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WHITHER PREDATORY PRICING? THE DIVERGENCE BETWEEN JUDICIAL DECISIONS AND ECONOMIC THEORY: THE *AMERICAN AIRLINES* AND *VIRGIN ATLANTIC AIRWAYS* CASES

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INTRODUCTION

Is predatory pricing actually as rare as a white tiger or as fanciful as a unicorn?[1] While modern economists would answer the question in the negative; that is, price predation can be a successful and rational strategy, federal courts continue to exhibit extreme skepticism, born out of Chicago School theory, against predatory pricing cases. Indeed, there is a general consensus among modern economists that, under certain market conditions, price predation – even price predation that does not meet the exacting technical requirements set up by the Supreme Court's predatory pricing standard[2] – can be used as a weapon to cause anticompetitive harm. Yet, courts have failed to recognize this consensus and have also failed to analyze the factual cases presented to them in light of this modern economic thinking. Rather, courts continue to adhere a narrow, non-strategic view of predatory pricing, which assumes that it is implausible and irrational economic behavior.

This divergence between modern economic theory and judicial policy can be seen at its most stark when examining the airline industry. There, enforcement authorities, including the Department of Justice ("DOJ"), the Department of Transportation ("DOT"), commentators, practitioners and economists have agreed that dominant airlines may engage in certain strategic pricing behavior that harms competition by either (i) discouraging or delaying potential new, low-cost entrants from initiating service on certain routes; or (ii) by disciplining or driving those new, low-cost entrants from routes on which they had initiated service. However, when given the opportunity to incorporate the economic consensus into its decisions, two courts have failed to do so. Specifically, in two recent cases in the airline industry, the Government's predatory pricing case against American Airlines and Virgin Atlantic's case against British Airways, courts rigidly adhered to the Chicago School view in examining the cases before them, and dismissed both cases on summary judgment.

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* Chuck gratefully acknowledges the assistance of Ann Rappleye, an associate at the firm, in preparing this article.
1 See Jonathan B. Baker, *Predatory Pricing After Brooke Group: An Economic Perspective*, 62 ANTITRUST L.J. 585, 586 (1994) (citing a 1987 dispute between two Federal Trade Commission Commissioners over the most apt animal metaphor to describe predatory pricing).
2 *See Brooke Group Ltd. v. Brown and Williamson Tobacco Corp.*, 509 U.S. 209 (1993).

This article argues that the American Airlines and Virgin Atlantic cases were both wrongly decided and uses these cases as a springboard to examine the way in which modern economic theory and judicial policy should converge to analyze price predation cases.

I. CURRENT JUDICIAL VIEWS OF PRICE PREDATION OVERLOOK CERTAIN STRATEGIC PRICING BEHAVIOR

The Supreme Court defines predatory pricing as "pricing below an appropriate measure of cost for the purpose of eliminating competitors in the short run and reducing competition in the long run."[3] It requires two elements of proof to sustain a predatory pricing claim: below-cost pricing and recoupment.[4] The Court has not precisely identified the appropriate method to determine whether an alleged predator is engaging in below-cost pricing. However, it stated in *Brooke Group* that a price is not predatory unless it is below some measure of cost or even "some measure of incremental cost."[5] Most lower federal courts have applied an average variable cost test or a marginal cost test to determine whether price predation is present.[6]

In order to prove recoupment, a plaintiff must show that the predatory scheme will ultimately be profitable. In other words, the predator must have the ability to raise price to supracompetitive levels in the future — after it has driven its victim from the market — to compensate for its predatory investment.[7] In *Brooke Group*, the Court held that the standard of proof required for recoupment could only be met if the market structure facilitated predation, which required proof of market concentration, high barriers to entry and the predator's ability to absorb its victim's market share.[8] Importantly, the Court noted that if these conditions are not present, "summary disposition of the case is appropriate."[9]

Lower federal courts have eagerly taken up the Supreme Court's invitation to dismiss price predation cases by summary means. Indeed, since *Brooke Group* was decided, no plaintiff has prevailed in a price predation case. More importantly, the vast majority of those cases were dismissed either on summary judgment, on the pleadings or by judgment notwithstanding the verdict.[10]

However, the Supreme Court's blanket acceptance of the Chicago School view that a dominant firm will engage in price predation *only* if it reasonably expects to gain new monopoly revenues in the *future* overlooks certain strategic pricing behavior that dominant firms have been known to have engaged in. Specifically, many price predators do not hope to gain monopoly revenues in the future; rather, they seek to protect established monopoly prices they are *already collecting* that may be threatened by a new entrant.[11]

Given this debate over the correct parameters of price predation, when the Government brought its predatory pricing case against American Airlines in 1999, commentators were hopeful that the case would "breath new life into the law in this area."[12] Indeed, it seemed the perfect case in which to bring the post-Chicago consensus to bear on strong facts, in an industry where regulators and others had been examining the competitive

3 *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 204, 117 (1986).
4 *See Brooke Group*, 509 U.S. at 222-24.
5 *See id.* at 223, quoting *Cargill*, 479 U.S. at 118.
6 *See* 3 Phillip Areeda and Herbert Hovenkamp, ANTITRUST LAW, ¶ 740a (Rev. ed. 1996).
7 *See Brooke Group,* 509 U.S. at 225-26.
8 *See id.* at 226.
9 *See id.*
10 *See* Patrick Bolton, Joseph F. Brodley and Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2258-60 (2000) (specifically identifying the disposition of price predation cases brought since *Brooke Group* was decided).
11 *See id.* at 2246-50; *see, e.g.,* Robin Cooper Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079, 2087-88 (1999).
12 Lawrence A. Sullivan and Warren S. Grimes, THE LAW OF ANTITRUST: AN INTEGRATED HANDBOOK 164 (2000); *see* Bolton, *et al., supra* note 10, at 2260.

forces present there. Instead, as discussed in detail below, when American moved for summary judgment, the Court all-too-willingly ignored the modern economics and granted summary judgment for American based on the standards set forth in *Brooke Group*. Likewise, faced with a price predation case between Virgin Atlantic Airways and British Airways, when British Airways moved for summary judgment, the Court also ignored modern economics and granted summary judgment for British Airways also based on the narrow view of price predation.

II. PREDATION IN THE AIRLINE INDUSTRY

Prior to bringing its case against American Airlines, both the DOJ and the DOT examined predation in the airline industry and set forth the conditions under which they believed it had been or could be successful.

A. The Fones Remarks

Prompted by "noticeable growth" in low cost airlines, and by several claims of predation by incumbent airlines against those low cost airlines, the DOJ set forth its framework for identifying illegal predation in the airline industry in a speech given by Roger Fones, then Chief of the Transportation, Energy and Agricultural Section in the Antitrust Division.[13] Fones expressed the DOJ's "*strong* interest in assuring that new entry is not thwarted by anticompetitive behavior by incumbent airlines" because of those new entrants' "beneficial effect on competition and consumer welfare."[14]

After first noting that the claims of predation that the DOJ found most credible were those in which the incumbent airline engaged in not only price cuts, but in significant capacity increases (*i.e.,* adding new flights), Fones then set out the DOJ's approach to measuring incremental costs in the airline industry. Put simply, the DOJ identified incremental costs as those costs that the incumbent airline could have avoided had it not embarked on the predatory strategy. Fones debunked the notion that predation in the airline industry cannot occur because the avoidable cost of filling an empty seat is so low (*e.g.*, the costs associated with filling an empty seat on an existing flight are as little as the administrative costs associated with issuing a ticket and on-board catering for that passenger). Rather, Fones identified the incumbent airline's cost of adding a new flight in response to new entry as the appropriate measure of incremental cost. Moreover, Fones also noted that (i) the longer a predatory strategy is in place, the more costs there are associated with it; and (ii) aircraft costs are incremental within a relatively short to medium time frame. Fones concluded his remarks by stating "the structure of the airline industry is conducive to successful predation strategies."[15]

B. Department of Transportation Proposal Concerning Unfair Exclusionary Conduct in the Airline Industry

Recognizing Fones' point that hub-dominant, incumbent airlines had engaged in a successful predatory strategy of expanding capacity and lowering fares in response to entry by low cost carriers, the DOT proposed guidelines in 1998 to protect against this problem.[16] These proposed guidelines define predation as any response to new entry by a hub-dominant airline that makes economic sense only because the hub carrier can exclude the

13 Roger W. Fones, Chief, Transportation, Energy and Agricultural Section, Antitrust Div., U.S. Dep't of Justice, *Predation in the Airline Industry*, Remarks before the American Bar Ass'n Forum on Air and Space Law, Seattle, WA, June 12, 1997 (hereinafter, "the Fones Remarks"), available at http://www.usdoj.gov/atr/public/speeches/1188.htm.

14 *See id.*

15 *See id.*

16 *See* DOT Proposal, *Unfair Exclusionary Conduct in Air Transportation Industry*, 7 Trade Reg. Rep. (CCH) ¶ 50,163, 49,227 (1998).

new entrant from the market and thereafter return to its pre-entry fares. Specifically, the proposed guidelines state that a hub-dominant airline is engaging in illegal predation if it responds to new entry by increasing capacity, cutting price, or both that either "(1) causes the hub-dominant airline to forego more revenue than all of the new entrant's capacity could have diverted from it or (2) results in substantially lower operating profits – or greater operating losses – in the short run than would a reasonable alternative strategy for competing with the new entrant."[17] Significantly, the proposed guidelines do not require proof of below-cost sales to demonstrate predation.[18]

The proposed guidelines state that the DOT had been conducting "informal investigations" in response to allegations of predation and that it had observed the following predatory behavior on the part of incumbents: When threatened by a new, low cost carrier, the hub-dominant airline cuts its prices and adds additional flights in order to keep the low cost carrier from achieving its break-even load factor. The low cost carrier is then forced to withdraw from the market. After the low cost carrier's withdrawal, the hub-dominant carrier discontinues the flights it added and raises it fares to at least their original level. In the long run, consumers lose the benefits of competition.[19] As a result of these "informal investigations," the DOT commented that:

> Although the Supreme Court has said that predation rarely occurs and is even more rarely successful, our informal investigations suggest that the nature of the air transportation industry can at a minimum allow unfair exclusionary practices to succeed.[20]

The DOT's formulation and approach is consistent with the modern economic consensus. Economists have recognized that if a dominant firm eliminates competition from new entrant firms that are equally efficient or even more efficient than the dominant one by cutting prices and increasing its capacity, competition is harmed, whether or not the dominant firm's prices are below its costs.[21] The DOT's approach is notably different from the one taken by the courts in that it attempts to look at the particular facts and circumstances in the specific markets at issue and determines, whether, based on those specific facts, the alleged predatory strategy used in those markets is likely to achieve its desired result.

III. THE *AMERICAN AIRLINES* CASE

Against this backdrop of examination of predation in the airline industry, the DOJ brought suit against American Airlines in 1999, alleging that American had monopolized and attempted to monopolize airline passenger service to and from its Dallas-Ft. Worth hub ("DFW") through predatory pricing, in violation of Section 2 of the Sherman Act.[22] Although this case presented an opportunity for the Court to incorporate in its legal analysis the post-Chicago economic theories that had already been set out relating to predation in the airline industry, it did not do so. Rather, the Court faithfully applied the *Brooke Group* standards, ignored the compelling facts and economic analysis proffered by the Government, and granted summary judgment in favor of American.[23]

17 *See id.*
18 *See id.*
19 *See id.* at 49,229.
20 *Id.*
21 *See id.* at n.5; Alfred W. Khan, *How to Know Airline Predatory Pricing When You See It*, FTC: WATCH No 512 (Dec. 7, 1998) (recognizing that incumbent airlines' monopoly power at their hubs allows them to engage in predatory strategies that harm competition by attempting to drive low cost carriers from those routes); Janusz Ordover and Robert Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 9 YALE L.J. 8 (1981); *see also* Bolton, *et al., supra* note 10, 88 GEO. L.J. at 2262.
22 *United States v. AMR Corp.,* Civil Action No.: 99-1180-JTM (D. Kan. May 13, 1999), available at http://www.usdoj.gov/atr/cases/f2400/2438.htm.
23 *United States v. AMR Corp., et al.*, 2001 WL 455848 (D. Kan. April 27, 2001). The Government has appealed this decision to the Tenth Circuit Court of Appeals. *See* the Government's Brief, dated January 11, 2002, available at http://www.usdoj.gov/atr/cases/f9800/9814.htm ("Govt. Br.") and its Reply Brief, dated March 19, 2002, available at http://www.usdoj.gov/atr/cases/f10800/10856.htm (Govt. Reply Br.").

The Government alleged in relevant part that, on seven routes out of DFW, American monopolized or attempted to monopolize those routes through predatory pricing.[24] The Court found that American had market shares ranging from 60% to 100% on various origin and destination city pairs out of DFW between 1990 and 1999, and that its share of passengers boarding at DFW in 2000 was about 70%.[25]

The Government presented compelling facts, recited in the Court's findings of fact, that American pursued a successful strategy against low cost carriers of increasing capacity and lowering its prices on routes in which those carriers had initiated service. Specifically, the Government demonstrated that, when faced with new entry by a low cost carrier on a particular route, American lowered its price to match that of the low cost carrier, while, at the same time, significantly increased its capacity on that route. These actions caused passengers to be diverted from the low cost carrier, who eventually was forced to withdraw from that route. After the low cost carrier had ceased operations on the route, American increased its prices and reduced its capacity on the route. For example, the Government presented (and the Court accepted) the following facts:

- On the DFW-Long Beach, Florida ("LGB") route, American had previously ceased operations due to lack of traffic on the route. However, when faced with new entry by SunJet, which was serving Long Beach through a connection from Newark Airport (en route from DFW), American responded. Recognizing that SunJet had an opportunity to establish a DFW hub, American added four DFW-LGB flights. After SunJet exited DFW-Newark, American withdrew capacity from DFW-LGB.[26]

- On the DFW-Colorado Springs, Colorado route, when Western Pacific Airlines entered the route, American lowered its prices to match Western Pacific's fares and added two flights to its schedule. It later upgraded the planes serving that route to bigger ones to increase capacity even more. American also attempted to choke Western Pacific's connections at Colorado Springs by engaging in a "massive incentive program" for travel agents in that area to book their customers on American. American's profitability on the DFW-Colorado Springs route during that time period was negative, as measured by its own fully allocated earnings measure.[27]

- On the DFW-Wichita, Kansas route, American responded to new entry by Vanguard Airlines by adding jet service to that route (which was not warranted according to American's capacity planning model) and lowering its fares to match Vanguard's. American also began to compete and to match Vanguard in routes where Vanguard offered connecting service against American's non-stop service. After Vanguard was forced to exit the DFW-Wichita route, American raised it fares and reduced its capacity. When questioned about the fare increases by Kansas' Senator Brownback, American's CEO drafted a letter admitting that fares had been "below cost."[28]

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24 The Government also claimed that, on a number of routes out of DFW, American (i) monopolized or attempted to monopolize those routes based on the reputation American had earned for predatory pricing on other routes; (ii) in addition to those routes, American monopolized or attempted to monopolize through it reputation of predatory pricing, service between DFW and a number of metropolitan areas; (iii) on certain routes, the effects of American's predatory actions were felt, even though there was no allegation that American monopolized to attempted to monopolize those routes; and (iv) American engaged in predatory conduct in certain routes. The discussion in this paper is limited to the Government's predatory pricing claims on the seven routes. For a general discussion of predation based on reputation, *see* Bolton, *et al.*, *supra* note 10, 88 GEO. L.J. at 2299-304.

25 *See AMR*, 2001 WL 455848, at *5-6.

26 *See id.* at *22-25.

27 *See id.* at *19-22.

28 *See id.* at *14-19.

Significantly, in all these cases, it was clear that American's actions had caused the low cost carriers to withdraw from these routes.

The Government's economists presented four alternative methods that suggested that American was engaged in unlawful predation against low cost carriers. The first method involved looking at American's own measures of profitability on the routes in question in light of adding additional flights to routes. If "the incremental revenue generated by American's capacity addition was below the incremental cost of that capacity addition," the Government's economists concluded that American had engaged in illegal predation.[29] The second method involved looking at American's own measure of profitability on a route basis. If the addition of a flight on a route caused American's profitability on that route to become negative, this suggested to the Government's economists that American's price was below its long run average variable cost.[30] The third method also involved looking at American's own measure of profitability on a route basis. If this number was persistently negative, this suggested to the Government's economists that American's addition of a flight was below its costs.[31] The fourth method involved an attempt to calculate the incremental revenues associated with adding flights on certain routes. If those revenues were less than incremental costs, the Government's economists concluded that American had engaged in illegal predation.[32]

The Court rejected these methods out-of-hand. Indeed, the Court's resistance to the Government's economic approach is evidenced by its response to the Government's attempt to label American's actions as "predatory capacity:"

> [T]he court rejects the government's attempt, after American filed its motion for summary judgment, to re-characterize the present action as one grounded, not on 'predatory pricing,' but a different, separate claim of 'predatory capacity,' and so evade the cost analysis mandatory under *Brooke Group*. . . . Rather, the government's approach is a fundamentally flawed attempt to circumvent the high standards for proof of a predatory pricing claim by semantic sleight of hand.[33]

Concerning the Government's methods two and four, the Court found them invalid because they were the "functional equivalent of applying an average total cost test" to determine whether American had engaged in illegal predation.[34] The Court noted that the costs that the Government used, based on American's own performance measures, did not represent the costs associated with a particular flight but, rather, included other general operating expenses that were arbitrarily allocated by American. Accordingly, the Court held these two methods insufficient to establish predation under *Brooke Group.*[35]

The Government's methods one and four fared no better in the Court's eyes. Specifically, the Court characterized them as simply "short-run tests for profit maximization" that focused on whether American had sacrificed some level of profit by pursuing its strategy of price cuts and capacity increases. The Court held this test to be invalid as a matter of law under precedents such as *MCI Communications Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081, 1114 (7th Cir. 1983) and *Stearns Airport Equip. Co. v. FMC Corp.*, 170 F.3d 518, 533 n.14 (5th Cir. 1999) (rejecting theories of predation based on the failure of a defendant to

29 *See id.* at *37.
30 *See id.*
31 *See id.* at *37-38.
32 *See id.* at *38.
33 *Id.* at *53.
34 *See id.* at *61-62.
35 *See id.* at *62.

maximize profits as "no longer tenable in the wake of *Brooke Group")*.[36] The Court further faulted the Government's methods one and four for failing to attempt what the Court termed the "impossible task" of determining how American might have performed on the routes in question had it not added capacity to those routes. Finally, the Court rejected the Government's methods one and four on the basis that they took into account only the incremental costs and revenues from the added flights. The Court found that the Government was required to show that American engaged in below-cost pricing on the entire route and not just on a portion of the services on a route.[37]

The Court's finding that the cost of adding a new flight is *not* the appropriate measure of incremental cost in the airline industry is disturbing in that it directly contradicts the Fones Remarks and makes it almost impossible for a plaintiff to prove predation under *Brooke Group* in an airline predation case. Equally disturbing is that the Court found that American was entitled to summary judgment because it never undercut the pricing of a low cost carrier.[38] There, the Court found that American was entitled to assert the meeting competition defense, while ignoring the fact that American's costs were significantly higher than the low cost carriers.'

The Court's discussion of recoupment also ignores the modern economic consensus. There, the Court found that there were no barriers to entry at DFW and that, as a result, there was no dangerous probability of supracompetitive pricing. Although American had raised its prices back to their original levels once the low cost carriers had exited the routes at issue, the Court found no evidence that the original prices on those routes were supracompetitive.[39] The Court found that a temporary reduction in prices is not an indication of predation. Moreover, because the Court took issue with the Government's cost calculations, its recoupment calculations, which were based on the cost calculations that the Court found were flawed, were likewise deemed unreliable.

The Court's decision certainly did not live up to commentators' expectations that it might "breath new life" into the law on predatory pricing. In fact, quite the opposite occurred. The Court's rigid adherence to *Brooke Group* coupled with its failure to look at the unique market facts present in the airline industry and its resistance to properly evaluating the modern economic theories that the Government proffered to address the specific market facts dealt a blow to post-Chicago School theorists. There, the Government presented evidence of American's monopoly power (which the Court accepted as true), a predatory strategy on the part of American involving price cuts and capacity increases, and facts that confirmed not only American's strategy but also its spectacular success at achieving its end, *i.e.*, protecting its DFW hub. This evidence – at the very least – should have allowed the Government the opportunity to prove its case at a trial on the merits.

The Government has appealed the District Court's decision to the Tenth Circuit Court of Appeals.[40] The Government's arguments on appeal are:

- American added money-losing capacity on certain of its routes out of its DFW hub with no business justification other than to exclude the low-cost carriers and protect its hub. The Government argues that the District Court failed to examine American's incremental costs and incremental revenue from adding capacity, but, rather, insisted that American's costs

36 *See id.* at *59.
37 *See id.* at *61.
38 *See id.* at *62.
39 *See id.* at *68.
40 *See supra* note 23.

and revenues could be evaluated only a route-wide basis, which was reversible error.[41]

- The District Court erroneously held that American's likelihood of recoupment should be limited to those route markets in which the alleged predation occurred. Consequently, it refused to consider the benefits American reasonably expected to obtain from excluding competition in other DFW route markets, which was reversible error.[42]

- The District Court improperly decided as a matter of fact that "structural barriers" at DFW made it impossible for American to charge supracompetitive prices there, where the Government presented direct evidence of American's surpacompetitive pricing at DFW.[43]

- The District Court erroneously imported the "meeting competition" defense available under the Robinson-Patman Act into the Sherman Act. It then erroneously concluded that American could not be liable for predation as long as it never charged prices lower than those charged by its target low-cost carriers.[44]

The Government's appeal provides the Tenth Circuit with an opportunity which I hope it will take up to view these strong facts through a post-Chicago lens and allow American's behavior to be tested at trial.

IV. THE *VIRGIN ATLANTIC AIRWAYS* CASE

The *Virgin Atlantic Airways* case, a private price predation litigation against British Airways ("BA") in which I represented plaintiff Virgin Atlantic Airways ("Virgin"), met with a similar fate to that of the *American Airlines* case. Virgin's case was dismissed on summary judgment and was affirmed by the Second Circuit Court of Appeals.[45] Here, as in the *American Airlines* case, the Court failed to evaluate the evidence in light of the specific market facts present in the markets at issue in the case, and failed to appreciate the modern economics that were presented in support of Virgin's case.

Virgin challenged BA's marketing agreements with travel agents and corporations, which, it contended, were structured to take illegal advantage of BA's monopoly power at Heathrow International Airport ("Heathrow"). This foreclosed competition in the markets for transatlantic passenger service in violation of Sections 1 and 2 of the Sherman Act. Virgin further alleged that BA's practices illegally diverted traffic from Virgin and other airlines, thereby delaying Virgin's entry or expansion on five U.S.-U.K. routes. Because Virgin's entry on routes caused BA's fares to fall on average 14%, BA's marketing agreements forced consumers to pay higher prices for as long as BA was able to prevent Virgin from entering or expanding service on U.S.-U.K. routes. In its complaint, filed in 1993, Virgin claimed that BA's conduct amounted to attempted monopolization and monopoly leveraging in violation of Section 2 of the Sherman Act, and an unreasonable restraint of trade in violation of Section 1 of the Sherman Act.

41 *See* Govt. Br., *supra* note 23, at 2, 7-20, 23-25; 28-54; *see* Govt. Reply Br. at 1-17.
42 *See* Govt. Br., *supra* note 23, at 2, 24, 26-27, 54-63; *see* Govt. Reply Br., *supra* note 23, at 18-26.
43 *See* Govt. Br., *supra* note 23, at 2, 26-27, 63-67; *see* Govt. Reply Br., *supra* note 23, at 20-21.
44 *See* Govt. Br., *supra* note 23, at 2, 27, 67-70; *see* Govt. Reply Br., *supra* note 23, at 26-29.
45 *See Virgin Atlantic Airways Limited v. British Airways Plc*, 69 F. Supp.2d 571 (S.D.N.Y. 1999), *aff'd*, 257 F.3d 256 (2d Cir. 2001).

A. BA's Dominance at Heathrow Was Undisputed

Virgin's claims were set against the backdrop of Heathrow, with its unique position as Europe's premier airport and BA's unique position there. BA's status as a state-owned airline from 1939 until 1987 allowed it to be protected from competition at Heathrow. In fact, since 1977, the U.K.'s Traffic Distribution Rules ("TDRs") prevented any carrier that had not already been flying out of Heathrow from initiating service there. During that time, BA was allowed to build up an extensive Heathrow-based route network. Virgin, which started service in 1984, was excluded from Heathrow by the TDRs, and was forced to operate its flights out of Gatwick Airport ("Gatwick"). Heathrow is considered to be superior to Gatwick in a number of ways. First, because it has an established reputation as the premier airport in Europe, other national flag carriers prefer it and, as a result, it has more connecting traffic. Gatwick, on the other hand, has served mainly charter flights, which provide many fewer connecting passengers. Heathrow's facility is also superior to Gatwick's. Heathrow has two runways, whereas Gatwick has one runway and more limited gate facilities. Finally, Heathrow is located near many corporate offices that generate demand for corporate travel and is considered to be more convenient to access from London than Gatwick.[46]

Virgin was granted access to Heathrow in 1991, when the TDRs were abolished. However, due to the scarcity of slots at Heathrow, it is impossible for any airline, including Virgin, to build a network out of Heathrow that even comes close to the network that BA enjoys. A runway "slot" is the right to take off and land at a particular time at a particular airport. An airline requires two slots in order to operate a single flight on a given day – one arrival slot and one departure slot. At Heathrow, slots are allocated by a slot coordinator. Once allocated, slots are subject to "grandfather rights," which guarantee that an airline can retain any slot previously allocated to it as long as the slot is used 80% of the time. The practical effect of this rule is that almost all of the slots at Heathrow are locked up by the historic holders of those slots. In fact, greater than 90% of the slots at Heathrow are allocated pursuant to grandfather rights. The remaining slots, "pool slots," are generally those that are available at commercially undesirable times (*e.g.,* early in the morning or very late in the evening), or are not available at the same time throughout a week, which makes it very difficult to sustain a schedule. Because they are undesirable, most pool slots remain unclaimed, even though new entrants at Heathrow have priority over those slots.[47]

Heathrow is essentially full. There is almost no room to expand, and the number of available slots was expected to grow, if at all, by about three percent, between 1997 and 2000. Accordingly, there is a significant barrier to entry at Heathrow. There is also a great disparity in size between the number of slots BA controls at Heathrow and those controlled by its competitors. BA holds the largest number of Heathrow slots, which amounts to more Heathrow slots than the next ten carriers combined. For example, in 1998, BA held approximately 39% of Heathrow slots, while its next largest competitor, British Midland, controlled 13.5% of those slots. Virgin controlled 1.9% of those slots. BA had maintained this size advantage for more than 20 years.[48]

B. BA's Incentive Agreements With Travel Agents and Corporations

Virgin claimed that BA illegally abused its dominance at Heathrow to delay or deter Virgin's entry on certain of BA's Heathrow routes through the use of incentive

46 *See* 257 F.3d at 259-60.
47 *See id.* at 260.
48 *See id.* at 261; 69 F. Supp.2d at 573.

agreements with corporations and travel agents. Simply put, those agreements bundled the rewards available for sales on one route with sales across BA's entire network. BA's incentive agreements contained two key contract terms that allowed BA to effectively bundle its entire route network: (1) network-wide sales targets that pooled sales from across all of BA's routes to generate a single, network-wide incentive payment; and (2) "back-to-dollar-one" clauses that triggered the incentive payment on all sales up to and beyond the network target only if the network target was satisfied.[49]

Virgin argued that, by bundling routes in this way, BA avoided competing with Virgin and other airlines on a route-by-route basis and disadvantaged Virgin because the value of an incentive on a single Virgin route could never match the incentives available to travel agents and corporations across BA's entire network. Moreover, Virgin argued that BA's network-wide incentives penalized travel agents and corporations that purchased tickets from Virgin by denying them incentive payments (*i.e.*, charging them higher prices) on routes where Virgin does not fly.

C. Professor Bernheim's Theory of Predatory Foreclosure

Virgin retained Professor B. Douglas Bernheim, a Stanford Economics Professor, to determine whether BA's incentive agreements were predatory. Employing standard post-Chicago economics, Professor Bernheim developed a method for evaluating and demonstrating that BA had priced its tickets to the passengers obtained through its incentive agreements below its costs. The objective and effect of this below-cost pricing was to deter and delay entry of competitors on Heathrow routes. Professor Bernheim labeled BA's predatory strategy "predatory foreclosure." While this strategy relies on below-cost pricing, it has different objectives than a narrow predatory pricing scheme that depends on driving existing competitors from the market and then charging supracompetitive prices after those competitors have been forced from the market. Rather, it takes a strategic view of predatory pricing and demonstrates empirically in this case that it was a successful strategy. Specifically, the objective of predatory foreclosure is to deter or delay the entry or expansion of a competitor, rather than to drive existing competitors from the market. Second, when a firm practices predatory foreclosure, it *immediately* recoups its losses on the sales that are priced below cost by setting prices substantially in excess of costs on other sales. In this case, these prices were 14% higher than those prices BA could charge when Virgin was present on a route.[50]

In order to demonstrate that BA's costs of attracting additional passengers through its incentive agreements exceeded the revenue generated by those passengers (*i.e.*, that they are predatory), Professor Bernheim performed the following standard economic calculations. First, he calculated the network-wide cost that BA incurs to serve the additional passengers who fly BA due to its incentive agreements. In performing this calculation, Professor Bernheim included the costs of increasing the number of BA flights to accommodate the additional traffic attracted by BA's incentive agreements. Professor Bernheim's decision to include the costs of additional flights was based on the following record facts:

- BA's load factors[51] have remained constant at about 70% for years even though its passenger numbers have increased as a result of its incentive agreements;

- BA added 8,450 flights to its schedule during the relevant time period;

49 *See* 69 F. Supp.2d at 574.
50 *See id.* at 576-77.
51 "Load factor" refers to the percentage of occupied seats on a given flight.

- Two BA executives testified that the use of incentive agreements enabled BA to offer more flights.[52]

In addition, Professor Bernheim incorporated and relied on the Fones Remarks, which identified the cost of adding a new flight as the appropriate measure of incremental cost.[53]

Next, based on information available in a BA database, Professor Bernheim determined that for every dollar of additional revenue that BA received from flying an incremental passenger (*i.e.*, a passenger flying on BA as a result of incentive agreements), it cost 90 cents to fly that passenger, not including incentives. Accordingly, BA would have had to pay 10 cents or less in incentives for every dollar of revenue received from incremental passengers or BA would be flying those passengers below its costs. Professor Bernheim found that the incentives in fact exceeded 10 cents and, as a result, BA was flying these passengers below its costs and was losing money on every ticket sold to an incremental passenger. Professor Bernheim argued that, without the additional profits that BA received from charging higher prices as a result of foreclosing entry by competitors, it would be economically irrational for BA to structure its incentive agreements as it did.[54]

Professor Bernheim then demonstrated that BA's incentive agreements diverted a significant number of passengers that would have been available to BA's competitors in the absence of these agreements. Reconstructing Virgin's route entry model, Professor Bernheim demonstrated that if Virgin had received its share of the revenue diverted by BA's incentive agreements, it would have initiated or expanded service on five specific U.S.-U.K. routes at least a year earlier than it did.[55]

Finally, Professor Bernheim demonstrated, from BA's own ticket sales databases, that BA charged 14% more on average, for tickets on routes where it faced no competition from Virgin. Thus, by foreclosing Virgin from entering or expanding on the five U.S.-U.K. routes, BA forced travelers on those routes to pay higher prices.

Notably, Professor Bernheim made no effort to determine where in BA's network it added flights. This is because BA's incentive agreements operate on a network-wide basis. As a result, the incremental costs of flying incremental passengers on one route cannot be calculated by looking at that one route alone, but must account for all of the costs of carrying those passengers, including the costs incurred on other routes. It is therefore not meaningful to calculate profitability on a route basis and Professor Bernheim never did so. Interestingly, this is consistent with BA's reports evaluating the performance of its incentive agreements, which calculated increases in incremental revenue on a network-wide basis. Because it is not meaningful to calculate profitability on a specific route, it is not meaningful to determine whether BA added flights to a specific route, including the five routes on which Virgin claimed it was deterred or delayed from entering.

BA moved for summary judgment after approximately 2 years of discovery. Notably, BA never requested discovery of Professor Bernheim; no expert reports were exchanged. Consequently, the sole statement of Professor Bernheim's analysis applied to the facts of the case was his affidavit submitted in opposition to BA's summary judgment motion. BA devoted its reply brief on summary judgment to attacking Professor Bernheim's analysis. Other than a 5-page sur-reply on one point of his analysis that the District Court

52 *See* 257 F.3d at 268.
53 *See supra* Section II.A.
54 *See* 257 F.3d at 267.
55 *See id.* Those routes are between Heathrow and New York, Los Angeles, Chicago, San Francisco and Washington, D.C.

requested, Professor Bernheim never had the opportunity to correct BA's misrepresentations concerning his analysis.

D. The European Commission Found That BA's Incentive Schemes Were Illegal

While the parties were awaiting the District Court's decision on BA's summary judgment motion (*see infra* III.E), the European Commission ("EC") concluded a three-year investigation into BA's incentive agreements with travel agents in Europe, which were almost identical to the agreements BA used with travel agents in the United States. In July 1999, it announced that it would impose a fine of 6.8 million euros on BA for illegally providing cash payments to travel agents to boost BA's ticket sales.[56] In announcing this fine, the EC stated that BA's incentive payments "make[] the travel agents loyal to BA, discouraging them from selling travel agency services to other airlines and have created an illegal barrier to airlines that wish to compete against BA on the U.K. markets for air transport."[57]

In connection with investigating BA's travel agent commission agreements, the EC negotiated certain principles for travel agent commissions that applied not only to BA but to other airlines operating in the European Community. Significantly, these principles prohibited airlines from employing the very mechanisms that Virgin was claiming were anticompetitive in its action, including back-to-dollar-one clauses and sales targets that pool sales from across all BA's routes.[58]

E. The District Court Granted BA's Motion For Summary Judgment and the Second Circuit Affirmed

Despite the EC Policy and fine on BA, and without the benefit of any testimony, deposition or otherwise, from Professor Bernheim (*see supra* III.C), the District Court granted summary judgment in BA's favor. Essentially, the District Court dismissed Virgin's case because it held that Virgin's antitrust claims were premised on an economic analysis that required it to introduce evidence that BA added flights (to accommodate the passengers illegally diverted by BA's incentive agreements) to the five U.S.-U.K. routes on which Virgin claimed harm.[59] However, as discussed above, Professor Bernheim's theory did not depend on adding flights on particular routes but, rather, depended on adding flights anywhere in its network to accommodate passengers diverted by its incentive agreements. The District Court also refused to accept the statement in the Fones Remarks that the appropriate measure of incremental cost in the airline industry is the cost of an incremental flight. Significantly, the District Court declined to reach the question of whether Professor Bernheim's predatory foreclosure theory is invalid as a matter of law. Rather, it termed the theory of predatory foreclosure "interesting."[60]

Virgin appealed the District Court's decision to the Second Circuit Court of Appeals. The Second Circuit affirmed the District Court's decision, also insisting that Virgin and Professor Bernheim were required to demonstrate that BA added flights to the five routes in question in order to sustain the claim of below-cost pricing.[61] However, unlike the District Court's opinion, the Second Circuit's opinion was openly premised on the Chicago School view that price predation is rare and irrational economic behavior and that price competition is beneficial to consumers. Indeed, it analyzed Virgin's claim as one for predatory pricing and measured it against the requirements set forth in *Brooke Group*.[62]

56 *See Commission Sets Out its Policy on Commissions Paid by Airlines to Travel Agents*, July 14, 1999, IP/99/504, p.1, available at <http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action.gettxt=gt&doc=IP/99/504|0|AGED&lg=EN>.
57 *See id.*
58 *See Principles Concerning Travel Agents' Commissions*, annexed at p. 3 to the Policy, *supra* note 56.
59 *See* 69 F. Supp. at 576, 579-80.
60 *See id.* at 577 n.2, 579.
61 *See* 257 F.3d at 268.
62 *See id.* at 259, 266-67.

Having found that Virgin did not demonstrate below-cost pricing, it then turned to recoupment and found that Virgin did not demonstrate that recoupment took place. The Second Circuit held that Virgin did not submit sufficient evidence that BA's incentive agreements compelled customers to steer business to BA.[63] In rendering its holding on recoupment, however, the Second Circuit did comment that a plaintiff asserting a predatory scheme faces a "significant hurdle in showing that a defendant raised prices in one market to compensate for losses elsewhere."[64]

Like the District Court's decision in the American Airlines case, the Second's Circuit's invocation of *Brooke Group* in the Virgin Atlantic Airways case dealt another blow to post-Chicago School theorists. There, the Court accepted BA's monopoly power at Heathrow, and Virgin presented evidence of BA's predatory strategy through its use of incentive agreements with corporations and travel agents. Moreover, another judicial body (the EC) had already found that BA's incentive agreements operated predatorily in precisely the way that Virgin had alleged. At the very least, Virgin should have been allowed to present its case, including the testimony of Professor Bernheim, at a trial on the merits.

V. SIGNS OF HOPE FOR POST-CHICAGO THEORISTS AND A PROPOSED METHOD FOR EVALUATING PRICE PREDATION CASES

Disabusing courts of the notion that predatory pricing is irrational and rare has been extremely difficult especially because courts have been so willing, as per the Supreme Court's invitation in *Brooke Group*, to dismiss price predation cases before a full factual record can be developed at trial. Despite this, there are some signs that courts may begin to recognize the modern economic consensus. For example, the D.C. Circuit in *Microsoft* acknowledged that the Government's price predation case was not the classic one in which the predator drives its rivals out of the market by pricing a product below cost and then, after its rivals had exited the market, raise its prices above the competitive level to recoup its earlier losses. Instead, the Government argued that the price predation case worked similarly to Virgin's: by pricing its Internet Explorer product below cost (in fact, paying people to take it), Microsoft was able to preserve its monopoly in the operating system market, and the monopoly profits it was receiving on Windows, thereby simultaneously recouping any losses it had incurred on Internet Explorer.[65] Although the predatory pricing claim was not decided by the District Court and was not pursued on appeal, the D.C. Circuit nonetheless found (in the context of the Government's monopoly claim) that Microsoft's actions in the browser market

> served to meet the threat to Microsoft's monopoly in another market (operating systems) by keeping rival browsers from gaining the critical mass of users necessary to attract developer attention away from Windows as the platform for software development.[66]

The D.C. Circuit's decision opens the door to courts' beginning to recognize that strategic pricing behavior that is not classic predatory pricing, can have anticompetitive effects.

There are also bundling, or package pricing, cases which provide precedent for courts to recognize that strategic pricing behavior, depending on the specific facts and circumstances present in the markets at issue, can cause anticompetitive harm. For example, the Second Circuit's decision in *Ortho Diagnostic Systems, Inc. v. Abbott Labs., Inc.*,[67] provides

63 *See id.* at 270.
64 *See id.* at 217, citing Robert H. Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 145 (1978).
65 *See United States v. Microsoft Corp.*, 253 F.3d 34, 68 (D.C. Cir. 2001), *cert . denied*, 2001 WL 910785 (Oct. 9, 2001).
66 *See id.* at 60.
67 920 F. Supp. 455 (S.D.N.Y. 1996).

an excellent analysis of sophisticated pricing mechanisms by which it would be possible for the defendant essentially to protect its core monopolies by linking pricing across a number of products.[68]

Finally, commentators have recognized that rebate programs that create incentives to exclusive dealing can cause anticompetitive harm.[69]

In the cases that signify hope for post-Chicago theorists, courts have examined the actual market realities at issue in each case and determined whether the alleged anticompetitive scheme is plausible and supported by those particular record facts. Indeed, this analysis is the one urged by the Supreme Court in *Eastman Kodak v. Image Technical Servs., Inc.*[70] The analysis for price predation cases should be precisely the same as that enunciated in *Eastman Kodak*. Specifically, if a plaintiff in a price predation case proffers sufficient facts to demonstrate that the defendant possesses monopoly power, along with a credible predatory strategy also supported by record facts, that plaintiff should survive a motion for summary judgment and should be allowed to present its case at trial.[71] Dispensing with the *Brooke Group* requirements and adopting this proposed market-based approach will allow meritorious cases to advance, while also allowing for summary dismissal of those cases in which the plaintiffs are complaining about a low-price scheme that is beneficial to consumers in the long term. Under the proposed market-based approach, both the *American Airlines* and *Virgin Atlantic Airways* cases would have been presented to a jury.

CONCLUSION

The Sherman Act certainly has the flexibility to accommodate changes in economic thinking. However, until courts begin examining these sophisticated pricing and discount schemes in light of actual market realities and allow them to advance to trial to develop those specific factual records, we will be stuck with an outmoded economic framework for analyzing price predation cases.

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68 Notably, the Third Circuit Court of Appeals called into question its previous helpful decision in one package pricing case, *SmithKline v. Eli Lilly & Co.*, 575 F.2d 1056 (3d Cir. 1987). In its decision in *LePage's v. Minnesota Mining & Mfg. Co. ("3M")*, 2002 WL 46961 (3d Cir. Jan. 14, 2002), *reh'g en banc granted, opinion vacated,* Feb. 25, 2002, the Third Circuit strained to distinguish *SmithKline* from the facts presented in *LePage's.* In its divided 2-1 decision, which has been vacated pending a hearing by the full Third Circuit, the panel overturned a $68 million jury verdict in favor of LePage's in its suit accusing 3M of using a "monopoly broth" of bundled rebate programs and exclusive dealing-type arrangements in an attempt to destroy the market for private-label tape and thereby steer customers back to 3M's Scotch brand tape. The majority commented that *SmithKline* has been labeled a monopoly leveraging case, however in such a case there are two markets, whereas in *SmithKline* there was only one market. This led the Third Circuit to conclude that "[c]onsequently, our prior characterization of *SmithKline* may be problematic." 2002 WL 46961, at *8 n.5. The dissent stated that *SmithKline* was directly applicable to *LePage's* and characterized the majority's efforts to distinguish *SmithKline* "unpersuasive." 2002 WL 46961, at *21 (Sloviter, J., dissenting). In its petition for rehearing by the full Third Circuit Court of Appeals, LePage's argued that the majority's decision erroneously overruled *SmithKline.* The Third Circuit's *en banc* decision in this case will be important in that it is certain to impact court's views in analyzing predatory pricing cases.

69 For a detailed discussion of the operation of these types of discount structures and their potential anticompetitive effects, *see* Willard K. Tom, David A. Balto and Neil W. Averitt, *Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing*, 67 ANTITRUST L.J. 615 (2000).

70 504 U.S. 451, 466-67 (1992) (citation omitted).

71 This proposed approach is supported by other commentators. *See, e.g.,* Sullivan and Grimes, *supra* note 12, at 157-58; Bolton, *et al.*, *supra* note 10, at 2262-64.