

Predation Problem Solution

$\$32 - \$19 = \$13$ Opportunity cost of selling @ \$19m when market price is \$32m

$P_m - \$32 =$ Additional profit from selling at monopoly price

$n =$ Number of aircraft sold per year

$$n \cdot 13 \cdot \left(\frac{1}{1+r} + \frac{1}{(1+r)^2} + \dots + \frac{1}{(1+r)^{10}} \right) = n \cdot (P_m - 32) \cdot \left(\frac{1}{(1+r)^{11}} + \frac{1}{(1+r)^{12}} + \dots + \frac{1}{(1+r)^{20}} \right)$$

$$13 \cdot \left(\frac{1}{1+r} + \dots + \frac{1}{(1+r)^{10}} \right) = (P_m - 32) \left(\frac{1}{(1+r)^{10}} \right) \cdot \left(\frac{1}{1+r} + \frac{1}{(1+r)^2} + \dots + \frac{1}{(1+r)^{10}} \right)$$

$$P_m = 13(1+r)^{10} + 32$$

$$r = .20$$

$$P_m = \$112.49$$

RESPONSE TO PREDATION CLAIMS

In paragraphs 62-63, 69-71, 79 and 110 the EC Statement of Objections raises concerns that the proposed merger of Boeing and MDC will strengthen the combined entity thereby making it a more formidable competitor. This is a curious concern; if the purpose of the European Commission is to protect consumers of aircraft (airlines) and consumers of aircraft services (air travelers), creation of a more formidable competitor, either because it is a more efficient producer or has greater access to customers, is a benefit to consumers. (See, Shapiro, "Theories of Oligopoly Behavior" Handbook of Industrial Organization, Vol I Schmalensee and Willig, eds., North Holland, 1992 pp.329-414).

Assuming that the European Commission is concerned with protecting the interests of consumers of aircraft and aircraft services, the only legitimate concern with the creation of a more formidable combined Boeing/MDC competitor is the possibility that Boeing/MDC could successfully pursue a predatory strategy; that is, that Boeing/MDC could drive Airbus from the market at some point in the future such that consumers would ultimately face higher prices or lower quality products and service. Indeed, the EC specifically raises this possibility in paragraphs 84-87 referring in illustration to Boeing's sale to SAS of B737's at a price of \$19 million. As described below there is no economic support for the conclusion that Boeing would engage in predatory strategy following the acquisition of MDC.

Economists have long been concerned with the question of how to distinguish, prospectively, between legitimate competition and predation. Both involve low prices, at least in the current period, that benefit consumers but cut into the profits of competing producers. Indeed, it is this tension between the interests of consumers

and producers that dooms any attempt to craft a competition policy that simultaneously protects both consumers and competitors. Therefore, in order to avoid discouraging competition that benefits consumers, it is extremely important to clearly distinguish instances in which predation is a concern from those in which predation is unlikely to occur.

The application of economic theory to analysis of the possibility of predatory pricing by Boeing/MDC is straightforward. In the classic predatory pricing scenario, the predator first engages in below cost pricing to drive competitors out of the market and then recoups its losses (plus additional profits) by exercising monopoly power thereafter. To make economic sense, the discounted present value of these additional profits in the recoupment period must outweigh the initial losses; the "investment" in current low prices pays off in higher prices in the future. Moreover, it is only the subsequent monopoly power that is of anticompetitive concern. The price war in the first stage is procompetitive and beneficial to consumers. Accordingly, predatory pricing is only harmful when it actually causes or creates a threat of recoupment of the initial losses through the subsequent exercise of monopoly power. The above description of predatory pricing is now accepted by virtually every economics textbook that addresses the topic. See e.g., Roger Blair and David Kaserman, Antitrust Economics (1985) at 122; Stephen Martin, Industrial Economics (1994) at 454; William Shepherd, The Economics of Industrial Organization (1997) at 234; F.M. Scherer and David Ross, Industrial Market Structure and Economic Performance (1990) at 470; William F. Shughart II, The Organization of Industry (1990) at 296; Kenneth W. Clarkson and Roger LeRoy Miller, Industrial Organization: Theory, Evidence and Public Policy (1982) at 255; Jean Tirole, The Theory of Industrial Organization (1989) at 377; Dennis Carlton and Jeffrey Perloff, Modern Industrial Organization (1994) at 385.

