

Paper Trail: Working Papers and Recent Scholarship

Editor's Note: In this issue we feature one paper that argues for the addition of networks as a third classification of antitrust practices, alongside vertical and horizontal restraints, and one paper that discusses how the FTC staff operationalized the analysis of entry barriers as described in the Merger Guidelines. Send suggestions for papers to review, or your comments, to: page@law.ufl.edu or jwoodbury@crai.com.

—WILLIAM H. PAGE AND JOHN R. WOODBURY

Recent Papers

George L. Priest, Rethinking Antitrust Law in an Age of Network Industries

(Yale Law & Economics Research Paper No. 352, 2007), available at SSRN:

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1031166

The title of this paper by Professor George Priest of the Yale Law School is literally accurate, but understates the scope of its argument. In the main part of the paper, Priest examines three of the Antitrust Division's most prominent recent challenges to practices in network industries. But he also argues for a broader reinterpretation of older precedents to take account of network interpretations of the practices at issue. Most fundamentally, he argues for the addition of networks as a third classification of antitrust practices (and prototypical cases) alongside vertical and horizontal restraints.

Priest begins by reviewing the basic economics of network markets. Network effects are economies of scale on the demand side. Their key characteristic is that the addition of new users to the network confers an external benefit on existing users. This benefit can arise directly in two-way communication networks and indirectly in markets for durable goods with which a variety of highly complementary products are used over the durable goods' useful life. In these circumstances, if the new user must pay the full cost of joining, the network will not reach the optimal size. The antitrust question these phenomena most often raise, according to Priest, is whether a practice "represents a strategy to overcome the consumer's inability to capture the positive externality that results from his or her decision to join the network or the positive externalities that derive from other actions that might expand networks."

Priest suggests that these characteristics of network markets require a "reversal of presumptions" about the effects of some familiar practices. Vertical restraints, for example, are traditionally viewed as most problematic when firms with market power use them to increase market share. In network markets, however, high market shares are normal and the use of various practices to increase the size of the network may actually enhance social welfare. Horizontal arrangements like product standardization and mergers also may be more likely to be socially beneficial in network markets than in others. Finally, below-cost pricing is "inevitable" in network industries, at least at certain stages of their evolution, because the cost to the consumer of joining the network is greater than the sum of the private and social gains from adding the consumer.

With this introduction, Priest criticizes three recent public enforcement actions in network markets. First, he argues that both the Antitrust Division and the court erred in the predatory pricing case against American Airlines by focusing narrowly on the definition of incremental costs and failing to “take account of the network character of the airline industry.” Airlines create hubs in order to aggregate traffic to and from numerous locations “to support more frequent service to smaller spoke cities.” Air travelers receive a network benefit from this strategy’s linkage of more spoke cities with more flights. Traditional predatory pricing standards do not address the distinctive issues in cases involving competition between an airline that supports a hub-and-spoke network with low-cost airlines that “siphon” off travelers on more heavily traveled routes. Priest argues that the appropriate question in such cases is whether competition from low-cost carriers reduces social welfare by preventing the maintenance of a network. He suggests that the fact that air travelers in the *American Airlines* case preferred the hub airline over the low-cost carrier at the lower fares suggests that consumers valued the network benefit that the hub airline provides.

The credit card industry is also a network because of the benefits that wider use of the card confers on both participating merchants and cardholders. There is competition both between and within card networks for acquisition of merchants to accept cards and the issuance of cards to consumers. The Antitrust Division persuaded the courts that Visa and MasterCard violated the antitrust laws by forbidding their member banks from also issuing American Express and Discover cards. Priest argues that this argument failed to account for the network nature of the market, in which large market shares are to be expected, but the most important competition is among networks. According to Priest, exclusivity provisions are ubiquitous in franchise networks, because they align the incentives of the franchisees with those of their network and against other networks.

The Antitrust Division did rely on network effects theory in the *Microsoft* case, but, according to Priest, did so incorrectly. The government contended that Microsoft had a monopoly of operating systems for Intel-compatible PCs that was protected by network effects, or an “applications barrier to entry.” Even though the government conceded that Microsoft acquired this position lawfully, it argued that that Microsoft’s effort to improve its network by adding a browser was monopolistic because it hindered the possible emergence of a rival platform.

Priest argues that the government’s case, which the district court endorsed, failed to show that the emergence of a rival platform would benefit consumers more than the enhancement of an existing network that had “emerged naturally.” Priest criticizes the court of appeals for affirming certain aspects of the district court’s decision without considering network benefits the practices may have had. Nevertheless, he endorses the court of appeals’ recognition of network considerations in its adoption of a rule of reason analysis for tying in the market for platform software.

After his review of recent cases, Priest undertakes to show that numerous familiar antitrust precedents had network characteristics that the conventional wisdom fails to recognize. He offers brief but provocative network interpretations of the early railroad cartel cases, *Dr. Miles*, *Terminal Railroad*, the trade association cases of the 1920s, *Chicago Board of Trade*, *Associated Press*, *BMI*, *Radiant Burners*, *NCAA*, and *Aspen Skiing*. For example, he notes that the usual point-of-sale services explanation for resale price maintenance does not explain *Dr. Miles* itself, which involved the sale of sketchy “potions.” Instead, he asks us to conceive of the distributors of the product as a network that requires the subsidy of resale price maintenance to achieve the optimal size.

In a final section, Priest proposes a recategorization of antitrust precedents, in which many of the cases he discusses are viewed as prototypical of a new class of network cases. In this kind of case, Priest argues, courts should:

- (a) Expect large market shares based upon the extent of network benefits;

- (b) Expect subsidized pricing in some form;
- (c) Expect other practices that serve to expand the network in order to capture network benefits.

Evidently, these market phenomena should not be presumed to be suspicious. Moreover, courts should

Evaluate practices as to whether they are network expanding in single network contexts or competition expanding where competing networks can survive. The ultimate economic question is whether there is a net increase in welfare from expansion of the network versus the reduction in alternative output.

As Priest recognizes, these questions will be difficult to answer in litigation, so the import of this recategorization will depend in large part on how the courts allocate burdens of proof.

—WHP

Malcolm B. Coate, Theory Meets Practice: Barriers to Entry in Merger Analysis
(Working Paper May 2007), available at SSRN: <http://ssrn.com/abstract=988423>

Video gamers have mixed feelings about this time of the year (i.e., the holiday season). On the one hand, video game companies release their most promising games during the holiday season. On the other hand, the companies are so pressured to release the games during the holiday rush that the games themselves are rushed out of the development door before being sufficiently tested. Potentially great games fail to meet expectations because of this rush (raising the question of how this can occur repeatedly in efficient markets). Gamer expectations are dashed, although later “patches” can fix the shortcomings in some of the games. This paper by long-time FTC economist Malcolm Coate reminds me of this type of experience—a potentially enlightening paper but released before its time—it needs a few patches.

Coate observes in the paper’s abstract that any definition of an entry barrier “must be linked to the specific theory of competitive concern under review . . . a theoretical barrier definition is unlikely to be useful. Instead, an operational definition of barriers to entry is required. This paper explores the operationalization of the Merger Guidelines barrier to entry concept.” Yet it isn’t until Section IV that the reader can finally see how (in this paper) the FTC staff operationalized the analysis of entry barriers as described in the Merger Guidelines (and summarized below). The bulk of the discussion preceding that section focuses on the evolution of the entry barrier concept and its development within the context of the Merger Guidelines. Some of this discussion is useful, as when the paper recounts the Bain, Stigler, and Posnerian definitions of entry barriers. But much of this discussion focuses on strategic barriers to entry driven by sunk cost differences between the incumbent and the entrant. This discussion tends to be too cryptic, as when the paper discusses the distinction between entry in the “Post-Chicago school of economics (PCE)” and the “multi-sided version of PCE (MS-PCE)” advanced by the Chicago school. And Coate only peripherally relates this distinction to how the agency evaluated entry barriers.

To get to what I think is the heart of the paper, Coate identifies how the timeliness, likelihood, and sufficiency of entry have been evaluated by the FTC staff in various merger cases.¹ Following the Merger Guidelines, Coate notes that entry is timely when the entrant can “move from the initial

¹ Subsequently, Coate notes that the sufficiency condition really is addressing the timeliness factor and the likelihood factor and suggests that the sufficiency factor should be absorbed into these other two factors. I agree—trying to define sufficiency in a way that is independent of timeliness and likelihood is a real challenge.

planning stage to a significant market impact within two years.” (p.11). Entry is regarded as likely if it is profitable at pre-merger prices. And entry is regarded as sufficient if the market impact of timely and likely entry can offset any post-merger tendency for prices to increase.

Coate reviewed 138 different matters investigated by the staff of the FTC’s Bureau of Competition and Economics. In determining which matters to review, he focused on those with a “core horizontal competitive concern.” (p.21). It’s not completely clear what this means. For example, does this mean that any proposed merger that potentially raised vertical as well as horizontal concerns was excluded? Or were some mergers that raised vertical issues nonetheless included because the “core” concern was horizontal, and, if so, what determined whether the vertical consideration was sufficiently marginal that it could be ignored? In addition, it’s not clear whether Coate defines entry to include the kind of product repositioning considered when unilateral concerns are a focus. If he does not consider repositioning, that would be surprising given the heightened interest in unilateral effects analysis during this time period and the similarity of the repositioning analysis to entry analysis. Unfortunately, much of the empirical analysis in this paper could be better explained or described.

At the outset, he finds that 80 percent of the 138 matters evaluated multiple “styles” or sources of entry—e.g., de novo entry, expansion by an existing firm, or entry by a firm in a related product area. Thus, rarely does the staff consider only one entry mode, so the ultimate conclusion on entry by the staff likely is based on the aggregate effect of the multiple entry modes, although the paper is not explicit about how the adding up occurs (or that the profitability of one entry mode likely depends on whether entry by another occurs).

Of the 138 matters reviewed, he concluded that 109 found that there were impediments to entry and 29 found entry to be easy. A particularly striking finding of the paper is the evaluation of the role of the *timeliness* of entry. One hundred of the 138 matters contained “suggestions” (p.24) that at least one style of entry would not be timely, with three recurring factors assessed—regulatory delays (e.g., a certificate-of-need requirement for constructing a new hospital), lengthy entry timelines (i.e., the time from entry planning to production), and reputation-building delays. Lengthy entry timelines were key in sixty-four of the one hundred matters for which entry impediments were found, while reputation-building delays accounted for thirty of the one hundred cases.²

There have also been three kinds of arguments that have led the FTC staff to question the *likelihood* of entry. The first are Stiglerian entry barriers, i.e., ones that result in entrants having higher costs than incumbents. These include certificate-of-need requirements, patents, and access to critical inputs. The second are lock-in kinds of arguments, such as long-term contracts, network effects, and “structural rigidities,” all of which suggest that the prospective entrant would find post-merger sales opportunities too limited. (Coate never explains what he means by structural rigidities.) Third is an evaluation of minimum viable scale, i.e., the output level required for entry to be profitable at current prices. If the scale is large relative to current output, that would raise the possibility that the post-entry price would fall below the pre-merger price.

Certificate-of-need considerations were relevant in the evaluation of the likelihood of entry in eighteen matters, other Stiglerian entry barriers in six matters, lock-in in ten matters, and a large

² Coate notes that there were multiple explanations for a finding of an entry impediment in fourteen of the matters. The paper later observes that in a number of matters, the staff relied on firms in the process of entry to gauge the timeliness of entry.

minimum viable scale in fifteen matters.³ Thus, about half of the 109 matters where entry impediments were found by the FTC staff are accounted for by these three reasons.

What about the other half? Coate concludes that the findings that entry was not likely “lacked clear empirical support.” Again, for us practitioners, it would be nice to know his definition of “clear empirical support.” For example, he notes that in fourteen matters, the staff made the argument that entry would not be profitable, but according to Coate, “the argument was under-developed, as no evidence underpinning the lack of profitability was developed.” (p. 25). But nowhere does Coate explain with any more precision how profitability was gauged or why the profitability analysis was under-developed. Perhaps where there was a high probability that entry would not be timely in any event, the need to focus resources on likelihood (or argue in the alternative) was not as necessary. Thus, the staff may have provided a more “developed” likelihood position if timeliness evidence wasn’t dispositive. However, Coate does note that in thirteen of the matters where the likelihood arguments were under-developed, that argument was “crucial” to a staff finding of entry impediments.

In addition, the paper also reports that there were fifty-six staff findings that entry would not be *sufficient*, with five types of reasons offered by the staff. The scarcity of inputs was key in eight findings, reputational effects (including product qualification requirements) in seven matters, and network effects in five matters. The absence of a substantial fringe played a role in thirty-seven matters (some of which also cited other reasons for the lack of entry sufficiency), while the need to have a full-line of products was important in seven of the matters. Interestingly, in contrast to his misgivings about some of the likelihood evidence, Coate does not opine on the strength of the underlying evidence for the sufficiency findings.

Moreover, the paper notes that the FTC staff apparently attaches significant weight to evidence of recent or expected future entry. According to the paper, the staff found no entry impediments in 58 percent of the matters in which such entry was identified. In only two of sixty-one cases where the staff found no evidence of recent entry did the staff conclude that entry was nonetheless easy. Thus, Coate concludes that “market entry evidence does not guarantee a theoretical finding on ease of entry, but the lack of such evidence is highly correlated with the finding of some type of entry impediment.” It would have been helpful to understand what distinguished the persuasive from the unpersuasive entry evidence.

So what can the practitioner take away from this paper? First, the evaluation of the timeliness of entry is key—if the agency is unpersuaded that entry is timely, a mountain of evidence on likelihood and sufficiency won’t matter. Second, Coate provides the practitioner with arguments the agency considers when evaluating the likelihood of entry—certificate-of-need, patents, input scarcity, lock-ins, and minimum viable scale. A similar list can be constructed for sufficiency. Third, evidence of actual or expected entry can play a substantial role in evaluating the efficacy of entry as a “remedy” to merger-related competitive concerns.

Another view is that although the Coate paper provides insight into the specific arguments relied on by the FTC staff, overall, there is nothing new here. These are the kinds of factors that have played a role in evaluating antitrust policy and specific matters for years. What would have been

³ With respect to likelihood of entry, the paper observes that in one matter, the staff considered historical entry in narrow geographic markets and, in a number of matters, the staff estimated minimum viable scale by using “net present value to determine the profitability of entry with the sunk costs defined as initial investments that could not be recovered by exit.” (p. 32.) It would have been useful to know if the FTC staff did a minimum viable scale analysis only for de novo entry or whether some of these analyses focused on expansion of existing facilities by a fringe or by a firm in an adjacent market.

helpful is a deeper understanding of, for example, the kind of evidence that staff “typically” relied on when evaluating timeliness or in concluding that input scarcity undermined the likelihood or sufficiency of entry or the kind of recent entry or evidence of future entry that the agency staff apparently found persuasive. On this score, as in other dimensions discussed at the outset of this note, the paper fails to realize its potential. My recommendation: Revise and re-submit. ●

—JRW