DEPARTMENT OF JUSTICE

Predation In the Airline Industry

Remarks by

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There has been in recent years a noticeable growth in the number and size of "upstart" (low cost) airlines. Southwest is the classic example, but more recent entrants such as Kiwi, Reno, Valujet and others also come readily to mind. Most upstarts have average seat mile costs in the 7 cent range, compared to the 10 cent range of traditional carriers. Upstarts maintain their low costs by a number of strategies, including lower labor costs, direct marketing and "no frills" service.

Even casual observers of the airline industry are familiar with the significant consumer benefits that can result when an upstart airline enters a market -- fares drop and capacity and frequencies increase, sometimes dramatically. It is not unusual for a deep fare cut to double the demand for airline service on a city pair. This not only confirms that competition is good for consumers, but also demonstrates that actual competition enhances consumer welfare far more than the threat of potential entry. Because of its beneficial effect on competition and consumer welfare, the Antitrust Division has a strong interest in assuring that new entry is not thwarted by anticompetitive behavior by incumbent airlines.

It is not surprising that incumbent carriers respond to new entry. The combination of low fares and increased demand may prompt an Incumbent to

increase its own service. If it matches the entrant's fares across the board, Incumbent may increase its capacity to handle profitable new traffic generated by the lower fares; and if Incumbent only lowers fares selectively, Upstart may grow, perhaps eventually building a competing hub and spoke network of its own. Either way, the consumer is better off. This is the essence of the competitive process.

In some cases, Upstart's lower operating costs and high load factors allow it to survive and even prosper; in other cases, too many passengers decide that the new lower fares offered by Incumbent, combined with other amenities such as better schedules, frequent flier programs, passenger lounges and in-flight service, are a better value than Upstart offers. The higher frequencies and network efficiencies of Incumbent sometimes more than counterbalance the lower operating costs of Upstart; Upstart fails to maintain profitability and must exit. After Upstart's exit, Incumbent's fares and service offerings quickly move back toward pre-entry levels, much to the chagrin of passengers.

If Upstart is forced to exit a route, it often believes that it has been the victim of "predation" -- that is, Upstart suspects Incumbent lowered its fares in order to drive Upstart from the route, and then raise fares back to the previous, highly profitable level. Although an encouraging number of new low cost airlines have begun service, some have foundered or failed in the face of intense competition. It is important that the antitrust enforcement agencies and the courts correctly identify and prevent any instances where Upstart's exit or failure is the result of illegal predation.

Accordingly, the Division has over the years investigated a number of what we considered meritorious claims of possible predation. The claims of predation that we find most credible involve not only price cuts, but also significant capacity expansion by incumbents. Our starting presumption is that Incumbent's pre-entry schedules are optimal for efficiently operating its network. And if the existing network is optimal, the added cost of carrying an additional passenger on the existing network can be quite small. Thus, in the absence of additional reasons to be suspicious, we are unlikely to pursue a predation complaint where Incumbent made few or no changes to its network operations post-entry, even if it cut fares significantly.

Claims of predation are more credible when they involve not only price cuts, but also significant capacity increases or other changes in network operations by Incumbent. Entry by Incumbent into a route it was not currently serving would seldom be a normal competitive response to a rival. If the route were not profitable for Incumbent before Upstart entered, why would it be profitable afterwards? On the other hand, expansion of capacity by Incumbent on a route it already serves might be a normal response if the new entrant forced prices down enough to greatly increase demand.

Probably our best known airline predation investigation involved Northwest's response to Reno Air's entry into the Reno-Minneapolis city-pair in 1993. Not only did Northwest institute service of its own on this route that it had previously abandoned, it also opened a new mini-hub in Reno that overlaid much of Reno Air's own operation. Our investigation was well under way when the matter was resolved because, with the intervention of the Department of Transportation, Northwest decided to abandon its overlay of Reno Air's hub operation.

The Reno Air case is perhaps an extreme example of increased capacity by an incumbent, but we have investigated a number of other possible

predation situations. Let me emphasize that there is nothing inherently wrong with Incumbent responding to new entry by cutting fares or increasing service. To the contrary, lowering fares in the face of new competition is desirable, and increasing service may be an appropriate adjustment by Incumbent to the higher level of demand stimulated by the new low fares in the market. Although in such situations the route will not be as profitable as it was before there was competition, Incumbent may be able to maximize its post-entry profits by increasing service. But a capacity response to Upstart can under some circumstances cross the line between legitimate competition and unlawful predation.

Because we are committed to examine claims of predation where they appear to have potential merit, it is useful for the industry to understand how we approach the issue. In order to distinguish illegal predation from legitimate price and service competition, we focus on a handful of fundamental principles. This isn't to say that the nuts and bolts details of a predation analysis are not crucial -- they are. But the first step is always to have a clear understanding of the basic principles.

Principle No. 1: It's not illegal predation unless consumers are worse off in the long run as a result.

What consumer doesn't enjoy, even relish, a good price war? Everyone agrees that consumers benefit in the short run from predation in exactly the same way they benefit from vigorous competition. Prices are lower, service and quality are better. In the airline industry, steep fare discounts inevitably result in a traffic surge -- consumers, both business and leisure passengers, take trips they otherwise would not, resulting in tangible benefits to the traveling public.

It is important to keep in mind that our concern is not with the financial health of Upstart as such, but rather with whether Upstart's survival benefits the consumer. As is often said, the antitrust laws protect competition, not competitors. So it is not without considerable care and trepidation that an antitrust enforcer contemplates a lawsuit, or even an investigation, that sends the message that prices might be too low, and service too good or plentiful. We want to be certain that consumers really would be, on balance, better off in the long run if short run prices were higher. How do we go about determining where the overall consumer welfare lies?

Principle No. 2: A pricing strategy by a suspected predator harms consumers when the strategy is rational only if the victim exits the market.

I used the word "rational" instead of "profitable" because I want to sidestep for a moment the issue of whether Incumbent's short-term pricing strategy is "below cost," and instead focus entirely on the long term effect of the strategy on passengers. A strategy could be profitable, but still harm consumers. But to be "rational," a strategy must be more profitable than alternate strategies. If a particular strategy is more profitable than alternate (less aggressive) strategies only because it causes Upstart to exit, then the strategy harms consumers. Restated, the strategy satisfies Principle No. 2 if the predator's conduct involves a short term sacrifice that it more than recovers (or anticipates recovering) once Upstart has exited.

This is starting to sound like the "recoupment" element that a plaintiff must prove under the Supreme Court's two-part legal test for predatory pricing.[1] If there is no prospect of recoupment, then we can be confident that Incumbent's pricing strategy benefits consumers, not only in the short run, but

[1] Brooke Group v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222 (1993).

in the long run as well. If, on the other hand, Incumbent charges consumers "irrationally" low prices in the short run, but can more than make up for it with higher prices in the long run, illegal predation may be occurring.

Many if not most predatory pricing cases fail on the recoupment element. Indeed, the Brooke Group case resulted in summary judgment for the defendants on this element. A number of commentators have suggested always looking at the recoupment issue first, and proceeding to a cost analysis only if the conduct in question satisfies the recoupment requirement. This is a sensible approach and it is the one we use.

Recoupment can come to Incumbent in different forms. The most direct recoupment comes when Incumbent raises fares and reduces capacity on a specific city-pair after Upstart has exited that city-pair. We are also mindful, however, that the "demonstration effect" of predation on one city-pair can protect or enhance Incumbent's profits on other city-pairs it serves. Thus, it is not necessary that all recoupment occur in the market where the predation occurs.

Our experience in the airline industry, however, suggests that recoupment on a city-pair by Incumbent after Upstart's exit is not only possible, but in

many cases quite likely. Indeed, we have seen examples where short term drops in profitability during a post-entry fare war are more than recovered within a few weeks or months following exit. But it is not enough to prove that recoupment is likely.

Principle No. 3: The incumbent's prices must be "below an appropriate measure" of its own costs.

Corollary A: An appropriate measure of costs should not establish a price umbrella for inefficient firms.

Corollary B: An appropriate measure of costs should minimize the risks of condemning legitimate competitive behavior.

Corollary C: An appropriate measure of cost should be reasonably measurable with a high degree of confidence and predictability.

One might reasonably ask, "Why does the law insist that the prices in question be below cost?" After all, the fundamental purpose of the antitrust laws is to protect consumers from the creation and exercise of market power. If we could be certain that a pricing strategy has the purpose and effect of enhancing or sustaining market power and consumers are harmed, why worry about Incumbent's costs?

There are two reasons identified by the Supreme Court: First, the "below cost" element helps assure that the law protects Upstart if it is at least as efficient as Incumbent. Although a number of commentators have correctly pointed out that even competition from inefficient firms can benefit consumers and improve overall efficiency, particularly where Incumbent is exercising considerable market power, the loss to society is greatest when firms that are more efficient than Incumbent are artificially excluded from the market.[2] Second, the "below cost" element reduces the risk of chilling legitimate, hard-nosed competition, which often involves aggressive price cutting. The "below cost" element acknowledges that it is difficult for courts to distinguish competition from predation, especially where the prices charged by the alleged predator are profitable, even in the short run.

While the Supreme Court has made it clear that prices are illegal only when below cost, the Court has not yet spoken on exactly what "an appropriate measure of costs" is. There are a number of alternatives that have garnered

[2]Another concern raised by some commentators is that the "below cost" requirement would permit a new entrant to be driven from the market while it is still in the process of becoming efficient. Because of the network efficiencies that can be achieved through hubbing, this timing issue could be of particular relevance in the airline industry.

support from the lower courts and in the academic literature. Most of the alternatives exhibit some common themes, but with different advantages and disadvantages. The cost structure of the airline industry make it one of the most interesting industries in which to address the issue.

The cost tests most widely accepted by the courts, if not by economic theoreticians, are based on price-cost calculations that can be derived from a firm's accounting records. Price-cost tests are based on the notion that firms normally do not price below their short run marginal cost because they could reduce their losses by cutting output. The most frequently-cited price-cost measure is the Areeda-Turner Average Variable Cost (AVC) test, which was first proposed in 1975 and used AVC as a more measurable surrogate for marginal cost.[3] The major criticism of price-cost tests is that they are theoretically flawed -- they do not necessarily test for long run consumer welfare (Principle 2), and thus produce both "false positives" and "false negatives."[4] (Principle 3B) More theoretically-based approaches test better for

[3]Phillip Areeda & Donald F. Turner, Predatory Pricing and Related Practices Under Section 2 of the Sherman Act, 88 Harv. L. Rev. 697 (1975).

[4]A price-cost test produces "false negatives" when it fails to detect a pricing strategy that harms consumers in the long run; it produces "false positives" when

consumer welfare by focusing on economic or opportunity costs rather than accounting data.[5] A major criticism of economic or opportunity cost tests is practical: they are difficult to apply because they often require speculative calculations about the profitability of hypothetical alternative business strategies. (Principle 3C).

While I cannot tell you the "right" answer or predict what the Supreme Court ultimately will say, I can describe how the Antitrust Division analyzes the "below cost" issue in the airline industry. Our general approach is to identify and measure only those costs that Incumbent could have avoided had it not embarked on the pricing/capacity strategy under scrutiny. We then compare those costs to the revenue attributable to the strategy. Not surprisingly, this approach is easier to describe in general than to apply in specific situations. A number of questions have to be answered before we can proceed to the difficult process of measuring the relevant costs (and their

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it condemns legitimate price competition as predatory.

[5]See, e.g., Janusz Ordover and Robert Willig, An Economic Definition of Predation: Pricing and Product Innovation, 91 Yale L. J. 8 (1981); William Baumol, Quasi-permanence of Price Reductions: A policy for Prevention of Predatory Pricing, Yale L. J. 1 (1979).

associated revenues). For example, should costs be measured seat-by-seat, flight-by-flight, route-by-route, or with some broader grouping? What is the appropriate time period over which to measure costs and revenues? How should the costs and revenues attributable to connecting passengers be allocated to the flight segments involved?

We seldom if ever limit our analysis to the "marginal seats." There is a popular misconception that predation cannot occur in the airline industry because the avoidable cost of filling an empty seat is so low -- as little as the cost of issuing the ticket and providing a bag of peanuts. If this were true, there would be little reason for us to open predation investigations. We would of course be concerned in the unlikely event that fares were below even avoidable seat costs. But we would also be concerned if the avoidable costs of <u>any</u> unit of output exceeded the revenues it generates. In the airline industry, capacity is readily increased and decreased by adding and subtracting flights. Therefore, we normally examine the revenue and avoidable costs of individual flights and groupings of flights on a city-pair. And as I suggested earlier, we consider responses by Incumbents that involve significant increases in capacity

or changes in operations to be more suspicious, and we look first at the profitability of any flights added on a city pair in response to new entry.

We also must determine the relevant time period(s) over which to measure costs and revenues. The shorter the time period, the fewer the avoidable costs. But given enough time, most if not all costs of a flight are avoidable. For a scheduled flight leaving this afternoon, avoidable costs are very low. But given six months or a year, an entire hub could be pulled down or even closed -- gates and ticket counters could be returned to airport authorities or sublet, aircraft could be redeployed or sold, and employees could be transferred or let go. The longer Incumbent anticipated its low-pricing strategy would be necessary, the more the costs of maintaining that strategy become avoidable, and the less likely it is that a consistent level of passenger revenues from that time period will cover the "appropriate measure of costs."

A key issue in any airline predation analysis is the correct treatment of aircraft costs. In the very short run, a carrier's fleet is fixed, and its costs of leasing or owning its aircraft are fixed and unavoidable. On the other hand, aircraft are not like rail lines or electric power lines -- they are mobile assets that are reasonably marketable, at least up to a point. Therefore, we treat

aircraft costs as avoidable within a relatively short to medium time frame. The time period can be even shorter if a carrier can profitably redeploy an aircraft from the route in question to another route. On the other hand, we do not automatically assume that Incumbent can easily abandon any city pair it served pre-entry without harming its network operations to some extent.

The reasons for including aircraft costs are easiest to demonstrate by example. Incumbent airline provides a morning and evening flight on city-pair AB, when Upstart enters with one midday flight, charging half of Incumbent's fares. Incumbent quickly matches Upstart's fares, at least for some seats, but also adds two flights that bracket Upstart's midday flight. Unlike a manufacturer operating at half capacity who can double its output without building a new plant, aircraft for Incumbent's midday flights must come from somewhere. If Incumbent had quickly arranged a short term lease from another carrier to initiate the mid-day flights, it would be easy to see why the lease costs are avoidable costs of the strategy Incumbent is pursuing. It is less obvious, but no less valid, when Incumbent simply redeploys two of its own airplanes from other routes it serves -- in essence leasing the aircraft from

itself. In either case, Incumbent is incurring avoidable aircraft costs to pursue its responsive strategy to Upstart.

When measuring aircraft costs, we must decide whether to use actual historical costs or some other measure. The answer is again dictated by examining what aircraft costs are avoidable, and over what time period. At a minimum, Incumbent has avoidable aircraft costs to the extent it could sublease the planes to others. Thus, as a first approximation, we include the fair market lease value as an avoidable cost.

We might also adjust avoidable costs upward if there is a clear basis for doing so. One reason we might do this is because the asset has a specific opportunity cost to Incumbent in excess of the market value of the asset itself. For example, assume Incumbent leases an aircraft for $200,000 per month, and is flying it on city pair XY where its profits are $20,000 per month. After Upstart enters city-pair AB, Incumbent shifts the plane to city pair AB in competition with Upstart, where the plane incurs losses of $5,000 per month (with lease costs taken into account). Should the $20,000 in foregone monthly profits of operating the aircraft on city pair XY be included in the costs of operating on city pair AB? Professors Areeda and Hovenkamp have argued

that the answer is "yes,"[6] although some court decisions can be read to suggest the answer is "no."[7]

Another issue we face is whether to look at the costs of Incumbent's two midday flights separately, or together with the morning and evening flights. What if the four flights taken together are covering costs, but one or both midday flights are not? While we are very cautious in drawing legal inferences from individual flights, it is also relevant that the money-losing flight(s) were not operating in the market until after Upstart had entered. That the flights were added suggests both that many of the costs of adding them were avoidable, and that there was no pre-existing business justification to operate below cost flights, such as repositioning or promotional purposes.

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[6]Phillip E. Areeda and Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application ¶714.6d, 520 n. 51 (Supp. 1996).

[7]See Rebel Oil Co., Inc. v. Atlantic Richfield Co., 957 F. Supp. 1184, 1200-02 (D. Nev. 1997); AD/SAT v. Associated Press, 920 F. Supp. 1287, 1301-02 (S.D.N.Y 1996); Continental Airlines, Inc. v. American Airlines, Inc., 824 F. Supp. 689, 701-02 (S.D. Tex. 1993); In re IBM Peripheral EDP Devices Antitrust Litigation, 459 F. Supp. 626, 630-32 (N.D. Cal. 1978). But see McGahee v. Northern Propane Gas Co., 858 F.2d 1487, 1503 (11th Cir. 1988), cert. denied, 490 U.S. 1084 (1989).

Finally, we must decide how to account for the costs and revenues attributable to connecting passengers on a flight. Like many multi-product firms, airlines incur a significant number of joint costs that must be properly allocated. Returning to our example, if Incumbent has a hub at City B, its flights between A and B carry not only local passengers in competition with Upstart, but also carry connecting passengers in city pairs AC, AD and AE where Upstart has no service. Suppose on average, half of the passengers on Incumbent's AB flights are local, and half are connecting to other flights. Incumbent cannot cancel all of its flights on city-pair AB without also exiting from city-pairs AC, AD and AE. Any allocation of joint costs, such as aircraft operating costs or overhead, to local AB traffic rather than AC, AD and AE traffic will be arbitrary. Consequently, we compare <u>all</u> revenue (local and attributable connecting) with <u>all</u> avoidable costs of the flight. Because there is a mix of local and connecting revenue on most flights, a strategy that harms consumers in the local market may not require pricing below cost for the flight as a whole.

Pricing below cost for the flight as a whole is more likely where Incumbent increases its capacity in response to Upstart's entry on AB. The

new flights may not conveniently meet Incumbent's connecting banks at B, causing a large proportion of the passengers on the new flights to be local. Moreover, the low fares stimulate traffic on city pair AB, but not on other city pairs where Upstart does not serve. So there may be relatively fewer connecting passengers on the incremental flights. If so, there is an increased likelihood that Incumbent is failing to cover "an appropriate measure of costs" for the added flights, even where connecting passenger revenues are added in.

In closing, I want to emphasize two thoughts. First, our experience has led us to conclude that the structure of the airline industry is conducive to successful predation strategies, so we will remain alert to the possibility and investigate suspicious conduct. Second, we are most likely to investigate conduct that includes significant capacity increases by an incumbent. If Upstart complains only that Incumbent has cut its fares so much that they must be below cost, we will be skeptical that predation is occurring. On the other hand, if Incumbent is contemplating a competitive response that includes shifting significant capacity to a route Upstart entered, Incumbent should review its strategy carefully to be certain it is within legal bounds.