Origins of the Airline Oversales Auction System

Julian L. Simon

Travelers being involuntarily bumped from flights for which they possessed a reservation and paid-for ticket was long a difficult problem in the airline industry. Until 1978, each airline had arbitrarily removed excess passengers with any selection policy it chose. For example, United Air Lines instructed its staff to bump old people and armed services personnel, on the assumption that they would be least likely to complain. But this policy produced trouble and outrage for many involuntarily bumped passengers.

The airlines publicly proclaimed that they never intentionally oversold a flight. But at the same time, they circulated among their employees elaborate instructions about how to handle oversales and bumping incidents. Here are some excerpts from the American Airlines Operations Manual (various 1974 and 1975 dates): "American Airlines never deliberately causes a passenger to be oversold. We tolerate a limited number of oversold and inconvenienced passengers only because we must allow some margin for error in our operation. . . . Reservations will select for removal the most recently sold locally boarding passenger, whenever good judgment

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dictates that this passenger will be less inconvenienced than some other passenger, except when undue hardship will be incurred. . . . If none of the alternatives provide a satisfactory solution and there are too many passengers on board, advise all passengers that their flight cannot be operated with more than the authorized number of passengers and request the proper number to deplane. . . . The passengers who voluntarily deplane should be given special treatment, appropriate interrupted trip expenses, and alternate transportation as soon as possible.

"In extreme cases it may be necessary to actually cancel the flight until all passengers have deplaned, after which, the flight can be reoriginated as an extra section and conformed to capacity. This action should be used as a last resort."

The manual included this precaution: "Never give an oversold passenger anything in writing which admits an error on the part of American Airlines." Marvin Rothstein, a member of American's operations research group later wrote about their overbooking system that "the scheme was never spoken of openly as overbooking; instead, we employed the euphemism 'revenue coordination."

The Eastern Airlines procedures included seeking a volunteer to deplane (though without recompense). If that ploy did not work, passengers who had not yet actually sat down were the first to be bumped. And the employees were instructed to "never use the words 'oversale' or 'overbooked' in conversation with those denied boarding or within hearing distance of anyone except company employees involved."

The oversales problem fed on itself. The larger the probability of being bumped, the greater the passenger's incentive to make multiple reservations on different flights under a variety of names to insure getting on at least one. And the greater the extent of this practice, the greater the need for the airlines to overbook to ensure a decent load factor. The vicious cycle got worse and worse.

The Volunteer Auction Scheme

In 1978, the Civil Aeronautics Board (CAB) mandated an auction plan to reduce the number of involuntary bumpings. Since then, whenever there is an oversale, airlines have been required to ask for volunteers to wait for a later flight, using whichever incentive system the airlines choose. This article is about the history of how that regulatory reform came about, and its results. I hope that the reader will pardon a bit of pride as I tell the story.

I learned in the late 1950s about the United Air Lines bumping policy from a friend who had been a stewardess, Betty Glad. The conversation lay dormant in my memory until sometime around 1965 or 1966 when I heard at a party a sad saga of how someone had been summarily kicked off a plane and forced to endure a costly and unpleasant delay. The next day when shaving it occurred to me that there must be a better way; indeed, a market could solve the problem by finding those people who least mind waiting for the next flight. The airline flight personnel would simply need to ask each ticket holder the lowest amount he or she would be willing to accept to wait for the next plane, and then select the necessary number of low bidders. The practical details fell into place before the shave was complete.

The scheme is simply a reverse auction, asking each ticket holder to write down the lowest amount she or he would be happy to accept in return for waiting for the next flight. In case of an oversale, the airline agent would simply proceed from lowest bidder upwards until the required number of bumpees is achieved. Low bidders would be given the amounts they bid (or the amount that the highest-bidding bumpee

bid, if that version is deemed more equitable and attractive) and they take the next flight, happy about it. All other passengers fly as scheduled, also happy. The airlines can overbook more, which aids them, too. Literally everyone is better off except the railroads and bus companies who compete in the transportation market. A cruder version is for the airline to cry a price and to ask for takers.

Attempts to Institute the Volunteer Auction Scheme

In 1966 and 1967 I wrote to all the airlines sug-

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gesting the scheme. The responses ranged from polite brushoffs, to denials that they overbooked, to assertions that the scheme could not work, to derision.

The letter from A.W. Leonard, Pan American's director of reservations, was more colorful than most, but otherwise not untypical: "Dear Mr. Simon: Mr. Shannon, our senior vice president-operations, asked me to thank you for your most practical solution to the reservations booking problem. Of course, we instituted the procedure immediately, after having the instructions for bidding translated into 18 languages. We are unable to tell you of the expected excellent results as yet because the first flight on which the system was tried was on St. Patrick's Day, the 17th. The plane hasn't left as of this writing [March 22, 1967], since the passengers keep changing their bids. We feel it's highly unfortunate also that the first occasion for using the procedure should happen on a flight destined for Ireland that day, and some of the passengers were in rather unusual condition!

"We will keep you advised.

"(Seriously, it was refreshing to have an objective view of airline reservations, and I

would like to discuss it further with you over lunch next time vou visit New York!)"

It seemed to me that the first airline to implement a volunteer scheme could reap an enormous marketing bonanza by advertising that on its flights a person would be safe from the hated bumping, unlike on other airlines. But suggesting this opportunity did not attract any airline, perhaps because such a marketing device was regarded as unsportsmanlike in the old clubby days of CAB regulation.

The airlines' responses made clear their belief that an outsider could not understand their industry well enough to develop a workable

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idea. Nor did the CAB show any interest.

I described the idea in a professional journal article just two pages long entitled "An Almost-Practical Scheme to Solve the Airline Overbooking Problem." The article noted that in extreme circumstances airlines had occasionally sought volunteers with satisfactory results.

The scheme was labeled "almost practical" partly as an (unsuccessful) eyecatcher, but more importantly because—as the article explained its chances of adoption were almost nil despite its practicality and ease of implementation and operation. I speculated that the lash of competition in the airline industry (as regulated by the CAB) simply was not severe enough to move anyone to bother with the scheme, even though it could be adopted unilaterally and with the possibility of a promotional coup.

Former airline executive Blaine Cooke later offered another explanation in a letter to me: the NIH factor ("not invented here"). "I greatly fear that your overbooking auction plan suffers from a flawed premise and a fatal defect. The flawed premise is that you assume that airline management and regulation is a rational exercise. It is not; it is more accurately described as an exercise in applied insanity. The defect is your plan offers a market-sensitive and sensible solution to a real problem but a solution not conceived by an airline. Accordingly, the idea must be disallowed since it is well established in airline marketing that only ideas which originate within the airlines are permissible.

"Somewhat more seriously, your plan can't possibly be tried since the CAB would have to provide an exception from its denied boarding policy—a process which theoretically could happen but practically would probably take five vears."

The scheme did not find publication easily in a professional journal. One never knows why an article does not catch referees' interest. Possible drawbacks in this case were brevity (only two pages), simplicity (equated with unimportance by many), absence of mathematics, and lack of connection to any ongoing work tradition among economists. The only apparent advantages were some novelty in the form of the auction, the scheme's rarity as a policy that constitutes a "Pareto improvement," (in economists' jargon, a situation in which everyone benefits) and brevity and simplicity (an advantage to my mind, at least). Eventually in 1968 it found its way into print in the Journal of Transport Economics and Policy.

The scheme was received mostly with derision, both by the academy and by industry. Even the table of contents in the Journal of Transport Economics and Policy referred to the scheme as "lighthearted." With engaging frankness, Rothstein of American Airlines later described his reactions at the time: "In 1970 . . . I discovered a short article in an obscure journal . . . that contained a remarkable proposal for solving the overbooking problem: if too many reserved passengers show up at flight time, the airline agents should conduct an auction among them. . . . Simon claimed that his solution would satisfy everybody: those left behind, those boarded, and the air carriers too. Nevertheless, he stated that 'of course this scheme will not be taken up by the airlines' because it will 'not seem decorous' or they will allege 'administrative difficulties.' . . . Amused, I imagined that the world would hear nothing more of the 'almost practical solution,' as he termed it."

Over the years, whenever there were CAB hearings on oversales and bumpings, I wrote to anyone who I thought might have some influence. Before the hearings scheduled in 1977 or 1978, I systematically wrote to a great many more persons—legislators, trade associations, financial analysts, Ralph Nader's Aviation Consumers Action Program, and so on. Still, no one else supported the idea.

In all my discussions on the idea, I insisted that one should not decide about it in the abstract, or even on the basis of hypothetical experimental data, but instead should conduct an actual experiment. But I was unable to persuade any airline (or the CAB) to conduct an experiment for even one day on a single airline at a single airport at a single boarding gate—an experiment that I believed would be sufficient, even with the inevitable breakdowns in any new activity. Rather, the industry and the bureaucrats preferred to insist on the basis of their "logic" alone that the scheme could not work.

I tried to convince eminent economists of the merits of the idea. I asked all the ex-presidents of the American Economic Association and the current members of the Council of Economic Advisers to write an endorsement to the CAB. Several did indeed write, including some very forceful statements.

But the reactions of the man I consider the greatest economist now alive (and the greatest spirit), and another of those economists whose work I honor most, were unusual and therefore particularly interesting. The latter, George Stigler, wrote that the scheme would not work because the passengers would form cartels and hold up the airlines for very high prices.

"Since your scheme strikes me as intellectually admirable and administratively impossible, I shall not write to the CAB. You should explore the possibilities of collusion by a group of 40 unemployed people," Stigler wrote.

Milton Friedman wrote as follows: "If the plan is as good as you and I think it is, I am utterly baffled by the unwillingness of one or more of the airlines to experiment with it. I conclude that we must be overlooking something. I realize that you have tested this quite exhaustively, and I have no reason to question your results; yet I find it even harder to believe that opportunities for large increments of profit are being rejected for wholly irrational reasons."

Surely nothing would have come of the scheme except for an extraordinary happening: For the first time in history, an economist, Alfred Kahn, was appointed to head the CAB.

Upon hearing that he was a candidate, I wrote to Kahn, and before his appointment he wrote me that the idea made obvious economic sense. Kahn announced something like the scheme in his first press conference. He also had the great persuasive skill to repackage it as a "voluntary" bumping plan, and at the same time to increase the penalties that airlines must pay to involuntary bumpees, a nice carrot-and-stick combination.

The Results of the Volunteer Auction System

The voluntary bumping plan has now been in operation for 14 years, with excellent results. Everyone is delighted with the various versions of the plan that the airlines use. The people who care least about waiting for the next plane select themselves to get a payoff that they prefer to flying as scheduled. Neither arbitrary airline agents nor bureaucratic policy decide who gets thrown off. And the airlines have increased their efficiency by being able to safely overbook to a

With the volunteer system the rate of *involuntary* bumpings per 100,000 passengers has fallen sharply—from 6.4 per 100,000 in 1978 to 1.1 per 100,000.

much greater extent than before, and therefore they now fly with fewer empty seats.

Half a year after inauguration of the scheme the senior vice president—marketing of American Airlines, who was in charge of passenger operations, wrote: "We've been very pleased with the results of our voluntary approach to denied boardings. . . . More than 85 percent of our denied boardings are now voluntary—a dramatic improvement which has yielded important dividends in the form of fewer dissatisfied customers."

Year by year since 1978, the airlines have been increasing the extent of overbooking, from 6.4 oversales per 100,000 passengers in 1978 to 15.1 in 1991. This practice—which the law and the Naderite reformers condemned—has enabled the airlines to raise the capacity level at which planes fly, hence increasing their efficien-

• A monopoly network will often have great economic power vis-a-vis those primary market participants which must depend on it.

This list suggests an antitrust policy which is generally hospitable to the network idea; anxious to encourage efficient risk sharing among potential network participants; and doubly anxious to achieve competition at the network level whenever possible.

Our failure to achieve such an antitrust policy flows from the courts' (and enforcement agencies') inability to focus on competition at the

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network level, and to see compulsory access as a structural issue with potentially adverse, long-run consequences in the network market. Instead we have allowed antitrust litigation and threats of it to create de facto mergers of network competitors—mergers that then compel us to look to public utility-type regulation as a way to protect primary market participants from often unnecessary network monopolies.

The Network Market

A network is the means by which primary market participants exchange transactions, impulses, molecules, or physical traffic with each other. It may be small, local, or specialized; or it may be large, geographically diverse, or ubiquitous. A network consists of *facilities* and *rules*.

The facilities side of networks is more visible. The Chicago Board of Trade, the New York Stock Exchange, and the Terminal Railroad of St. Louis are large and familiar edifices that have been used to interchange transactions and traffic throughout the twentieth century. By contrast, many modern network facilities (such as a big computer or telephone switching center) only become visible to the public when they "crash" at a critical moment.

The rules side of a network is more subtle. Network participants must usually agree to accept certain technical and operational standards. Those may deal with nondiscrimination, interface arrangement, or predetermined compensation for network transactions. Such rules are designed to avoid opportunism, incompatibility, or uncertainty, thus making the network more efficient. An electric power pool or a bank clearing house is a good example of a network that is mostly concerned with rules and only secondarily, if at all, with network-owned facilities.

The network market (for interchanging transactions, traffic, or information) must be juxtaposed to the primary market in which network participants serve their own customers. Thus, in its primary market, a utility sells electricity to retail customers; a bank offers checking accounts and credit cards to consumers; a railroad solicits traffic from shippers; and a retail broker solicits stock exchanges from potential buyers and sellers.

Competition in network markets generally produces the same economic benefits that we see from competition elsewhere: it drives prices down toward costs, encourages innovation, and rewards success in anticipating user demand. By the same token, network monopoly can have the familiar detriments that are associated with monopoly generally: poor service, discrimination, and high prices.

There are many ways network services can be provided:

- An independent third party which contracts with primary market participants (e.g., EDS);
- A joint venture of primary market participants (e.g., The New York Clearing House Association);
- A leading primary market participant that offers network service to other primary market participants (e.g., the AT&T Long Lines Division prior to 1983);
- An independent third party offering the network service direct to end users using links provided by the primary market participants (e.g., MCI Communications and other long-distance telephone networks).
- A government entity providing subsidized network service (e.g, the traditional Federal Reserve check clearing system).

Often the ultimate customer does not know or care what happens in the network market (e.g., for exchanging electric power or checks). But there is another kind of network: the modern consumer network, which has not only facilities and rules, but a trademark to tell the public where the network service is available. Visa and Teleflora are two familiar examples. The network trademark may have attained a real consumer franchise from a lot of advertising and promotion, either by the network or its participants, and it may become the network's most valuable asset.

Those product-creating networks are frequently joint ventures, and they are now most familiar in the financial services area. One primary market competitor may use the network to provide its customers with access to services of other primary market participants far away. The purpose of such a network is frequently to create a value-added service and thereby give the local member a competitive advantage over its local primary market competitors, or at least a chance to compete more efficiently with a large. more geographically dispersed enterprise. If such a network proves to be successful, it is likely to generate compulsory access claims from disadvantaged competitors, or "free riding" problem among members.

The Bias Against Joint Ventures

As already noted, a joint venture may sometimes have practical advantages for those trying to start a network. It provides a way of allocating initial costs and risks, while giving those with the potential network traffic a direct economic stake in the success of the network. A joint venture may also involve a significant psychological advantage: it offers members direct participation in ongoing governance of the organization in uncertain market circumstances. Thus, participation may seem a lot more attractive than having to rely on long-term vertical contracts which may require recurring, contentious renegotiation.

As we know, antitrust has been anything but neutral on the form of networks. It has reflected a strong bias against joint ventures by subjecting them to anticartel rules. That bias appears in the compulsory access rules that allow a primary market competitor to shoot its way into a successful network by alleging that the joint venture is essentially involved in a boycott of all competitiors outside the venture, which is not

permitted under current antitrust law—even if the joint venture is competing with other networks.

The idea of network market competition has been frequently ignored. A network has been assumed to be a utility rather than a competitor. Too often courts and enforcers have focused only on the primary market—and especially the perceived plight of any primary market competitor denied membership in what is alleged to be the biggest or best network. Short-run benefits of access have been emphasized, long-run network competition reduced, and novel regulatory solutions generated.

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This is wrong. Antitrust policy ought to be interested in competition and efficiency in the network function. It ought to be neutral to the exact form—full integration, partial integration, third party provider, or joint venture—chosen by the network creators.

The Hazards of Judicial History

The Supreme Court had at least three chances to deal with network joint ventures during the first half of the twentieth century: *United States v. Terminal Railroad Association of St. Louis*, (1912); *Board of Trade of the City of Chicago v. United States*, (1918); and *Associated Press v. United States*, (1945). The latter two are major sources of the legal confusion that has blighted the second half of the century.

In St. Louis Terminal, the Court confronted what it regarded as a network monopoly, based on a joint venture railroad terminal controlling physical facilities that apparently could not be efficiently bypassed or duplicated. The Court ordered that equal ownership or access be

granted to all 15 railroads terminating in St. Louis and East St. Louis. The Court apparently created the compulsory access remedy on its own motion, rather than break up the joint venture as the Justice Department had proposed.

In Chicago Board of Trade, the Court confronted a powerful joint venture commodities exchange which was trying to prevent a form of bypass competition to the exchange floor from night-trading members. Ignoring the issue of market power at the network level, the Court upheld the Board of Trade's night-trading ban largely because such trading disadvantaged

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smaller traders. Justice Brandeis wrote a classic, much-cited opinion, saying that all factors relating to motive and effect can be considered in a "rule of reason" case under Sherman Act § 1. At the very least, Justice Brandeis' opinion broadly invites subjective decisionmaking by trial judges and juries, with too little regard for either network market power or legal predictability. (Interestingly, the defendant's night-trading rule has ultimately been overruled 70 years later by network competition made possible by dramatic technical change: the Chicago Board of Trade has recently—and, it appears, reluctantly—gone to round-the-clock electronic trading to keep up with its global competitors in the futures markets.)

The third case in the trilogy, Associated Press, is the worst. It made the Supreme Court confront a pure information network joint venture for the first time. Justice Black's plurality opinion also ignored competition at the network level (from United Press and International News Services) and the history of local exclusivity in the newspaper business. Based on a boycott theory, the Supreme Court imposed a compulsory

access order requiring that Associated Press (AP) not discriminate against membership applications from local competitors of AP members.

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Yet the story need not have been viewed that way. AP was a nonprofit joint venture which had been blessed by the U.S. attorney general back in 1916. Its bylaws had always offered members some exclusivity vis-a-vis their local competitors, both on membership and news distribution. AP had traditionally always seen itself as an entity enabling members to gather news for each other and exchange it on an exclusive basis; and, in addition, the joint venture would employ reporters and editors in order to seek out, write, and distribute news for AP members on an exclusive basis. It was thus characterized by economies of scope, specialization, and scale. Thus, AP created something new beyond the power of its individual members, namely, "wire service news." It had begun as a small organization, but by the time of the case, it was (according to Judge Learned Hand) the biggest and best wire service in the country.

However, the Associated Press joint venture was not a monopoly by any stretch of the imagination. When the case was tried in 1943, it actively competed with both United Press and International News Service—both of which were proprietary corporations rather than joint ventures. For example, in 1942, AP had 1,247 domestic newspaper subscribers, United Press had 981, and International News Service had 338. Those competing services also had local exclusivity arrangements, so that (as the District Court found) "no [new] newspaper can obtain any of the three services without a substantial payment to the papers already in possession" of news service rights in the particular field and territory.

Despite all that competition, a distinguished three-judge District Court and five Supreme Court Justices ordered compulsory access. There was, however, no consensus among those judicial luminaries on why access should be compelled. No majority decision could be written in the Supreme Court (what lawyers treat as

the "Court's decision" was Justice Black writing for himself and only two others). Justice Black's opinion was a "horizontal restraints of trade are bad" theory written broadly and heavily loaded with pejorative and confusing references to naked cartel and boycott cases in which there was no pretense of integration or efficiency. Justice Black's ultimate rationale seemed to be that "it is apparent that the exclusive right to publish news in a given field, furnished by AP and all its members, gives many newspapers a competitive advantage over their competitors. Generally, a newspaper without AP service is more than likely to be at a disadvantage."

Justice Douglas concurred separately to provide a fourth vote—while recognizing that the government's reliance on *St. Louis Terminal* missed the mark on the facts of this industry.

The crucial fifth vote was Justice Felix Frankfurter's. He adopted the theory on which Judge Hand had sustained the government's complaint in the District Court—a theory that had nothing much to do with economic markets. His opinion was all about John Milton rather than John Sherman; it was about the First Amendment—and the reader's right to obtain whatever news she wanted from whatever newspaper she wanted to buy. As Justice Frankfurter explained, the press is unique because "truth and understanding are not wares like peanuts and potatoes."

Justices Roberts and Murphy wrote long dissents and were joined by Chief Justice Stone. Justice Roberts saw the network competition issue and warned that "the decree may well result not in freer competition [in newsgathering services] but in a monopoly in AP or United Press, or some resulting agency." His assumption seemed to be that all newspapers might join AP because it was the best or abandon it because it no longer offered the advantage of any local exclusivity.

How prophetic the dissenters proved to be! International News Service is gone, and United Press (now United Press International) is on the ropes. Meanwhile, some of AP's leading members (such as *The New York Times, The Chicago Tribune*, and *The Los Angeles Times*) have formed their own syndicated services that can be offered to local papers on an exclusive basis.

The Practical Legacy

The trilogy of early network joint venture cases

reflects an uncomfortable mix of three classic themes. They might be called:

- The Thomas Jefferson Theme: a concern that some worthy competitor will be left out or disadvantaged by the joint effort.
- *The Adam Smith Theme*: a corrosive suspicion that competitors cannot be trusted even when they get together for benign or productive purposes.
- The Louis Brandeis Theme: a preference for big, unstructured factual inquiries that leave lots of room for subjective judgments in which evidence about motives can override network competition as a determinant factor.

Each of those themes can be (and has been) used to attack joint venture admission standards, with generally no regard for network

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market effect. Justice Black's Associated Press opinion (which reflects the first two) has provided a shiny boycott tool for restructuring successful joint ventures on a largely mindless basis.

Most of the post-Associated Press activity has been based on private antitrust suits by excluded competitors. In such a case, the incentives are hopelessly skewed. The plaintiff comes in as a private attorney general armed with all the Clayton Act bounties, can ignore the critical issue of competition at the network level, and can get a jury verdict based on a boycott claim about preserving competitive equality for itself and other primary market participants.

Moreover, the joint venture partners face a very uneven risk/reward equation when a major network competitor (or potential competitor) pounds on their door and demands admission. They have two alternative risks. First, if they admit the applicant, they face a possible government injunction for letting the joint venture get too big and eliminating network competition.

Second, if they refuse the applicant, they face a treble damage case by the excluded competitor (who also gets an award of attorneys' fees and costs, if successful).

Actually, the situation is even worse than it sounds at first blush. The risk of government action is almost entirely theoretical: the federal antitrust agencies have seldom even threatened to bring a case of that type in the last quarter century. Moreover, the joint venture's treble damage exposure in a private case is the converse of its success in the network market: the more successful the joint venture, the larger the plaintiff's likely jury showing of economic loss from exclusion.

Compelled association is a conceptually bad way to run a business. An involuntary partner is very different from a voluntary one, and no court order can change that.

Not surprisingly, a joint venture usually chooses to take the less risky course of surrender (and de facto merger), rather than stand up to the door-pounding plaintiff in a federal courthouse. Nowhere is this better illustrated than in the bank credit card industry, where private U.S. antitrust litigation and threats have produced fundamentally different competitive results in the United States than in Canada.

In both countries, the original Visa and MasterCard joint ventures were commenced (under different names) in the late 1960s as entirely separate competitive organizations. A card-issuing bank could belong to only one network and it pushed its network offering in competition with other local banks promoting the other network card. The same thing occurred on the merchant side, with a major bank acting as acquirer of only Visa or MasterCard paper. This situation ended in the United States in the mid-1970s, as a result of a major private boycott case from a bank desiring to belong to both systems, followed by the Justice Department's unwillingness to bless Visa's proposed system exclusivity rule. The net result was that virtually every American bank now belongs to both the Visa and MasterCard systems and each bank tends to charge consumers and merchants the same price for Visa and MasterCard services.

Meanwhile, in Canada, where they have neither an Associated Press rule nor many private antitrust cases, the two systems have remained entirely separate; and the pricing of MasterCard and Visa services to both cardholders and merchants tends to differ, as each bank is trying to use the superiority of its network offering as a device for taking primary market business from its rivals. In sum, the Canadians seem to have less antitrust history and more network competition than we do in the United States.

The Road to Reform

Congress or the Supreme Court need to understand the essential nature of the problem. Compulsory access orders will tend to level competition in the network market and threats of antitrust litigation backed by treble damage remedies will tend to bring about de facto mergers of the competitive alternatives in the network market (as we have seen with Visa and MasterCard).

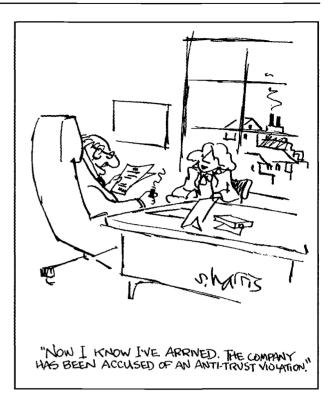
No law or public policy dictates that a joint venture network must be subjected to more stringent access rules than a proprietary network. Section 1 of the Sherman Act allows antitrust courts to impose more stringent rules on collective activity, but it does not compel them to do so. Antitrust rules ought to be the same regardless of whether the network is a joint venture or not. An enterprise ought to be free to select its customers—subject to a caveat that the vertically integrated monopolist must deal with its upstream or downstream competitors on reasonable and nondiscriminatory terms with respect to any essential facility. The same ought to be true of a joint venture network: unless it is a network monopolist, it ought to be free to pick its customers and members, with an eye to offering members (and potential members) a competitive advantage in their primary markets.

Compulsory access to a network ought to be invoked only as a last resort, only when no competitive alternative is available at the network level. The reasons for restraint in compelling access are clear and strong:

• Compulsory access is highly regulatory. The antitrust court is required to act as if it were a public utility commission in setting the precise

terms for membership or access charges, and yet it lacks any special expertise or specialized agency staff to do the job. (Disputes over the exact terms of access in the *St. Louis Terminal* case went on for almost 15 years after the Supreme Court's initial decision in 1913.)

- Free riding is a real problem. Unless the beneficiary of the compulsory access order is charged not only for its share of the embedded network cost, but an appropriate risk premium payment, the compulsory access doctrine will encourage laggards to hang back and let others bear the risk of establishing a new network. The free riding problem is particularly acute where the network owns what turns out to be a valuable trademark.
- Compelled association is a conceptually bad way to run a business. An involuntary partner is very different from a voluntary one, and no court order can change that. A network business requires skill, judgment, and sometimes hard choices; it involves different perceptions of risks and benefits. The compulsory access order simply moves the business conflicts between the joint venture partners and the outsider to the joint venture's governance institutions (the Board of Directors, members' meetings, and so forth). Where the outsider competes with the joint venture in the network function, it may have a special incentive to use its voice and vote to retard the joint venture's efforts and innovations in the network market.
- Compulsory access is an invitation to future antitrust litigation. Forced association sets up the circumstances for a series of further Sherman Act § 1 disputes in which the original partners are accused of conspiring to operate the joint venture in some way that the outsider regards—perhaps properly—as unreasonable and anticompetitive. A dispute over pricing or technical standards may easily be categorized as a classic "price-fixing" or "boycott" claim; and this has in fact happened in several instances.
- Repeated use of compulsory access orders may deter long-run investment, innovation, and expansion in new network markets. To the extent that network founders realize that the fruits of any competitive success may be "taxed" in an antitrust court's compulsory access order, they will have to reevaluate their risk-benefit analysis and may decide to trim their efforts. In other words, compulsory access orders tend to deal with short-run competitive problems by



stunting long-run incentives to compete in the network market.

Either Congress or the Supreme Court could accept this practical message and effectively deal with the problem. The Supreme Court has enormous flexibility in framing specific rules to

The plaintiff that fails to make a threshold showing of network monopoly should have its case dismissed as a matter of law on summary judgment.

apply the open-ended statutory language embodied in Sections 1 and 2 of the Sherman Act. Congress has at least three times since 1980 explicitly recognized that potentially efficient joint venture activities may be deterred by uncertain antitrust rules and the high costs of treble damage litigation brought by disgruntled private plaintiffs, and passed clarifying amendments.

Whether embodied in a statute or a Supreme Court decision, the required rule would be quite simple: in order to compel access to a network joint venture, the plaintiff must show that the joint venture possesses monopoly power in the network market and that denial of access would prevent the plaintiff from being an effective competitor in its primary market. Even where the defendant is the only present participant in the network market, it should be permitted to maintain its exclusion if it can show that the plaintiff was offered a nondiscriminatory opportunity to participate at the outset of the venture. or if it can show sufficient potential traffic is available from other primary market competitors to support a second efficient network facility. (In the unusual case where the market could support a second network facility, but monopoly is maintained by heavy government subsidy, as the Federal Reserve System used to do, then compulsory access can and should be ordered for outsiders-in part to deter such government subsidies.)

The Supreme Court could clarify matters by making clear that the plaintiff that fails to make a threshold showing of network monopoly should have its case dismissed as a matter of law on summary judgment. If the network monopoly issue is contestable, it must be submitted to the jury; but a jury finding, after trial, that the joint venture lacks monopoly power in the network market should end the case—without regard to any evidence concerning the defendants' motives for excluding the plaintiff. Such a rule would provide a lot more certainty than today's Brandeisian swamp.

The same substantive standards could be written into legislation. Moreover Congress could go a step further and rewrite the procedural rules for private antitrust litigation, as it has most recently in the Joint Production Amendments of 1993, and before that in the Trading Company Act of 1982 and the National Cooperative Research Act of 1984. Congress could (and should) provide that only single damages (rather than treble damages) could be obtained against a network for denial of access; and Congress could go further by allowing the successful joint venture defendant to recover its own court and legal defense costs from the access-seeking plaintiff. This so-called "English

rule" on costs has been embodied in certain statutory rules for export joint ventures, research joint ventures, and now production joint ventures that Congress wished to encourage. Why should it not be extended to network joint ventures (or all networks)?

Conclusion

Antitrust policy always should favor "competition based on efficiency" (as the Supreme Court explained in 1975); and, where efficient network alternatives are possible, it should favor competing networks. Therefore, antitrust law should require a rigorous initial analysis of the uniqueness or monopoly power of the network facility, based on its cost characteristics and the lack of competitive alternatives to it, before invocation of any compulsory access rule. No time is perfect to rethink awkward legal legacies from the distant past—but this is a good time to try, because network competition can be a vital part of our post-industrial future.

Selected Readings

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