Transparency and Antitrust Policy

R. Preston McAfee
Vice-President and Research Fellow
Yahoo! Research
3333 Empire Blvd
Burbank, CA 91504
preston@mcafee.cc

Abstract: This paper discusses the major tradeoffs between a transparent antitrust policy and a policy providing less information and more discretion on the part of the authority. A growing phenomenon is the strategic use or misuse of antitrust by firms, and this misuse creates challenges for antitrust enforcement and transparency.

Disclaimer: The opinions presented herein are held by the author and are not necessarily those of Yahoo! Inc.

Antitrust analysis, as performed by antitrust authorities and competition commissions, has advanced dramatically in the past fifty years. In 1960, the prevailing view was that antitrust only concerned the creation of monopoly and the deterrence of collusion, and the latter was assessed using the market shares of the four largest firms. Now we employ a much more nuanced analysis, assessing unilateral effects of combinations, recognizing that efficiency gains benefit society even when they are offset to some extent by the exercise of market power, and that competition is dynamic and a large market share in an industry frequently overturned by disruptive entry may not signal effective market power.

The increasing complexity of antitrust analysis has reduced the transparency of both the criteria for evaluation and the process of evaluation. This paper considers the costs and benefits of transparency in the context of modern antitrust analysis.

There are flaws in the analytical framework. Moreover, antitrust has become exploitable as a competitive tool of firms, used to harass, distract and generally stymic rivals, counter other lawsuits and obtain a strategic advantage. The misuse of antitrust is a growing phenomenon that should influence the design of antitrust policy and procedures, and affects the optimal level of transparency as well.

Transparency, other things equal, is a great feature of any regulatory regime. However, other things necessarily are not equal: increased transparency has an enormous impact on costs, flexibility, and legitimacy. Therefore, the optimal level of transparency requires a balancing of costs and benefits.

The Antitrust Analytical Framework is Incomplete

Some analysts, associated with the "Chicago school," consider markets to be the 'best of all possible worlds,' so any market-driven combination is good for society as a whole. Unfortunately, some examples suggest that reasoning is naïve. For example, in March 1979, Xidex Corporation acquired Kalvar Corporation. Both of these companies made non-silver microfilm. Upon acquiring Kalvar, Xidex closed Kalvar's plant, fired the workers, and increased prices by at least 25%. As corporations are motivated by profit, there is no reason to expect that merger and cooperative activity by corporations will benefit consumers: the invisible hand *requires* competition.

A few analysts, mostly attorneys rather than economists, think size is itself the problem and thus consider all combinations are bad. This view is so economically naïve that few economists hold it. My favorite example is the Lockheed-Northrop merger, which led to the stealth cruise missile, one of the greatest innovations in military hardware since World War II.

My starting premise is that there is a non-trivial antitrust problem: some corporate actions are inherently anti-competitive, while others are pro-competitive, and the goal of the antitrust authority or competition commission is to prevent the anti-competitive actions while not deterring the pro-competitive actions.

McAfee: Transparency and Antitrust

Most monopolization problems eventually self-correct. New entrants engineer around patents or build alternate solutions to the customers' needs. Improvements in technology may vitiate the customer's need as, for example, DVDs have supplanted videotapes. Even when combinations provide an ability to raise prices to customers, the speed at which market power will be challenged by entry is critical. Thus antitrust enforcement is often about assessing timing and delay of entry and alternatives. Many corrections take a very long time, while others happen rapidly.

The United States Post Office has a legal monopoly on first-class mail within the United States. This legal monopoly creates a strong entry barrier, and for decades there were few alternatives to the USPS. Now, however, the list of alternatives is substantial: express mail, fax, and electronic mail compete vigorously and successfully with the USPS. From the perspective of 1950, the postal monopoly was incredibly durable, but competition eventually arose.

Microsoft's Internet Explorer obtained a dominant position in the browsing market by the year 2004, well over 90%, essentially crushing all rivals on Microsoft's Windows operating system. Five years later, this share has declined to around 65% and there is substantial competition and choice.

Much of antitrust analysis is focused on entry barriers, and of course barriers to entry are necessary for antitrust harm to persist. However, the durability of entry barriers has been much less studied, both empirically and theoretically, even though barriers are only important insofar as they are durable. For example, capital costs, scale economies and risk are not barriers in the classic sense of George Stigler unless they affect entrants in a different way than they affect incumbents. If incumbents paid the same capital cost as a potential entrant would need to pay, such a cost is hardly a barrier to entry, but just a cost of doing business. Nevertheless, a large, up-front, sunk cost can readily enhance the durability of other barriers by making it very risky for a company to enter the market. Similarly, the need to acquire unpatented technology or learning-by-doing is not an entry barrier, but may enhance other entry barriers by substantially delaying entry, even when it is profitable.

Many, perhaps even most, questions addressed by antitrust authorities represent a tradeoff. In merger analysis, a merged firm may become a more effective competitor, enhancing competition, while creating the ability to exert a modest amount of market power over a segment of the market. A joint venture, patent pool, standards organization, or other cooperative agreement can have the same feature. Antitrust evaluations necessarily require balancing the gains from enhanced competition with the social costs of the monopoly power. Frequently, sound judgments are required.

We have an incomplete analytical framework for evaluating delay and for considering the tradeoffs of cooperative business arrangements. There has been a modest level of research into the causes of entry delay and few analyses account for risk. Yet risk is perhaps the single most important factor influencing the decision to enter a market. Risk makes the "option of delay" valuable; entry exercises that option and hence burns the value. For large levels of risk, the option value of delay is huge.

Moreover, it is clear that even very sophisticated analyses of corporate behavior miss salient, relevant factors. Many mergers are in the end either unprofitable or unexpectedly difficult to execute. Notable examples include General Motor's acquisition of Electronic Data Systems; Sony's acquisition of Columbia Pictures and Daimler's acquisition of Chrysler. In some cases the complexity of business relationships leads to humorous outcomes, such as the recent case of Wells-Fargo suing itself. Thus, the analytical framework used by businesses themselves is incomplete, or there wouldn't be so many notable failures. It is unreasonable to expect an antitrust authority to perform merger analyses more effectively than the merging parties.

Are Transparency and Good Economics Consistent?

Because of the complexity of factors that go into an antitrust analysis and the incomplete analytical framework, it is not possible to write clear, sensible "bright-line" rules that effectively prevent consumer harm yet permit or even encourage pro-competitive actions. Any bright-line rule will make mistakes, preventing pro-competitive behavior or permitting durable anticompetitive behavior. Effective antitrust enforcement requires the inaptly named "Rule of Reason," in which each case requires an army of economists and attorneys for evaluation, rather than a straightforward test such as a market-share critical value. Announcements like the US Merger Guidelines are helpful in creating understanding both about the process of evaluation and the methodology used, they are and should remain guidelines.

Therefore, transparency must be about the process of antitrust evaluation, rather than about the rules themselves. Given that transparency is about process, most or all of the advantages of transparent processes can be obtained by after-the-fact revelation rather contemporaneous openness. That is, it suffices to reveal the basis for decisions, and perhaps the methodology, after the fact, rather than during the evaluation.

A major practical impediment to transparency is that transparency itself is a continuum. "Full transparency" is probably impossible; in many cases unarticulated analytical information, such as a situation being reminiscent of another monopolization case, or a "back of the envelope calculation" used to prune an investigation, will not be publishable. For example, an analyst may perform a calculation using market shares that are known to have flaws, to approximate an effect, then find that the "ballpark numbers" suggest either proceeding or not. Because antitrust analysis transpires in a world of imperfect data and incomplete models, such approximations are common, as there is a great need to reduce the scope of the problem to be analyzed to a manageable level. Yet publishing them requires redoing the analysis to make them comprehensible to others, thereby eliminating the very reason for the calculation! If one thinks of transparency on a percentage scale, with 0 being Kafkaesque and 100% being complete transparency, the cost of transparency certainly diverges to infinity as complete transparency is approached.

Transparency Tradeoffs

In assessing the value of transparency, the literature has identified many distinct costs and benefits. Most authors promote or oppose transparency based on emphasizing one or two of these many considerations; it is preferable to consider the complete set rather than stress one or two.

On the negative side, transparency encourages bright-line rules; as already argued, such bright-line rules will lead to consistent, avoidable errors relative to a more nuanced analysis. Bright-line rules are encouraged because otherwise it is very difficult to communicate the reasoning of decisions. For example, it is easy to say "this case met a simple rule," which encourages the use of such simple rules, even if the simple rule makes substantial errors because it ignores relevant factors.

Transparency substantially increases the burden placed on the regulatory authority, who must reveal outcomes and reasoning. Providing a comprehensible description of the reasoning can be many times more costly than the reasoning itself, for the same reason that it is more difficult to document computer code than to write computer code. In addition to the direct costs, there are likely to be many indirect costs that arise through media and political coverage and questioning of decisions. Antitrust analyses are large, complex objects not amenable to the sound-bite discourse level common in the press.

The increased resource expenditure associated with transparency will tend to discourage investigations because investigations now have the added cost of disclosure. Thus, some investigations that should be pursued may be dropped to avoid the disclosure burden. But this is not the only way transparency may influence an outcome. Some cases may be brought to avoid setting a bad precedent. For example, a merger that leads to 100% market share in an industry with easy entry may be challenged to avoid the precedent that a merger to monopoly is acceptable in some circumstances.

Transparency also threatens to delay an already lengthy process. Documenting steps in a complex decision-making process will discourage short-cuts and approximations, and encourage "process propriety" over process efficiency.

Past decisions become a constraint on the system. Over the last forty years, the quality and complexity of antitrust analysis has risen dramatically. However, the US court system, with its reliance on precedent, has been much slower to adopt newer techniques. For example, courts have treated competing products as either in the market or out of the market based on historical simplifications. Techniques for assessing imperfect competition, which provide for a more nuanced analysis, have generally not been accepted at trial. Transparency increases the likelihood that past decisions influence future decisions incorrectly and limit the ability of future investigations to take advantage of new techniques.

Merger activity varies dramatically from time to time, with high years as much as three times the level of low years. In high activity years, the authority may reasonably permit some "marginal" mergers which it suspects are mildly anti-competitive but for which it lacks the resources to

prosecute. There is a risk of such decisions becoming precedents, and that risk is magnified substantially by transparency.

Moreover, transparency may encourage declining standards, along the lines of Sobel's 2000 analysis of tenure decisions. Focus for a moment on two factors, market share and entry speed. Suppose the authority permits a 30% share with entry in 2 years, and a 40% share with entry in 1 year. The '40%, 2 year' merger may be difficult to block, because it meets one of the criteria of each of the permitted cases. This phenomenon is especially likely when some difficult-to-summarize factors are involved in the evaluation; the existence of lenient precedents then becomes likely. It is clear that standards in US merger enforcement have fallen dramatically over the past five decades and that mergers which would have surely been challenged are not. In some cases this leniency is a result of a better understanding of scale economies and competition, but not in all.

Antitrust authorities often lack expertise in the industries they evaluate. In such situations, they rely on information provided by rivals and customers and suppliers. These parties may privately tell the authority important, relevant information and their willingness to talk is preconditioned on that privacy. Transparency in the process makes the likelihood of such information spilling into the public domain much greater. For example, documents released by the Court in the BP-Arco case led to class—action lawsuits against BP. The risk of information spillage will reduce the willingness of companies to speak honestly to antitrust authorities, which in turn reduces the quality of the information available and hence the quality of the decisions.

With such an overwhelming set of negatives, it is perhaps surprising that anyone supports transparency. Yet the advantages of transparency are similarly overwhelming. The direct effect of transparency is a greater knowledge of the process by firms and the public. That knowledge enhancement can encourage self-compliance: firms that know their actions will be challenged will avoid such actions.

Good effects on the antitrust authority itself are a fostering of accountability and the reduction in personal bias. Because the basis for decisions and reasoning are made public, bad decisions will create negative press for the authority, discouraging such bad decisions. The reduction in bias and increase in accountability, in turn, make the process substantially more fair and equitable.

The increase in accountability and reduction in poor decision-making has a very important ramification, which some authors rank above others. This ramification is an increase in confidence in the process. When the process is secret, behind-closed-doors and in the anachronistically named "smoke–filled rooms," it is easy to believe that decisions involved bribery, corruption, or personal influence. Transparency dispels such beliefs, encouraging faith in the process.

Finally, antitrust analysis is increasingly an international minefield, involving large corporations subject to multiple antitrust jurisdictions. In the US, state-level antitrust laws are used frequently to annoy national or international corporations, which employs armies of attorneys. More substantively, the European Union blocked the General Electric – Honeywell merger, which involved two US based firms. The problem of international reconciliation of mergers is going to

grow more prominent in the near future. By fostering understanding by other antitrust authorities, transparency improves the quality and coherence of decisions by authorities in distinct jurisdictions.

Transparency about Process, Not Details

Most of the benefits of transparency come from providing to all interested observers an understanding of the process used and that the process was followed. Most of the harm from transparency arises in the details. Therefore, a strategy for transparency is to provide information about the process, while suppressing specifics and details. The level of information provided must balance costs and benefits. Where firms are unclear about the execution of policy or there is little faith in the authority, more detail should be provided.

Competition policy is an evolving discipline and antitrust authorities should constantly evaluate new scientific methods for competition policy. This is important not just for improving the quality of decision-making, but also for international reconciliation. By frequently evaluating alternative methodologies, especially in light of their performance in other jurisdictions, harmonization of international antitrust is more likely to be achieved, and more likely to coordinate on best practices.

Strategic Abuse of Process

US companies increasingly use antitrust as a "competitive tool" to restrain competition. Sun Systems allegedly helped create the US Department of Justice's antitrust case against Microsoft, by providing expert analysis and assembling testimony of other companies. Regardless of the merits of the case, this incident represents an illustration of the ability of firms to influence the execution of antitrust enforcement. This increase in the use of the antitrust laws for corporate advancement has implications for antitrust evaluation and transparency.

In the same way that corporations lobby legislators and industry regulators, they are starting to lobby antitrust authorities. Such lobbying efforts are frequently in the news.

There are a variety of reasons for corporations to lobby antitrust authorities and most of them are not directed at improving the competitive efficiency of the marketplace. Indeed, companies rarely profit from increasing the competitiveness of their industry, so generally lobby against actions that will make their rivals more competitive. For this reason, the strategic exploitation of the antitrust laws represents a growing threat to the integrity and legitimacy of antitrust enforcement

It is naïve to think that there is a simple fix to the strategic abuse of the process. The problem for the antitrust authority is that it needs information held by firms: by rivals, by customers, by suppliers. It is not possible for an authority to make a sensible decision without consulting with a variety of industry participants and such consultations are common in all antitrust analyses. In many cases it is necessary to obtain data on transactions in order to evaluate a proposed combination. As a consequence, the strategy of "just prevent lobbying" is untenable. The authority simply cannot do its job without talking to participants.

The need to talk to participants opens the door to strategic communications, ulterior motives and manipulation. Essentially, companies now have an incentive to massage the message to further their own interests. Those interests range from distracting a rival or slowing a pro-competitive deal to tying a rival up in years of painful litigation and preventing entry. Customers may oppose supplier mergers that are beneficial to society due to substantial efficiency gains but will increase the bargaining power of suppliers.

Exacerbating the problem of strategic abuse is that industries favor entry barriers, as entry barriers enhance the profits of all incumbents. Thus, a major use of lobbying is the creating of entry barriers. This use turns the antitrust laws on their head, invoking pro-competition policy to reduce competition.

Moreover, lobbying favors the concentration of interests. As is familiar from sugar quotas in the US, a small group with strong interests is more effective in lobbying than a large group with small interests, even if the large group in total has a larger economic incentive. The significance of the concentration of interests arises from the "free rider problem." Lobbying is expensive and parties with large interests will do proportionately more of it. As a consequence, the effect of the strategic manipulation of antitrust authorities tends to push them away from decisions that best reflect overall social efficiency toward protection of existing entrenched industry participants.

Transparency exacerbates the strategic abuse of antitrust by increasing the number of points the firm can pressure, influence and manipulate. When there is a known trigger for an antitrust investigation, a firm can manipulate the data, often in apparently innocuous ways, to pull that trigger. As it stands, former antitrust personnel are in great demand as guides to the process. Transparency focuses and lowers the cost of lobbying by identifying what is likely to work and vice-versa. At the same time, transparency levels the playing field by making "counterlobbying" efforts more successful.

Modeled as a "war of attrition," a reduction in the transaction costs of lobbying increases the overall levels of lobbying, at least among symmetric parties. In such a situation, the reduction in the costs of lobbying can actually make all firms – even the ultimate winners – worse off. In this way, transparency can actually harm all parties.

Aside: Private Antitrust Litigation

While we are talking about the strategic abuse of the antitrust process, a related issue arises in private antitrust cases. The US permits such litigation but most countries do not. The potential for strategic abuse is dramatically increased by private suits, especially with respect to small entrants who can't bear the cost of litigation. (Large entrants are common but able to withstand private suits.)

There are certainly examples of valid private antitrust suits. But many private antitrust suits are brought in response to other lawsuits like a patent lawsuit, that is, they are punitive in nature. Such lawsuits may serve individual interests but rarely serve society as a whole, and this is not surprising. In the case of governmental authority, the government itself can represent society. In

the case of a private suit, no party except perhaps the adjudicator represents society. Thus, the suits tend to be brought to further the interests of a single company and not society.

On balance, private antitrust suits are problematic for society and should probably be banned. The rest of the world has this one right. The government should protect competition, not individual companies who don't have an actual interest in promoting greater competition.

Antitrust as a Nuclear Weapon

A large antitrust investigation is expensive, indeed. The merger of Exxon and Mobil, which created the world's largest company at the time, involved providing over 125 million pages of documents to the US Federal Trade Commission. This could create a stack 13 km high, and there was an index that ran thousands of pages, so there was an index to the index, which was still hundreds of pages, so there was an index to the index. Antitrust investigations are often large, complex affairs with hundreds of personnel working full time and thousands of hard drives imaged and scanned for relevant documents. Executives must be prepped and deposed, losing many days of work.

A weapon which will never be used is of no use; there must be some circumstances in which it might be used for it to have any effect. Even so, a weapon so large that it will only be used in truly extraordinary circumstances is of limited use in deterrence in normal circumstances. Neither the US nor the Soviet Union was deterred from indirectly engaging the other (in Vietnam and Afghanistan) by the presence of overwhelming nuclear arsenals.

The modern theory of deterrence emphasizes *brinkmanship*. The object is to provide a response to bad behavior not by using the nuclear weapon, but by increasing the probability that events spin out of control, leading to the ultimate use of the weapon. Thus, the threat is not the use of the weapon, but an increase in the probability that the weapon is used.

Because antitrust trials are so expensive, they are like a nuclear weapon. And because they are like a nuclear weapon, the right strategy for wielding them is not a bright-line rule, which invites behavior "near the line," but a more nuanced, adept and measured response driven by specific circumstances.

The ability to see inside the antitrust authority's decision-making process is an invitation for companies to play the brinkmanship game, which ultimately will trigger the bad outcome more frequently. Consequently, a certain amount of ambiguity is necessary to use the nuclear weapon of antitrust effectively and adeptly.

Conclusion

Perhaps the most important lesson from the economic reform of the communist countries is that the state enterprises matter only in the short run; almost all growth comes from new entrants. For this reason, the Hippocratic Oath of Antitrust Authorities is "Do Not Deter Entry." Actions which interfere with well-functioning markets do more harm than good, and it is better to permit a transitory exercise of market power than to micro-regulate the operation of well-functioning

markets. Invasive micro-regulation risks shutting off the "creative destruction" of new entry for a trivial, transitory advantage.

Antitrust policy has an incomplete framework; consequently, it is generally not possible to articulate bright-line rules for an antitrust authority. At best, then, transparency should be about the process, rather than the rules, governing antitrust analysis. Even then, transparency is necessarily incomplete.

In promoting transparency, it is best to promote transparency about process rather than the details.

Governments generally have a lot of power and the potential for misuse. The incompleteness of transparency enhances the power of the antitrust authorities. For this reason, a system of independent judicial review is valuable. Unfortunately, judicial review is often less effective in the case of antitrust because the expertise required is so arcane.

The problem of the strategic abuse of antitrust is growing and will continue to grow. Such abuse is often harmful to the public, but it is often harmful to the business community as well, because it represents a negative—sum game. Limiting the ability of firms to cause antitrust investigations may benefit firms and society as a whole. The strategic abuse of antitrust parallels the "capture theory" of regulation, wherein regulation evolves, via lobbying, to benefit the regulated firms rather than final consumers.

Bibliography

APEC, "IAP - Competition Policy/USA," http://www.apeccp.org.tw/doc/USA/Policy/uspol1.htm 2003.

Carstensen, Peter C., Transparency in Antitrust-Do What We Say and Not What We Do: Some Reflections on Professor Grimes's Quest," *Buffalo Law Review Antitrust Symposium Issue*, 51:4, Fall 2003.

De Meester, Bart, "Testing European Prudential Conditions for Banking Mergers in the Light of Most Favoured Nation," *Journal of International Economic Law* 2008 11(3):609-647.

Gelfand, David I., and Jeremy Calsyn, "Transparency in Antitrust Merger Review: A Model Proposal for More," *The Antitrust Source*, January 2005.

Geradin, Damien, "The Perils of Antitrust Proliferation- The Globalization of Antitrust and the Risks of Overregulation of Competitive Behavior," *Chicago Journal of International Law*, Volume 10, Number 1, Summer 2009.

Goldman, Calvin S. and John D. Bodrug, "Symposium On Canadian Competition Law- The Merger Review Process- The Canadian Experience," *Antitrust Law Journal*, 1997.

Grimes, Warren S., "Transparency in Federal Antitrust Enforcement," *Buffalo Law Review Antitrust Symposium Issue*, 51:4, Fall 2003.

Groves, Theodore, John McMillan, Yongmiao Hong, and Barry Naughton, "Autonomy and Incentives in Chinese State Enterprises," *Quarterly Journal of Economics* 1994.

Groves, Theodore, John McMillan, Yongmiao Hong, and Barry Naughton, "Productivity Growth in Chinese State-run Industry," *Reform of China's State-owned Enterprises*, edited by Dong Furen, Cyril Lin, and Barry Naughton, Macmillan Press, 1994.

Heilemann, John, "The Truth, The Whole Truth, and Nothing But The Truth: The untold story of the Microsoft antitrust case and what it means for the future of Bill Gates and his company," *Wired*, Nov 2000.

Kovacic, William, "Remarks Before Seoul Competition Forum- Achieving Better Practices in the Design of Competition Policy Institutions," April 20, 2004.

Lewis, Al, "Wells Fargo Bank Sues Itself," *Fox Business*, http://www.foxbusiness.com/story/markets/al-lewis-wells-fargo-bank-sues/, July 10, 2009.

Lowe, Philip and Ansgar Held, "Modernisation Policy and Beyond- The Role of Competition Policy in Driving Economic Growth," *European Competition Journal*, March 2005.

McAfee, R. Preston and Hugo Mialon "Barrieres a l'entree dans l'analyse antitrust," *Revue Lamy de la concurrence: Droit, Économie, Régulation*, No. 1, November 2004, 155-7.

McAfee, R. Preston, Hugo Mialon and Michael Williams, "What is a Barrier to Entry?", *American Economic Review Paper and Proceedings* 94(2), May 2004, 461-5.

McAfee, R. Preston, Hugo Mialon and Sue Mialon, "Private v. Public Antitrust Enforcement: A Strategic Analysis," *Journal of Public Economics* 92(10), Oct 2008, 1863-75.

McAfee, R. Preston and Nicholas Vakkur, "The Strategic Abuse of the Antitrust Laws," *Journal of Strategic Management Education*, Vol. 2, no. 1, 2005.

McAfee, R. Preston, and Michael Williams, "Can Event Studies Detect Anticompetitive Mergers?," *Economic Letters* 28, 1988.

Mollgaard, Peter and Per B.Overgaard, "Market Transparency and Competition Policy," Rivista di Politica Economica 91,2001, p11-58.

Nalebuff, Barry "Brinkmanship and Nuclear Deterrence: The Neutrality of Escalation," *Conflict Management and Peace Science* 9, 1986, 19-30.

Nannes, John M., "Transparency in Federal Antitrust Enforcement Decisions: A Reaction to Professor Grimes," *Buffalo Law Review Antitrust Symposium Issue*, 51:4, Fall 2003.

Neven, Damien J. and Lars-Hendrik Roller, "Consumer surplus vs. welfare standard in a political economy model of merger control," *International Journal of Industrial Organization*, vol. 23 (9-10), pages 829-848, December, 2005.

Owen, Bruce M., Sun, Su and Zheng, Wentong, "China's Competition Policy Reforms- The Anti-Monopoly Law And Beyond," *Antitrust Law Journal*, 2008.

Pitofsky, Robert, "Comments on Warren Grimes: Transparency in Federal Antitrust Enforcement," *Buffalo Law Review Antitrust Symposium Issue*, 51:4, Fall 2003.

Ross, Stephen F., "Symposium On Canadian Competition Law: Antitrust Lessons From The True North Strong And Free," *Antitrust Law Journal*, 1997.

Sobel, Joel, "A Model of Declining Standards," *International Economic Review*, vol. 41(2), pages 295-303, May, 2000.

Swedish Competition Authority, "The Pros and Cons of Information Sharing," 2006, pp 101-129

US Department of Justice and US Federal Trade Commission, "Horizontal Merger Guidelines," 1992 revised 1997.