

ANTITRUST IN HIGH-TECH INDUSTRIES

George Mason Law Review's Fifteenth Annual Symposium on Antitrust Law in Partnership with the Law & Economics Center at George Mason University School of Law and Sponsored by Kelley Drye & Warren LLP

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INTRODUCTION

On January 26, 2012, the *George Mason Law Review* hosted its Fifteenth Annual Symposium on Antitrust Law in partnership with the Law & Economics Center at George Mason University School of Law. The Symposium, sponsored by Kelley Drye & Warren LLP, took place at George Mason University School of Law in Arlington, Virginia. The Symposium brought together a distinguished group of practitioners and scholars to discuss the role and impact of antitrust law on dynamic, high-technology industries, as well as to analyze future issues that may arise.¹

Daniel Polsby, Dean and Professor of Law at George Mason University School of Law, welcomed the participants, and Catherine Brown, Symposium Editor of the *George Mason Law Review*, offered opening remarks and an introduction to the Symposium. The Symposium's first two panels discussed macro perspectives of antitrust law on high-technology industries and the antitrust concerns raised by social media. Next, William E. Kovacic, Global Competition Professor of Law and Policy and Director of the Competition Law Center at the George Washington University Law School, gave a keynote address. The Symposium's final two panels addressed how antitrust law treats mergers in high-technology industries and examined the proper antitrust analysis to apply to online searching and advertising. The Symposium concluded after Catherine Schmierer, Editor-in-Chief of the *George Mason Law Review*, gave the final remarks.

¹ This synopsis of the symposium was written by the staff and editors of the *George Mason Law Review*; any errors or omissions are attributable to the *George Mason Law Review*. Full videos of the Symposium's four panels and keynote address, accompanied by individual presentation materials, are available at <http://www.georgemasonlawreview.org/symposium/symposium-2012>.

PANEL ONE: MACRO ANALYSIS OF THE ROLE OF ANTITRUST IN HIGH-TECHNOLOGY MARKETS

Moderator:

Howard Shelanski, *Professor of Law, Georgetown University Law Center*

Speakers:

Herbert Hovenkamp, *Ben V. & Dorothy Willie Chair Professor of Law and History, University of Iowa College of Law*

Keith N. Hylton, *Professor of Law, Boston University School of Law*

George L. Priest, *Edward J. Phelps Professor of Law and Economics and Kauffman Distinguished Research Scholar in Law, Economics, and Entrepreneurship, Yale Law School*

As moderator, Professor Shelanski introduced the speakers with a brief summary of their works and accomplishments. He presented the topic of analyzing and applying antitrust law in high-technology industries as a “truly important problem” of determining when and whether to intervene in new markets, where those new markets are developing rapidly and often difficult to define. The first panel addressed the extent to which antitrust laws are well-suited to ferret out conduct that has the potential to harm innovation. In addition, the panel debated whether the potential for errors outweighs the benefits of antitrust application.

Herbert Hovenkamp

Professor Hovenkamp discussed collaborative innovation, also called the “innovation commons,”² for high-technology industries.³ He explained that collaborative innovation may occur when multiple firms work together to share intellectual property rights or set standards for common development. Professor Hovenkamp initially observed that promoting invention through collaborative innovation requires navigating a variety of legal fields in addition to antitrust law, including intellectual property law, telecommunications law, and regulatory law. Moreover, he pointed out two limitations of antitrust law to deal with collaborative innovation: it focuses heavily on short-run concerns, and innovation does not behave as predictably as established markets do. Specifically, there are no models or history to evaluate market forces for new innovations or predict the consequences of intervention.

² See LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD 23 (2001), available at http://www.the-future-of-ideas.com/download/lessig_FOI.pdf.

³ See generally Herbert Hovenkamp, *Antitrust and the Movement of Technology*, 19 GEO. MASON L. REV. 1119 (2012).

Professor Hovenkamp presented several rationales for antitrust law to allow collaborative innovation. First, he asserted that fixed costs in innovative markets tend to be very high. This creates the potential for significant economies of scale when producers share new technologies. Second, Professor Hovenkamp explained that high-technology industries frequently require common standards for interoperability. He offered two methods for creating common standards: government regulations imposing a common standard on an industry, or, more commonly, the firms that participate in the market agree to work with a common standard together. Since the firms developing new technologies normally protect their innovations through intellectual property law, developing common standards usually requires substantial cross-licensing of patents. He justified the need for cross-licensing by observing that without it, innovations requiring interaction with multiple other inventions would give several firms the power to mark up the price of using their intellectual property, which could make further innovation incredibly expensive. If a joint venture of firms can license all necessary patents together, it permits the development of new technology at a lower cost.

Professor Hovenkamp's third rationale for encouraging collaborative innovation in high-technology industries is the fact that these joint ventures are nonrivalries. He explained that there are two types of common-resource pools. First, there are limited-resource commons that create rivalries for resources. Common examples of these commons include grazing rights, fisheries, and oil and gas rights. To protect these commons, Professor Hovenkamp stated that managers of the commons must restrict the use of the shared resources, and that these limitations will be permitted under antitrust law. Common resource pools are exemplified by patents, for which there is not a limited supply. While overproduction of patents can be a problem in some situations, the patent itself is not a limited resource because it can be replicated an infinite number of times.

Professor Hovenkamp's final rationale for allowing collaborative innovation is boundary ambiguity resulting from deficiencies in the patent system. Particularly in information technology, firms attempting to innovate must navigate many patents that are small in scope and poorly defined. As a result, new inventions require costly negotiations and frequently result in litigation. Sharing technologies through collaborative innovation cuts down on these costs and risks for innovators. Professor Hovenkamp justified support for creating patent pools by likening it to the framework used by Ronald Coase to explain when a firm will produce a component internally or seek to obtain it from an external producer.⁴

Professor Hovenkamp acknowledged that these patent pools required for collaborative innovation are a costly solution to a broken or ineffective

⁴ See generally R.H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386 (1937).

patent system. However, he also highlighted many advantages they offer. Since patent pools are a response to the problematic patent system, they are difficult to challenge through antitrust law unless there are output limitations in production. He explained that, while there may be a limited number of cases where output limitations are necessary to keep the collaborative innovation ventures from hitting their marginal costs, and thus risk losing the investment in the fixed costs that were contributed to the patent pools, in the vast majority of cases the value of the patent pools will be protected by product differentiation. Professor Hovenkamp concluded that antitrust law should allow an extraordinary tolerance for collaborative innovation, but it should take a closer look at patent pools that include output restraints in the venture.

Keith N. Hylton

Professor Hylton examined six prominent antitrust cases or investigations in the high-technology field that involved dominant firms. His first example was the ongoing investigation into Google's aggressive protections of its vertical search technologies. Second, he mentioned the now-settled Federal Trade Commission ("FTC") investigation of Intel for allegedly engaging in predatory pricing by issuing volume discounts, designing software to disadvantage chips made by other firms, and acting too aggressively to protect its intellectual property. The third case that Professor Hylton explored involved IBM and the European Commission's accusation that IBM excluded independent service organizations from technological information needed to work with its products.

Next addressing some large merger cases, Professor Hylton started with the proposed merger between AT&T and T-Mobile, which he hypothesized was an attempt by T-Mobile to exit the market. The fifth investigation he discussed was the merger between Google and Motorola, which he noted was still under investigation by the antitrust authorities in the European Union. Professor Hylton connected this merger to Professor Hovenkamp's presentation, noting that Google's likely motivation for the merger was to obtain the rights to a large number of patents. These patents would allow Google to develop new products, avoid costly litigation, and negotiate future technology partnerships with outside firms.

Finally, Professor Hylton considered cases he labeled "pay for delay," where pharmaceutical companies enter into agreements with generic producers to delay entering the market of selling medicines with expired patent protection. To Professor Hylton, there is no question that these practices are anticompetitive. However, the issue that antitrust law must evaluate is whether these practices are harmful to the consumer. Professor Hylton did not believe the answer was obvious for these cases; for instance, the pharmaceutical agreements could help incentivize further investment in new medical research that ultimately benefits the consumer.

Professor Hylton viewed these recent or ongoing cases and investigations in light of recent precedents in dominant-firm case law. He observed that the current law and enforcement efforts in this area are inconsistent and argued that the courts should do more to clarify and reconcile the law. He first looked at dominant-firm cases addressed under Section 2 of the Sherman Act.⁵ As the controlling precedent on this issue, Professor Hylton identified the holding in *Pacific Bell Telephone Co. v. Linkline Communications, Inc.*,⁶ that a dominant firm does not have a duty to allow competitors to remain viable.⁷ He considered *Linkline* to be too broad of a reading of antitrust law and preferred the view offered by *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*.⁸ Professor Hylton said that *Trinko* made an effort to distinguish its facts from those of *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*,⁹ finding that Verizon did not do enough to help its rivals, but also that it did not attempt to destroy them.¹⁰ The *Trinko* court found the statutory regulations required Verizon to subsidize its rivals to a certain extent, but held that, without a specific intent to monopolize, Verizon's conduct did not violate Section 2.¹¹ Professor Hylton interpreted this as reading a "specific intent" standard into Section 2 and observed a drastic variation from the dominant-firm standard established in *United States v. Aluminum Co. of America*.¹² He viewed *Alcoa*, revamped in *United States v. Microsoft Corp.*,¹³ as an alternative and largely conflicting standard for evaluating high-technology antitrust behavior.

As a result, the clash between these differing cases creates many problems for technology firms when dealing with antitrust law. Professor Hylton proposed extending the *Trinko* and *Linkline* holdings to most high-technology cases and stopping prosecutions of dominant firms for investing in new products or enhancing their current offerings, which is how he views the Google investigation based on press reports. He believes antitrust law should incentivize these sorts of investments to enhance the products available to consumers, rather than allow these productive behaviors to expose firms to antitrust liability.

George L. Priest

Professor Priest addressed the notion that antitrust law must behave differently when evaluating rapidly changing markets. He disagreed with

⁵ 15 U.S.C. § 2 (2006).

⁶ 555 U.S. 438 (2009).

⁷ *See id.* at 447-48.

⁸ 540 U.S. 398 (2004).

⁹ 472 U.S. 585 (1985).

¹⁰ *Trinko*, 540 U.S. at 409-410.

¹¹ *Id.* at 415-16.

¹² 148 F.2d 416 (2d Cir. 1945).

¹³ 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

this notion because courts and enforcement agencies believe that antitrust laws are good for society. However, he did acknowledge that these rules must be carefully applied in the dynamic environment of high-technology industries.

Professor Priest did not believe that *Microsoft*, *Linkline*, or *Trinko* offer useful precedents in high-technology industries. *Linkline* and *Trinko* both dealt with industries that were sufficiently established to be regulated, and Professor Priest viewed the Supreme Court's rulings on both cases in a context where the direct regulations of the relevant industries were more controlling than general antitrust law.

Instead, he identified two important concepts to consider in high-technology industries. First, Professor Priest identified mootness as an important consideration for antitrust law in rapidly changing markets. In his view, if the issue being litigated no longer exists due to changes in technology or changes in the market, then a court should not have jurisdiction over the case because there is no longer a controversy worthy of the court's time. However, he believes there are limits to this notion of mootness. For example, if parties engage in practices that are likely to be replicated in the future, the issue may not be moot even if the specific circumstances that gave rise to the case have changed.

Professor Priest said the *Microsoft* case exemplifies this concept. The issues dealt with in *Microsoft* did not revolve around the parts of the browser industry that were changing; instead, it addressed contractual issues with manufacturers and Internet providers that limited the ability of a competitor to operate in the same market.¹⁴ Therefore, the court's opinion was still significant even though the technology and market had evolved. Since the contractual practices evaluated by the court were fixed despite the changing technology, *Microsoft* does not offer much guidance to courts or practitioners evaluating antitrust concerns in rapidly changing markets.

Professor Priest's second consideration when applying antitrust law to rapidly changing markets is that the markets change faster than the judicial process can address potential issues. He explored the question of whether search engines like Google should be required to apply their search algorithms neutrally. He noted that Google can change its algorithm fifty times each year. Since courts cannot investigate and evaluate each change expeditiously, antitrust law will struggle to monitor all of Google's search practices.

According to Professor Priest, antitrust law cannot assume that all changes to Google's algorithm indicate unlawful behavior. He believes there must be a distinction between changes that improve Google's product and competitive position and changes that help the company avoid regulation when under investigation. For fast-changing high-technology indus-

¹⁴ *Id.* at 59-62.

tries, Professor Priest suggested that antitrust law could regulate more generally and focus on aspects that do not change as frequently. Yet he still expressed skepticism that these regulations would be useful or could be applied in a helpful manner.

Finally, Professor Priest expounded on the reasons these markets change so quickly. He reiterated that if the markets change for competitive reasons, there is much less need for antitrust law to intervene. In those instances, competition would correct any improper market behavior. Professor Priest observed that this reasoning does not hold true for the anticompetitive contractual behavior in issue in *Microsoft*. This sort of fixed behavior can and should be regulated. He proposed that the actual rapidly changing parts of dynamic markets do not require antitrust intervention because market changes will correct discrepancies better than antitrust law.

Discussion: Themes of the Presentations

As Professor Shelanski noted in his opening, a theme running through all the presentations was the issue of time: either because an issue becomes moot over time or because time allows the market to adjust to firm behavior and clarify whether some changes are competitive or anticompetitive. He asked the panelists whether antitrust law should continue to pursue potential offenders after the challenged practice has ceased.

Professor Hovenkamp responded first, observing that antitrust law has both forward-looking concerns—preventing anticompetitive behaviors in the future—and backward-looking concerns—providing damages to compensate victims of anticompetitive behavior. He viewed the real quandary as whether antitrust law should be more concerned about general deterrence or specific deterrence in these fields.

Professor Hylton offered three things for courts and regulators to consider. First, they should look at whether the issue is moot due to changes in the industry and thus whether they should pursue the investigation. Second, he suggested that time gives regulators and courts a better understanding of the practice and the harm it causes. Waiting to bring charges facilitates better accuracy. Finally, Professor Hylton encouraged courts to consider whether they are in a position to offer a remedy at all for issues that change too quickly for effective judicial evaluation. He suggested that courts could refuse to try to monitor practices like Google's algorithm that change so frequently.

Professor Priest thought the real question was whether the courts have the capacity to understand and decide the cases before them. For new technologies, the courts may not be able to understand the issues well enough to make informed and accurate rulings, leading to additional lawsuits based on bad precedent that punishes practices with no harmful effects. This phenomenon is illustrated by the more than 130 class action lawsuits brought by consumers after the *Microsoft* case. While there was no real harm, Mi-

crosoft still had to spend millions of dollars defending legal challenges because judges did not understand the technological issues in the original case.

Next, Professor Shelanski asked the panelists whether some changes are good and whether the market can identify competitive and anticompetitive changes better than courts. For example, Google's algorithm changes could be procompetitive if the company is innovating to stay ahead of competitors and maintain a superior product. Alternatively, these changes could be anticompetitive if they are designed to increase consumer brand loyalty.

Professor Priest contested Professor Shelanski's assertion that these different views are significant or that either one is anticompetitive. Professor Priest believes that change is good for consumers, and so as long as the practice is not exclusionary of other products in some way, it should be allowed.

Professor Hylton suggested that antitrust law should focus on whether there was harm, and if there was, antitrust law should provide a remedy. He observed that in many cases, there may not be any harm for a court to remedy. In those circumstances, the courts should stay out of the competitive process of the markets.

Professor Hovenkamp warned that courts and regulators cannot make a blanket assumption about changes in industry standards or individual firm practices. He drew a comparison to the case of *Allied Tube & Conduit Corp. v. Indian Head, Inc.*¹⁵ In *Allied Tube*, after effective lobbying by its steel industry members, a trade association excluded a new kind of plastic electrical conduit from the National Electrical Code's list of approved devices.¹⁶ The steel companies thought the new plastic product would be superior to their steel conduit and thus harm their businesses. For this reason, the Supreme Court ruled this particular exclusion was anticompetitive, even though most of the association's other standards were pro-competition.¹⁷ Likewise, high-technology industries that usually set procompetitive standards or an individual firm that normally makes competitive product changes can still engage in anticompetitive behavior sometimes. According to Professor Hovenkamp, even when high-technology industries or firms appear to act legally, courts and enforcement agencies should continue to monitor their activities in case these firms occasionally engage in anticompetitive behavior.

¹⁵ 486 U.S. 492 (1988).

¹⁶ *Id.* at 496-97.

¹⁷ *Id.* at 501-02.

PANEL TWO: SOCIAL MEDIA AND ANTITRUST

Moderator:

James C. Cooper, *Director, Research and Policy, the Law & Economics Center at George Mason University School of Law*

Speakers:

Frank Pasquale, *Schering-Plough Professor in Health Care Regulation and Enforcement, Seton Hall University School of Law*

Catherine Tucker, *Douglas Drane Career Development Professor in Information Technology and Management, Associate Professor of Marketing, MIT Sloan School of Management*

Spencer W. Waller, *Professor and Director, Institute for Consumer Antitrust Studies, Loyola University Chicago School of Law*

Christopher S. Yoo, *John H. Chestnut Professor of Law, Communication, and Computer and Information Science; Director, Center for Technology, Innovation and Competition, University of Pennsylvania Law School*

Moderator James C. Cooper began the second panel by describing his participation ten years ago in a Law Review symposium on high-technology industries and network effects focusing on Nintendo and video games. He noted that the industries discussed at this Symposium, such as social media, did not exist ten years ago. He then proceeded to introduce the panelists and describe the topic as whether social networking raises antitrust concerns, and if so, what type of conduct might rise to the level of an antitrust violation.

Spencer W. Waller

Professor Waller provided an overview of the antitrust issues in the social networking space. He focused his presentation on the question of whether Facebook is a monopolist. He noted that in the United States, a firm must have more than 60-percent market share to be considered a monopoly, whereas any market share greater than 50 percent is generally sufficient in Europe. Still, market definition is just one tool to identify market power.

Professor Waller suggested that the important question is what consumers view as reasonable substitutes for Facebook. He noted that websites such as Groupon, YouTube, and specialized networking sites are not perfect substitutes for Facebook. As a result, he acknowledged the difficulty of measuring market share for social networking sites. One can estimate market share by using page views, users, or percentage of the market for user information, which is the measure Professor Waller prefers. By access, Professor Waller found that Facebook has about a 63-percent market share, but he suggested this understates Facebook's market share because it includes services such as YouTube, which is not a true substitute for Facebook.

Professor Waller noted there are significant obstacles for users to switch social networking services. For example, network effects make it difficult for a person to switch from Facebook when a person's social contacts are on Facebook. Similarly, it is difficult for a social network user to deactivate his or her account and then port data to another service.

Professor Waller next argued that Facebook's 63-percent market share may not indicate monopoly status because competition "is just a click away." However, he pointed out the dilemma that arises when the average user "never clicks away." Perhaps this lock-in makes Facebook more like a monopoly. Finally, Professor Waller addressed what activity Facebook engages in that might constitute a Section 2 violation. He suggested Facebook has probably not done anything that would count as a violation.

He noted that Facebook may be an example of "creative destruction" by displacing previous social networking platforms. The notion of creative destruction stems from the work of the economist Joseph Schumpeter. Professor Waller said that, while many draw on this concept to argue for a policy of *laissez faire*, this is probably both a misreading of Schumpeter and bad antitrust policy. While seeking to encourage the process of creative destruction may cut in favor of a relatively lenient antitrust policy toward the initial creation of market power, it still requires a careful antitrust analysis of whether the dominant firm is unlawfully taking action to prevent innovative new entrants from displacing it as market leader.

Frank Pasquale

Professor Pasquale focused his presentation on the issue of whether Facebook users pay a "price" to use the service. Although the social network is free in terms of money, Professor Pasquale suggested that users pay for the service with the personal information they post to their Facebook profiles. Individuals have widely different privacy preferences. Users willing to exchange more personal information may receive greater utility from the social network. Among regulators and scholars, there is an ongoing debate about the privacy concerns with services such as Facebook. The FTC could address these issues through consumer protection law. However, Professor Pasquale posited that antitrust law may provide a regulatory platform as well.

Professor Pasquale argued that privacy levels can provide a form of nonprice competition, which is properly the concern of antitrust law. In general, data collected on individuals can have useful purposes. With social media, the disclosure of information facilitates social connections for the user and market data for advertisers. Professor Pasquale also noted some anticompetitive concerns with this system: users have different privacy preferences, but social networks often provide limited choices for privacy settings.

Nevertheless, Professor Pasquale argued that governmentally imposed privacy rules may prevent nonprice competition between companies. He also suggested that regulators could require companies to disclose the privacy effects of mergers. Professor Pasquale ended his presentation by responding to Professor Waller's point about substitutes, noting that while Twitter may be a substitute for Facebook among some users, Facebook is the only successful monetizer of weak ties.

Catherine Tucker

Professor Tucker focused her presentation on the relationship between social networking and advertising.¹⁸ She noted that Facebook is the largest provider of display advertising, as measured by number of impressions. People spend a significant amount of time on social networking sites and provide substantial personal information, which makes social media attractive to marketers.

Although social networking sites control 30 percent of the relevant advertising market, they only account for 5 percent of the industry revenue, which Professor Tucker called a dramatic failure. According to Professor Tucker, demographic marketing has not worked well on social networking sites. As examples, she noted recent advertisements she received on Facebook for shoes and baby products. Even though the network's generation of these ads was based on the fact that Professor Tucker is a woman, these items did not personally appeal to her. Instead, Professor Tucker said Facebook is moving towards more social advertising, where an ad highlights the fact that a friend has used or recommended the product.

For antitrust law, Professor Tucker noted that social advertising is based on network effects. She also suggested that social networking sites may potentially provide double network effects. Finally, she agreed with Professor Pasquale that new privacy regulations, particularly consent requirements, may function as barriers to entry into the social networking market, as established companies like Facebook already have their users' consent whereas start-up networks may not.

Christopher S. Yoo

Professor Yoo offered a more skeptical perspective on the role of antitrust scrutiny for social media.¹⁹ He suggested that antitrust scrutiny is a "high-tech rite of passage." He cautioned that it is important to remember

¹⁸ See generally Catherine Tucker & Alexander Mathews, *Social Networks, Advertising, and Antitrust*, 19 GEO. MASON L. REV. 1211 (2012).

¹⁹ See generally Christopher S. Yoo, *When Antitrust Met Facebook*, 19 GEO. MASON L. REV. 1147 (2012).

the lessons of *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*²⁰ and resist returning to thinking “big is bad,” to thinking there is only one way to organize, or to protecting competitors instead of competition. Professor Yoo provided the cases *LiveUniverse, Inc. v. MySpace, Inc.*²¹ and *Facebook, Inc. v. Power Ventures, Inc.*²² as examples of antitrust scrutiny of social media.

Professor Yoo argued that practitioners do not always understand that the existence of network effects alone do not create a monopoly or a market failure. Network effects usually do not create a market failure, in part, because competitors can offer customers incentives to switch firms. He also noted that market failure arguments based on network effects often improperly assume that network benefits continue to increase as the network grows. In the case of social networks, larger networks do not continue to create network benefits for users as they become larger. Rather, congestion occurs, and the marginal value of each new user is relatively low. Similarly, the average number of websites a customer visits each month is very low.

Next, Professor Yoo discussed how “gateways” between social networks can preserve network effects and mitigate potential market failures. Data portability concerns are likely not important because users can normally move their current data in some form, and the switching costs associated with these moves do not necessarily imply a market failure.

Professor Yoo also argued that a market for privacy would be both good and viable. He also suggested that vertical integration in social media will most likely benefit users and that concerns about vertical integration in social media rest on questionable assumptions. If social media companies were forced to avoid vertical integration, a standard interface would be necessary, which could freeze innovation. He concluded that it is too easy to raise antitrust concerns when one firm is really successful. He referred again to *Matsushita*, which teaches that an antitrust suit needs a viable theory of completion harm and evidence of support, not simply any harm. Finally, Professor Yoo suggested that the relevant market may actually be advertising, where Facebook competes primarily with Google for contracts with marketers.

KEYNOTE ADDRESS

William E. Kovacic, *Global Competition Professor of Law and Policy and Director, Competition Law Center, George Washington University Law School; Former Chairman, Federal Trade Commission*

²⁰ 475 U.S. 574 (1986).

²¹ 304 F. App'x 554 (9th Cir. 2008).

²² 91 U.S.P.Q.2d 1430 (N.D. Cal. 2009).

Professor Henry N. Butler, Executive Director of the Law & Economics Center and Foundation Professor of Law at George Mason University School of Law, introduced Professor Kovacic as the keynote speaker. Professor Butler first gave a brief history and explanation of the Law & Economics Center and its association with George Mason University School of Law. He then introduced Professor Kovacic as one of the key professors who transformed George Mason University School of Law into a leading influence on the field of law and economics. He noted Professor Kovacic's former role as chairman of the FTC.

Professor Kovacic began by recounting that one of the interesting challenges he faced at the FTC was incorporating academic programs that had strong conceptual appeal into the existing FTC structure.²³ He used this speech to offer some suggestions for effectively bridging the gap between scholastic theory and practical implementation in the future. Specifically, he focused on the joint venture between the FTC and Department of Justice Antitrust Division ("DOJ") and how they enforce antitrust laws in high-technology industries.

First, Professor Kovacic recounted the perception of disparity between the high-technology sector and the antitrust enforcement institutions. Specifically, the high-technology sector is complex and dynamic, while antitrust enforcement institutions are perceived as too slow and inward-looking to address the complicated problems of enforcement in fast-changing industries. He argued that today, the FTC and DOJ are collaborating better and looking in the right direction to enforce antitrust laws in this difficult area. The agencies have taken steps to improve their knowledge of new fields. These steps include using outside consultants knowledgeable in these fields, recruiting more capable attorneys and analysts to staff their cases, and focusing on continuous improvement. Despite these improvements, Professor Kovacic declared that the current enforcement system "passes, but it does not get an A-plus."

Next, Professor Kovacic proposed several enhancements for the current federal antitrust enforcement joint-venture framework between the FTC and DOJ as they relate to high-technology industries. He explained that the agencies are both complements and substitutes. The substitution nature of this relationship is unique in the United States because it is a deliberate policy choice. Several other industries have overlapping regulations, but Section 7 of the Clayton Act²⁴ explicitly gives enforcement power to both agencies without offering any guidance on how to divide these powers. They are also complements in the sense that the FTC was designed to fulfill information-gathering purposes that the DOJ could not perform.

²³ For a more thorough account of his remarks, see William E. Kovacic, *Antitrust in High-Tech Industries: Improving the Federal Antitrust Joint Venture*, 19 GEO. MASON L. REV. 1097 (2012).

²⁴ 15 U.S.C. § 18 (2006).

Although it does not currently use this power, the FTC also has authority as a master in chancery in suits of equity brought by the DOJ.²⁵

This joint structure means that the quality of the system depends on the ability of the two agencies to work well together. Professor Kovacic noted that he has never seen a circumstance where competing rivals have successfully worked together in the private market, but observed that the United States system depends on the FTC and DOJ overcoming these hurdles. He did note some success with this structure, such as the 2010 Horizontal Merger Guidelines (the “2010 Guidelines”) issued with the cooperation of both agencies.²⁶ However, he warned that this cooperation is reluctant and only occurs on an as-needed basis. The outward appearance of harmony does not reflect the true state of conflict between the two agencies. He suggested that better integrating these two agencies would produce better results.

Professor Kovacic identified two ways to achieve better integration: ownership and contract. One method of achieving ownership would be to fold the DOJ Antitrust Division into the FTC and have one agency handle both functions. Another option would be to split all matters along civil and criminal cases, where DOJ would handle the criminal matters and leave the civil cases to the FTC. Professor Kovacic did not offer a detailed solution for how to fold one agency into the other or how to create a clear “ownership” model for the dual responsibilities. Instead, he looked at the second general method of achieving better integration, using a contract. Professor Kovacic suggested this is how the split is handled today and that it will continue into the future.

Professor Kovacic next identified six areas where this contract allocation of work could run more smoothly: (1) clearance, (2) pooling of experience across the two agencies, (3) the FTC Act, (4) litigation, (5) remedies, and (6) research. Clearance is the formal mechanism through which the agencies determine who handles which cases. Professor Kovacic suggested there are several aspects of clearance that could be improved. First, he indicated that in some large industries, the subdivision of individual activities between agencies is senseless. Regulatory activities for a complex industry should be managed by a single agency. He said this ownership model would encourage expertise and information retention that could help the designated agency better handle similar cases in that industry. As an example, he looked at the multiple ongoing Google investigations. He indicated that these investigations will probably be split between the FTC and the DOJ. As an alternative, he recommended that one agency handle all the

²⁵ *Id.* § 47 (“In any suit in equity brought by or under the direction of the Attorney General as provided in the antitrust Acts, the court may, upon the conclusion of the testimony therein, if it shall be then of opinion that the complainant is entitled to relief, refer said suit to the Commission, as a master in chancery, to ascertain and report an appropriate form of decree therein.”).

²⁶ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES (2010).

Google activity to streamline all the knowledge required for these and future cases into one agency.

Second, Professor Kovacic suggested the competition for cases creates institutional friction and mistrust between the agencies. These conflicts consume valuable energy and slow down both agencies' abilities to perform their responsibilities. Unfortunately, fixing the current mechanism is too difficult to achieve.

With respect to pooling experience, Professor Kovacic observed that both agencies would function better if they were better equipped to communicate how they are managing similar cases. This pooling of institutional knowledge does not currently occur. According to Professor Kovacic, this would be particularly helpful in complex areas such as intellectual property licensing markets or developing new guidelines.

Third, Professor Kovacic looked at the FTC Act and asked whether the FTC should develop a formal policy statement for itself to clarify its responsibilities. He said the DOJ and FTC need to be able to share intuitional knowledge within their organizations and between the agencies. Until they create a framework that allows and encourages frequent interagency communications, neither agency will be able to perform to the best of its abilities.

Fourth, Professor Kovacic discussed how the agencies could reform the way they litigate cases. Specifically, he urged the agencies to consider whether a certain case is better suited for administrative litigation before the FTC's courts than a DOJ case in the federal judicial system. He offered the American Airlines predatory pricing investigation as an example of a case better suited for the administrative process, even though it was handled by the DOJ instead. He also suggested that the FTC and DOJ create common working groups to share talents and resources on cases progressing through the FTC's adjudicative system.

Fifth, Professor Kovacic proposed using the FTC as a "federal remedies" agency in antitrust cases. He suggested that DOJ-FTC working groups, in partnership with these unique remedy courts, would facilitate a better exchange of information, ultimately producing superior results for both agencies.

Finally, Professor Kovacic proposed creating a common research program for the FTC and DOJ. This program could be used to evaluate specific cases or to build expertise in particular sectors. It would enhance the agencies' abilities to communicate and transfer institutional knowledge so they grow and produce better future results. Professor Kovacic said the lack of a common research program has hurt the antitrust efforts of both agencies. One example was the disallowed merger of H.J. Heinz Co. and Beech-Nut Nutrition Corp. At the time, Gerber controlled nearly 70 percent of the baby food market. Nevertheless, the FTC blocked the merger of Heinz and Beech-Nut, the next two largest companies. Professor Kovacic suggested that, if the agencies had better communicated about the state of the baby

food market, they may have realized the benefits of allowing this merger so that Gerber would face stiffer market competition.

Professor Kovacic concluded by looking at the future of antitrust law and the role of the United States in maintaining global competitive markets. He asserted that the dysfunction in the current domestic system created opportunities for other countries to develop more coherent regulation and consistent enforcement. In turn, this will encourage innovation and investment in those foreign markets rather than in the United States. Professor Kovacic predicted that the costs of complacency in reforming the domestic regulatory framework will only grow over time. With President Obama focused on eliminating duplication in government,²⁷ Professor Kovacic said that restructuring the relationship between the FTC and DOJ deserves attention. Reforming the two antitrust enforcement agencies should be a high priority to increase government efficiency and preserve American dominance in innovative and high-technology markets.

PANEL THREE: ANTITRUST MERGER ANALYSIS IN HIGH-TECHNOLOGY MARKETS

Moderator:

Alden F. Abbott, *Deputy Director, Office of International Affairs, Federal Trade Commission; Adjunct Professor, George Mason University School of Law*

Speakers:

Jonathan B. Baker, *Professor of Law, American University Washington College of Law*

Thomas W. Hazlett, *Professor of Law and Economics, George Mason University School of Law*

Bruce Kobayashi, *Professor of Law, George Mason University School of Law*

Professor Abbott introduced the panelists and began with an overview of dynamic merger analysis. Professor Abbott posited that, contrary to the traditional view that the agencies charged with enforcement of the antitrust laws erroneously disregard dynamic market forces, current merger analysis at the DOJ and FTC reflects dynamic analysis.

First, Professor Abbott defined the static model as one that looks only at competitive conditions in existing markets, assuming away innovation

²⁷ See, e.g., Memorandum on Government Reform for Competitiveness and Innovation, 2011 DAILY COMP. PRES. DOC. 167 (Mar. 11, 2011) (recognizing that “duplicative programs have sprung up” in the federal government and assigning “the Nation’s first Chief Performance Officer . . . the responsibility of leading the effort to create a plan for the restructuring and streamlining of the executive branch”).

and other related factors that can dramatically alter industries' characteristics. In contrast, a dynamic model emphasizes how innovation may lead to a fundamentally changed business model in the industry. However, Professor Abbott said this is not a common occurrence. It is more common that dynamic factors merely lead to changes in existing markets. As a result, dynamic analysis does not necessarily involve product change, merely changing process. Professor Abbott said one consequence is the importance that intellectual property plays in high-technology mergers.

Second, Professor Abbott briefly discussed the attempt of the 2010 Guidelines to move towards more dynamic analysis. Specifically, he noted that the 2010 Guidelines explain merger analysis as fact specific and fluid and eliminate the two-year time limit for committed entry in Section 9.²⁸ Importantly, the 2010 Guidelines explain that market definition should be applied flexibly and provide candidate markets and alternatives. Additionally, they directly address innovation and efficiency in merger analysis in a new section. As a result of the 2010 Guidelines, participants can now see a general framework for how the agencies take dynamic considerations into account.

Jonathan B. Baker

Professor Baker began by reviewing the historical progression of academic thought about the relationship between antitrust and innovation. Around 1980, it was difficult to describe this relationship. There was a theoretical debate about whether competition or monopoly encouraged innovation, with Kenneth Arrow being a proponent of the former hypothesis²⁹ and Joseph Schumpeter a proponent of the latter.³⁰ Meanwhile, the empirical literature seemed to show that moderately concentrated industries were the most innovative. Since there was no clear resolution to the controversy about what the relationship between market structure and innovation was, scholars tended to reserve judgment about whether antitrust was good for innovation.

Thirty years later, Professor Baker detailed the debate as more settled. Economic theory recognizes four mechanisms that relate competition and innovation—two ways in which competition encourages innovation and two ways in which competition discourages innovation. First, competition

²⁸ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, *supra* note 26, § 9.

²⁹ See generally Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in NAT'L BUREAU OF ECON. RESEARCH, *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS* 609, 619-25 (1962) (providing a formal explanation of the innovative advantage of competition).

³⁰ See generally Joseph A. Schumpeter, *CAPITALISM, SOCIALISM AND DEMOCRACY* 98-106 (Routledge Books 2003) (1942) (arguing that "the large scale establishment [of] monopoly . . . has come to be the most powerful engine of [economic] progress and in particular of the long-run expansion of total output").

in innovation itself—such as competition to develop new products or processes—unambiguously encourages innovation. Second, a firm facing competition with respect to its products has an incentive to innovate and create newer, cheaper, or better products and processes to escape competition. Conversely, competition can discourage innovation in two ways. First, if innovation will not let a firm escape its rivals, the firm will not innovate. Second, firms can discourage other firms from innovating by heavily investing in research and development.

However, Professor Baker said these more concrete findings do not settle the debate about the merits of antitrust. These four mechanisms show that increased competition could be either good or bad on balance for innovation. While greater market competition encourages firms to escape that competition through innovation, anticipated post-innovation competition discourages innovation because the firm does not want to get pushed out later.

Professor Baker then analyzed the findings of two recent case studies: (1) antitrust law should not give high-technology industries a free pass; and (2) the regulatory agencies must protect competition in order to encourage it. The first case he examined was a proposed vertical merger between Comcast, a broadband provider, and NBC, a multichannel video programming distributor (“MVPD”). In this merger, there was an input foreclosure concern: NBC could either withhold its content from other broadband providers or raise the price for other providers. The FTC also found that raising prices for competing broadband providers would be profitable for the newly merged NBC/Comcast entity.

The innovation issue was the possibility of future competition from online video distributors (“OVDs”), such as Hulu. However, at the time, there was a lot of uncertainty in the OVD market. The FTC considered OVDs “potential rivals” for MVPDs and concluded that NBC could hinder OVDs in the same way as MVPDs. The solution was an agreement: whenever an OVD enters into deal with a network like CBS, NBC must enter into similar agreement, with nondisclosure terms.

The second case study was the withdrawn proposal for a horizontal merger between AT&T and T-Mobile, two wireless networks. The marketplace for mobile networks is already highly concentrated, with the top four mobile networks (Verizon, Sprint, AT&T, and T-Mobile) claiming 87 percent of national subscribers. Had the AT&T/T-Mobile deal been completed, the company would have secured 48 percent of subscribers, with 37 percent from AT&T and 11 percent from T-Mobile.

Professor Baker asserted that the regulatory agencies were concerned about cramping innovation by allowing more concentration in an already concentrated market. This concern was heightened by the fact that T-Mobile, though it only had 11-percent market share, was considered to be “disruptive” in the market, competing both through lower prices and through innovation (e.g., by adopting the Android operating system in re-

sponse to AT&T's contract for the Apple iPhone). The FTC found that the loss of this disruptive player would increase chances of exclusion from the marketplace. Moreover, the loss of an alternative network for AT&T, Verizon, and Sprint customers would harm consumers through increased prices because small or regional firms could not replace the disruptive role of T-Mobile in the marketplace.

Professor Baker also explained that although AT&T had a plausible story about data traffic and efficiency being good reasons to acquire T-Mobile, the FTC found that these claims were overstated, unreliable, and could not outweigh competition concerns. For instance, AT&T inflated cost savings from the merger so that when corrected, AT&T's own models predicted a cost increase from the merger. Therefore, the FTC recommended an administrative action, and the proposal was withdrawn and later dropped.

Professor Baker said the takeaway from these two studies was to show how antitrust enforcement was essential to protect competition and encourage product innovation.

Thomas W. Hazlett

Professor Hazlett challenged Professors Abbott and Baker's assertions that the antitrust enforcement agencies are engaging in dynamic merger analysis. Instead, Professor Hazlett claimed that the analysis Professor Baker had outlined was actually static analysis. Additionally, he said that trying to take efficiencies into account is controversial.

Professor Hazlett also examined two case studies to illustrate his point that regulators do not engage in dynamic analysis even when they say they do. The first case study was the 2007 merger between XM and Sirius, two satellite radio providers. Though the merger went through, it took thirteen months and the new company is currently being restructured after declaring bankruptcy. Professor Hazlett posited that although the DOJ was correct to allow the merger, the agency's reasons were wrong. The DOJ claimed that competition would not decrease because the two products had "different primary markets." That is, since Sirius was involved in long-term automobile contracts, it did not compete with XM in the short term. However, Professor Hazlett asserted the real reason the merger should have been approved was that satellite radio faced substantial competition from other entities, including traditional radio and MP3s.

Second, Professor Hazlett offered a different perspective on the AT&T/T-Mobile case, which he described as representing the intersection of antitrust policy and the FTC's overly conservative spectrum policy. Professor Hazlett described how mergers among mobile providers resulted in improved networks, including the upgrade from 2G to 3G service, during the period between 1994 and 2004 when the FCC did not increase the spectrum available. He said the resulting efficiencies were an unfortunate way

to address errors by regulators, who should have simply increased the available spectrum. Moreover, Professor Hazlett explained that the FCC opposed the merger because it would take away spectrum from small providers. Still, Professor Hazlett acknowledged that T-Mobile already takes away this spectrum. Eventually the company ended up being sold at a discount compared to the value of its part of the spectrum.

Professor Hazlett was equally critical of the DOJ's merger analysis. He claimed that the DOJ essentially looked at the move from four to three mobile networks as anticompetitive per se, without examining the evidence. Meanwhile, there were low profits in the marketplace, which is indicative of a high level of competition, and there were losses at both T-Mobile and Sprint. These losses should have given regulators an insight into the dynamics of the markets.

Bruce Kobayashi

Finally, Professor Kobayashi offered a thought-provoking discussion of the 2010 Guidelines and the movement to more flexible and dynamic merger analysis by the DOJ and FTC. Though he did not actually assert that it should be done, he wondered whether the move to more dynamic merger analysis actually improved the quality of merger analysis over the standard structural analysis.

He contrasted the 2010 Guidelines to the criminal sentencing guidelines he helped develop at the U.S. Sentencing Commission. Whereas the sentencing guidelines are empirically based, Professor Kobayashi believes the 2010 Guidelines were made with little empirical basis. He posited that the "dynamic" additions to the 2010 Guidelines have made predictability almost impossible, which undermines their very purpose.

Professor Kobayashi described how the decrease in predictability could lead to significant error costs for regulated entities. The assumption is that the move to more dynamic merger analysis will decrease both Type I errors, the costs of blocking procompetitive mergers, and Type II errors, the costs of not blocking anticompetitive mergers. However, dynamic analysis would increase Type III costs, or administrative and legal costs.

Professor Kobayashi said merger analysis works well in agencies when natural experiments produce empirical evidence that can be analyzed and compared to similar facts. For example, when Staples and Office Depot proposed a merger, the FTC had information showing that, when a new Office Depot store entered a market, prices decreased. Such a phenomenon will not happen when a dynamic, innovative merger is being examined because there is never empirical evidence about the "next big thing." Since the quintessential feature of innovation is uncertainty, it cannot be accounted for in a predictable model.

To Professor Kobayashi, the unquantifiable nature of innovation is why efficiencies are rarely mentioned in antitrust. When efficiencies are

discussed by regulators, it is only when they have decided to approve the merger. Additionally, although efficiencies motivate innovative mergers, these same efficiencies are not a defense to a merger deemed structurally anticompetitive. Professor Kobayashi said the takeaway is that agencies should seriously consider returning to the old structural model for predictability purposes.

PANEL FOUR: THE ROLE OF ANTITRUST IN SEARCH AND ONLINE ADVERTISING

Moderator:

William C. MacLeod, *Partner, Kelley Drye & Warren LLP*

Speakers:

Daniel Crane, *Professor of Law, University of Michigan Law School*

Frank Pasquale, *Schering-Plough Professor in Health Care Regulation and Enforcement, Seton Hall University School of Law*

Scott A. Sher, *Partner, Wilson Sonsini Goodrich & Rosati P.C.*

Mr. MacLeod introduced the panelists and described the final panel of the Symposium as exactly the sort of practical application of theory that Professor Kovacic urged in his keynote address.

Frank Pasquale

Professor Pasquale began the discussion with an overview of the arguments both for and against legal scrutiny of dominant search engines, particularly Google. At the outset, he addressed the question of what a “search” is. He considered whether it is just a function of the Internet or, rather, a “layer” of the Web. Defining the market is especially important in the case of Google, because a lot of the scrutiny involves its self-portrayal as neutral and “nice.” From this perspective, Google is merely a directory leading to other content on the Internet. As the product progressed, however, Google began providing other services as well. Critics argue that Google is abusing its reputation as a neutral directory by directing users to its own sites instead of competitors’ sites, even when the latter might offer higher quality.

According to Professor Pasquale, the response is that Google simply reorganizes information in an innovative way to better serve consumers. The fundamental question is whether Google is trying to leverage its reputation in one field, general searches, into control of another field, specialized searches. Professor Pasquale noted that Internet theorists are conflicted about this question, but if the entire search market is considered a “layer” of the Internet, then the leverage claim fails.

There is also debate about Google’s purported dominance in search, with respect to both the origin and magnitude of that dominance. Professor

Pasquale said part of Google's story is the amazing skill and brilliance of its engineers. There are likely other reasons for the company's meteoric rise. One story is that Google enjoys a natural monopoly. Because each search creates more information for the engine, there is pervasive personalization that tailors future searches to a user's interests. Because personalization increases the user's utility, this story poses no antitrust problems. Another hypothesis is that advertisers flock to the product that has the most users. Similarly, users want the search engine with the most content, which also knows the most about them. Professor Pasquale compared this hypothesis to a user's likely preferences when choosing a dating site. For instance, even if a site with one hundred users has better algorithms, a consumer will still choose the site with 1,000 users because it offers better content. After all, in the world of online dating, more users mean more potential dates.

Professor Pasquale also said there is some evidence of a monopolization story, perhaps best demonstrated through Foundem's suit against Google in the European Union. Foundem, a specialized product search engine, claimed that once Google came out with its own product search function, it unfairly used discriminatory penalties for Internet spamming in order to lower Foundem's rankings in organic searches. Foundem also alleged that Google is dominant in horizontal search and had more than 80 percent of the global market share. Under this theory, a dominant horizontal search engine would have an unassailable competitive advantage if it could both use discriminatory penalties against a competitor and direct people to its own site.

Professor Pasquale argued it would be unfair, from a normative basis, to tell Google that the company has to stay out of specialized search. However, he considered whether there should legitimately be a stopping point for general search engines edging out other engines. If the regulators discovered dominant search engine continually pushing out specialized searches, they should be concerned about some cases but not others. After all, some companies could be forced out of the market by lawful competition.

However, even if the law should be concerned with some cases, Professor Pasquale considered what the law could actually do. Under the natural monopoly theory, Professor Pasquale said a system to monitor search algorithms would probably suffice, while acknowledging this might raise First Amendment concerns. Professor Pasquale noted regardless of the method chosen, there is a role for antitrust to encourage accountability among Internet firms.

Professor Pasquale concluded his discussion by stating that regulators should not shy away from an industry simply because it is complicated and changes too quickly.

Daniel Crane

Professor Crane's presentation focused on the idea of "search neutrality" as an antitrust principle.³¹ Search neutrality is the notion that search providers have a duty to provide nondiscriminatory results; in other words, results have to be based on an "objective" measure of relevance.

Professor Crane said there are two theories of Internet search. According to one theory, Internet search is an algorithm that gives you "ten blue links." Here, a search is merely a portal to content. The competing theory describes a search engine as an integrated platform that provides users with information instead of just links. Thus, a search engine provides website functions as well. Professor Crane described the latter theory as more reflective of the present state of the market.

Professor Crane noted that before even addressing the "monopoly" question, it is necessary to ask if Google is dominant as a referral service. Professor Crane questioned whether it is enough to merely show that Google is dominant in search or whether one must also show that a high ranking in a Google search is, in effect, an essential facility. If it is not essential to have search access to compete, there are no anticompetitive effects to the potential "bad act."

As an example, Professor Crane presented some information about how much traffic comes to small travel sites from Google organic searches. Before Google entered the travel search field, Expedia only received 12 percent of its traffic from Google searches, Travelocity received 10 percent, and Bing's travel service received 4 percent. Professor Crane argued that this data suggests websites do not need Google's organic search to receive hits. While a listing on Google searches may be helpful, it is not indispensable. He noted that the true referral numbers might be higher than these figures, for instance, if a consumer first finds a site through a Google search and then directly navigates to it. Additionally, search access may be more important for less established websites, even though these sites can resort to other advertising methods.

Regardless, Professor Crane described the market as moving beyond the "ten blue links" concept. Consumers now expect more from search engines and want them to provide data and answers, not just links. This shift from search engines as directories to searches that provide consumers with services and end information affects the viability of search neutrality. Specifically, the neutrality principle would mean consumers lose these desirable features and Google would have to revert to a system of "ten blue links."

Professor Crane also responded to the idea that there should be special rules for Google because it is "uniquely dominant" or because it promised consumers neutrality. First, even if one believes that dominant firms have special obligations, the law must allow them to innovate as the rest of the

³¹ See generally Daniel A. Crane, *Search Neutrality as an Antitrust Principle*, 19 GEO. MASON L. REV. 1199 (2012).

market shifts away from old models. Additionally, he asked whether regulators can hold Google to its past promises.

Next, Professor Crane summarized his proposals. He clarified that he was not suggesting there should be no antitrust intervention in search engines. He said a general principle of search neutrality makes little sense once the theory of leveraging and the evolution of Internet search are considered. Meanwhile, he argued that if the entire Foundem theory could be proven, that would provide a good case that is much narrower than the general principle of search neutrality. In the Foundem case, it was alleged that (1) Google deliberately targeted a competitor to disadvantage it, (2) Google overrode its ordinary algorithm results, (3) it did so to gain a competitive advantage, and (4) Google's actions had anticompetitive effects.

Professor Crane also said it is useful to consider Google's potential defenses to such antitrust claims. He said he would advocate something like a business judgment rule: Google had a good faith belief that the ranking was within its business model. Professor Crane discouraged an ex post balancing of the procompetitive and anticompetitive effects because the marketplace changes too quickly to analyze these things.

Professor Crane concluded by claiming that the administrative complexities of a neutrality principle would likely make the system infeasible. He wondered who would administer a scheme based on search neutrality and said it would be expensive, complicated, and have extensive free speech concerns.

Scott A. Sher

Mr. Sher, who represents Google in antitrust matters, spoke next and addressed the issue from the practitioner's perspective. He considered what elements would be required to demonstrate an actual antitrust violation.

First, Mr. Sher addressed the question of whether Google has market power. He began by noting that there is ample evidence of strong competition in search. AltaVista was dominant in 1996, but by 1998 Yahoo! had taken over. Now, Google is considered dominant, but it still faces competition from Bing, Yahoo!, and more recently, Apple's Siri interface. This competition means that Google and other search engines are forced to innovate constantly.

Mr. Sher emphasized that under antitrust law, no company has monopoly power in search. Not only is there vibrant competition, but to demonstrate market power, three elements must be shown: (1) a sufficiently high market share, (2) lock-in and high switching costs, and (3) network effects. He noted that the hallmark of monopoly is a rapid decline in innovation, which simply is not present in the search industry.

To the first question, Mr. Sher said Google only has 65 percent of market share in the United States, which is probably not enough to show a presumption of market power under existing case law. Furthermore, search

is not the “gatekeeper” of the Internet because not all website traffic comes from search. Additionally, Mr. Sher noted that users do not spend a lot of time on Google, compared to social networks like Facebook. Mr. Sher said this is important because search and social networks are becoming more integrated. For instance, Bing and Facebook have a partnership. Integration also makes it difficult to determine neutrality since search engines now incorporate both personal and social preferences from social networks into their results. As a result, it is probably impossible to determine what an “objective” result list looks like.

Next, Mr. Sher argued that consumers are not locked into Google. Not only does Google lag in social search, which could hurt its product, it is also extremely easy and free for users to switch search providers. Mr. Sher acknowledged that an alleged lack of transparency somehow harms consumers and locks them in. He rebutted this argument by positing that search is not a public good and that Google’s algorithm is intellectual property.

Furthermore, there is evidence that users do, in fact, switch services. Heavy Internet users utilize many different engines, a concept called “multi-homing.” A Google glitch in 2009 provided an interesting natural experiment. For an hour, all Google results had a malware warning on them. During that hour, Yahoo!’s market share doubled. According to Mr. Sher this is strong evidence indicating that Google’s large market share is a result of user preference, not anticompetitive behavior.

In addition, Mr. Sher detailed that the market for search cannot possibly be characterized as one lacking innovation. Google is constantly investing in its product, which it would not have to do if it thought users would not leave. Mr. Sher compared the search market to the market of browsers. Internet Explorer did not change significantly for five years—basically an eternity in Internet years. As a result, it lost substantial market share over that period.

Even if Google has market power, an antitrust violation does not occur without anticompetitive behavior or an exclusionary act. To Mr. Sher, the claim that Google rigs its own results misses the point of search engines. No search engine is objectively neutral, which is precisely why users get different results with different search engines.

Mr. Sher continued by asserting that Google made its neutrality claims when other engines were allowing companies to buy positions in organic search results. Furthermore, research done by Professors Geoffrey Manne and Joshua Wright indicates that Microsoft’s Bing search engine shows its own content more than Google shows its own.³² Mr. Sher said this is permitted because Bing is allowed to determine subjectively that its product is superior and therefore use it to attract more users.

³² See generally Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality Is the Answer, What’s the Question?*, 2012 COLUM. BUS. L. REV. 151 (2012).

Mr. Sher next addressed one of Foundem's claims, that it was penalized and pushed down in Google's rankings. The fact that one company was moved down in search rankings is not an antitrust violation. Antitrust laws are designed to protect competition, not competitors. One court recently reaffirmed this principle in *Google, Inc. v. myTriggers.com, Inc.*³³ The court dismissed a local search engine's claim against Google, holding that the plaintiff failed to show competition suffered because of Google's business practice.

To Mr. Sher, the real competition to Google in product search is not Foundem, nor is it myTriggers. Rather, sites like Amazon and eBay provide competition in product search. Yet these sites do not get pushed down in Google's rankings because they provide good experiences for consumers.

Finally, Mr. Sher said that regulating search to ensure fairness would heavily limit innovation in the industry. Search engines have to compete purely on quality of product, not on price. So, if Google cannot show its own content to users that want it, these people will simply not use Google. Mr. Sher concluded by emphasizing that the antitrust laws have an extraordinarily strong presumption that companies can change products to improve customer experiences, which he believes is exactly what Google is doing.

CONCLUSION

Overall, the *George Mason Law Review's* Fifteenth Annual Symposium on Antitrust Law was enormously successful. Participants and panelists left with a better understanding of how antitrust law impacts high-technology industries and the future issues that will arise. The *George Mason Law Review* is thankful for the partnership of the Law & Economics Center at George Mason University School of Law, as well as the generous sponsorship of Kelley Drye & Warren LLP. Details for future symposia can be found at www.georgemasonlawreview.org/symposium.

³³ No. 09CVH10-14836 (Ct. C.P. Franklin Cnty., Ohio Aug. 31, 2011), available at <http://online.wsj.com/public/resources/documents/GoogleMyTriggersRuling09012011.pdf> (granting defendant Google's motion to dismiss).