FROM: TRUTH ON THE MARKET

ANTITRUST REMEDIES

Josh Wright[†]

BARNETT V. BARNETT ON ANTITRUST

Tom Barnett (Covington & Burling) represents Expedia in, among other things, its efforts to persuade a US antitrust agency to bring a case against Google involving the alleged use of its search engine results to harm competition. In that role, in a recent piece in Bloomberg,[1] Barnett wrote the following things:

- "The U.S. Justice Department stood up for consumers last month by requiring Google Inc. to submit to significant conditions on its takeover of ITA Software Inc., a company that specializes in organizing airline data."
- "According to the department, without the judicially monitored restrictions, Google's control over this key asset "would have substantially lessened competition among providers of comparative flight search websites in the United States, resulting in reduced choice and less innovation for consumers.""
- "Now Google also offers services that compete with other sites to provide specialized "vertical" search services in particular segments (such as books, videos, maps and, soon, travel) and information sought by users (such as hotel and restaurant

[†] Professor of Law, George Mason University School of Law. Originals at truthonthemarket.com/2011/05/10/barnett-v-barnett-on-antitrust/ (May 10, 2011), truthonthemarket.com/2011/07/11/searching-for-antitrust-remedies-part-i/ (July 11, 2011), and truthonthemarket.com/2011/07/13/searching-for-antitrust-remedies-part-ii/ (July 13, 2011) (all vis. Oct. 1, 2011). © Joshua Wright.

[1] *Google's Search Tactics Warrant Antitrust Scrutiny: Commentary*, lammgl.files.wordpress.com/2011/03/google_s-search-tactics-warrant-antitrust-scrutiny_-commentary1.pdf.

reviews in Google Places). So Google now has an incentive to use its control over search traffic to steer users to its own services and to foreclose the visibility of competing websites."

- "Search Display: Google has led users to expect that the top results it displays are those that its search algorithm indicates are most likely to be relevant to their query. This is why the vast majority of user clicks are on the top three or four results. Google now steers users to its own pages by inserting links to its services at the top of the search results page, often without disclosing what it has done. If you search for hotels in a particular city, for example, Google frequently inserts links to its Places pages."
- "All of these activities by Google warrant serious antitrust scrutiny. . . . It's important for consumers that antitrust enforcers thoroughly investigate Google's activities to ensure that competition and innovation on the Internet remain vibrant. The ITA decision is a great win for consumers; even bigger issues and threats remain."

The themes are fairly straightforward: (1) Google is a dominant search engine, and its size and share of the search market warrants concern, (2) Google is becoming vertically integrated, which also warrants concern, (3) Google uses its search engine results in manner that harms rivals through actions that "warrant serious antitrust scrutiny," and (4) Barnett appears to applaud judicial monitoring of Google's contracts involving one of its "key assets." Sigh.

The notion of firms "coming full circle"[2] in antitrust, a la Microsoft's journey from antitrust defendant to complainant, is nothing new. Neither is it too surprising or noteworthy when an antitrust lawyer, including very good ones like Barnett, say things when representing a client that are at tension with prior statements made when representing other clients. By itself, that is not really worth a post. What I think is interesting here is that the prior statements from Barnett about the appropriate scope of antitrust enforcement generally, and monopolization in the specific, were made as Assis-

[2] Geoffrey Manne, *Microsoft comes full circle*, truthonthemarket.com/2011/03/31/Microsoft-comes-full-circle/.

tant Attorney General for the Antitrust Division – and thus, I think are more likely to reflect Barnett's actual views on the law, economics, and competition policy than the statements that appear in Bloomberg. The comments also expose some shortcomings in the current debate over competition policy and the search market.

But lets get to it. Here is a list of statements that Barnett made in a variety of contexts while at the Antitrust Division.

- "Mere size does not demonstrate competitive harm." (Section 2 of the Sherman Act Presentation, June 20, 2006)[3]
- ". . . if the government is too willing to step in as a regulator, rivals will devote their resources to legal challenges rather than business innovation. This is entirely rational from an individual rival's perspective: seeking government help to grab a share of your competitor's profit is likely to be low cost and low risk, whereas innovating on your own is a risky, expensive proposition. But it is entirely irrational as a matter of antitrust policy to encourage such efforts. (Interoperability Between Antitrust and Intellectual Property, George Mason University School of Law Symposium, September 13, 2006)[4]
- "Rather, rivals should be encouraged to innovate on their own – to engage in leapfrog or Schumpeterian competition. New innovation expands the pie for rivals and consumers alike. We would do well to heed Justice Scalia's observation in Trinko, that creating a legal avenue for such challenges can 'distort investment' of both the dominant and the rival firms." (emphasis added) (Interoperability Between Antitrust and Intellectual Property, George Mason University School of Law Symposium, September 13, 2006)[5]
- "Because a Section 2 violation hurts competitors, they are often the focus of section 2 remedial efforts. But competitor well-being, in itself, is not the purpose of our antitrust laws. The Darwinian process of natural selection described by Judge Easterbrook and Professor Schumpeter cannot drive

[3] www.justice.gov/atr/public/hearings/single_firm/docs/218775.pdf.
[4] www.justice.gov/atr/public/speeches/218316.htm.
[5] *Id*.

growth and innovation unless tigers and other denizens of the jungle are forced to survive the crucible of competition." (Cite).[6]

- "Implementing a remedy that is too broad runs the risk of distorting markets, impairing competition, and prohibiting perfectly legal and efficient conduct." (same)
- "Access remedies also raise efficiency and innovation concerns. By forcing a firm to share the benefits of its investments and relieving its rivals of the incentive to develop comparable assets of their own, access remedies can reduce the competitive vitality of an industry." (same)
- "The extensively discussed problems with behavioral remedies need not be repeated in detail here. Suffice it to say that agencies and courts lack the resources and expertise to run businesses in an efficient manner. . . . [R]emedies that require government entities to make business decisions or that require extensive monitoring or other government activity should be avoided wherever possible." (Cite)[7]
- "We need to recognize the incentive created by imposing a duty on a defendant to provide competitors access to its assets. Such a remedy can undermine the incentive of those other competitors to develop their own assets as well as undermine the incentive for the defendant competitor to develop the assets in the first instance. If, for example, you compel access to the single bridge across the Missouri River, you might improve competitive options in the short term but harm competition in the longer term by ending up with only one bridge as opposed to two or three." (same)
- "There seems to be consensus that we should prohibit unilateral conduct only where it is demonstrated through rigorous economic analysis to harm competition and thereby harm consumer welfare." (same)

---

[6] *Section 2 Remedies: What to Do After Catching the Tiger by the Tail*, American Bar Association Conference on Monopolization Remedies, Charlottesville, VA, June 4, 2008.
[7] *Section 2 Remedies: A Necessary Challenge*, Fordham Competition Law Institute 34th Annual Conference on International Antitrust Law & Policy New York, NY, Sept. 28, 2007.

I'll take Barnett (2006-08) over Barnett (2011) in a technical knockout. Concerns about administrable antitrust remedies, unintended consequences of those remedies, error costs, helping consumers and restoring competition rather than merely giving a handout to rivals, and maintaining the incentive to compete and innovate are all serious issues in the Section 2 context. Antitrust scholars from Epstein and Posner to Areeda and Hovenkamp and others have all recognized these issues – as did Barnett when he was at the DOJ (and no doubt still). I do not fault him for the inconsistency. But on the merits, the current claims about the role of Section 2 in altering competition in the search engine space, and the applause for judicially monitored business activities, runs afoul of the well grounded views on Section 2 and remedies that Barnett espoused while at the DOJ.

Let me end with one illustration that I think drives the point home. When one compares Barnett's column in Bloomberg to his speeches at DOJ, there is one difference that jumps off the page and I think is illustrative of a real problem in the search engine antitrust debate. Barnett's focus in the Bloomberg piece, as counsel for Expedia, is largely harm to rivals. Google is big. Google has engaged in practices that might harm various Internet businesses. The focus is not consumers, i.e. the users. They are mentioned here and there – but in the context of Google's practices that might "steer" users toward their own sites. As Barnett (2006-08) well knew, and no doubt continues to know, is that vertical integration and vertical contracts with preferential placement of this sort can well be (and often are) pro-competitive. This is precisely why Barnett (2006-08) counseled requiring hard proof of harm to consumers before he would recommend much less applaud an antitrust remedy tinkering with the way search business is conducted and running the risk of violating the "do no harm" principle. By way of contrast, Barnett's speeches at the DOJ frequently made clear that the notion that the antitrust laws "protection competition, not competitors," was not just a mantra, but a serious core of sensible Section 2 enforcement.

The focus can and should remain upon consumers rather than ri-

vals.[8] The economic question is whether, when and if Google uses search results to favor its own content, that conduct is efficient and pro-consumer or can plausibly cause antitrust injury. Those leaping from "harm to rivals" to harm to consumers should proceed with caution. Neither economic theory nor empirical evidence indicate that the leap is an easy one. Quite the contrary, the evidence[9] suggests these arrangements are generally pro-consumer and efficient. On a case-by-case analysis, the facts might suggest a competitive problem in any given case.

Barnett (2006-08) has got Expedia's antitrust lawyer dead to rights on this one. Consumers would be better off if the antitrust agencies took the advice of the former and ignored the latter.

SEARCHING FOR ANTITRUST REMEDIES, PART I

This is part one of a two part series of posts in which I'll address the problems associated with discerning an appropriate antitrust remedy to alleged search engine bias. The first problem – and part – is, of course, how we should conceptualize Google's allegedly anticompetitive conduct; in the next part, I will address how antitrust regulators should conceive of a potential remedy, assuming *arguendo* the existence of a problem at all. Despite some commentators' assumptions, I do not think the economics indicate any such problem exists.

The question of how to conceptualize Google's business practices – even its business model! – remains the indispensible starting point for antitrust analysis, including potential remedies; doubly so in the wake of the FTC's decision to formally investigate Google. While the next part will focus more directly upon potential remedies that have been proposed by various Google critics, there is a fundamental link between how we conceptualize Google's provision of search results for the purposes of antitrust analysis and the design

[8] Josh Wright, *Google, Antitrust, and First Principles*, truthonthemarket.com/2011/03/31/google-antitrust-and-first-principles/.

[9] Francine Lafontaine and Margaret Slade, *Vertical Integration and Firm Boundaries: The Evidence*, www.aeaweb.org/articles.php?doi=10.1257/jel.45.3.629, and 45 J. Econ. Literature 629 (2007).

of remedies. Indeed, antitrust enforcers and scholars have taught that thinking hard about remedies upfront can and frequently should influence how we think about the competitive nature of the conduct at issue. The question of how to conceptualize Google's organic search results has sparked serious debate, as some[10] have claimed that "Google's behavior is harder to define" than traditional anti-competitive actions and represents "a new kind of competition." Some have also focused upon "search bias" itself as the relevant conduct for antitrust purposes. Of course, as I've pointed out,[11] these statements are not in line with modern antitrust economics and usually precede calls to deviate from traditional consumer-welfare-focused antitrust analysis.

I see two useful conceptual constructs in evaluating "search bias" within the antitrust framework. Recall that "search bias" typically translates to allegations that Google favors its own affiliated content over that of rivals. For example, a search query on Google for "map of Arlington, VA" might turn up a map of Arlington from Google Maps in the top link. These allegations usually concede that we would expect Bing Maps if we ran the same search on Bing. The complaints from vertical search engines and travel services like Expedia particularly center around the notion that Google's "entry" into various spaces – such as travel services – supported by prominent search rankings disadvantages rivals and may lead to their exit.

Observant readers will note my use of scare quotes around "entry." This is not coincidental. It is not obvious to me that Google necessarily *enters* a new sector (much less a well-defined antitrust product market) when it directs a user to content in a new format– such as a map, video, or place page. Google's primary function is search; users rely on search engines to reduce search and information costs. I think it is at least as likely that Google's attempts to provide this content by *any* chosen metric is simply an attempt to do their cardinal job better: answering user queries with relevant in-

---

[10] *Google antitrust probe could bring out enemies*, www.politico.com/news/stories/0711/58464_Page2.html.

[11] *Sacrificing Consumer Welfare in the Search Bias Debate, Part II*, truthonthemarket.com/2011/06/28/sacrificing-consumer-welfare-in-the-search-bias-debate-part-ii/.

formation at a minimum of cost. Holding that threshold issue aside for a moment, in my mind, there are two ways to classify that conduct in the antitrust framework.

First, one might conceive of search bias allegations as "vertical integration" or vertical contractual activity. I've explored this conception at significant length both in blog posts (see, e.g. here[12] and here[13]) as well as a longer article with Geoff.[14] The classic antitrust concern in this setting is that a monopolist might foreclose rivals from an input the rivals need to compete effectively. For example, Google owns YouTube; Google could prominently place YouTube results when users enter queries seeking video content. (Ignore for the moment that YouTube will necessarily rank highly on other search engines because it is the leading site for video content). Within this vertical integration framework, there is a standard analysis for understanding when competitive concerns might arise, the conditions that must be satisfied for those concerns to warrant scrutiny, a deeply embedded understanding that harm to rivals must be distinguished from demonstrable harm to competition, and an equally deeply held understanding that these vertical arrangements and relationships are often, even typically, pro-competitive (e.g., in the YouTube example vertical integration likely leads to reduced latency and faster provision of video content).

Second, one might conceptualize organic search results as the product of Google's algorithm and thus falling into the category of conduct analyzed as "product design" for antitrust purposes. This algorithm faces competition from other search algorithms and vertical search engines to deliver relevant results to consumers. It is the design of the algorithm that ranks Google-affiliated content, according to the complaints, preferentially and to the disadvantage of rivals. I explore both beneath the fold.

The two conceptions are not mutually exclusive. The antitrust

---

[12] *Id*.

[13] *Sacrificing Consumer Welfare in the Search Bias Debate*, truthonthemarket.com/2011/04/22/sacrificing-consumer-welfare-in-the-search-bias-debate/.

[14] Geoffrey A. Manne and Joshua D. Wright, *If Search Neutrality is the Answer, What's the Question?*, papers.ssrn.com/sol3/papers.cfm?abstract_id=1807951.

implications of the two different conceptions of Google's organic search are significant. Courts and agencies generally give wide latitude to product design decisions, through with some prominent exceptions (Microsoft, FTC v. Intel). Courts are skeptical to intervene on the basis of complaints about product design by rivals because they concerned that such intervention will chill innovation. Concern for false positives play a central part in the analysis, as do concerns that any remedy will involve judicial oversight of product innovation. Plaintiffs can and do, from time to time, win these cases, but the product-design conception carries with it a heavy deference for design decisions.

The "vertical" (in the antitrust sense) conception of Google's search results requires us to think about the economics of algorithmic search ranking, placement choices, and the economics of vertical relationships between a content provider and a search engine. There are many economic reasons for vertical contractual relationships between such content or product providers and retailers. Coca-Cola pays retailers for promotional shelf space, manufacturers compensate retailers by granting them exclusive territories, and product manufacturers and distributors often enter into exclusive relationships in which the distributor does not simply feature or promote the manufacturer's product, but does so to the exclusion of all of the manufacturer's rivals.

The anticompetitive narrative of Google's conduct focuses heavily on that prominent placement within Google's rankings, e.g. the first link or one towards the top of the page, results in a substantial amount of traffic. This is no doubt true; it is not a sufficient condition for proving competitive harm. It is equally true that eye-level and other premium level shelf space in the supermarket generates more sales than other placements within the store. There is good economic reason for manufacturers to pay retailers for premium shelf space (see Klein and Wright, 2007[15]) and evidence that these arrangements are good for consumers (Wright, 2008[16]). Retailers'

---

[15] Benjamin Klein and Joshua D. Wright, *The Economics of Slotting Contracts*, papers.ssrn.com/sol3/papers.cfm?abstract_id=773464.

[16] Joshua D. Wright, *Slotting Contracts and Consumer Welfare*, papers.ssrn.com/sol3/papers.

shelf space decisions, and decisions to promote one product over another, are often influenced by contractual incentives; and it is a good thing for consumers. Now consider the case when the retailer shelf space decision is influenced not by contractual incentive and compensation, but by ownership. This is really just a special case – as ownership aligns the incentives (like the contract would) of the manufacturer and retailer. For example, a supermarket might promote its own private label brand in eye-level shelf space. Alternatively, in a category management relationship,[17] a retailer might delegate a specific manufacturer as "category captain" and allow it significant influence over product selection and shelf space placement decisions. Note that in the case of exclusive relationships, the presumption that such arrangements are pro-competitive applies to shelf placement that would entirely exclude a rival from the shelf, not just demote it.

In economics, the theoretical and empirical verdict is in about these sorts of vertical contractual relationships: while they can be anticompetitive under some circumstances, the appropriate presumption is that they are generally pro-competitive and a part of the normal competitive process until proven otherwise. How we conceptualize placement of search results, including those affiliated with the search engine (e.g. Google Maps on Google or Bing Maps on Bing), should influence how we think about the appropriate burden of production facing would-be antitrust plaintiffs, including the Federal Trade Commission.

Indeed, these two models offer important trade-offs for antitrust analysis. To wit, in my view, the vertical integration model provides a still difficult, but relatively easier case for potential rivals to make under existing case law, but it also integrates efficiencies directly into the analysis. For example, vertical integration and exclusive dealing cases accept as a starting point the notion that such arrangements are often efficient. On the other hand, while potential plaintiffs have a tougher initial burden in a product design case, the focus

---

cfm?abstract_id=897394.

[17] Joshua D. Wright, *Antitrust Analysis of Category Management: Conwood v. United States Tobacco Co.*, papers.ssrn.com/sol3/papers.cfm?abstract_id=945178.

often turns to how the design impacts interoperability and whether the defendant can defend its technical design choices. Having explored the potential conceptual constructs for characterizing Google's conduct for the purpose of antitrust analysis, my next post will link those concepts to a discussion of potential remedies, exploring the proposed remedies for Google's conduct, a relevant historical parallel to today's "search bias" debate raised by some as a model of regulatory success, and a discussion of the economic non sequiturs surrounding the case against Google as juxtaposed against these proposed remedies.

SEARCHING FOR ANTITRUST REMEDIES, PART II

In the last post,[18] I discussed possible characterizations of Google's conduct for purposes of antitrust analysis. A firm grasp of the economic implications of the different conceptualizations of Google's conduct is a necessary – but not sufficient – precondition for appreciating the inconsistencies underlying the proposed remedies for Google's alleged competitive harms. In this post, I want to turn to a different question: assuming *arguendo* a competitive problem associated with Google's algorithmic rankings – an assumption I do not think is warranted, supported by the evidence, or even consistent with the relevant literature on vertical contractual relationships – how might antitrust enforcers conceive of an appropriate and consumer-welfare-conscious remedy? Antitrust agencies, economists, and competition policy scholars have all appropriately stressed the importance of considering a potential remedy prior to, rather than following, an antitrust investigation; this is good advice not only because of the benefits of thinking rigorously and realistically about remedial design, but also because clear thinking about remedies upfront might illuminate something about the competitive nature of the conduct at issue.

Somewhat ironically,[19] former DOJ Antitrust Division Assistant Attorney General Tom Barnett – now counsel for Expedia, one of

[18] "Searching for Antitrust Remedies, Part I" above.
[19] "Barnett v. Barnett on Antitrust" above.

the most prominent would-be antitrust plaintiffs against Google – warned (in his prior, rather than his present, role) that "[i]mplementing a remedy that is too broad runs the risk of distorting markets, impairing competition, and prohibiting perfectly legal and efficient conduct," and that "forcing a firm to share the benefits of its investments and relieving its rivals of the incentive to develop comparable assets of their own, access remedies can reduce the competitive vitality of an industry." Barnett also noted that "[t]here seems to be consensus that we should prohibit unilateral conduct only where it is demonstrated through rigorous economic analysis to harm competition and thereby harm consumer welfare." Well said. With these warnings well in-hand, we must turn to two inter-related concerns necessary to appreciating the potential consequences of a remedy for Google's conduct: (1) the menu of *potential* remedies available for an antitrust suit against Google, and (2) the efficacy of these potential remedies from a consumer-welfare, rather than firm-welfare, perspective.

What are the potential remedies?

The burgeoning search neutrality crowd presents no lack of proposed remedies; indeed, if there is one segment in which Google's critics have proven themselves prolific, it is in their constant ingenuity conceiving ways to bring governmental intervention to bear upon Google. Professor Ben Edelman has usefully aggregated and discussed several of the alternatives, four of which bear mention: (1) a la Frank Pasquale and Oren Bracha, the creation of a "Federal Search Commission,"[20] (2) a la the regulations[21] surrounding the Customer Reservation Systems (CRS) in the 1990s, a prohibition on rankings that order listings "us[ing] any factors directly or indirectly relating to" whether the search engine is affiliated with the link, (3) mandatory disclosure of all manual adjustments to algorithmic search, and (4) transfer of the "browser choice" menu of the

[20] Frank A. Pasquale III and Oren Bracha, *Federal Search Commission? Access, Fairness and Accountability in the Law of Search*, papers.ssrn.com/sol3/papers.cfm?abstract_id=1002453.
[21] 14 C.F.R. pt. 255 – Airline Computer Reservations Systems.

EC Microsoft litigation to the Google search context, requiring Google to offer users a choice of five or so rivals whenever a user enters particular queries.

Geoff and I discuss several of these potential remedies in our paper, *If Search Neutrality is the Answer, What's the Question?*[22] It suffices to say that we find significant consumer welfare threats from the creation of a new regulatory agency designed to impose "neutral" search results. For now, I prefer to focus on the second of these remedies – analogized to CRS technology in the 1990s – here; Professor Edelman not only explains proposed CRS-inspired regulation, but does so in effusive terms:

> A first insight comes from recognizing that regulators have already – *successfully!* – addressed the problem of bias in information services. One key area of intervention was customer reservation systems (CRS's), the computer networks that let travel agents see flight availability and pricing for various major airlines. Three decades ago, when CRS's were largely owned by the various airlines, some airlines favored their own flights. For example, when a travel agent searched for flights through Apollo, a CRS then owned by United Airlines, United flights would come up first – even if other carriers offered lower prices or nonstop service. The Department of Justice intervened, culminating in rules[23] prohibiting any CRS owned by an airline from ordering listings "us[ing] any factors directly or indirectly relating to carrier identity" (14 CFR 255.4). Certainly one could argue that these rules were an undue intrusion: A travel agent was always free to find a different CRS, and further additional searches could have uncovered alternative flights. Yet most travel agents hesitated to switch CRS's, and extra searches would be both time-consuming and error-prone. Prohibiting biased listings was the better approach.
>
> The same principle applies in the context of web search. On this theory, Google ought not rank results by any metric that distinctively favors Google. I credit that web search considers

[22] See above at note 18.

[23] 14 C.F.R. pt. 255 – Airline Computer Reservations Systems, law.justia.com/cfr/title14/14-4.0.1.1.32.html#14:4.0.1.1.32.0.8.4.

> myriad web sites – far more than the number of airlines, flights, or fares. And I credit that web search considers more attributes of each web page – not just airfare price, transit time, and number of stops. But these differences only grant a search engine more room to innovate. These differences don't change the underlying reasoning, so compelling in the CRS context, that a system provider must not design its rules to systematically put itself first.

The analogy is a superficially attractive one, and we're tempted to entertain it, so far as it goes. Organizational questions inhere in both settings, and similarly so: both flights and search results must be ordinally ranked, and before CRS regulation, a host airline's flights often appeared before those of rival airlines. Indeed, we will take Edelman's analogy at face value. Problematically for Professor Edelman and others pushing the CRS-style remedy, a fuller exploration of CRS regulation reveals this market intervention – well, put simply, wasn't so successful after all. Not for consumers anyway. It did, however, generate (economically) predictable consequences: reduced consumer welfare through reduced innovation. Let's explore the consequences of Edelman's analogy further below the fold.

History of CRS Antitrust Suits and Regulation

Early air travel primarily consisted of "interline" flights – flights on more than one carrier to reach a final destination. CRSs arose to enable airlines to coordinate these trips for their customers across multiple airlines, which necessitated compiling information about rival airlines, their routes, fares, and other price- and quality-relevant information. Major airlines predominantly owned CRSs at this time, which served both competitive and cooperative ends; this combination of economic forces naturally drew antitrust advocates' attention.

CRS regulation proponents proffered numerous arguments as to the potentially anticompetitive nature and behavior of CRS-owning airlines. For example, they claimed that CRS-owning airlines engaged in "dirty tricks," such as using their CRSs to terminate passengers' reservations on smaller, rival airlines and to rebook customers

on their own flights, and refusing to allow smaller airlines to become CRS co-hosts, thereby preventing these smaller airlines from being listed in search results. CRS-owning airlines faced further allegations of excluding rivals through contractual provisions, such as long-term commitments from travel agents. Proponents of antitrust enforcement alleged that the nature of the CRS market created significant barriers to entry and provided CRS-owning airlines with significant cost advantages to selling their own flights. These cost advantages purportedly derived from two main sources: (1) quality advantages that airline-owned CRSs enjoyed, as they could commit to providing comprehensive and accurate information about the owner airline's flight schedule, and (2) joint ownership of CRSs, which facilitated coordination between airlines and CRSs, thereby decreasing the distribution and information costs.

These claims suffered from serious shortcomings including both a failure to demonstrate harm to competition rather than injury to specific rivals as well as insufficient appreciation for the value of dynamic efficiency and innovation to consumer welfare. These latter concerns were especially pertinent in the CRS context, as CRSs arose at a time of incredible change – the deregulated airline industry, joined with novel computer technology, necessitated significant and constant innovation. Courts accordingly generally denied antitrust remedies in these cases – rejecting claims that CRSs imposed unreasonable restraints on competition, denied access to an essential facility, or facilitated monopoly leverage.

Yet, particularly relevant for present purposes, one of the most popular anticompetitive stories was that CRSs practiced "display bias," defined as ranking the owner airline's flights above those of all other airlines. Proponents claimed display bias was particularly harmful in the CRS setting, because only the travel agent, and not the customer, could see the search results, and travel agents might have incentives to book passengers on more expensive flights for which they receive more commission. Fred Smith[24] describes the

[24] Fred L. Smith, Jr., *The Case for Repealing the Antitrust Regulations*, cei.org/pdf/3261.pdf ("Based Upon 'The Case For Reforming the Antitrust Regulations (If Repeal Is Not an Option)' in *The Harvard Journal of Law and Public Policy,* Vol. 23, No. 1, Fall 1999. pp. 23-

investigations surrounding this claim:

> These initial CRS services were used mostly by sophisticated travel agents, who could quickly scroll down to a customer's preferred airline. But this extra "effort" was considered discriminatory by some at the DOJ and the DOT, and hearings were held to investigate this threat to competition. Great attention was paid to the "time" required to execute only a few keystrokes, to the "complexity" of re-designing first screens by computer-proficient travel agents, and to the "barriers" placed on such practices by the host CRS provider.

CRS Rules

While courts declined to intervene in the CRS market, the Department of Transportation (DOT) eagerly crafted rules to govern CRS operations. The DOT's two primary goals in enacting the 1984 CRS regulations were (1) to incentivize entry into the CRS market and (2) to prevent airline ownership of CRSs from decreasing competition in the downstream passenger air travel market. One of the most notable rules introduced in the 1984 CRS regulations prohibited display bias. The DOT changed both this rule and CRS rules as a whole significantly, and by 1997, the DOT required each CRS "(i) to offer at least one integrated display that uses the same criteria for both online and interline connections and (ii) to use elapsed time or non-stop itinerary as a significant factor in selecting the flight options from the database" (Alexander, 2004). However, the DOT did not categorically forbid display bias; rather, it created several exceptions to this rule – and even allowed airlines to disseminate software that introduced bias into displays. Additionally, the DOT expressly refused to enforce its anti-bias rules against travel agent displays.

Other CRS rules attempted to reinforce these two goals of additional market entry and preservation of downstream competition. CRS rules specifically focused on mitigating travel agent switching costs between CRS vendors and reducing any quality advantage in-

58.").

cumbent CRSs allegedly had. Rules prohibited discriminatory booking fees and the tying of travel agent commissions to CRS use, limited contract lengths, prohibited minimum uses and rollover clauses, and required CRSs to give all participating carriers equal service upgrades.

Evidence of CRS Regulation "Success"?

The CRS regulatory experiment had years to run its course; despite the extent and commitment of its regulatory sweep, these rules failed to improve consumer outcomes in any meaningful way. CRS regulations precipitated neither innovation nor entry, and likely incurred serious allocative efficiency and consumer welfare losses by attempting to prohibit display bias.

First, CRS regulations unambiguously failed in their goal of increasing ease of entry:

> Only six CRS vendors offered their services to domestic airlines and travel agents in the mid-1980s . . . If the rules had actually facilitated entry, the number of CRS vendors should have grown or some new entrants should have been seen during the past twenty years. The evidence, however, is to the contrary. It remains that '[s]ince the [CAB] first adopted CRS rules, no firm has entered the CRS business.' Meanwhile, there has been a series of mergers coupled with introduction of multinational CRS; the cumulative effect was to *reduce* the number of CRSs . . . Even if a regulation could successfully facilitate entry by a supplier of CRS services, the gain from such entry would at this point be relatively small, and possibly negative. (Alexander and Lee, 2004) (emphasis added).

As such, CRS regulations did not achieve one of their primary objectives – a fact which stands in stark contrast to Edelman's declaration that CRS rules represent an unequivocal regulatory success.

Most relevant to the search engine bias analogy, the CRS regulations prohibiting bias did not positively affect consumer welfare. To the contrary, by ignoring the reality that most travel agents took consumer interests into account in their initial choice of CRS operator (even if they do so to a lesser extent in each individual search

they conduct for consumers), and that even if residual bias remained, consumers were "informed and repeat players who have their own preferences," CRS regulations imposed unjustified costs. As Alexander and Lee[25] describe it

> [T]he social value of prohibiting display . . . bias solely to improve the quality of information that consumers receive about travel options appears to be low and may be negative. Travel agents have strong incentives to protect consumers from poor information, through how they customize their internal display screens, and in their choices of CRS vendors.

Moreover, and predictably, CRS regulations appear to have caused serious harm to the competitive process:

> The major competitive advantage of the pre-regulation CRS was that it permitted the leading airlines to slightly disadvantage their leading competitors by placing them a bit farther down on the list of available flights. United would place American slightly farther down the list, and American would return the favor for United flights. The result, of course, was that the other airlines received slightly higher ranks than they would have otherwise. When "bias" was eliminated, United moved up on the American system and vice versa, while all other airlines moved down somewhat. The antitrust restriction on competitive use of the CRS, then, actually reduced competition. Moreover, the rules ensured that the United/American market leadership would endure fewer challenges from creative newcomers, since any changes to the system would have to undergo DOT oversight, thus making "sneak attacks" impossible. The resulting slowdown of CRS technology damaged the competitiveness of these systems. Much of the innovative lead that these systems had enjoyed slowly eroded as the internet evolved. Today, much of the air travel business has moved to the internet (as have the airlines themselves) (Smith, 1999).

[25] Cindy R. Alexander and Yoon-Ho Alex Lee, *The Economics of Regulatory Reform: Termination of Airline Computer Reservation System Rules*, litigation-essentials.lexisnexis.com/webcd/app?action=DocumentDisplay&crawlid=1&doctype=cite&docid=21+Yale+J.+on+Reg.+369&srctype=smi&srcid=3B15&key=c8729641e598741bc2a21a40e62a99ba, and 21 Yale J. on Reg. 369 (2004).

These competitive losses occurred despite evidence suggesting that CRSs themselves enhanced competition and thus had the predictable positive impact for consumers. For example, one study found that CRS usage increased travel agents' productivity by an average of 41% and that in the early 1990s over 95% of travel agents used a CRS – indicating that travel agents were able to assist consumers far more effectively once CRSs became available (Ellig, 1991). The rules governing contractual terms fared no better; indeed, these also likely reduced consumer welfare:

> The prohibited contract practices – long-term contracting and exclusive dealing – that had been regarded as exclusionary might not have proved to be such a critical barrier to entry: entry did not occur, independently of those practices. Evidence on the dealings between travel agents and CRS vendors, post-regulation, suggests that these practices may have enhanced overall allocative efficiency. Travel agents appear to have agreed to some, if not all, restrictive contracts with CRS vendors as a means of providing those vendors with assurance that they would be repaid gradually, over time, for their up-front investments in the travel agent, such as investments in equipment or training (Alexander and Lee, 2004).

Accordingly, CRS regulations seem to have threatened innovation by decreasing the likelihood that CRS vendors would recover research and development expenditures without providing a commensurate consumer benefit.

Termination of Rules

The DOT terminated CRS regulations in 2004 in light of their failure to improve competitive outcomes in the CRS market and a growing sense that they were making things worse, not better – which Edelman fails to acknowledge and which certainly undermines his claim that regulators addressed this problem "successfully." From the time CRS regulations were first adopted in 1984 until 2004, the CRS market and the associated technology changed significantly, rapidly becoming more complex. As the market increased in complexity, it became increasingly more difficult for the DOT to

effectively regulate. Two occurrences in particular precipitated deregulation: (1) the major airlines divested themselves of CRS ownership (despite the absence of any CRS regulations requiring or encouraging divestiture!), and (2) the commercialization of the internet introduced novel forms of substitutes to the CRS system that the CRS regulations did not govern. Online direct-to-traveler services, such as Travelocity, Expedia and Orbitz provide consumers with a method to choose their own flights, entirely absent travel agent assistance. More importantly, Expedia and Orbitz each developed direct connection technologies that allow them to make reservations directly with an airline's internal reservation system – bypassing CRS systems almost completely. Moreover, Travelocity, Expedia, and Orbitz were never forced to comply with CRS regulations, which allowed them to adopt more consumer-friendly products and innovate in meaningful ways, obsoleting traditional CRSs. It is unsurprising that Expedia has warned against overly broad regulations in the search engine bias debate – it has first-hand knowledge of how crucial the ability to innovate is.)

These developments, taken in harmony, mean that in order to cause any antitrust harm in the first instance, a hypothetical CRS monopolist must have been interacting with (1) airlines, (2) travel agents, and (3) consumers who *all* had an insufficient incentive to switch to another alternative in the face of a significant price increase. Given this nearly insurmountable burden, and the failure of CRS regulations to improve consumer welfare in even the earlier and simpler state of the world, Alexander and Lee find that, by the time CRS regulations were terminated in 2004, they failed to pass a cost-benefit analysis.

Overall, CRS regulations incurred significant consumer welfare losses and rendered the entire CRS system nearly obsolete by stifling its ability to compete with dynamic and innovative online services. As Ellig notes, "[t]he legal and economic debate over CRS. . . frequently overlooked the peculiar economics of innovation and entrepreneurship." Those who claim search engine bias exists (as distinct from valuable product differentiation between engines) and can be meaningfully regulated rely upon this same flawed analysis

and expect the same flawed regulatory approach to "fix" whatever issues they perceive as ailing the search engine market. Search engine regulation will make consumers worse off. In the meantime, proponents of so-called search neutrality and heavy-handed regulation of organic search results battle over which of a menu of cumbersome and costly regulatory schemes should be adopted in the face of evidence that the approaches are more likely to harm consumers than help them, and even stronger evidence that there is no competitive problem with search in the first place.

Indeed, one benefit of thinking hard about remedies in the first instance is that it may illuminate something about the competitive nature of the conduct one seeks to regulate. I defer to former AAG Barnett in explaining this point:[26]

> Put another way, a bad section 2 remedy risks hurting consumers and competition and thus is worse than no remedy at all. That is why it is important to consider remedies at the outset, before deciding whether a tiger needs catching. Doing so has a number of benefits. . . .
>
> Furthermore, contemplation of the remedy may reveal that there is no competitive harm in the first place. Judge Posner has noted that "[t]he nature of the remedy sought in an antitrust case is often . . . an important clue to the soundness of the antitrust claim."[27] The classic non-section 2 example is *Pueblo Bowl-O-Mat*, where plaintiffs claimed that the antitrust laws prohibited a firm from buying and reinvigorating failing bowling alleys and prayed for an award of the "profits that would have been earned had the acquired centers closed."[28] The Supreme Court correctly noted that condemning conduct that increased competition "is inimical to the purposes of [the antitrust] laws"[29] – more competition is not a competitive harm to be remedied. In the section 2 context, one might wish that the Supreme Court had focused on the injunctive relief issued in *Aspen Skiing* – a compelled joint venture whose ability to enhance competition

[26] *Section 2 Remedies: What to Do After Catching the Tiger by the Tail*, June 4, 2008, www.justice.gov/atr/public/speeches/233884.htm.

[27] *Brunswick Corp. v. Riegel Textile Corp.*, 752 F.2d 261, 267 (7th Cir. 1984).

[28] *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 490 (1977).

[29] *Id.* at 488.

> among ski resorts was not discussed[30] – in assessing whether discontinuing a similar joint venture harmed competition in the first place.[31]

A review of my paper with Geoff reveals several common themes among proposed remedies intimated by the above discussion of CRS regulations. The proposed remedies consistently: (1) disadvantage Google, (2) advantage its rivals, and (3) have little if anything to do with consumers. Neither economics nor antitrust history supports such a regulatory scheme; unfortunately, it is consumers that might again ultimately pay the inevitable tax for clumsy regulatory tinkering with product design and competition. //

---

[30] *See Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 598 n.23 (1985).

[31] *See generally* Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal – Why* Aspen *and* Kodak *Are Misguided*, 68 Antitrust L.J. 659, 662 (2001) (maintaining that "the only outcome to expect from court intervention" in situations like *Aspen Skiing* "is inefficiency").