TELECOMMUNICATIONS DEREGULATION: LESSONS FROM OTHER INDUSTRIES

by

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Revised
June 3, 1983

Presented at the Annual Convention
of the
Florida Telephone Association

May 3, 1983

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By reviewing the impacts of deregulation in other industries, it is possible to better understand the motivations behind FCC actions and to gain an appreciation for the problems facing telecommunications managers today. First, let us set the stage with a fable:

> Once upon a time, there was a matriarchal rabbit family lead by Ma Nell, a very special mother rabbit. Living with her were twenty-two children in various stages of development (and prospect). The story begins with the entire Nell family enmeshed in a regulatory tar-baby. They were not an unhappy family, since all of their cousins were attached to tar babies too. In fact, rabbits were all able to get their rabbit chores done because along with the tar baby came a security blanket. (How they originally got stuck is a story for another day.)
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> As time passed, Ma Nell saw other rabbit-like creatures making very good livings for themselves in the forest. She began to feel more and more burdened down by her twenty-two children. (Each of the children had their own tar-babies too.) The whole family began to feel quite constrained, as they wondered why some of the other critters were not stuck in the tar. Worst of all, some of the critters tore holes in their security blankets.
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> Well, Brer Bear came along and found Ma Nell and her family trapped there. And he was delighted at the prospect of putting Ma Nell in her place since he harbored a grudge against the Nell family. "Should I drown you?" he asked. "Oh yes," she responded, "that would be fine. Just don't throw me into the briar patch away from my children." Brer Bear couldn't find water nearby, so he came back and said, "Maybe I'll jist skin ya, and hang you up to dry." "Oh yes," said Ma Nell, "do that. Jist don't throw me in the briar patch." But Brer Bear couldn't find a knife.

> The rest of the story is well known. Ma Nell was delighted to get tossed into that competitive briar patch, leaving her children even more enmeshed in the regulatory tar baby. All rabbit families found out that the world had changed the day of the briar patch decision. For there were lots of critters out there competing for lettuce and other goodies. Even Ma Nell began to look like one of them other critters, as she threatened the survival of her kin.

Brer Bear may have known all along that setting Nell free was going to upset the little critter's world. In fact, that neighborly economist, Brer Fox, may have encouraged the action. His counterparts in universities and government agencies have applauded telecommunications deregulation, but managers are left enmeshed in the regulatory tar baby. Their backs are to the patch, with a lot of thorny issues remaining: Will regulators be more accepting of usage sensitive pricing? How does one establish appropriate levels of access charges? Where will lost toll revenue be made up?

Regulators deserve some sympathy too. They do not want telcos to lose out to other creatures on the roam. Yet, they are being forced to reconcile conflicting goals, like universal service and cost-based pricing.

There is no simple four point program or strategic plan that will let telcos continue to operate near the thicket of deregulation. However, by placing deregulation in perspective, we can benefit from the experience of other industries.

First, economists have a confession to make. We have the same character flaw artists possess: We, too, tend to fall in love with our models. Although economists tend to be enamored with the competitive model, we are not naive. We know that competition has warts and limitations; nor are we deceived by thinking in terms which are too abstract.

In fact, the opposite is true. Economic analysis is grounded in reality. Consumer preferences, production technologies, input prices, and institutional constraints provide the framework for organizing data and analyzing alternative policies. In the case of telecommunications, the policy alternatives include deregulation and re-regulation.

Three components of the economic policy-evaluation framework are: market structure, corporate behavior, and industrial performance. These three dimensions of an industry are listed in order of causation: structure constrains behavior, which leads to particular levels of desired performance. Structure refers to the number and size distribution of firms, entry barriers, and the nature of the product. We know that telecommunications industry structure will be quite different after the day of modified final judgment.

Until the last two decades, the "structural" conditions were generally viewed as not being conducive to competitive behavior in telecommunications. That regulatory tar-baby had as its primary purpose the control of multiproduct "natural monopolies". We had a political consensus: a single firm was the most efficient provider of a set of services. Brer Fox and his economist friends saw the tar-baby as a blessing. The Nell family grew by leaps and bounds. In addition there was room for other critters to operate in their respective territories. Thanks to technology, regulatory boundaries are now completely blurred.

Another widely accepted justification for regulation is to keep things orderly and fair. Predatory pricing and discriminatory pricing are two examples of behavior that regulators view as unacceptable or inefficient. We can debate which is the more effective way of controling abuses: direct regulation of behavior or the encouragement of market structures that constrain such behavior. The record from other industries suggests that the regulation of price and entry behavior has often resulted in weak economic performance.

The bottom line for economic analysis and for sound public policy is "industrial performance". We seek to minimize production costs and to avoid monopoly power, with its excess profits and output reductions. We also desire the appropriate mix of products and product qualities. Finally, as a goal of economic performance, we seek innovation--reflected in new products and improved production processes.

Of course, regulators have other goals besides efficiency. Fairness does matters, but there are many dimensions of fairness. Customers deserve access to goods and services on equal terms. This anonymous fairness implies that entrepreneurs ought to be free to enter a market and those who cause costs to be incurred should pay those costs. Cross subsidies protected by entry restrictions runs counter to the goal of equal treatment.

Targeted fairness is another matter altogether. This concept is based on the value judgement that the existing income distribution involves poverty and the lack of opportunity for many of our citizens. Many of us accept the goal of redistributing income, although recommended policies differ. Universal service is based somewhat on achieving targeted fairness. Thus, besides the natural monopoly justification for regulation, we find that intervention is sometimes designed to achieve targeted equity and to eliminate so-called "competitive excesses".

The policies that are foremost in our minds today are those stemming from the FCC's commitment to competitive market forces in most telecommunications markets. To say that changes in the last decade have been dramatic is an understatement. The AT & T agreement, coupled with the IBM

decision, represent the greatest change in the structure of American industry since the 1911 Standard Oil divestiture. Note the emphasis on "structural change". No longer will regulators determine the parameters of "corporate behavior" in many areas. Rather, the briar patch of competition is viewed as constraining monopoly power. Only the local loop has been declared immune from competitive forces. Those concerned with the by-pass threat know that the next decade can be expected to bring competitive pressures to bear here too.

Economists do not take pleasure in seeing the industry shaken by changes in the regulatory environment. We do not view the changes as costless: "There is no such thing as a free lunch." However, we tend to view deregulation as being a good deal for consumers, and ultimately a good deal for efficient producers. Other industries have undergone the upheavals of deregulation in the last two decades. Available evidence from other industries supports the view that our telecommunications resources will be better utilized and consumers better served when market forces, rather than regulation, guide the industry. Let us examine several industries.

Brer Fox asks: "Who benefited from airlines regulation? Who was hurt by deregulation?" Some firms (and their stockholders) can show that they are not better off with unrestricted entry and price decontrol. Braniff and Republic Airlines are certainly worse off. At present, Eastern Airlines seems to be in trouble too. Peoples Express and NY Air are the new boys on the block: they are taking advantage of new opportunities. Consumers are also taking advantage of new opportunities. The record shows improved route structures, equipment which better matches the markets (big jets no longer do short hauls), improved load factors, and improved employee productivity. For example, pilots

no longer have flying time of only 45 hours per month.

The final evaluation of airlines deregulation has yet to be delivered, and perhaps a definitive analysis of performance impacts will never be available. We do know that those managements which were responsive to new technological and commercial opportunities are those which are surviving the shakedown in the brambles.

The parallels with telecommunications ought not to be drawn too sharply, since the fixity of capital investments and the pace of technological advance present telcos with unique challenges. Yet the airline experience does shape the regulatory environment in which telcos operate.

One point of irony in the comparison is that for airlines, entry within states made national regulators and legislators aware of the lack of cost-based pricing. For example, in 1975, the fare for Los Angeles to San Francisco was about $19; for Chicago to Minneapolis, the fare was $39--for the same distance. Clearly, customers in Chicago were not being protected by the CAB. Studies by academic economists were used by political entrepreneurs to support deregulation. Thus, for the airlines industry, gains to consumers in intrastate short-haul markets put pressure on the CAB-regulated long haul markets. Pressures in the reverse direction have occurred in Telecommunications. In the case of airlines, consumers were the ultimate winners, as the so-called cream skimming brought prices more in line with costs. The threatened loss of local service to smaller cities (a parallel concern to giving up universal service) did not prove to be a problem, as regional and commuter carriers began filling gaps in the national network.

CAB Chairman Kahn offered his views of the situation. He stressed that flash deregulation for airlines, although it sounded harsh, was destined to yield better outcomes than slow, deliberate processes that

open up one market at a time. He argued that existing airline firms and potential entrants would have concentrated their energies on those individual markets. Under flash deregulation, firms were forced to identify their comperative advantages, and develop market stategies that best suited their capabilities.

The transition for telecommunications on the other hand, may be in fits and starts. Regulatory policies and interexchange arrangements will evolve, with decisions provoking business responses in the form of entry and exit. In a number of plausible scenarios, local customers will become highly vocal. Companies will have to go beyond defensive strategies if they are to weather the storms.

For example, we can expect to see joint ventures between local operating companies and other firms. The telcos have good reputations and fine service networks. Combined with the special advantages of other firms, there should be some significant product innovations in the next decade.

Another deregulation success story occurred in the securities industry. Brer Fox asks, "Who benefited from fixing brokerage fees in the securities industry?" The SEC had tried to keep prices of small volume transactions relatively low, while the regulated brokerage fees for large transactions (such as those for insurance companies or pension funds) were fixed at artifically high levels. Furthermore, nonprice competition raised costs without providing comparable benefits to customers. Economists questioned both the efficiency and fairness of such a price structure. In the end, the industry could not be insulated from market forces. The share of transactions on the New York Stock Exchange fell, as buyers and sellers found ways to get around the regulated fee structure. Finally , fees for very large transactions were deregulated in 1968, and deregulation of all fees occurred in 1975.

We see that market forces were tearing the cartel apart even prior to deregulation. Price decontrol just ratified what was already going on. Did the financial system collapse because of competition, as brokers had predicted? No, but some brokerage houses were subject to take-overs. Had consumers really benefitted from price regulation? Again, no. In fact fees fell with deregulation, and consumers faced a wider set of price/service options thanks to unbundling. On the whole, our experience with this industry further supports the view that consumer choice, managerial efficiency, and innovative activities are stimulated by competition.

Brer Fox might ask "Who benefitted from petroleum price controls?" We know that those regulations prolonged the energy crisis by attempting to insulate consumers (and some refiners) from higher oil prices. Thanks to multi-tiered pricing schemes and complicated allocation mechanisms, retail prices were held below world prices, encouraging high levels of consumption.

Or, think about price controls and allocations for natural gas. Some consumers gained by the FPC freezing prices--those with access to gas. Others were harmed as they were unable to obtain gas--they would have been willing to pay much more than the "low" regulated price.

In the case of natural gas, one concern with the current deregulation process is how the poor will be able to afford energy. Most economists would prefer to target special income programs to help those viewed as worthy of assistance, rather than freeze a particular price structure. In natural gas, regulation created distortions, discouraged production, delayed adaptation to changing economic conditions, and scattered windfall gains and losses across the populace.

Look at another industry--cable television. Brer Fox again asks, "Who benefited from regulation?" FCC regulation delayed market entry in major markets and protected local broadcasters from outside competition. The reasons given publically were to protect viewers from the risk of harm, if local stations folded. The irony is that the most extensive cable restrictions were not applied to small market VHF network affiliates, the stations with the most precarious financial positions. No, the most powerful and profitable large-city stations were the main beneficiaries of excluding cable. However, technological opportunities could not be denied forever. Deregulation came bit by bit, with a 1980 FCC order finally eliminating most of the remaining regulations in this area. Pay TV has not meant the end of free TV.

Surface transportaion is proving to be a more difficult industry to deregulate, despite the studies of economists showing the gains to the economy. In Florida, the legislature had the foresight to deregulate trucking, but at the national level, the ICC is dragging its feet. Two major groups, powerful unions and protected truck companies, stand to loose. Under competition, labor settlements will have to reflect productivity not raw barganing power, and inefficient companies will not be protected by entry restrictions.

There is an interesting parallel with transportation in the 1930's and telecommunications today. During the Great Depression, politicians could embrace protectionist economic regulation partly because of the loss of confidence in competitive markets. Trucks were making inroads on railroad service, so regulators faced a choice. The ICC brought trucks under the regulatory umbrella--fixing rates, entry, and exit. History shows that the attempt to manage surface transportation through centralized regulation led to tremendous inefficiencies. Modes and traffic were mismatched. In particular, fully distributed cost pricing for

railroads prevented them from effectively competing in markets where they were relatively efficient. Furthermore, innovation was discouraged by regulation. For example, the piggyback technology was delayed by the regulatory process. A strong case can be made that neither efficient producers nor consumers are well served by transporation regulation. The argument that routes will go unserved without regulation just does not stand up under analysis.

So what are the lessons to be learned by the telecommunications industry? First, that cross-subsidization will ultimately be undermined unless regulation is expanded to conver potential substitutes and self-production. Regulation at its worst is like a "tar-baby" which gets all stake-holders enmeshed in a mess of ad hoc decisions and lost opportunities.

Second, deregulation is likely to improve the efficiency of the industry. The surviving airlines and the remaining brokerage firms are lean and highly productive. Managers found that in a competitive environment, information about costs and alternative technologies has high value. With regulation there are few checks on managerial decisions. Under competition, managerial mistakes can (and must) be corrected upon seeing the success of rivals.

Third, customer choice expands under competition. A wider variety of price/cost combinations emerge when managers face the potential loss of customers. Special needs get met; appropriate price/quality options emerge.

Are there no negatives? Of course there are. Telcos are caught in the midst of trying to reconcile the many pressures introduced by the deregulation of equipment and attachments. They face new entrants in the toll service market. Most important, they will experience a reduction (and future elimination) of subsidies for the local loop.

In fact, most of the negatives hit established companies harder than they hit customers. Existing firms, with underdepreciated equipment and rivals on the horizon face tremendous problems. The risks telcos face have significantly increased, and ought to be reflected in higher allowed rates of return. Yet the local regulated monopolies are caught in a terrible squeeze. Their customers just do not believe that more efficient use of telecommunication resources will ultimately benefit them by lowering other prices.

Developing a marketing program which educates local customers is a task facing utilities. Economists would stress that the gains to the economy, and to consumers in general, are real. The technological convergence of the telecommunications and computer industries has begun, and will continue, to revolutionize the way we live. If automobiles and the paving of America changed the character of our nation, then surely the emerging telecommunications industry represents "the" major force of the last quarter of the twentieth century.

One cannot conclude from the experience of deregulation in other markets that all is well when telcos are pushed toward the briar patch. The view from the edge depends on the quality of regulations at the state level. After all, even Brer Rabbit would have had a tough time if he had been tossed into the patch while he was still completely stuck to the tar-baby. The lesson is that in the future, competition will constrain local telco policies as much as state regulation.

The deregulation process may be painful to telcos, but it is not a random development. The task facing regulators is to create an environment that will allow the local service companies to take advantage of the technological and commercial opportunities in this market. The task facing telco managers is to learn from the stories reviewed here, and to build upon corporate strengths in the new era of telecommunications.