to assets of over 5%; by the end of 1982 this ratio was below 1%. Since the higher interest rates also meant a substantial decline in the market value of thrifts' assets (and only a modest decline in the market value of their liabilities), the thrift industry's aggregate market value net worth declined by even more and was surely negative by 1982.¹²

The Congress, the Bank Board, and a number of state governments recognized that the thrifts' interest rate problems required more fundamental solutions, and they embarked on a series of actions. First, in 1979 and 1980 the Bank Board authorized thrifts to offer adjustable rate mortgages (ARMs), so that thrifts in the future would not be locked into long-term, fixed-rate mortgages. (This change could not, of course, instantly cure the thrifts' problems, since the thrifts were stuck with the embedded losses in their existing portfolios, and it would take time for ARMs to become an accepted mortgage instrument.) The Congress, which had objected to similar Bank Board initiatives earlier in the 1970s, this time concurred.

Second, the Congress, in 1980 (the Depository Institutions Deregulation and Monetary Control Act) and 1982 (the Garn-St Germain Act), authorized federally chartered thrifts to make other types of consumer loans, commercial real estate loans, commercial loans, and even a small quantity of direct equity investments.¹³ This was designed to allow thrifts to diversify their asset portfolios and reduce their dependence on

residential mortgage lending. At about the same time, a number of states were providing (or had already provided) even wider asset authority to their state chartered thrifts.

Third, as part of the DIDMCA, the Congress authorized the phasing-out of Regulation Q (except for commercial bank checking accounts) and the ability of all banks and thrifts to offer interest-bearing checking accounts to consumers;¹⁴ in the Garn-St Germain Act the Congress hastened the phasing out of Regulation Q.

Fourth, in the DIDMCA the Congress raised the maximum size of an insured deposit to \$100,000, from the \$40,000 level at which it had been since 1974.¹⁵

The first three economic deregulation actions were generally sensible and consistent with the economic deregulation that was occurring in other sectors, such as airlines, rail, trucking, telecommunications, and securities brokerage. Allowing thrifts to diversify their portfolios, authorizing ARMs, and removing Regulation Q were clearly the correct actions and should have been done years earlier. The increase in the insured deposit amount was (in retrospect) more controversial but, in this author's opinion, was also the correct action.¹⁶ Unfortunately, in the haste to deal with the thrift industry's losses and its interest rate and maturity mismatch problems, there was little realization of the enhanced risk-taking and moral hazard problems that were being created and little thought given to the safety-and-soundness regulatory adjustments that were concomitantly necessary.

As a result, an explosive mix of ingredients were in place:

(a) Thrifts had expanded *opportunities* for risk-taking. They were no longer confined to making residential mortgages and could undertake many other types of investments.

(b) Thrifts had expanded *abilities* to fund that risk-taking. With Regulation Q being phased out, thrifts with little or no brand name reputation could advertise nationwide (or employ a broker to do so) that it paid market rates—or even above-market rates—on FSLIC insured deposits. And the increase to \$100,000 in the insured amount meant that depositors' transactions costs in placing these deposits were reduced.

(c) Thrifts had expanded *incentives* for risk-taking. Many thrifts' market value net worth had either been eroded entirely or was very thin indeed. They had little to lose and much to gain from risk-taking or from taking less care generally. Even the managers of mutually organized (i.e., depositor "owned") thrifts—which in 1980 constituted 80% of

all thrifts (but only 73% of thrift assets)—could retain their positions, salaries, and perquisites by taking risks in order to regain solvency. In other instances, new owners were able to buy thrifts that were barely solvent, or enter *de novo*, and expand rapidly (investing in new and risky assets) with little of their own money at risk, and they had little in the way of community reputation or community franchise value at risk either.

The Bank Board's net worth standards at that time were insufficient to protect the insurance fund. First, they were keyed to historical cost accounting rather than to market value. Second, the DIDMCA authorized the Bank Board to adjust its net worth requirement for thrifts, which had been set at 5% of fixed liabilities, to a range of 3% to 6%. Responding to this signal from Congress and to industry pressures, the Bank Board *lowered* the standard to 4% in November of 1980 and lowered it again to 3% in January of 1982. Further, the standard was based on a five year moving average of liabilities, and new institutions were allowed a 20 year phase-in period to reach their required net worth levels.¹⁷ Rapid growth in assets, especially by a *de novo* institution, required very little net worth at the margin. Finally, in 1981 and 1982 the Bank Board (in some instances at the Congress' behest) authorized accounting changes (regulatory accounting principles, or RAP) that allowed thrifts to inflate their reported net worth levels above those permitted by the standard (generally accepted accounting principles, or GAAP) accounting framework.

(d) Thrifts faced *few regulatory constraints* to risk-taking. As was just noted, the Bank Board's net worth standards were inadequate to the task. And, as was noted above, the deposit insurer's insurance premium structure was a flat rate that was insensitive to risk. Further, the command-and-control regulatory system (encompassing the examiners and supervisors of the thrifts and the regulations they enforced) was geared to, and adequate for, the simpler and safer world of thrifts' specializing on residential lending. But in an era and ethos of deregulation—but also in a thrift industry in which the pervasive culture was that of small, community-oriented mutual thrifts that had a "calling" of promoting housing finance and encouraging thrift and that had not been aggressive and had not created serious problems in the past—there was apparently little thought given to strengthening that regulatory system. In fact, as is seen in Table 4, the size of the examination and supervisory staff was actually reduced between 1981 and 1984. Unfortunately, that regulatory system proved inadequate for the wider world of economic

deregulation and was overwhelmed.

There were a number of additional circumstances that compounded the problem. First, many of the commercial real estate loans and investments that thrifts made in the Southwest were predicated on a rise in the price of oil from its level of the early 1980s and on the expansionary effect that this rise would have on the Southwest economy. Instead, the price of oil fell substantially. (Of course, the moral hazard incentives discussed above encouraged thrifts to be less cautious in their predictions about the future price of oil.) Second, the Economic Recovery Tax Act of 1981 made real estate a relatively favored area of investment, and thrifts provided much of the financing for the wave of tax-favored investments that followed. The Tax Reform Act of 1986 rescinded much of this tax-favored status for real estate and applied the new rules to existing real estate projects, making them less viable. The thrifts holding the loans on these projects suffered. (Again, the moral hazard incentives surely exacerbated the problem.)

Third, in mid 1983 the headquarters of the regulatory district that encompassed Arkansas, Louisiana, Mississippi, New Mexico, and Texas was moved from Little Rock to Dallas. Though the move (in the abstract) was sensible, its timing (in retrospect) was abysmal. Few supervisors from that office moved, so that the Dallas office had to restaff itself. Though virtually all examiners did move, the annual number of examinations of thrifts in that district fell substantially in the two years after the relocation as compared with the year before the move. (See Table 5) The thrifts in that district surely realized that they were being subjected to less regulatory scrutiny.

In sum, a recipe for disaster had unwittingly been followed; an explosive mix of ingredients were ready to ignite.

IV. THE CONSEQUENCES

The economic deregulation of the thrift industry would likely have meant substantial structural changes for the industry, in any event. With wider investment powers, changing economic circumstances, and a rapidly changing technology, increased levels of thrift failures were a near certainty. Some thrifts would be better suited to the new environment; others would be less well suited. The former would expand and prosper; the latter would contract and fail. The pattern has been true for other industries that have experienced economic deregulation,¹⁸ and should have held true for thrifts as well. Further, commercial banks, which were exposed to the same changes in economic and technological environment (but were much less affected by the deregulation efforts—primarily, just the loosening of Regulation Q), experienced sharply higher rates of failures in the 1980s than had been true in earlier decades. These data can be seen in Table 3.

But it is now clear that the thrift industry's experience with economic deregulation was far beyond what otherwise could have been expected. Hundreds of thrifts (out of a population of roughly 3,300 as of 1982) took advantage of the opportunities, abilities, and incentives discussed above and took risks, exercised less care, were negligent, and/or in some cases engaged in fraudulent or criminal violations of laws or regulations. In short, they engaged in substantial moral hazard behavior, with disastrous long-run consequences for the FSLIC.

One broad indicator of this behavior is the growth spurt of the overall industry in 1983 and 1984. As can be seen in Table 6, the thrift industry's growth in assets in those two years was more than twice the rate of the previous two years. Thrifts in states with liberal charters grew even faster. Rapid growth meant a large number of new loans and investments and new moral hazard opportunities; and, of course, it meant expanded insurance exposure by the FSLIC.

The 205 insolvent thrifts that the Federal Home Loan Bank Board disposed of in 1988 (at an estimated discounted present value cost to the FSLIC of \$31.7 billion¹⁹) provide another indication of some of this behavior.²⁰ As can be seen in Table 7, these insolvents tended to be state chartered (whereas only 42% of the industry was state chartered in 1988); almost half grew faster than 20% per year during the years 1983-85, and

over three-quarters of the worst 50 exceeded that growth rate (the overall industry average annual growth rate was 16% during those years); they tended to have above average amounts of direct equity investments; and various violations appear to have been present in non-trivial frequencies.

Table 8 throws further light on the relative contribution of state chartered thrifts to the FSLIC's problems. As can be seen, through 1984 (the period of interest rate spread problems) the disposal costs to the FSLIC of the merged or liquidated state chartered and federally chartered thrifts were roughly equal. In 1985 and 1986 they were still roughly equal. In 1987 and 1988, however, the costs of disposing of failed state chartered thrifts greatly outweighed those of failed federals. And, as of early 1989, the FSLIC's estimates of the costs of disposing of the remaining insolvent thrifts showed the same pattern.

V. THE REGULATORY RESPONSE

After a recognition lag and a false start that attacked the sources of funds (brokered deposits)²¹ rather than their use, the Bank Board in 1985 began to strengthen its regulatory system. As Table 4 indicates, between 1984 and 1988 the Bank Board more than doubled its examination and supervisory personnel. In early 1985 the Bank Board placed limits on the amounts of direct equity investments that state chartered thrifts could hold and linked those limits to a thrift's net worth; these limits were tightened in early 1987. Later in 1985 the Board placed specific limits on asset growth by inadequately capitalized thrifts. In August of 1986 the Board raised the net worth standards for thrifts, setting a goal of a 6% ratio of net worth to fixed liabilities; this regulation also introduced risk-related elements, since thrifts could reduce their net worth requirement by up to 2% (200 basis points) by reducing their interest rate risk exposure, but they also had to provide more capital to support direct equity investment positions. In December 1988 the Board proposed a more ambitious and comprehensive set of risk-based net worth requirements.²² And in 1987 (partially at the behest of Congress) the Bank Board began phasing out RAP and reinstating GAAP as the standard accounting and reporting framework.

Overall, the regulatory system today is characterized by a concern for safety and soundness regulation that was much less pervasive in 1983. And the regulatory reforms do seem to have stemmed the tide. The thrift industry's annual growth rates have slackened considerably since 1984, and book net worth levels by the solvent portion of the industry have increased. The regulatory system today does not appear to be in danger of being overwhelmed the way it was in 1983. Unfortunately, these regulatory improvements cannot cure the insolvency problems—and their huge costs to the FSLIC—caused by the bad loans of the past. And there are still major regulatory improvements that are necessary.

VI. THE NECESSARY REGULATORY REFORMS

Despite the strengthening of the thrift regulatory system in the past few years, four major regulatory changes are still necessary to improve the efficacy and efficiency of that system. Of the four, only one—higher net worth (capital) levels, based on the risks embedded in a thrift's portfolio—has achieved wide acceptance within the Washington policy community. The other three—requiring market value accounting and reporting by thrifts, instituting a system of risk-based premiums, and strengthening the regulator's power to intervene and take control of an errant thrift earlier—languish because they are still considered to be too controversial and/or too difficult to implement. In the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), higher and risk-based net worth standards for thrifts are explicitly mandated, whereas the other reforms are relegated to an eighteen month study by the Treasury.

Higher, risk-based net worth standards are clearly a move in the right direction. As noted earlier, net worth acts like a deductible; it both directly protects the insurance fund by providing a larger buffer and indirectly protects the fund by discouraging moral hazard behavior. But, as currently contemplated, the higher net worth standards will have one fundamental flaw:²³ They will be based on historical book value accounting measures. Thus, the insurer will not know a thrift's market value net worth. But it is the latter that is the real protective buffer for the insurance fund and that provides the real incentive or disincentive for moral hazard behavior by a thrift.

It is clear that a switch to market value accounting is the most important reform that still needs to be achieved by the thrift (and commercial bank) regulatory system.²⁴ Only then could the insurer know the market value net worth of its insureds and regulate accordingly. Also, only with market value information could a thrift's portfolio risks be properly measured and regulated, since market value information yields the asset returns covariances that are necessary for measuring portfolio risk; historical book value accounting cannot yield that important information.²⁵

The arguments against market value accounting do not withstand close scrutiny.²⁶ Market value accounting will always involve estimates and approximations; but the apparent precision of historical cost based accounting information is a snare and a delusion.

The net worth calculation yielded by that apparently precise information is only an approximation to current market value net worth; but it is only the latter that is the real deductible that protects the insurer.

Risk-based premiums would be a useful supplement to risk-based net worth standards. The same risk assessments that are used for risk-based net worth standards could be used for risk-based premiums as well. Risk-based premiums, however, would have one additional advantage. Since higher net worth levels provide greater protection to the insurer, a thrift should be rewarded if it chooses to operate with higher net worth levels than the minimum requirements.²⁷ Though eased regulatory strictures are one possible means of reward, a reduction in the premium would be a more straightforward financial reward for the reduction in risk to the insurer.²⁸

One line of argument against risk-based premiums is that they are difficult or impossible to implement.²⁹ As we noted above, however, there is now widespread acceptance of risk-based net worth standards, and the same risk assessments could be used. A second line of argument (which is also used against risk-based net worth standards) is that the government deposit insurer will inevitably mismeasure risk and/or manipulate risk assessments for political purposes, leading to distortions and misallocations.³⁰ This is a curious criticism. Even in the absence of market value accounting information, the insurers are able to learn a great deal about risk and should be permitted to try to make use of that learning. And, in the presence of opportunities for taking on differential risks, uniform premiums (and uniform net worth standards) are not neutral but induce distortions (adverse selection and excessive risk taking) as well.

Finally, strengthened powers for earlier regulatory intervention and removal of owners from control and ownership rights, either through the formal cancellation of insurance or through the appointment of a receiver for a thrift—in essence, the removal of prospective insurance coverage for the insured thrift (though the existing depositors remain protected)—would be desirable.³¹ The formal cancellation of insurance traditionally involved a lengthy process that could stretch to two years;³² it was a sanction that was almost never used. Instead, the effective cancellation of coverage almost always occurred through the appointment by the FSLIC of a receiver. The major legal grounds for the appointment of a receiver are the book insolvency of the thrift, operating it in an unsafe or unsound condition, or the dissipation of its assets. Because the latter two grounds

have never been defined or amplified by regulation, the FSLIC's lawyers were generally uneasy about using them alone as grounds, and thus the agency almost always waited for the book insolvency of a thrift before appointing a receiver. But waiting until book insolvency inevitably meant that the insurer incurred a larger market value loss. The clarification of the other grounds—e.g., by defining the operation of a thrift at a dangerously low but positive net worth level as unsafe and unsound³³—would be one means of achieving the desired objective.

The major objection to this form of early intervention is that it would be an unconstitutional "taking" of private property. But only the taking of something with real market value should be objectionable. The owners of a thrift with no market value net worth, even if it has a positive book net worth, are only losing the value of their put option—which has value only if the insurer is slow to take control of the thrift after it becomes market value insolvent. Further, in the rare event that positive market value might be present when the insurer disposes of an insolvent thrift, that value could be refunded to its original owners. And, as a thrift slid downhill toward the intervention point, the owners would always have the option to raise fresh capital to stave off intervention.

VII. CONCLUSION

The past decade has been a searing experience for the thrift industry and for its regulators. Much has been learned, and remedial measures have been put into place or are in process. But more—the reforms discussed in the previous section—are still necessary.

Unfortunately, FIRREA falls far short of the mark. The legislation does provide a funding mechanism that (the Congress and the Bank Administration hoped) will cover the costs of disposing of the remaining insolvent thrifts;³⁴ and it does provide expanded powers for thrift regulators to levy civil money penalties, higher criminal fines, and added resources for the Department of Justice for criminal prosecutions. Deterrence of criminal or near-criminal behavior is clearly increased. But, as was noted above, of the four important reforms, only higher (and risk-based) net worth standards are explicitly mandated by FIRREA; the other three reforms are relegated to a Treasury study.

If the four reforms discussed above were implemented effectively, the extensive command-and-control regulatory structure that is currently in place for thrifts (and for commercial banks as well) should be re-evaluated and (probably) pared considerably. The command-and-control regulation should be seen as a substitute for the protection that can be provided by better net worth standards, better information, a better premium structure, and stronger powers of early intervention. More extensive use of these latter four measures should permit less reliance on the former. The proper task of public policy is to find the right balance among all of these measures so as to provide the basis for a competitive and efficient financial services sector that does not impose undue risk or cost on the deposit insurer.

TABLE 1

The Balance Sheet of a Healthy Thrift

<u>Assets</u>	<u>Liabilities</u>
\$100 (loans)	\$92 (deposits, insured)

	\$ 8 (net worth)

TABLE 2

The Balance Sheet of a Deeply Insolvent Thrift

Assets	Liabilities
\$60 (loans)	\$92 (deposits, insured)

	-\$32 (net worth)

TABLE 3

FSLIC and FDIC Disposals of Insolvent Thrifts
and Banks, 1934-1988

	FSLIC ^a			FDIC		
	Number of Disposals	% of All Insured Thrifts	% of All Thrift Assets	Number of Disposals	% of All Insured Banks	% of All Bank Assets
Annual Averages						
1934-1939	2.2	0.10%	0.13%	52.5	0.38	0.10
1940-1949	2.7	0.12	0.14	10.5	0.08	0.03
1950-1959	0.4	0.01	0.01	2.7	0.02	0.01
1960-1969	4.3	0.10	0.14	4.4	0.05	0.01
1970-1979	4.3	0.10	0.11	7.6	0.05	0.08
Annual Data						
1980	11	0.28%	0.23%	10	0.07	0.01
1981	28	0.75	2.11	10	0.07	0.24
1982	63	1.91	2.52	42	0.29	0.53
1983	36	1.14	0.57	48	0.33	0.31
1984	22	0.70	0.52	79	0.54	0.13
1985	31	0.96	0.60	120	0.83	0.32
1986	46	1.43	1.07	138	0.97	0.24
1987	47	1.49	0.85	184	1.34	0.23
1988	205	6.95	7.45	200	1.47	1.04

^aFor 1980 and after, only FSLIC-assisted acquisitions and liquidations are included; prior to 1980, supervisory cases are included as well.

Source: Barth, Bartholomew, and Labich (1989); Barth et al (1989); and FDIC data.

TABLE 4

FHLBB Regulatory Resources

	Examination and Supervision Staff ^a	Examination and Supervision Budget ^b
1979	1,282	\$41.0
1980	1,308	49.8
1981	1,385	52.8
1982	1,379	57.3
1983	1,368	62.5
1984	1,337	67.0
1985	1,990	108.8
1986	2,986	168.5
1987	3,258	207.6
1988	3,411	226.2

^aFull time equivalents, including non-professionals and support staff.

^bIn millions.

Source: Barth and Bradley (1988) and FHLBB data.

TABLE 5

Thrift Examinations in the Southwest

	Before Relocation ^a	After Relocation ^a		10/85-91
	10/82-9/83	10/83-9/84	10/84-9/85	
Arkansas	15	8	22	42
Louisiana	50	50	41	70
Mississippi	17	24	19	26
New Mexico	13	1	0	8
Texas	166	100	91	137
Total	261	183	173	283

^aThe headquarters of the Ninth District of the Federal Home Loan Bank System, encompassing the five states shown in the Table, was relocated from Little Rock to Dallas in September 1983

Source: Dochow (1989).

TABLE 6

Annual Thrift Growth Rates, as Measured by Assets

	U.S.Total	California	Florida	Texas
1981	6.0%	8.3%	6.6%	9.7%
1982	7.2	23.2	3.7	11.0
1983	18.7	32.4	9.1	32.4
1984	20.3	34.2	26.5	37.7
1985	9.4	8.8	7.6	18.4
1986	8.8	13.2	2.2	5.5
1987	7.5	12.0	-3.4	2.7
1988	8.1	14.1	10.7	11.5

Source: FHLBB data

*Asset growth rates for 1988 overstate the growth rates in fixed liabilities, because of the high volume of FSLIC-assisted acquisitions in that year. The annual growth rates for fixed liabilities for 1988 were 7.5%, 12.9%, 10.4%, and 2.6%, respectively, for the four columns in the table.

TABLE 7

Selected Characteristics of the 205 Insolvent Thrifts
That Were Disposed of by the FHLBB in 1988

	All 205	Costliest 50
% that were state chartered at the time of GAAP insolvency	56%	80%
% that had more than twice the industry average proportional holdings of direct equity investments	53%	74%
% that had average annual growth rates, 1983-1985, that were greater than 20%	49%	76%
% in which violations of the regulatory limitations on loans to one borrower were present	34%	50%
% in which self-dealing was present	34%	50%
% in which other fraud was present	27%	42%

Source: Barth, Bartholomew, and Labich (1989).

TABLE 8

The FSLIC's Disposals of Insolvent Thrifts,
by Charter Type

	Numbers		FSLIC's Costs ^a	
	State	Federal	State	Federal
1980	7	4	\$ 0.04	\$ 0.1
1981	9	19	0.2	0.6
1982	20	43	0.3	0.5
1983	19	17	0.2	0.1
1984	13	9	0.6	0.2
1985	12	19	0.5	0.6
1986	24	22	1.5	1.5
1987	24	23	2.4	1.3
1988 ^b	115	90	25.3	6.5
1989 ^c	210	195	31.2	13.5

^aIn billions.

^bDoes not include 18 "stabilizations."

^cEstimates made by Bank Board personnel, as of early 1989, as to liquidation costs of the remaining insolvent thrifts; includes the costs of the 18 "stabilizations."

Source: Barth, Bartholomew, and Labich (1989);
FHLBB data.

Notes

* New York University. The first draft of this paper was written while the author was a Board Member on the Federal Home Loan Bank Board. The opinions expressed in this paper are solely those of the author and not necessarily those of the Federal Home Loan Bank Board. Thanks are due to Paul Horvitz, Julie Nelson, Tom Pugel, and an anonymous referee for helpful comments on an earlier draft.

1. Other recent discussions of this crisis can be found in Brumbaugh and Carron (1987), Strunk and Case (1988), Benston and Kaufman (1988a; 1988b), Bernheim (1988), Benston et al (1989), Brumbaugh and Litan (1989), Kane (1989), Scott (1989), and White (1989).
2. This relatively thin capitalization is also true for commercial banks.
3. See Brumbaugh and Hemel (1984). With respect to the value of the put option, the important action by the deposit insurer is not necessarily closure of the thrift but the removal of the owners from control and ownership rights.
4. See Jensen and Meckling (1976) and Golbe (1981).
5. The current premium is 20.83 cents per \$100 in deposits. Prior to 1985 the premium was 8.3 cents.
6. The FSLIC usually found that transactions with acquirers were less costly than liquidations. First, the going concern (or franchise or brand name reputation) value could be preserved as an off-balance-sheet asset (which meant that the FSLIC had to pay less cash or other assets) if an operating thrift was delivered to an acquirer, but not if the thrift was liquidated. Second, in 1988 the FSLIC found that it could arrange contracts for the management and disposal of assets with acquirers that were likely to be less costly than similar activities carried out by liquidating receivers. Third, tax loss carryforwards could be preserved as an asset in a transaction with a tax-paying acquirer but would be lost in a liquidation. Through the end of 1988 the FSLIC was subject to the legal requirement that disposal actions should minimize cost solely to the insurance fund, without consideration of an overall cost to the U.S. Government.
7. The Federal Home Loan Bank Board's proposed (December 1988) risk-based net worth standards would, for the first time, require this information on a systematic basis.
8. The deposit insurance and related regulation for state chartered mutual savings banks, located largely in the Northeast and Washington state, was assigned to the Federal Deposit Insurance Corporation.
9. Not too surprisingly, this limit on price competition induced considerable

- non-price competition. See White (1972; 1976).
10. In order to inhibit depositors' switching to alternatives, the Treasury in 1970 increased the minimum denomination on Treasury bills to \$10,000, whereas it had previously been \$1,000.
 11. Tangible net worth is calculated by subtracting any goodwill assets from a thrift's total assets and then subtracting fixed liabilities.
 12. Carron (1982, p. 19) estimates that by mid 1981 the thrift industry (including mutual savings banks) had a market value net worth of negative \$44 billion; Brumbaugh (1988, p. 50) estimates that at the end of 1980 the market value of FSLIC insured thrifts was negative \$75 billion and by the end of 1981 it was negative \$110 billion.
 13. A thrift's authority to make these new types of loans was limited to specified percentages of its total of assets. For further details on the two bills, see Brewer et al (1980) and Garcia et al (1983).
 14. These interest bearing checking accounts (NOW accounts) had previously been limited to banks and thrifts in New England, New York, and New Jersey.
 15. The insured deposit amount was originally set at \$2,500 in 1933 (for FDIC insured banks). In 1934 it was raised to \$5,000; in 1950 to \$10,000; in 1966 to \$15,000; in 1969 to \$20,000; and in 1974 to \$40,000.
 16. The argument in favor of expanding the coverage of deposit insurance is that it reduces the likelihood of bank or thrift runs, which can be costly and contagious. See White (1989).
 17. The 20 year phase-in period was designed to allow de novo mutuals, which had no stockholders from whom they could raise equity capital, to meet the net worth standards from retained earnings.
 18. For a discussion of the effects of economic deregulation in other industries, see Stoll (1979), Tinic and West (1980), Bailey, Graham, and Kaplan (1985), Morrison and Winston (1986), Kaplan (1986), Moore (1986), and MacDonald (1989).
 19. An additional 18 insolvent thrifts were "stabilized" in preparation for eventual disposal. These 18 had an estimated discounted present value cost to the FSLIC of \$6.8 billion.
 20. This discussion draws heavily on Barth, Bartholomew, and Labich (1989).
 21. The Bank Board attempted to limit insurance coverage on all the deposits provided to a thrift by a single broker (on behalf of multiple ultimate depositors) to a single \$100,000 amount. This limitation was appealed to the courts, and the Bank Board lost.
 22. The proposed risk-based net worth requirements for thrifts is similar in

structure to the "Basle standards" that are being required for commercial banks, except that the Bank Board's requirements include a specific component for interest rate risk.

23. This is also true of the net worth standards that apply to commercial banks.
24. See Kane (1985; 1989), White (1988a; 1988b; 1988c; 1989), and Benston and Kaufman (1988a; 1988b).
25. A second argument for market value accounting is that it would reduce the ability of public officials to engage in moral hazard behavior. See Kane (1986; 1988; 1989) and White (1989).
26. See White (1988a; 1988c).
27. Different and more formal versions of this argument are provided by Flannery (1988) and Chan, Greenbaum, and Thakor (1988).
28. It is standard practice for insurance companies to offer lower premiums on insurance contracts if the insured takes out a larger deductible.
29. See Horvitz (1983) and Goodman and Shaffer (1984).
30. See Horvitz (1983) and Benston and Kaufman (1988a; 1988b).
31. See Benston and Kaufman (1988a; 1988b), Benston et al (1989), and White (1989).
32. FIRREA appears to shorten this period considerably.
33. FIRREA contains some language that points in this direction.
34. The legislation also abolished the Federal Home Loan Bank Board and its insurance arm, the FSLIC. The thrift regulatory powers of the former have been reconstituted in a new bureau (the Office of Thrift Supervision) within the Treasury Department; the insurance function of the latter has been absorbed into the Federal Deposit Insurance Corporation, which had previously provided deposit insurance only for commercial banks and mutual savings banks. The responsibility for cleaning up the problems of the remaining insolvent thrifts has been given to a new entity, the Resolution Trust Corporation; the RTC is mostly embodied within the FDIC, but it has an external "Oversight Board." And the Bank Board's former oversight responsibility vis-a-vis the Federal Home Loan Bank System, which lends substantial sums to thrifts, has been assigned to another new entity, the Federal Housing Finance Board.

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Representative HAMILTON. Thank you very much, gentlemen.

We appreciate your testimony.

Why did the financial reform of FSLIC that we just had miss all these points, Mr. White?

Mr. WHITE. Could I say, Mr. Chairman—

Representative HAMILTON. We only hit one out of four and we didn't hit that very good, according to you.

Mr. WHITE. Clearly, my persuasive powers were not great enough, Mr. Chairman. There's no other way to explain it.

Representative HAMILTON. Well, I don't understand why these other elements of reform were not addressed.

Mr. WHITE. They were sent to the Treasury. There's a tailpiece of the legislation that assigns a group of studies for the Treasury to conduct over an 18-month period and market-value accounting, risk-based deposited insurance premiums, and early intervention were part of the package of things that were sent to the Treasury to study.

Why more wasn't done? I think partly because the word "accounting" causes peoples' eyes to glaze over. It's considered technical. They don't want to be bothered. Also, almost to a person, the banking and thrift industry will oppose changes in the accounting structure, because the accounting structure right now is very favorable to their interests. It allows them to book gains when they choose to book gains and prop up their capital, but to hide losses when they choose to hide losses and thereby avoid reporting any erosion of capital.

Representative HAMILTON. Now, because we did not address these other elements of reform that you mentioned in your prepared statement, do you think we're headed for more trouble in that industry?

Mr. WHITE. I fear so. I don't think that we will experience the same overwhelming of the regulatory structure that occurred in the early 1980's. But I do believe that regulation will be more costly, more restrictive, and that there will be greater hits to the insurance fund as a consequence of the regulators' not having this current market-value accounting.

Representative HAMILTON. Does it make any sense to you to have a thrift industry?

Mr. WHITE. I think that there will continue to be efficient providers of mortgage finance who also take in deposits. I think we will continue to see them on the landscape because they are good at what they do. I don't think that the financial services industry is only going to be a world of financial "department stores" any more than is true for regular retailing.

Representative HAMILTON. Should we just continue to move in the direction of deregulation in the financial institutions so that, in effect, we blur the distinctions among the various kinds of financial institutions?

Mr. WHITE. On the economic side, I think that would be sensible. Unfortunately, FIRREA again took a step in the wrong direction by raising the "qualified thrift lender" test: requiring that thrifts increase the fraction of their investments in home mortgages. This is a movement away from the blurring that you've suggested. I think that further economic deregulation steps would be sensible,

as long as they are accompanied by these proper reforms in safety and soundness regulation.

Representative HAMILTON. How do you describe the crisis we've had in the S&L industry? Is it a failure of deregulation or a failure of regulation, or both?

Mr. WHITE. I think the proper description would be that it was a failure of both because there was economic deregulation that was sensible, but there was a failure of the necessary stepping up of safety and soundness regulation.

Mr. KAHN. May I interrupt?

Representative HAMILTON. Oh, sure.

Mr. WHITE. It was as if we deregulated the airlines and simultaneously cut back on the Federal Aeronautics Administration's efforts at airline inspections, motor engine overhauls, the whole air traffic system. Had we cut that back at the same time that there had been the economic deregulation of airlines, we would be seeing a very different airline situation out there today.

Representative HAMILTON. Mr. Kahn.

Mr. KAHN. Larry White will correct me if he feels I'm wrong, but I feel perhaps he's overly emphasized the question of the kind of accounting you use.

The critical thing it seems to me was the failure to close down thrifts that were really insolvent even though their accounting didn't show it. That is to say, that really had no net worth except on their books.

Now the accounting shouldn't have fooled the examiners. The examiners should have looked and said, "Well, you have assets listed on your books that are not worth the paper they are written on."

Representative HAMILTON. Was the problem that the regulators didn't have the power or that the regulators just were derelict in performing their responsibility?

Mr. WHITE. It was clearly a mixture of those things. It's important to realize that prior to 1980 the thrift industry had never caused any problems for anybody. It was largely mutual in organization rather than stock in organization. Their executives were "pillars of the community." They were promoting thrift and encouraging home finance. For a long time there was a recognition lag that this was an industry that actually could cause problems.

Now, further, if examiners said, "These things aren't worth what you claim them to be," they then got into arguments with the savings and loan or with their accountants. That could slow things down. And, further, the ability of the Federal Home Loan Bank Board, the regulator, to take control of a thrift was limited by the legal proscriptions that bound its intervention capabilities. There are three basic grounds for intervention: book insolvency, operating in an unsafe and unsound manner, or dissipation of assets. Unfortunately, operating in an unsafe and unsound manner and dissipation of assets has never been defined by regulation. The agency's lawyers therefore felt very queasy about taking aggressive action just on those grounds alone, so they preferred to rely on insolvency; but that meant relying on book insolvency. If the examiner didn't win or was delayed in winning the dispute over what assets were worth, that delayed the necessary action.

Representative HAMILTON. Is there still further room for deregulation of the banking industry?

Mr. WHITE. I believe so.

Representative HAMILTON. Economic deregulation?

Mr. WHITE. Economic deregulation. I believe that providing wider powers is still reasonable. I see no reason why, for example, a nonfinancial holding company shouldn't be allowed to own a bank. Ford Motor Co., which does own a savings and loan, has not been the source of the problems for the savings and loan industry.

Representative HAMILTON. Do we need special consumer protection regulation or laws for the banking industry?

Mr. WHITE. That is a completely separate set of regulatory problems from the kinds of safety and soundness problems that we've been talking about.

I think there is a good argument for information types of regulation: making sure that interest rates are properly announced and properly specified. That's true on the deposit side as well as on the mortgage side—so that borrowers are fully informed as to what their obligations are. I think there's a good basis for this. These are complicated transactions. Many consumers are not financially sophisticated. So, yes, I think there are grounds there, but that should be kept separate from the safety and soundness regulation, which is still yet separate from the economic regulation.

Representative HAMILTON. I certainly want to come back to Mr. Gaskins and Mr. Kahn in another round. I'll turn now to Congresswoman Snowe.

Representative SNOWE. Thank you, Mr. Chairman.

Mr. Kahn, you made reference to Massachusetts Airport Authority landing fees. I am one who opposes those landing fees because of commuters who fly from the State of Maine to Boston Airport and rely on Boston in order to connect with major airlines to other parts of the country. And you made reference that, in fact, you objected to the Department of Transportation's decision which said that those landing fees were discriminatory. You made reference to charter planes and corporate jets. But what about commuter aircraft? My concern with deregulation of the airline industry back in the late 1970's was the impact it would have on small communities. A number of my small communities in the State of Maine have suffered as a result. I've seen certainly more competition in the major airports like the one in Portland, Maine. Also, the competition has been greater and therefore the prices have come down. Then I look at Bangor, Maine, which is the only other major airport in the State of Maine, and we're, really, serviced by one airline for the most part, Delta Airlines, and they charge very high prices. So they are not charging the cost of delivering that passenger from Bangor to Boston but rather they are charging the price they want to charge because there's no competition at the Bangor Airport.

So I'll ask a couple of questions. One is, you view deregulation from strictly an economic point of view, but you also have to look at what the impact has been in a number of small, rural areas throughout this country, because there has been a major consolidation within the airline industry. Most of the airline industry is now concentrated in the hands of a few airlines, and the impact has been greater on areas in which those carriers don't provide service.

Mr. KAHN. That's a challenging set of questions. Let me point out right away I live in Ithaca, New York, which we refer to as a centrally isolated town. So I have the same concerns as you.

No. 1, the fact is that Logan Airport is very congested a great deal of the time. We have to be concerned about making efficient use of that limited facility. The fact is that when a small plane lands there and takes up the same space that would otherwise be taken up by a large plane that each passenger in that small plane is imposing a much greater cost on the community than the passenger on the large plane.

In the few months after Logan Airport's fees went into effect, during that brief period when they were permitted to remain in effect, there was not a decline in the service to small communities. What they did was congregate their passengers in larger planes in order to be efficient, to conserve the use of Logan. By the way, it's happening in the case of Ithaca, New York. It's a little bit demeaning that I now have to go—my hub is Syracuse, which has an inferior university. [Laughter.]

But I now go in small planes from Ithaca to Binghamton or Ithaca to Syracuse. There I get in larger planes which then fly me to places that by the way that we used to have to walk to, but we couldn't fly to Boston or Philadelphia before. I now three times a day can go to 10 to 12 places via these hubs and there we are put in larger planes which then make more efficient use of that scarce capacity at La Guardia, Kennedy, Philadelphia, Pittsburgh, and so on.

No. 2, the adequacy of service to small towns. Thanks to the essential air services program, which I supported, the extension of which for another 10 years I supported in 1988, according to the General Accounting Office, not one town that had a minimum level—only 5 or 10 passengers a day—of air service back in 1978 has lost it—not one. Certificated service, regulated service. Now it is true that a hundred or so towns have lost service in the last decade, but over a hundred towns lost service in the last decade of regulation as well. That's unregulated service. That's these air taxis, the local fixed-base operators who come in and out.

But so far as regulation is concerned and deregulation, I called the Department of Transportation a few months ago and they assured me it is still true, not one town that had certificated or regulated service has lost it. And small towns as a group have had a very sharp increase in the average number of flights of departures out. That is the convenience of service in every respect but comfort. Perfectly true. I have to crawl into these cigars and I don't like that, but jet service is uneconomic for a town like Ithaca which, even with the students, has 50,000 people. It's just uneconomic and I don't see any reason why my service in Ithaca where I have fresh air should be subsidized by people in Boston or New York.

Fares. There's no question about it. The competition has been unequally effective. It has obviously, as you say, been more effective in dense markets than in thin markets. It has been more effective in appealing to discretionary travelers who can make their reservations a couple of weeks in advance and it's the business travelers who are paying the high fares and it's true in small communities.

But again, in Ithaca, if I make my reservation in advance, the same economics that dictates to the carriers the desirability of filling those empty seats helps me. I can get discounts in those circumstances in and out of Ithaca. Remember that in August and indeed the same thing is true for all of 1988, over 90 percent of travelers managed to get those discount fares—90 percent. And the average discount in August was 65 percent below the coach fare.

So I recognize in my statement that there is probably some real monopoly exploitation of the minority of travelers who can't make their plans in advance. They do, however, have the advantage—most of them are business travelers, most of them their fares paid by other people, including the U.S. Treasury, and in addition, the majority of business travelers as well, according to this arithmetic, since about half of the travel is business travel, they must be availing themselves as well of these discount fares, the majority of them.

It hasn't been perfect. I quite agree. And when I had to go to Atlanta once and I had to go down on a Monday and come back on a Monday, I had to pay a fare that I found was outrageous. In principle, therefore, I can't say we shouldn't have ceilings in markets where we have a monopoly. But as a general proposition—and I know this is even more clearly true in trucking—as a general proposition, travelers in small towns have benefited from the price competition, as have travelers in the larger towns.

Representative SNOWE. I found that commuter air fares are much more expensive, obviously, and that's what I objected to in the landing fees in Boston, because it didn't make a distinction between a charter or a corporate jet and a commuter jet. So why should commuter passengers have to pay these extra costs for a landing fee because they happen to be in a small plane, because you can't get a large plane to service their small town.

Mr. KAHN. Well, I suppose there are at least three answers. One reason is that a commuter coming in on a small plane who delays and causes congestion to 200 people in the large plane really costs more, is imposing more cost on society. Why should a candy store that wants to locate at who knows where—18th and G or in Georgetown—have to pay a rent that is so very, very high? Well, the reason is that that space is very valuable. That's part of the economics.

The second is, however, that in the case of Boston, they quite wisely introduced a program like the essential air services program. They exempted from the higher fees a certain number of flights per day from small communities that were covered under the essential air services program.

Third, however, you may find people in Maine having to go to some intermediate stop where they will be joined by people from Vermont and New Hampshire to get in larger planes at the cost of some greater inconvenience, in order to economize on the use of space which is very valuable space. I didn't make the fact that that space is valuable, but it is valuable and we have to make the most efficient use of it.

Representative SNOWE. It has become valuable because we haven't expanded the airports or the numbers.

Mr. KAHN. I agree enthusiastically. But you can't expand in Boston. The people in Boston will not permit that additional runway. So what we have to do is encourage expansion at Worcester, which Massport was trying to do.

Representative SNOWE. That's what they were trying to do except, then, where do you go from Worcester?

Mr. KAHN. You could conceivably go to large planes and go to Boston.

Mr. WHITE. Mr. Kahn, correct me if I'm wrong, but I thought that there was at least one moderately sized flaw in the Massport pricing scheme, in that it was not sensitive to time of day considerations. The kind of pricing notions that Fred Kahn has described ought to have a time of day component, because a landing slot is much more valuable at 9 in the morning or at 6 in the evening than either at 6 in the morning or at 9 in the evening.

Mr. KAHN. Absolutely correct. It was a ridiculous thing to have done.

Mr. WHITE. And that could have eased some of these commuter problems, if there had been time of day pricing, so that a commuter plane or a private plane coming in either at 6 in the morning or 1 in the afternoon would pay less than coming in at 9 in the morning.

Mr. KAHN. Yes, and observe what that would do in addition. Larry White is, of course, perfectly right about that. But it would have helped the discretionary people on personal travel. The business travelers who want to get into Logan at the busy hours would have had to pay the high fare. I don't feel sorry for them. But the personal travelers would then have had this option which they are enjoying in the country at large of traveling offpeak at less congested times so they can get bargains.

Representative SNOWE. Thank you.

Representative HAMILTON. Congressman Solarz.

Representative SOLARZ. Thank you very much, Mr. Chairman. I'm sorry for having come in a little bit late so I missed the testimony.

I'd be interested if each of you could let us know, recognizing the complexity of this question, what you consider to be the two or three greatest successes of deregulation as well as the two or three greatest failures in terms of their impact on the consumers, why you think the successes were successful and why the failures were failures?

Then, based on that, could you tell us what remains on the agenda of deregulation and what other candidates you personally believe should be subject to deregulation? Or have we completed your agenda?

Mr. KAHN. Well, maybe I should have Darius Gaskins speak first because it seems clear, unequivocally clear, that the trucking deregulation has been an enormous success and he describes that very eloquently, and in the case of railroads as well.

I think in terms of topic rather than industry that the overwhelming successes have been in terms of unleashing price competition and bringing people of modest means in airlines. It's not visible in trucking but it's probably much more important in trucking. The benefits of price competition, No. 1.

No. 2, the pressures of competition, as well as the relaxation of all the restrictions on where you might go and what you might carry and what you might not carry, leading to a reformulation of operations. The hub and spoke system, for example.

The failure of regulation to have perceived the efficiencies of the hub and spoke operation is one of the most eloquent testimonials to the weakness of government planning.

So productivity improvement I think would be the second.

Probably the third would be offering customers a much greater variety of options, of kinds of services. I mentioned discount brokerage as just one example of that kind of thing. If you're willing to make your plane reservations in advance, if you're willing to stay over a weekend, if you're willing to put up with crowded seating and longer lines, you get bargains. Ninety percent of the travelers get bargains.

When I was chairman of the CAB the fare between New York and California was \$430 roundtrip and that's what you paid. That's well over \$850 roundtrip in today's dollars. There are people who pay more than that, but they are a small minority of the travelers. Most people are paying much less than \$850.

Very briefly about the others. I don't see major new areas on the agenda. I do think that further financial deregulation in terms of opening up competition is desirable. I don't see any reasons why banks shouldn't be in the insurance business, just as retail stores are in the banking business, or in real estate brokerage business. We'd have to maintain separations to see to it that when they sell you a house they don't tie it in somehow with the fact that you take a mortgage from them. We can stand a good deal more competition of that kind in financial markets generally. But in some considerable measure—I may have missed one, now that we have deregulated natural gas in the field. I can't think of any major areas that we should be opening up.

But cleaning up in terms of having the Government do the things that it has not been doing that all of us have been outlining in our testimony, there's still a major job to be done.

Representative SOLARZ. You see no failures, no instances where deregulation produced unwanted consequences?

Mr. KAHN. One example. I do not call it a failure, but certainly in the public's mind, since something like the end of 1983 in real terms—that is adjusted for inflation—the price of long distance telephone calling has gone down more than 50 percent. The average residential telephone—not bill because that includes long distance calling—I mean the price of basic residential local service in real terms has gone up about 23 maybe 25 percent.

Now, whereas, the income distributional consequences of deregulation in the airlines has clearly been favorable—all sorts of people are traveling today, people you don't like to sit next to, but that's all right. They probably don't like to sit next to me.

Mr. WHITE. You haven't been on the New York subways if you're worried about that.

Mr. KAHN. So I think it's clear the income distributional effects of airline deregulation have been a kind we would approve of.

In the case of telephone service where we had for decades been subsidizing the basic residential charge in order to promote univer-

salinity of service, the people who don't make many long distance calls probably have an increase in bills.

Now as an economist, I don't think that's a failure. I look at universality of service. Only 37 percent of households had telephone service 45 years ago. Today, it's 93 percent and it continues to go up even in the last 3 or 4 years. The great majority of States now have programs in which they help low-income families with their telephone bills. That's great. The way to take care of it for people with low income is to help them directly.

Representative SOLARZ. Let me just note for the record there's nothing wrong with people who ride the New York subways. [Laughter.]

Mr. WHITE. I do it all the time, but there are times when the people next to me—I mean if Fred Kahn is worried about people on airlines—

Representative SOLARZ. Would the rest of you like to answer?

Mr. GASKINS. I would comment that the deregulation of surface transportation, rail and trucking, has been a terrific success and a whole range of numbers has been generated about what it's worth, but probably the best study I think has been done by Cliff Winston and he estimates that it saves the Nation about \$22 billion a year because of deregulation of surface transportation. That is a very large number.

One other success that Fred Kahn did not mention I think was equally as important if not more important to the economy was deregulation of oil prices. Because if you remember where we were with our attempts to regulate oil prices in the 1970's and the problems that was creating in terms of corruption in some instances and gas lines in other instances and just a screwed-up economy, deregulation was a tremendous success. And it's interesting after we deregulated oil prices the oil market started to behave a whole lot better as far as consumers were concerned and we now have a situation where oil prices are much more moderate than anyone would have anticipated in 1979, for example.

In terms of areas that we need to deregulate further, I'd like to shift the focus a little bit. I think that we have some major problems facing us on the environmental side where we will continue to have to regulate the economy in significant ways because of environmental problems. I would not call for deregulation, but I would call for increased use of economic incentives to achieve environmental objectives. I think there's a lot to be learned in how we attempt to solve these environmental problems. The Government is going to have to do it. There's going to have to be some sort of regulatory scheme, but I would hope that we're a little smarter about it than in the past and I must say that I see what the Congress is attempting to do with the Clean Air Act and particularly with respect to the acid rain question and I think they are doing a much better job in 1989 than they did in 1977 because of their increased reliance on economic incentives to achieve their objectives. That's going to be an important problem area that will be with us for the next several decades.

Mr. WHITE. Going last, one has the disadvantage. They used up all the good lines. I had written down here stock brokerage, trucking, oil, natural gas as my four unquestioned success stories.

Failures: Clearly, as I indicated in my prepared statement, the savings and loan economic deregulation, which was not accompanied by the necessary increase in safety and soundness regulation, must be judged overall as an extremely costly failure. It was a failure not because of the economic deregulation, as I indicated in my prepared statement. That was the right thing to do. But it needed to be accompanied by stepped-up safety and soundness regulation, and that wasn't done until far too late. The barn door needed to be closed, but it was closed after an awful lot of horses had escaped.

What's still to go? I would echo what my two colleagues on this panel have indicated—more economic deregulation of banking and thrifts, accompanied by the proper stepped-up safety and soundness regulation. I think Darius Gaskins' point about increased use of economic incentives in environmental regulation is terrifically important.

But I can offer at least four other areas. One is ocean shipping, where we still have the heavy hand of regulation impeding effective competition.

Second is areas of local regulation of potentially competitive markets. Congressman, you are familiar with the New York taxi market, and that is a tightly regulated area. As you are well aware, just recently the taxi and limousine commission had the opportunity to add 400 more taxi medallions to the supply of taxi services, accompanied by an effort to provide more service to the outer boroughs. The proposal was killed. That is a market that basically is competitive. There may be congestion and pollution problems, but they are properly dealt with by economic incentives, not by restricting the supply of taxis and inefficiently regulating their fares.

A third area would be the use of the spectrum in telecommunications, and that—again—needs a combination of deregulation and proper use of pricing. Just as is true for airplane landing slots, the spectrum is a valuable resource, and it needs to be priced appropriately. It is not so priced today.

The last area would be wholesale electricity pricing. That should not be confused with the local retail distribution of electricity. That is a local monopoly and does need to be regulated, as is true for local telephone and for local water and natural gas. But wholesale electricity is potentially competitive and could be priced competitively. There may have to be some structural changes like separating retail distribution from generation, but that is an area that could be sensibly deregulated if it were accompanied by the right structural changes.

Representative HAMILTON. Congressman Upton.

Representative UPTON. Mr. Chairman, I also apologize for being late. Three 10 o'clock appointments can be tough to make.

I think all of us here would certainly accept that airline deregulation has been good for the traveling public, that its successes are really tremendous. Safety has actually been improved.

I'm interested in comments from all three of you with regard to some action that the House Public Works Committee took yesterday by passing legislation, that may be on the House floor as early as next week, which would allow the Department of Transportation to block LBO's of the airlines. The White House has threatened a

veto on this legislation, despite the fact that Secretary Skinner seemed inclined to support it only 2 days ago.

As we've seen the number of major carriers really diminish now from probably 20 or 25, 10 or 20 years ago down to 7 or 8 today, would this legislation be good or bad for the traveling public? Also, what are your thoughts with regard to airlines having special rules that other sectors of our economy don't? I'd be interested in comments from all three of you.

Mr. KAHN. I guess if it's airlines I have to go first. The fundamental conception behind economic deregulation was that the airline industry should really not be treated any differently from industries generally, except to the extent that we need direct intervention in regard to safety, for example. Never deregulate safety.

That colors my attitude toward special legislation with respect to LBO's in the airline industry. I'm troubled about the LBO phenomenon in industry generally and I think by far the most important thing that Congress can do is to eliminate the distortion in the tax laws that makes LBO's profitable when they might not otherwise be profitable—the whole question of the differential tax treatment of debt and equity. And I would love to see that applied across the economy generally.

Beyond that point, I believe that the concern about airline safety is best taken care of by seeing that the FAA has an adequate budget. By the way, that suggests to me a very strong possible desirability of taking it out of the Federal budget, perhaps even privatizing the air traffic control operations, and see that they are funded with user taxes. But the whole hypothesis—and it's clearly the case with trucking as well—the way to take care of safety is to enforce safety. Pull those trucks off the road and have random roadside inspections. The evidence is very clear that that's the way to do it.

So I guess I tend to be hostile to the notion of separating out the treatment of airline LBO's from other LBO's. I think the fundamental hypothesis is wrong.

That does not mean that I have not been very much concerned about the takeovers. I must point out right away on this question of concentration of the airline industry, the concentration at the national level is marginally higher than it was under regulation. The trunk carriers had about 88 percent or 87 percent of the business under regulation. Now there is a smaller number of them and they have about 93 percent. But concentration market by market has gone down. On average, we definitely have more carriers per market now per route than we had before.

Representative UPTON. But wouldn't that diminish if this legislation was vetoed?

Mr. KAHN. I would say it has nothing to do with LBO's. Just tell the Antitrust Division to do its job. An LBO by KLM of Braniff, to take an extreme case—they probably will not thank me for saying this—I don't care if they own 100 percent of it. I think it would serve the cause of competition and they would have a motive for doing so if they could fly nonstop between Kansas City, which is one of Braniff's hubs, or Orlando, which is another one of Braniff's hubs, and Amsterdam, both of which cities have petitioned the Department of Transportation to be permitted to have nonstop inter-

national service. It would help revivify competition in the United States.

So the critical question is not, is it an LBO? The critical question is, is it pro- or anti-competitive? And that, by the way, leads me to another answer that I should have thought of to Congressman Solarz' question. Protectionism is a form of regulation which is suppressing competition and our xenophobia about foreign airlines having a piece of the American pie may be hurting domestic travelers. If KLM would take over Eastern or would take over Braniff, I think we would have a preservation of competition and they would have a motive to do so because it would give them international feed. So I'd like to see deregulation of steel quotas—I'm sorry about Indiana—but there are areas in which we should be deregulating in that respect. Perhaps that's enough for a start.

Mr. GASKINS. I would only add to that, Congressman, because I essentially agree with Fred Kahn in all respects with respect to LBO's and airlines and other transportation industries, I would also comment that the market seems to move pretty quickly to solve the problem. So with some luck you don't need legislation. The bloom is off that rose.

Mr. WHITE. Once again, all the good lines have been taken.

As Fred Kahn was saying it, about 5 seconds earlier I had said to myself, allow an airline not only to take over existing domestic airlines but to offer service de novo. If KLM wanted to fly between Syracuse and New York and just establish new service, I see no reason to prevent it from doing so.

Mr. KAHN. Or maybe go into Ithaca.

Mr. WHITE. Yes. This is just blatant protectionism. We rail against protectionism when we see it abroad. The Japanese at the moment are a favorite target. But keeping foreign airlines out of the domestic U.S. market is exactly the same kind of protectionism, and it is anticompetitive. It is a major deregulation effort that still needs to be done.

The other point that Fred Kahn mentioned is to have the Antitrust Division do its job whenever mergers among airlines are proposed. There are at least two major mergers over the past 4 years that, had the responsibility been the Antitrust Division's, rather than the Department of Transportation's, wouldn't have gone through or would have gone through in a much less anticompetitive fashion. As everyone knows, the Department of Justice opposed the combination of TWA and Ozark and opposed the combination of Northwest and Republic Airlines. I have talked to my academic friends around St. Louis, I talked to them in Ann Arbor close to Detroit and in Minneapolis. They will tell you the details of what has happened to competition since those mergers. The Antitrust Division in the last few months has been showing renewed vigor with respect to scrutiny of mergers in the airline industry. They opposed the transfer of gates from Eastern Airlines to USAIR in Philadelphia. That was a sensible thing to do. And they stopped the merger of the airline reservation systems of Delta and American; again, that was the sensible thing to do.

So renewed, vigorous antitrust—and if only it had been in place 4 years ago—would be welcome.

Mr. KAHN. There are two other issues that are going to come to Congress. May I just mention them?

Representative UPTON. My time is expiring and I wanted to ask one quick question and get a quick response.

I remember that back in the Carter days, Mr. Kahn, you were encouraged not to use the term "recession" and I think you replaced it with the word "banana." And I'm curious to know if you see a "banana" on the horizon now; and if not, what type of fruit would you describe?

Mr. KAHN. I should point out for the record that I got a letter of protest from the president of United Fruit and I responded that henceforward I would use the word kumquat. [Laughter.]

This is not the area of my expertise. I think it is amazing how few signs there are of recession. It's not out of the question that we will not have a recession in the foreseeable future. I don't think people are generally aware that in the last 45 years the average length and depth and severity of recessions or depressions has been less than half what it was in the preceding 45 years, and even if you leave out the Great Depression of the 1930's, we have clearly moved, for a great variety of reasons, in the direction of a stabler economy.

In the 1960's we almost managed—indeed, we had the longest recovery in history, but had it not been for the upsurge of the Vietnam spending and the failure then to control the money supply we might have had an indefinite extension of that recovery. Most of the signs—there has been an abating of inflation slightly. There has been a shift from consumption-based recovery to business expenditures on plant and equipment export led. There are a lot of things that are quite healthy in the present situation.

We can sustain a 2.5 percent rate of growth keeping unemployment around the 5 percent range. Well, any economist would give up his professional credentials to give such an optimistic statement, but there's no clear sign that a recession is inevitable.

May I mention those two other cases because they are to come before Congress. One is the question of what to do about the continued restraints on the Bell operating companies and their ability to go into information services and that sort of thing. It's not an easy issue because they clearly did violate the antitrust laws and there clearly is a danger of the abuse of control over the local monopoly bottleneck to inconvenience or make it difficult for other people to compete with them, but there is clearly an economic growth dimension of this. The fact that I think almost everybody agrees that the growth of the United States in competitiveness does depend very critically on the full exploitation of telecommunications computing technologies and that probably means fiberoptics to the home as well as digitalization of networks and a plausible case can be made that continuing to keep the wraps on the telephone companies, which in many ways with their own switches which are computers, ought to be encouraged to go into that and that there ought to be other ways of protecting against unfair competition. Congress is going to face that. This is not a criticism of Judge Greene. He's enforcing the antitrust laws.

The other closely related one is whether the telephone company should be permitted to go into cable and it's very closely related.

Now that we've deregulated cable, it's an interesting question as to why they should be insulated from this competition, particularly when if you can get the bringing of entertainment to the home as your anchor tenant in a sense that may make feasible the extension of fiberoptics to the home which may be one of the next major items on the national agenda.

So here again, there's a kind of protectionist regulation which we clearly ought to be reconsidering.

Representative UPTON. Thank you.

Representative HAMILTON. Why did we ever regulate the trucking industry if the advantages of deregulation are so good?

Mr. GASKINS. Well, you have to remember when we did that, Congressman. That occurred in 1935 at the depths of the Great Depression. There are various views on why it happened, but clearly at that point in our history we had lost a lot of faith in the market system to perform very well. We were running around imposing lots of changes on our economic system.

It's also true that truckers had become more obvious competitors to railroads and one school of thought is that the railroads reached out and said, "Well, we have to be protected from these guys and therefore they should come under the same kind of regulatory umbrella that we do."

Mr. KAHN. And the railroads did lobby very actively for the control of trucking for precisely that reason.

Mr. GASKINS. What I think is really important to remember when you ask why it happened, to think about what the attitudes of politicians and the—

Representative HAMILTON. How much regulation of the trucking industry remains?

Mr. GASKINS. There's very little at the Federal level. Tariffs have to be filed. There are some consumer protection functions that the ICC looks at. At the State level it's still quite onerous in some instances. Texas has tight controls on entry. The State of Washington still has rigorous controls and I understand California is going through a battle now to try to deregulate their trucking industry. So you have State regulations.

Representative HAMILTON. We get a lot of complaints from people about that, too. In other words, you have a variety of State regulations, not uniformity, and this causes a lot of extra burden to the trucking industry. Is that a valid argument?

Mr. GASKINS. I think it's a valid argument.

Representative HAMILTON. How do you deal with it?

Mr. GASKINS. You have to trade that off against the concern about allowing the States to control commerce within their borders. But my view would be that we're a nation and interstate commerce is very important and these are inhibiting factors.

Representative HAMILTON. There are different weights permitted, for example. Is that correct?

Mr. GASKINS. That's a separate issue, but that's an issue that's—

Representative HAMILTON. That arises because of State regulation?

Mr. GASKINS. Yes. And it's a burden.

Representative HAMILTON. You think we ought to have things like uniform weights, for example? That would make it a much more efficient industry, right?

Mr. GASKINS. Yes, sir.

Representative HAMILTON. Why has deregulation of railroads been much less complete than deregulation of trucks?

Mr. GASKINS. Because on the surface railroads clearly had a different competitive relationship with their shippers than trucks did. Trucks were ubiquitous in the American economy. Highways are everywhere. You can literally, except for the regulations, you could take a truck almost anyplace and any shipper that has a loading dock can have any truck pull up to it. The same is not true in the railroad industry and there was and has been for 100 years concern that without some regulatory regime railroads would exploit those shippers who are highly dependent on rails.

Representative HAMILTON. Do you favor going to deregulation of the railroads, for example, to the extent that we've gone to deregulation in the trucking industry?

Mr. GASKINS. I would predict that we will do that sometime in the next 10 or 20 years. We will do that if, and only if, the shippers decide that they no longer need the protection of regulation. But they've learned a lot since 1980 about what really goes on.

Let me give you a couple of examples just to show you what happens.

One of the most captive markets that we perceived was the production of soda ash, trona, from the Green River area of Wyoming served by a single railroad. The nearest rail competitor was 207 miles away and it appeared that that was a monopoly if there ever was one and without regulatory protection shippers had no alternative. Well, after the passage of the Staggers Act, railroads developed different ways of competing. What happened in that particular market was the railroad that was 207 miles away developed a trucking reload operation that hauled trona 207 miles by truck and they penetrated that market—I think they have about 10 percent of that market.

Well, it isn't that they hauled all the trona, but the competitive spur served to moderate those rates and anybody in that market now discovers, well, maybe we don't need government regulation to protect us. Maybe this rail-truck alternative is an effective protector of our interests.

The same kind of thing happens with reload operations with lumber products in Oregon and Washington. So as you experience a more competitive environment things occur to people that they didn't think about before. We're going to get complete deregulation of railroads eventually when shippers say, "Look, the market is taking care of us. We really don't need the ICC anymore."

And it's interesting that the cases before the ICC have diminished dramatically. There are very few rate cases before the ICC today.

Representative HAMILTON. If you had deregulation of the railroads, would you have all the good things happening that you've had with deregulation of the trucking industry?

Mr. GASKINS. No, sir. You need more than that. I pointed that out in my prepared statement. The problem that the railroads have

is that they have some cost burdens that are special and you have to change the laws. You have to change the Railroad Labor Act. You have to change the act that controls their liability compensation. You have to do something about railroad retirement.

Representative HAMILTON. Do you favor those changes?

Mr. GASKINS. Absolutely.

Representative HAMILTON. Do all of you favor those changes?

Mr. KAHN. Yes, we do.

Mr. WHITE. Yes.

Mr. KAHN. But we're not running for office.

Representative HAMILTON. You'd better be careful there, Mr. Kahn. You're getting into very dangerous territory. [Laughter.]

So we'd all be better off if you didn't have these things that you're talking about—the labor law, controlling wage and benefit negotiations, a mandated retirement system and the compensation system? And that's the general view of economists, I presume.

Mr. GASKINS. Yes, sir.

Mr. KAHN. Absolutely.

Representative HAMILTON. Should we think of the trucking and the railroad industries as separate industries or should we really look at them—

Mr. GASKINS. I don't think shippers think about them as separate because they've become closely integrated, they are part of the distribution system and when you think about alternatives and you try to define a market you have a rail alternative and you have a truck alternative and you have a combination alternative in many instances. So literally when you try to make judgments about the markets, I think you have to think about them together.

Mr. KAHN. But that will differ from market to market. I agree with Darius Gaskins that the captivity of shippers is probably diminishing, but I was involved for quite a while in the issue of people producing coal in the Powder River basin and trying to deliver it primarily to the utility companies in the southwest and until CNW came in they were dependent exclusively on Burlington Northern and trucks were not an available alternative for them. These were hauls where it was at least 800 miles to the nearest barge point.

So I would want to retain the look at markets to see where there is still monopoly power.

Representative HAMILTON. Well, does that mean that we ought to think about doing away with the Interstate Commerce Commission?

Mr. GASKINS. Well, I would say that if shippers are convinced that the system works well enough without the Interstate Commerce Commission in railroads, then you'd have no use for the agency because their functions in trucking regulation are very minimal.

Representative HAMILTON. Your test seems to be the shippers all the time?

Mr. GASKINS. They're the people who have to deal with the consequences and I'm not really interested in abolishing an agency until the people that deal with it every day say we don't need them any more.

Representative SNOWE. Would you yield, Mr. Chairman?

Representative HAMILTON. Sure.

Representative SNOWE. On this point of railroad deregulation. We had another experience in Maine—I don't know if you're familiar with Gilford Transportation.

Mr. GASKINS. I've heard of it.

Representative SNOWE. I don't know how they took a perfectly good, profitable railroad like Maine Central Railroad and essentially let it deteriorate in all respects. As you know, they've had a labor-management fight and so on and so forth as they tried to circumvent their agreements.

But the point in all this is that Gilford Transportation took Maine Central Railroad, and Dover and Hudson, and Boston and Maine. Maine Central happened to have been a profitable operation, and obviously it has some serious problems as a result of what they've been trying to do. So it seems to me they've tried to get bigger, not necessarily better, nor have they enhanced the service or the railroad itself.

Mr. GASKINS. I think your characterization of that is correct. Unfortunately, many of the mergers that occurred in the rail industry after 1980 didn't work out as well as people hoped because it turns out it's real difficult to marry various properties and manage them effectively. In the case of Maine Central it was more profitable than other railroads in the northeast, but railroads in the northeast are all in trouble. The reason is that none of them have earned their cost of capital for decades and even the relatively healthy railroads have long-term problems and the long-term problems go to their labor costs and some of these other cost burdens I mentioned.

So I can't say that even without the Gilford merger that you wouldn't have had severe problems in the State of Maine. But it is also true some of these mergers haven't worked out real well and there have been some real problems because it turns out all economic benefits are not there and a lot of costs pop up that you were unaware of when you consummated the merger.

Representative HAMILTON. Mr. Kahn, you're familiar I guess with Mr. William G. Shepherd's writings.

Mr. KAHN. Yes, I am, very well.

Representative HAMILTON. Then let me just quote a paragraph or two from him with respect to airlines. "Taken together, the industry's concentration, hubbing, entry barriers and reservations systems have reduced competition. The industry is now a complex, tight oligopoly with high dominance in many markets but mingled with competition on some major routes. Most of the industry is not effectively competitive."

Mr. KAHN. I took the precaution of bringing down with me a copy of a long letter that I wrote to Professor Shepherd. We're friends. He's at the University of Massachusetts. He had sent me the manuscript of this chapter in advance. Here's one example—"you surely give inadequate recognition to the fact that last year 91 percent of all travel was on discount tickets and that's saving travelers about \$10 to \$15 billion a year." As I say, I respect Professor Shepherd. He is a very ardent advocate of antitrust policy, as I think I am. And we are in total agreement that there have been severe derelictions.

Representative HAMILTON. We have eight major airlines that control 90 percent of the traffic and there is more concentration than we had under regulation.

Mr. KAHN. That's right. But you had about 13 controlled, 87 percent, under regulation, so there's not a tremendous difference. But you look at how many airlines there are between Dallas-Ft. Worth and Las Vegas, for example, back in 1977 or 1978 there were two. I believe now there are seven or eight. What has happened here and also in trucking where concentration increased at the national level is that they now invade one another's markets. American Airlines has come in and built a big hub at Raleigh-Durham and Nashville. United Airlines has built a big hub at Dulles. They've moved into one another's markets and that's why you find that the number of markets served by a single airline or by two airlines has gone down very, very sharply.

Representative HAMILTON. So you would expect to see more competition developing as these major airlines invade one another's hubs, is that it?

Mr. KAHN. Absolutely. It has indeed developed. The industry is unquestionably far more competitive now than it was under regulation. That does not mean that there are not some maybe 10 percent of the travelers in isolated communities who begin and end their trips at a hub dominated by one or two carriers. I'm not worrying about Boston to Phoenix. You can go between Boston and Phoenix over probably eight different hubs and be served by eight different airlines. But if you're in Pittsburgh and you begin in Pittsburgh and want to go somewhere and if not to the hub of another carrier and you want to come back to Pittsburgh, then you are stuck.

Representative HAMILTON. How about other factors like the pace of innovation in the airline industry? Is that as good today as it was under regulation?

Mr. KAHN. It's a little bit hard for me to say. There's no question that competition has forced all sorts of marketing and organizational innovations. The hub and spoke is a tremendously powerful innovation which makes it possible for it means bigger planes because they feed traffic into the hub. It makes it possible for them to have fuller planes and it makes it possible for them to offer a wider menu of destinations via the hub. That's why the Brookings study concluded that the major beneficiaries of deregulation were business travelers because of the greater convenience of scheduling. That has been a very powerful innovation. The frequent flyer programs are a tremendously powerful marketing innovation.

Representative HAMILTON. Your argument is that the pace of innovation has quickened?

Mr. KAHN. Undoubtedly true, but it's hard for me to—

Representative HAMILTON. What about safety? You had a statement that safety was better.

Mr. KAHN. Accident rates are down about 35 or 40 percent compared with the prederegulation period. That's not because of deregulation. It's simply that we've had a long-term improvement in the technology. That's where a lot of the innovation is occurring.

Representative HAMILTON. Do air carriers today have fewer incentives to operate safely in a deregulated environment or do they have more incentives to operate safely, or isn't it a factor?

Mr. KAHN. Well, I'd say if there's any change, they have more incentives simply because if you have a series of accidents you're likely to be out of business and your people have available to them, on average—and that's in small towns as well as big ones—more carriers available to come in. But we don't want to rely exclusively on those incentives. We rely on the FAA and scrutiny of safety.

All I say is that the record seems to show that we can have all the safety we want without having to go to restriction of competition.

Representative HAMILTON. If I may quote Mr. Shepherd again, "service has deteriorated in virtually every dimension. Most longer flights now require two separate legs with a transfer to a hub. That lengthens time involved. It doubles the number of landings and takeoffs and it increases the passenger's burden in making connections. Inside the plane there is more crowding. Space is more cramped. Generally, the level of amenity has descended toward that of bus travel. Also, the frequency of flight cancellation for reason of profit has risen."

Mr. KAHN. There is no evidence of that whatever. Everybody believes it.

Representative HAMILTON. Evidence of what?

Mr. KAHN. There is no evidence that the number of cancellations either has increased or that it is because of profit. When I was Chairman of the CAB, I used to get complaints all the time that the airlines were canceling because of profit. I would like to know if it is true because that would be a pertinent—that would be the kind of thing the Government should step into because that is deception.

If an airline says you have a reservation on a flight that is going to go out and it cancels the flight for reasons not beyond its control, the Government ought to be stepping in and slapping them down. That is lying just as much as if you have misleading advertising.

But there is no evidence that that is true.

I beg your pardon for interrupting.

Representative HAMILTON. No, that is all right.

Mr. KAHN. But, I fully concede that you have more delays and you have more crowding, and it is because of the fact that we are offering people bargains, necessarily poorer quality of service.

By the way, it is not true that we have substantially worse connection problems. People—there is a great improvement in connecting on a single carrier, from one flight to another of a single carrier, than going from one carrier to another because if you have traveled you know perfectly well the chances of your baggage not being lost and the airline holding up the plane for connections are greatly increased. Interline travel transfer, which used to be something like, I think, 35 percent of all transfer, is down to about 1 percent. You have had an enormous increase in transfer on the same airline.

But a lot of what Mr. Shepherd says is true. A lot of it is a necessary consequence of deregulation. A lot of it is the result of the fact that the Government hasn't done its job in the ways that I have described.

Representative HAMILTON. Yes.

Well, gentlemen, I am running out of time. They have a bill on the floor that I am supposed to have a role in, and I am going to have to go over to that.

I did want to hit this local cable television business.

Do any of you have a comment about the status of regulation of local cable television?

Mr. KAHN. I was slightly involved. I was asked to testify in favor of the deregulation and refused to do so.

Representative HAMILTON. Is that because it is a natural monopoly?

Mr. KAHN. Well, it may be a natural monopoly. Whether or not it is natural we will never know as long as we keep the telephone companies out because they are the logical competitor.

So don't get me wrong. I don't think it was a heinous thing to do. Television does compete with over the air, and if you have a lot of over-the-air signals available maybe it is not worth regulating, but certainly we ought then to make sure the franchises are not exclusive and probably we ought to be permitting the telephone companies to come in and challenge them.

Representative HAMILTON. Do you favor auctioning gates or slots?

Mr. KAHN. Yes, I do.

Representative HAMILTON. You do.

Mr. KAHN. Or as an alternative charging proper fees.

Representative HAMILTON. Yes, and I suppose that, too, would be a view economists would adopt generally?

Mr. KAHN. Yes, absolutely. No question.

Mr. WHITE. It is a scarce resource, Mr. Chairman.

Representative HAMILTON. Now, how do you all feel about government intervention to protect America's competitive position in the world by promoting particular technologies—high definition television, for example? Is that a good thing for us to do?

Mr. GASKINS. I have had some experience looking at research and development in the energy sector where it is driven by government decisions, and I don't think the Government does a very good job in picking technologies because the politics tend to become important, and when the politics override the science or the scientific judgments you get bad results.

So basically I am quite skeptical about government making major scientific or technical choices because, unfortunately, in our system of government it is hard to keep the politics out of those choices.

Representative HAMILTON. Yes.

Mr. KAHN. I don't think anybody can deny in principle that there may be some technologies that are so basic and have such external benefits in terms of the economy at large that we ought to subsidize them.

I mean, I think it is a matter of dismay that the Federal Government expenditures in support of R&D, nondefense R&D, have gone down sharply as a percentage of our GNP. I think there is an area in which we need more government spending, but guided by the National Science Foundation.

Mr. WHITE. And it should heavily emphasize basic, very fundamental research, rather than applied research.

Mr. KAHN. And not protectionism, which is the more dangerous way of doing that.

Representative HAMILTON. OK, thank you very much for joining us this morning.

It has been a good discussion. I would like to continue it, but I am not able to do that, and we thank you for your statements.

Mr. WHITE. Come on up to NYU, Mr. Chairman.

Representative HAMILTON. All right.

Mr. WHITE. We would be happy to continue it.

Mr. KAHN. Thank you, Mr. Chairman.

Mr. WHITE. Thank you, Mr. Chairman.

Mr. GASKINS. Thank you, Mr. Chairman.

Representative HAMILTON. The committee is adjourned.

[Whereupon, at 11:35 a.m., the committee adjourned, subject to the call of the Chair.]

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