Has The Consumer Harm Standard Lost Its Teeth?

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Executive Summary

There appears to be universal agreement that antitrust policy should “protect competition, not competitors” and that consumer welfare is the fundamental standard for evaluating competitive effects. There is considerable debate, however, about how to implement those principles in practice when evaluating rule-of-reason antitrust claims under the Sherman Act. The choice of an appropriate consumer harm necessarily involves a tradeoff between the risk of being so lenient that firms think they can get away with anticompetitive behavior and the risk of being so strict that the courts condemn practices that help consumers and thereby stifle the very competitive process the antitrust laws seek to protect. There is no way to eliminate both risks, and the courts—and ultimately society—need to choose how to minimize the expected costs of the inevitable errors.

The Clinton Administration, in cases brought against Intel, Microsoft, and Visa/MasterCard, asked the courts to use a consumer harm standard that relied on an inference of harm to consumers from harm to competitors. In the two cases that went to trial and for which there is a complete record—U.S. v. Microsoft and U.S. v. Visa U.S.A. et al.—the district court accepted this approach. We explore two important issues in inferring consumer harm from competitor harm. The first is what preconditions must hold for it to be valid to make this inference. We show in this paper that courts in both Microsoft and Visa did not require Clinton Administration antitrust enforcers to establish critical preconditions. The second important issue is whether a showing of substantial harm to consumers should be required for liability. The courts can reduce errors by requiring evidence that the challenged practices have caused, or are likely to cause, substantial harm to consumers. The Microsoft and Visa cases both demonstrate that this is a realistic evidentiary hurdle that could have been required of the plaintiffs. There were many studies plaintiffs could have done to demonstrate significant effects on consumers if in fact there were such effects.
Has The Consumer Harm Standard Lost Its Teeth?

Howard H. Chang, David S. Evans, and Richard Schmalensee

I. Introduction

There appears to be universal agreement that antitrust policy should “protect competition, not competitors” and that consumer welfare is the fundamental standard for evaluating competitive effects. ¹ There is considerable debate, however, about how to implement those principles in practice when evaluating rule-of-reason antitrust claims under the Sherman Act. On one side, a number of commentators focus on the need to show that substantial “consumer harm” ²—e.g., in the form of significantly higher prices or lower output—either has occurred or plausibly could occur before condemning a practice as anticompetitive.³ On the other side, a number of commentators contend that sufficient consumer harm to establish a violation can be inferred indirectly “harm to competition” or “harm to the competitive process.” Under some versions of this second standard the question of substantiality does not arise; it is only necessary to show some harm to actual or nascent

¹ Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962) (“the legislative history illuminates congressional concern with the protection of competition, not competitors”); Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (“Congress designed the Sherman Act as a ‘consumer welfare prescription.’”). Robert H. Bork, Antitrust Paradox: A Policy at War with Itself, 51 (The Free Press, 1978) (“The only legitimate goal of American antitrust law is the maximization of consumer welfare.”); Robert E. Litan and Carl Shapiro, Antitrust Policy During the Clinton Administration, in American Economic Policy in the 1990s, 435 (J. Frankel and P. Orzag eds., Cambridge: MIT Press, 2002) (“For at least 20 years a broad, bipartisan consensus has prevailed regarding the goal of U.S. antitrust policy: to foster competitive markets and to control monopoly power, not to protect smaller firms from tough competition by larger corporations. The interests of consumers in lower prices and improved products are paramount.”). “Social welfare,” which would include producer surplus in addition to consumer surplus, and, perhaps equivalently, “efficiency” are also sometimes mentioned as goals for antitrust policy. Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, 604-606 (Addison Wesley Longman, 3rd ed., 2000); Robert H. Bork, supra, at 91, 104-106, 409-410, 416, 427-429; and Richard A. Posner, Antitrust Law 196 (University of Chicago Press, 2nd ed., 2001). It is unclear whether the courts generally consider effects on producer surplus as an important factor. In addition, the inquiry in merger cases as to whether cost savings are passed on to consumers versus being retained by the merged firm reflects a clear preference for consumer gains over producer gains.

² We regard the terms “significant” and “substantial” as synonyms and use them interchangeably in this paper.

competitors. The crux of the debate is over the relative frequency and cost of false convictions versus false acquittals and the extent to which the courts can confidently predict the effects of challenged practices on consumer welfare given the evidence (including economic theory and empirics) available to them.

The Clinton Administration invited the courts to rely on a relatively weak consumer harm standard for assessing liability in antitrust cases brought against Intel, Microsoft, and Visa/MasterCard. The Government adopted the view that it was enough to show that the challenged practices had harmed the competitive process—we will argue it did not even make that showing—and that direct evidence was not needed that the challenged practices, on balance, raised prices, lowered output, and/or reduced quality, and thereby reduced consumer welfare. In the two cases that went to trial and for which there is a complete record—U.S. v. Microsoft and U.S. v. Visa U.S.A. et al.—the district court accepted this view. And in the one case that has gone to an appeals courts—Microsoft—the D.C. Circuit affirmed liability without reaching findings that the anticompetitive actions resulted in substantial harm to consumers; it specifically found that the district court’s findings do not demonstrate that there was a causal relationship between those actions and any significant changes in the competitive process that could lead to substantial harm and directed the lower court to address causation as part of the examination of remedies. The Court itself described the standard it employed as “edentulous”—i.e., toothless. We argue in general and in the context of these two cases that this weaker standard represents economically unsound policy.

We develop and explore two important differences between those who insist on direct proof of harm to consumers and those who are willing to infer consumer harm from harm to competitors. The first is arguably technical and turns on what preconditions must hold for it to be valid to infer injury to consumers indirectly from injury to one or more competitors. We

5 During the Clinton years, antitrust enforcers displayed an increased “confidence that they could correct market failures in the realm of innovation.” See Litan and Shapiro, supra note 1, at 436.
9 Id., at 79.
show in what follows that courts in both Microsoft and Visa did not require Clinton administration antitrust enforcers to establish critical preconditions. The second important difference is whether a showing of substantial harm to consumers should be required for liability. We argue here that such a requirement is necessary for sound policy. A finding of liability generally implies the imposition of structural or behavioral relief that, by design, reduces the competitive effectiveness of the defendant (generally a leading firm and, in Section 2 cases, the market leader) and thus generally imposes non-trivial costs on both that firm and, potentially, consumers. Without the likelihood of substantial offsetting benefits from enhancing competition from other sources, such relief, even if it does not go beyond an order to cease some facially suspect practices that pass a minimal consumer harm standard, is more likely than not to harm consumers on balance.

The remainder of this paper is organized as follows. Section II spells out the general issues in more detail. Section III uses an error-cost framework to explain why it is economically important to require plaintiffs to show (directly or indirectly) that a challenged practice actually imposes or is highly likely to impose significant consumer harm. Sections IV and V use the Microsoft and Visa cases to illustrate how the Clinton Antitrust Division’s failure to undertake analyses that could have ascertained whether there was significant harm to competitors and competition led the courts to mistake protecting competitor profits for protecting consumer welfare. Section VI provides a brief summary of our major conclusions. It also considers whether the weak consumer harm standard successfully employed by the Clinton Administration in the Microsoft and Visa cases will establish an enduring legacy of an era of activist antitrust. We conclude that the Clinton standard is so inconsistent with the thrust of antitrust jurisprudence over the last twenty years that it will become a legacy only if the Supreme Court makes a very sharp turn.

II. The Consumer Harm Standard

Although the Supreme Court has not enunciated a particular standard for assessing consumer harm in antitrust cases, it has touched on the principles for determining consumer harm in several cases. The most detailed treatment involves determining the circumstances under which pricing low is anticompetitive. The Court has addressed this issue in two leading predatory pricing cases, Matsushita and Brooke Group. Together these decisions have resulted
in what is known as the “Brooke Group test,” which emphasizes the need to show harm to consumers rather than harm to competitors.

A. Brooke Group Approach

There are two main elements to the *Brooke Group* test, which establishes the standard for a showing of predation (where the defendant is accused of setting low prices to harm competition by driving competitors out of business). First, a plaintiff alleging predation must show that the defendant’s prices were “below an appropriate measure of… costs.” Thus, pricing must be below cost to support a claim of predation, even though, in theory, there can be predatory prices that are above cost. Second, the plaintiff must show that the defendant had “a reasonable prospect, or, under §2 of the Sherman Act, a dangerous probability, of recouping its investment in below-cost prices.” That is, finding that prices were low enough to inconvenience a competitor is not enough. Logically, in order for recoupment to be reasonably likely, low prices must eliminate substantial competition in a way that persists even after a post-predation price increase.

The Brooke Group test provides what we would consider to be a sound standard for assessing whether low prices are predatory. In *Brooke Group* and *Matsushita*, the Court gave two reasons that fit into an error cost framework. First, the Court noted, “predatory pricing schemes are rarely tried, and even more rarely successful” whereas “cutting prices in order to increase business often is the very essence of competition.” Because the Court believed predation to be uncommon, it was more concerned with judicial mistakes that would wrongly condemn procompetitive price-cutting. Second, the Court noted that “mistaken inferences [in predation cases] are especially costly, because they chill the very conduct [vigorous price competition] the antitrust laws are designed to protect.”

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14 *Id.*
condemning procompetitive price-cutting is particularly high. These two reasons suggest that we should be most concerned about lowering the error cost from false convictions (versus false acquittals) in predation cases. This is what the Court did in *Brooke Group* and *Matsushita* when it required evidence of below-cost pricing as well as evidence on likely reduction in competition and likely recoupment of losses suffered during the alleged predatory period.\(^{15}\) It is worth noting that the second of these reasons—the concern with the chilling effect on procompetitive behavior—applies to a wide variety of antitrust claims that involve, in essence, charges of competing too hard.

In other contexts the Supreme Court has also rebuffed attempts to infer consumer harm from theoretical musings. The Supreme Court’s reasoning in the recent *California Dental* decision is instructive.\(^{16}\) The FTC had argued that certain advertising restrictions—including restrictions affecting price advertising—adopted by a dentists’ association in California were anticompetitive. The FTC was sure enough of its case that it did not even have an economist testify as to whether consumers had been harmed. In some literal sense, it could be argued that advertising restriction restrained competition—competitors faced restrictions on the type of advertising they could employ. But, in the absence of empirical evidence, that literal argument fails to show that consumers were actually harmed.

The Ninth Circuit Court of Appeals endorsed the FTC’s argument. The Supreme Court, however, rejected the characterization of the advertising restrictions as naked restrictions on price and insisted on actual evidence, especially empirical evidence, of consumer harm:

> But these observations brush over the professional context and describe no anticompetitive effects. Assuming that the record in fact supports the conclusion that the CDA disclosure rules essentially bar advertisement of across-the-board discounts, it does not obviously follow that such a ban would have a net anticompetitive effect here. Whether advertisements that announced discounts for, say, first-time customers, would be less effective at conveying information relevant to competition if they listed the original and discounted prices for checkups, X-rays, and fillings, than they would be if they simply specified a


\(^{16}\) Cal. Dental Ass’n v. FTC, 526 U.S. 756 (1999). See also NYNEX Corp. v. Discon, Inc., 525 U.S. 128, 135 (1998) (“the plaintiff here must allege and prove harm, not just to a single competitor, but to the competitive process, i.e., to competition itself.”).
percentage discount across the board, *seems to us a question susceptible to empirical but not a priori analysis.*

[Justice Breyer] thinks that the Commission and the Court of Appeals “adequately answered that question,” ibid, *but the absence of any empirical evidence on this point indicates that the question was not answered,* merely avoided by implicit burden-shifting of the kind accepted by Justice Breyer. The point is that before a theoretical claim of anticompetitive effects can justify shifting to a defendant the burden to show empirical evidence of procompetitive effects, as quick-look analysis in effect requires, there must be some indication that the court making the decision has properly identified the theoretical basis for the anticompetitive effects and considered whether the effects actually are anticompetitive. Where, as here, the circumstances of the restriction are somewhat complex, *assumption alone will not do.*

On remand, the Ninth Circuit looked at the facts in the record and ruled against the FTC. The Supreme Court has not, however, addressed the proper standard for assessing consumer harm generally in rule-of-reason cases or for specific practices, beyond predatory pricing, that often come under the rule-of-reason rubric. Nevertheless, the error-cost framework implicit in *Brooke Group* can be extended to these other practices. Before we turn to this, however, it is useful to describe approach toward consumer harm advocated by the Clinton antitrust enforcers.

**B. Clinton Administration Approach**

A canonical view of the Clinton approach, based on a review of *Microsoft, Visa,* and *Intel* goes roughly as follows. *First,* the Government presented evidence to demonstrate that

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18 Since *Intel* was settled before trial, the publicly-available record does not permit us to discuss the case in as much detail as we do below for *Microsoft* and *Visa,* but the antitrust philosophy of the enforcement agencies during the Clinton Administration can also be seen in *Intel.* In response to separate patent infringement suits from three of its customers, Intel withheld from those customers the right to use certain intellectual property. The Federal Trade Commission (FTC) argued that Intel’s behavior was a means of “coercing” licenses to their rival microprocessor technology, thereby maintaining and enhancing Intel’s monopoly in the general-purpose microprocessor market. The available evidence provides little support for the existence of significant consumer harm. Of the three companies at issue, only one was even a competitor in the relevant market for general-purpose microprocessors, and that company’s executives testified that its microprocessor research and development efforts were not harmed as a result of Intel’s conduct. Intel Corporation’s Trial Brief, Public Version, FTC Docket No. 9218 (February 25, 1999), at 12-13. The FTC also failed to produce evidence of any likely significant harm to incentives to innovate of Intel’s customers or any other firms in the microprocessor industry. Although the FTC settled its case against Intel with a consent decree, the Court of Appeals for the Federal Circuit dismissed similar antitrust claims in a private lawsuit against Intel, saying, “Although Intergraph (continued...
competitors were harmed. Second, the Government presented evidence to demonstrate that the harmed competitors were important competitors (either actual or potential) in concentrated markets, so that harm to competitors constituted harm to competition or to the competitive process. The Government believed this was sufficient for a finding of liability because harm to consumers could be inferred from harm to competition or to the competitive process.

It is important to distinguish analytically between three terms that are often used in this context: (1) harm to competitors, (2) harm to competition or to the competitive process, and (3) harm to consumers.\textsuperscript{19} There is little debate about what (1) and (3) mean. Harm to competitors occurs when a competitor is disadvantaged—e.g., faces higher costs or lower demand as a result of the challenged action. Harm to consumers occurs when, e.g., prices are higher or industry output lower as a result of the challenged action. There is, however, considerable debate about what constitutes harm to competition.

If harm to competition were synonymous with harm to consumers, which is the convention adopted by some commentators and is our preferred definition, then there would obviously be no dispute that significant harm to competition would be a sufficient basis for antitrust liability. During the Clinton Administration, however, antitrust enforcers often seemed to stress that plaintiffs did not have to demonstrate consumer harm, thus implying a difference between these two concepts. For example, the Government’s main economic witness in \textit{Microsoft} has stated:

\begin{quote}
The presumption of antitrust policy is that competition itself brings consumer benefits, and the lessening of competition brings consumer harm. Hence, \textit{plaintiffs are required to show an injury to competition rather than immediate harm to consumers}.\textsuperscript{20}
\end{quote}

Similarly, the lead trial counsel to the state plaintiffs in \textit{Microsoft} has written:

\begin{quote}
(...continued)

stresses the adverse effect on its business of Intel's proposed withdrawal of these special benefits, the record evidence contains no analysis of the effect of such action on competition among manufacturers of graphics subsystems or high-end workstations.\textsuperscript{19} Intergraph Corp. v. Intel Corp., 195 F.3d 1346, 1355 (1999).
\end{quote}

\textsuperscript{19}To add to the confusion about terminology, some commentators use harm to competition interchangeably with harm to consumers. As we discuss, the Clinton approach sometimes refers to harm to competition as harm to the competitive process and regards both as something clearly short of harm to consumers.

[There is] no requirement of proof of actual harm to consumers—beyond that of injury to competition…. Proof of actual consumer harm is not required because it is inferred from injury to competition.  

And in Visa, the Government argued:

To show consumer harm, it is not necessary to prove precisely what choices consumers would have made, precisely how individual firms would have tried to respond to consumers, or whether they would have won or lost the competitive battle; it is sufficient to prove that the challenged restraint had a significant impact on the process by which competitive decisions were made.  

From these statements, it is evident that the Clinton-era harm to competition standard was intended to be distinct from, and less rigorous than, a showing of harm to consumers.

To the extent that the Clinton standard relies on competitor harm, by itself, as a proxy for consumer harm, it is simply wrong as a matter of economics. Competitor harm must be insufficient for antitrust liability because the competitive process, by its very nature, involves firms trying to gain competitive advantages over other firms. Merely because a firm is disadvantaged does not mean its contribution to market competition is substantially reduced: the disadvantage may be minor or affect only fixed costs, or the firm may not be an important actual or potential competitor in the first place. Moreover, even a substantial reduction in the effectiveness of a few firms in a competitive market may not harm consumers at all if other firms or potential entrants have the ability and incentive to take up the slack.

We believe there is no meaningful concept of harm to competition in antitrust that does not imply harm to consumers. Otherwise, there would necessarily be cases in which courts were asked to choose between protecting consumers and protecting competition, and we are aware of no such cases. If there has been substantial harm to important competitors, in a way that truly matters for competition, it should be straightforward to take the next step and show that consumer harm is likely. We believe that evidence of likely consumer harm—in the form of substantial harmful effects on prices, output, or quality—should be required for antitrust liability in rule-of-reason Sherman Act cases. If it is difficult to show that consumers were

21 Stephen D. Houck, supra note 4, at 596.
harmed or likely will be harmed, then that should be a clear signal that any harm to competitors that was found may not have had any significant impact on competition.

In many cases, it will be feasible at reasonable cost to assess consumer harm directly through analysis of impacts on price, quantity, or quality. In such cases, plaintiffs should be obliged to present this sort of direct analysis. In other cases, however, direct analysis will be impossible or impractical. For example, if the allegation is that a firm has been driven out of business by predation or if a nascent competitor has been prevented from developing into an actual competitor by exclusionary practices, the resulting consumer harm would not come until the future. In such cases, a direct analysis of actual consumer harm is clearly not possible. Even when consumer harm is not prospective, it may be practical only to assess consumer harm indirectly, by analysis of impacts on competition. Nevertheless, following *Brooke Group*, competitor harm alone should not be sufficient to establish liability, since it is not sufficient to establish consumer harm. It is analytically correct to infer consumer injury from injury to competitors only if (1) the injury is severe enough to have a significant impact on the competitors’ effectiveness; (2) the affected competitors are important enough so that their effectiveness matters to consumers in the short run; and (3) the short-run injury to competition cannot be easily overcome by the entry or expansion of other firms.

In the context of predation, the Supreme Court has explicitly recognized that harm to competitors is insufficient to establish liability. A showing that a competitor has been driven out of business—which would certainly constitute substantial harm to the competitor and to its effectiveness—is not enough. The plaintiff must show that pricing was below cost and that the alleged predator had a “dangerous probability” of recouping its losses from predation. In order for this to be possible, conditions (2) and (3) in the paragraph above must hold. Without these additional requirements, the courts would be unable to distinguish instances of competitor harm that are part of the normal competitive process from instances of competitor harm that may lead to substantial harm to consumers.

In regard to the exclusion of nascent competitors, the appeals court decision in *Microsoft* articulates the analytically correct test—whether (1) “the exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly to a defendant’s continued monopoly power” and (2) “whether [the firms affected] reasonably constituted
nascent threats at the time [the defendant] engaged in the anticompetitive conduct at issue.\textsuperscript{23} This test is closely related to the three conditions mentioned above, with the second modified to require that the affected firms reasonably constitute important nascent competitors.\textsuperscript{24}

Not only did the Clinton Administration seem to confuse injury to competitors with injury to competition, in major cases, as evidenced in \textit{Microsoft}, \textit{Visa}, and \textit{Intel}, it failed to demonstrate \textit{substantiality} of harm, either to competitors or to competition. Let us start with harm to competitors. In \textit{Microsoft} and \textit{Visa}, the Government identified particular practices used by the defendant (generally practices that would be termed aggressive competition if engaged in by smaller entities) and argued that competitors would have been better off absent those practices.\textsuperscript{25} And the respective courts agreed. We will argue in detail in Sections 0 and 0 below that the courts in both cases made findings of competitor harm without requiring an attempt to quantify or otherwise demonstrate the substantiality of that harm, even though there were analyses that could have been realistically undertaken that would have shown substantial harm if it had existed.\textsuperscript{26}

Without evidence that competitors have been harmed substantially enough to reduce their effectiveness in the marketplace, there can be no meaningful attempt to assess whether harm to some competitors translated to any harm to competition overall, let alone substantial harm. Even if substantiality of competitor harm had been shown, it would still be necessary to show that such harm led (or was likely to lead) to substantial harm to consumers. As we discussed above, there are many reasons why consumer harm does not automatically follow from competitor harm, even substantial competitor harm. Since the Government was relying on its inference of harm to consumers from harm to competitors, it made no attempt to demonstrate directly that consumers had been (or were likely to be) harmed significantly in the form of higher prices, lower quality or lower output.

\textsuperscript{23} United States v. Microsoft, 253 F.3d 34, 79 (2001).
\textsuperscript{24} As we will argue below, however, the appeals court failed to apply this test correctly to the set of acts it upheld as anticompetitive in \textit{Microsoft}.
\textsuperscript{25} United States v. Microsoft, 253 F.3d 34 (2001); United States v. Visa, 163 F. Supp. 2d 322 (2001). See also \textit{supra} note 18 for a discussion of \textit{Intel}.
\textsuperscript{26} In \textit{Microsoft}, the appeals court reduced the set of acts found anticompetitive but failed to require a reexamination to determine whether the remaining anticompetitive acts had caused significant harm to Navigator as a competitor to Windows.
The Clinton approach to consumer harm is in stark contrast to the approach laid out by the Supreme Court in the *Brooke Group* test. Even a showing of substantial harm to competitors in a highly concentrated market is not enough under the *Brooke Group* test. Additional evidence is needed that the harm to competitors comes from anticompetitive rather than procompetitive behavior and is likely to lead to the long-term elimination of competition. The Clinton approach, on the other hand, permits inferences of harm to competition from harm to competitors without requiring examination of the conditions that must be satisfied to validate such an inference.

**III. An Error Cost Analysis**

In this section, we use an error cost analysis to discuss the standard required for a showing of significant consumer harm in rule-of-reason Sherman Act cases. A weaker standard of evidence of consumer harm increases the likelihood of “false convictions”—condemning procompetitive practices. A stronger standard of evidence of consumer harm increases the likelihood of “false acquittals”—exonerating anticompetitive practices. We argue that the standard used by the Clinton antitrust enforcers strikes that balance in the wrong place—it is too weak and leads to too many false convictions. We advocate a more stringent standard. Ours would require evidence that consumers have been harmed substantially or, in the case of prospective harm, evidence that consumers would likely be harmed substantially. This stronger standard would necessarily reduce false convictions. However, the more stringent standard we advocate is one that can realistically be met by plaintiffs in cases where the challenged behavior is in fact anticompetitive—a point that we demonstrate below in our analysis of the *Microsoft* and *Visa* cases. Consequently, we believe that our standard would result in a minimal increase in false acquittals.

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C. Basic Framework

The frequency of false convictions and false acquittals depends in part on the burden of proof and other standards of evidence. Civil antitrust cases are decided based on the preponderance of the evidence. That is generally taken to mean that, if it is more likely than not that the defendant’s actions are anticompetitive, the defendant is convicted (and conversely, if it is more likely than not that the defendant’s actions are not anticompetitive, the defendant is acquitted). The frequencies of false convictions and of false acquittals also depend on what must be shown: in this context, and how seriously the courts take the requirement that consumer harm is significant. Almost any action taken by a major firm is likely to make some consumers unhappy, just as all contracts necessarily restrain trade.\(^{28}\) As the standards for determining what constitutes significant consumer harm and what evidence is necessary to show its existence become weaker, the likelihood of false convictions increases. From the point of view of social cost, the problem is not such errors themselves or even the unjustified monetary damage awards to which they give rise. The social costs associated with such awards, which are primarily transfers, are relatively small. Social costs can be significant, however, when an efficiency-enhancing practice is barred, when a leading firm is forced to compete less effectively, or when structural relief directly lowers productive efficiency.

Consider a simple model with the following parameters. The probability that the challenged action is in fact anticompetitive and has thus actually caused consumer harm is \(p\). There is no “true” uncertainty regarding whether an action is anticompetitive—an action is either anticompetitive or it is not. The court, however, does not know ex ante whether the defendant is innocent or guilty, only that the proportion of anticompetitive actions among the population of actions challenged is \(p\).

The probability that an “innocent” defendant is “falsely convicted” is \(x_c(s)\), where \(s\) is the standard required for a showing of consumer harm.\(^{29}\) That is, for a case where the

\(^{28}\) United States v. Addyston Pipe & Steel Co., 78 F. 712, 721 (1897).

\(^{29}\) The standard \(s\) could also include other aspects of the process, such as the “preponderance” standard and allocations of burdens of proof. In this paper we focus on the consumer harm standard. In addition, for simplicity, we assume that the probability \(p\) that a defendant has behaved anticompetitively does not depend on \(s\), which may not be true if the standard of proof affects the cases brought by plaintiffs. Our discussion below, which is qualitative in nature, would still hold.
challenged conduct should be permitted, \( x_c(s) \) is the probability that the court makes a mistake and finds the defendant liable. Similarly, the probability of a “false acquittal”—permitting conduct that is anticompetitive—is \( x_a(s) \). The probability of both false acquittals and false convictions depend on \( s \). We define a higher \( s \) to be associated with a stricter standard. As \( s \) becomes more stringent, \( x_c(s) \) generally decreases because it is less likely that a defendant is falsely convicted when a greater showing of consumer harm is required. Similarly, as \( s \) becomes more stringent, \( x_a(s) \) generally increases. Finally, we must also consider the relative costs to society of false convictions (\( c_c \)) and false acquittals (\( c_a \)). The cost of a false conviction, \( c_c \), is the loss in welfare from firms not being able to engage in the practice that has been wrongly prohibited plus the impact of any other associated relief that might be imposed. Similarly, the cost of a false acquittal, \( c_a \), is the loss in welfare from failing to prohibit the conduct that is in fact anticompetitive.

The total cost of judicial errors is the sum of the respective error costs from false convictions and false acquittals. First, consider the error cost resulting from false convictions. The probability (across all cases) that a given case involves an “innocent” defendant that is falsely convicted is equal to the probability a given defendant is innocent \((1-p)\) multiplied by the probability that an innocent defendant is wrongly “convicted” \((x_c(s))\). The cost of a false conviction is \( c_c \) so that the expected error cost (per case) from false convictions is \((1-p) * x_c(s) * c_c\). Similarly, the cost of false acquittals is equal to the frequency of false acquittals multiplied by their costs, or \( p * x_a(s) * c_a \). The total expected error cost (per case) is the sum of the costs from these two types of errors or

\[
\text{Total Expected Error Cost} = x_c(s) * (1-p) * c_c + x_a(s) * p * c_a
\]

The natural objective for policy is to minimize the total expected error cost by choice of the standard, \( s \), for finding consumer harm.

**D. Effect of Consumer Harm Standard on Error Costs**

The socially optimal consumer harm standard depends on our beliefs about the relative size of the marginal error costs from false convictions versus false acquittals. If the marginal error cost from false convictions (the decreased error cost resulting from a decrease in false convictions from increasing the standard \( s \) slightly) is relatively high then we should favor
requiring a stricter standard for consumer harm. Conversely, if the marginal error cost from false convictions is relatively low then a looser standard for consumer harm would be appropriate.

Antitrust jurisprudence implicitly reflects, to some extent, this sort of error cost analysis. This approach can be seen in the evidence required by the courts in recent years for predatory pricing, as discussed above. We can also see this in the context of the standard of proof in criminal versus civil cases. In criminal cases, as a society we have decided that, as is commonly said, “it is better to acquit ten guilty defendants than convict one innocent one.” That is, we believe the social cost of a false conviction greatly outweighs that of a false acquittal. Thus, the standard of proof in a criminal case is “beyond a reasonable doubt” rather than the “preponderance of the evidence” standard used in civil cases.

In our simple model, there are three factors that determine the relative size of marginal error costs from false convictions versus false acquittals: (1) the size of $\frac{dx_c}{ds}$ versus $\frac{dx_a}{ds}$ at the current consumer harm standard, (2) the probability $p$ that a given defendant is “guilty,” and (3) the size of $c_c$ versus $c_a$. We now explain why a consideration of these factors indicates that the standard for consumer harm advocated by the Clinton antitrust enforcers, and accepted in whole or in part by some courts, is too low.

1. Error Probabilities: $\frac{dx_c}{ds}$ versus $\frac{dx_a}{ds}$

Currently some courts, such as in Microsoft and Visa, find defendants liable without requiring either a showing that there has been a significant harm to either consumers or to competition. Instead, the courts have found defendants liable based only on evidence that some harm to competitors has resulted, from which harm to the competitive process and to consumers is inferred. Such a minimal standard provides no meaningful test of whether behavior is in fact anticompetitive and is thus almost certain to result in high probabilities of false convictions (high $x_c$). Moving to a stricter standard is likely to significantly decrease false convictions without, as we will argue, nearly as significant a decrease in false acquittals.

As we have discussed, to properly infer significant consumer harm from harm to competitors, the courts must require plaintiffs to show that competitors have been harmed significantly—that is, there must be a significant effect on the competitors’ ability to compete
effectively. In addition, the courts should require plaintiffs to show that competition or consumer welfare has been harmed significantly as a result of competitor harm—that is, that other competitors cannot in effect replace the harmed firm or firms. Without this more stringent standard, the courts have no meaningful basis for distinguishing between procompetitive and anticompetitive behavior. Requiring such a standard would lower the probability of false convictions substantially.

This stricter standard for consumer harm would likely have a much smaller impact on the probability of false acquittals. As we will describe in more detail in discussing the Microsoft and Visa cases below, the question of whether a challenged act causes or is likely to cause significant consumer harm is a question of fact, which can be addressed empirically. We will argue that those cases demonstrate likely judicial error resulting from a weak consumer harm standard, that they provide support for our assertion that $x_c$ is currently high. But regardless of whether we are right on the merits, our discussion will also illustrate that there were analyses that the Government could have undertaken in those cases that could have demonstrated significant consumer harm—and that the courts should have required. A stricter consumer harm standard certainly requires more effort on the part of plaintiffs to prove liability but it would not necessarily entail a significant increase in false acquittals.\(^{30}\)

The minimal standard used by some courts would only be appropriate if we had a strong belief that the vast majority of defendants had behaved anticompetitively (that $p$ is high) and/or that the costs resulting from false acquittals greatly outweighed the costs of false convictions (that $c_a$ is much higher than $c_c$). As we discuss next, neither presumption seems warranted.

2. Proportion of Innocence versus Guilt: $(1-p)$ versus $p$

While it is difficult, if not impossible, to offer firm conclusions about the percentage of antitrust defendants that have in fact caused consumer harm, there is little reason to believe it is so high at present as to justify a weak consumer harm standard. First, a weak standard would surely encourage some plaintiffs, particularly competitors, to file meritless suits seeking treble

\[^{30}\text{Any extra resources the Government would have to expend would be worthwhile from a social perspective in avoiding false acquittals. In addition, especially in cases such as the ones we discuss, it is doubtful that the additional cost of undertaking the analyses we discuss would represent a substantial increase in total costs.}\]
damages and/or the hobbling of an aggressive rival. Where plaintiffs do not have to show significant harm to competition or consumers, they can prevail in cases where no such harm exists. Thus it is reasonable to expect that, under a weak consumer harm standard, a significant fraction of private antitrust cases and perhaps even some government cases would target behavior that plaintiffs knew involved no consumer harm.

This problem is magnified because the antitrust case law considers suspect some business practices that we now know are not generally anticompetitive. As the Chicago School has emphasized, there are many procompetitive reasons for firms to engage in many of the types of conduct that are frequently challenged under the Sherman Act, especially tying arrangements and vertical agreements among firms. For example, firms may enter into exclusivity agreements in order to limit free-riding and opportunistic behavior or engage in tying or integration because of consumer preference or transactions cost savings. The “post-Chicago” literature, while embracing the Chicago School’s use of economics to evaluate the effect of allegedly anticompetitive practices on consumers, has identified many possible exceptions to the Chicago School’s findings. The post-Chicago literature, for example, has identified conditions under which exclusivity restrictions or tying can be anticompetitive. These models, however, require very specific conditions to hold and provide no support for the view enshrined in the case law that anticompetitive effects generally follow from exclusivity agreements or tying arrangements. As Michael Whinston, one of the main contributors to the post-Chicago literature, has noted: “What is striking about the area of exclusive contracts and tying, however, is how little the current literature tells us about what [the typical] effects [on competition] are likely to be.”

If we are thus in a world where we cannot be confident that most antitrust defendants are guilty, there is no reason to rely on a minimal consumer harm standard, especially when a more stringent standard incurs relatively minimal costs of false acquittals.

31 See, e.g., Robert H. Bork, supra note 1, especially at chapters 14 and 19.
33 Keith N. Hylton and Michael Salinger, supra note 27.
3. Costs of Error: $c_e$ versus $c_a$

The cost of false acquittals depends on the extent of consumer harm from the anticompetitive behavior. Even assuming an act is anticompetitive, market forces may provide a corrective role over the longer run even when a court has failed to prohibit the act, but market forces are probably less effective in correcting judicial errors. As Judge Easterbrook put it:

[T]he economic system corrects monopoly more readily than it corrects judicial errors. There is no automatic way to expunge mistaken decisions of the Supreme Court. A practice once condemned is likely to stay condemned, no matter its benefits. A monopolistic practice wrongly excused will eventually yield to competition, though, as the monopolist’s higher prices attract rivalry.  

For example, if a firm has achieved a monopoly over distribution through anticompetitive behavior, its competitors still have strong incentives to find alternative means of distributing their products. Market forces will certainly not correct all harms flowing from anticompetitive behavior, especially in the short run, but market forces can serve to offset some of the anticompetitive effects over the long run.

When courts mistakenly prohibit behavior that is procompetitive, competition is directly reduced in the market or markets at issue, and production and transaction costs may be increased. Moreover, procompetitive behavior is discouraged in other markets, as firms across the economy seek to reduce their legal risk. It is less likely that market forces can play a corrective role when courts mistakenly prohibit behavior that is procompetitive. Suppose a defendant that has been prohibited from using a particular business practice tries an alternative practice that achieves a similar outcome. It is likely that plaintiffs would have a strong case in court by showing that the defendant had simply employed a functionally equivalent substitute for the prohibited conduct. For example, Sealy, a mattress manufacturer, sought to replace an outlawed system of exclusive territories for its distributors with a system of contractual payments among distributors for selling in another distributor’s “area of primary

35 Frank H. Easterbrook, supra note 12, at 15.
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responsibility.” The new scheme effectively replicated the old exclusive territories. Sealy was sued and lost.37

It is also important to note that the consequences of an antitrust conviction often go well beyond damage awards and orders to cease the offending behavior—though as the discussion of Visa below indicates, simple cease and desist orders can have profound implications for industry structure and behavior. Courts can impose and have imposed a wide variety of behavioral restrictions and structural changes in attempts to remedy the effects of past actions that have been found illegal and to prevent future violations. Such broad remedies may have diverse consequences for competition and consumer welfare, many of which are unintended and unanticipated. The proclivity of courts to impose broad remedies in Section 2 cases adds substantially to the expected societal cost of a finding of guilt without real consumer harm.

Thus the remedial effect of market forces for injunctions that are wrongly denied may limit the cost of false acquittal ($c_a$) more than the cost of false convictions ($c_c$), and the tendency of courts to impose broad remedies tends to raise the latter. The larger is $c_c$ relative to $c_a$, all else equal, the more stringent should be the consumer harm standard required to find an antitrust violation.

C. Additional Considerations

The standard of proof of substantial consumer harm that should be required also depends on a variety of other factors. Based on an error-cost analysis, we conclude that the courts should require a lower standard of proof when the practice at issue is one with which the courts and economists have experience in assessing competitive consequences. For example, simple horizontal price-fixing cases are treated under a per se standard because there is no dispute that the practice is harmful. Moreover, the costs of false convictions under that standard are minimal. A price fixing agreement between two firms without market power may not cause any significant consumer harm, but there is little cost in prohibiting such conduct. The Court in BMI, however, chose not to apply the per se standard because there was a significant chance

that, as the Court ultimately ruled under a rule-of-reason analysis, the price agreements in that case had significant procompetitive benefits. This suggests that generally the courts should require a higher standard of proof when the issues in the case are complicated or novel. Greater evidence of consumer harm should be required when, for example, the plaintiff’s liability theory depends on new and untested economic theories.

Another important factor is the likely impact of the relief demanded. When the plaintiff is seeking relief that is likely to have substantial external effects, such as firm-wide or industry-wide restructuring, the court should require greater evidence of substantial consumer harm. Economics gives us good reason to believe that even in the presence of market power, firms and industries are, as a general matter, organized efficiently because market forces tend to reward efficiency and punish inefficiency. Thus any forced reorganization is likely to involve significant social costs. When the impact of relief extends beyond the challenged practice, we should be particularly certain that there is consumer harm that needs to be remedied. This is consistent with the point made by the appeals court decision in *Microsoft* that although it had used a minimal standard for “causation” (whether Microsoft’s actions had actually led to consumer harm) on its finding of liability, much greater judicial scrutiny of consumer harm, among other things, was needed to support the divestiture proposal accepted by the trial court:

[D]ivestiture is a remedy that is imposed only with great caution, in part because its long-term efficacy is rarely certain. Absent some measure of confidence that there has been an actual loss to competition that needs to be restored, wisdom counsels against adopting radical structural relief….If the court on remand is unconvinced of the causal connection between Microsoft’s exclusionary conduct and the company’s position in the OS market, it may well conclude that divestiture is not an appropriate remedy.

Clearly, relief need not be narrowly structural in form to have the sort of radical consequences that gave the appeals court pause. Indeed, as we show below, even what might seem to be simple cease-and-desist orders can have such consequences. Because there is no such thing as a harmless remedy, and no court is likely knowingly to impose a remedy with de minimis effects,

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39 This presumption would therefore not necessarily hold in heavily regulated industries.
serious direct or indirect evidence of significant consumer harm should be required to support a finding of liability.

IV. Microsoft

A. Introduction

The Government filed its complaint against Microsoft in May 1998, focusing on Microsoft’s reaction to perceived threats to its Windows operating system, specifically from the Netscape Navigator Web browser and Sun’s Java technologies. In particular, the Government argued that Microsoft took steps to prevent Navigator from becoming a viable platform that could compete with Windows. The Government made four broad allegations: market foreclosure and tying under Section 1 of the Sherman Act, and attempted monopolization and monopoly maintenance under Section 2 of the Sherman Act.\footnote{Complaint, United States v. Microsoft, Civil Action No. 98-1232 (TPJ), May 18, 1998, http://www.usdoj.gov/atr/cases/f1700/1763.htm.} The state plaintiffs also claimed that Microsoft engaged in monopoly leveraging in violation of Section 2 of the Sherman Act.\footnote{Plaintiff States’ First Amended Complaint, New York v. Microsoft Corp., Civil Action No. 98-1233 (TPJ), July 17, 1998, http://www.naag.org/features/microsoft/amendco.cfm, ¶¶ 91-92.} The district court judge dismissed the monopoly leveraging claim prior to the start of trial and then rejected the Section 1 foreclosure claim as well as several of the charges included under the Section 2 monopoly maintenance claims. But the judge found Microsoft liable for tying under Section 1 and several of the claims under Section 2.\footnote{Conclusions of Law, United States v. Microsoft, Civil Action Nos. 98-1232 and 98-1233, April 3, 2000, http://www.usdoj.gov/atr/cases/f4400/4469.htm.} He ordered a remedy that included splitting Microsoft into two separate companies.

Microsoft appealed the district court’s liability findings to the DC Circuit Court of Appeals, which reversed the Section 2 attempted monopolization claim, affirmed a portion of the Section 2 monopoly maintenance claim, and vacated and remanded the Section 1 tying claims. The appeals court vacated the remedies ordered by the district court in their entirety and remanded them for the district court “to determine the propriety of a specific remedy for the limited ground of liability which we have upheld.”\footnote{United States v. Microsoft, 253 F.3d 34, 107 (2001).}
In September 2001, the Government announced that it would not pursue the tying claims on remand. In November 2001, Microsoft settled the case with the Department of Justice and nine of the state plaintiffs. That settlement had to be approved by a new district court judge. Meanwhile, the nine remaining state plaintiffs plus the District of Columbia pursued stricter remedies before the same district court judge that reviewed the settlement. As of this writing the judge has not ruled on either the settlement or the litigating states’ remedies.

B. Consumer Harm

1. Liability Standard

The appeals court stated the following standard on liability:

[T]he question in this case is not whether Java or Navigator would actually have developed into viable platform substitutes, but (1) whether as a general matter the exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly to a defendant’s continued monopoly power and (2) whether Java and Navigator reasonably constituted nascent threats at the time Microsoft engaged in the anticompetitive conduct at issue.

The appeals court stated the right principles for its liability standard but failed to apply them correctly. First, in finding liability, the appeals court relied on the district court’s findings that Navigator had been significantly harmed by those Microsoft actions the appeals court found anticompetitive (“anticompetitive acts”) and that Navigator was a “nascent” competitor to Windows. However, the district court’s finding of harm to Navigator had been based on the entire set of acts it found anticompetitive. The appeals court subsequently narrowed the acts it upheld as anticompetitive, stating that it had “drastically altered the District Court’s conclusions on liability.”

A reassessment of the finding of substantial harm to Navigator was necessary to determine if the remaining anticompetitive acts had caused significant harm to Navigator as a nascent competitor to Windows. As we discuss next, there were empirical

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47 For convenience, we refer to the acts found anticompetitive by the appeals court as the “anticompetitive acts.” As we discuss, however, we believe that a closer examination suggests that there was no showing of significant consumer harm and that the acts should not therefore be characterized as anticompetitive.
analyses that could have been performed and that would have addressed whether the challenged actions by Microsoft had caused any significant harm to Navigator.

Second, the appeals court described its liability standard as “edentulous” or toothless because it did not require a showing that Java or Navigator would have actually developed as platform competitors, 49 but it appeared to believe that its “toothless” standard was unavoidable given the “nascent” character of the competitive threats. It did not want to permit harm to a nascent competitor simply because such a firm, by definition, would not yet be an established competitor. The appeals court reasoned that “[t]o some degree, ‘the defendant is made to suffer the uncertain consequences of its own undesirable conduct.’” 50 Although determining whether a firm is really a nascent threat is not easy, the courts should nevertheless require an assessment, based on the available evidence, of whether a firm that is harmed “reasonably constituted” (as the court put it) a nascent threat. The court’s failure to require this made the liability standard weaker, or more toothless, in practice than in the principles asserted by the court.

2. Harm to Competitors

The core theory of the Government’s case during the liability phase was that Microsoft’s actions caused Navigator to lose the ubiquity it needed to become a platform competitor to Windows. 51 The Government argued that while Navigator was not an operating system competitor to Windows at that time, it could develop into a platform competitor over time. If Navigator were to achieve “ubiquity,” the argument went, software firms might write to application programming interfaces (APIs) that Navigator might develop and expose, rather than to Windows APIs. The Government argued that Navigator might thus eventually become a platform competitor to Windows.

49 Id., at 79.
50 Philip E. Areeda and Herbert Hovenkamp, 3 Antitrust Law ¶ 651c, at 78, quoted in Id., at 79 (2001).
51 There was a similar claim regarding Java. Microsoft presented similar evidence during the remedies stage arguing that, as with Navigator, Microsoft’s actions did not affect Java significantly enough to harm competition. For the purposes of this paper, we focus on Microsoft’s actions that related to Navigator.
The Government’s expert, Professor Fisher, had suggested that the minimum threshold share Navigator needed for ubiquity was 50 percent. Navigator’s browser usage share had fallen to less than 15 percent by the time of the remedies hearing (though it was substantially higher at the time of trial). So, a central question for liability should have been whether the acts found anticompetitive by the appeals court were likely to have reduced Navigator’s share by more than 35 percentage points.

As we noted, many of the important actions taken by Microsoft in competing with Navigator were found not to be anticompetitive. Some actions were found permissible by the district court. Others, initially found anticompetitive by the district court, were later ruled permissible by the appellate court. Some of the more significant Microsoft actions found permissible were: (1) offering its IE at no additional cost to consumers, (2) investing heavily in improving the quality of IE, (3) making IE free for Internet Access Providers (IAPs), (4) offering payments to IAPs for distributing IE, (5) developing and distributing at no charge a “tool” enabling IAPs to customize IE, and (6) designing IE in a “componentized” way that made it attractive to AOL and other partners.

The relevant question is whether Navigator’s loss of ubiquity could be plausibly attributed to the remaining anticompetitive acts rather than to the large set of competitive acts that the courts found to be legal. If, for example, Microsoft’s anticompetitive acts had reduced

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54 As we discussed above, since the appeals court reduced the set of acts found anticompetitive, a reexamination of liability would need to determine whether the remaining anticompetitive acts had caused significant harm to Navigator as a competitor to Windows. Such a hearing would have presumably taken place at about the time the remedies hearing actually took place. In this paper, we discuss the analyses presented by Professor Murphy at the remedies hearing. We also note that most of Professor Murphy’s analyses relied on data that would have been available around the time of the initial trial.
56 The appeals court reversed the district court’s initial finding of liability on (3), (4), and (5). The district court was ambiguous on whether (1) and (2) were anticompetitive but the appeals court found that they were clearly permissible. Id., at 3.
57 Making IE “componentized” allowed other firms, such as AOL, to include IE functionality in their own software, without necessarily opening an IE window, so that consumers might not even know they were using IE functionality. This had both technical and marketing advantages for potential partners. Direct Testimony of Kevin M. Murphy, New York v. Microsoft Corp., Civil Action No. 98-1233 (CKK), April 12, 2002, ¶¶ 50, 108-109, 117.
Navigator’s share by 5 percentage points, Navigator’s share would still only be 20 percent and those anticompetitive acts would not have had a significant effect on Navigator’s ability to become a platform competitor. That is, even if Microsoft’s suspect actions did harm Navigator’s success as a browser, they may have had no significant effect on its ability to develop into a platform competitor. To find liability without real evidence of the likelihood of significant harm to competition or consumers is to move very close to a *per se* standard, which seems unjustifiable for the types of practices at issue.

The appeals court’s decision failed to require any evidence that would have shown whether Microsoft’s actions, either individually or collectively, denied Navigator the ubiquity it needed as a platform competitor. For example, consider the appeals court finding that Microsoft’s contractual terms with OEMs (original equipment manufacturers) that prohibited the deletion of the Internet Explorer icon from the desktop or the start menu was an anticompetitive act. It stated that “[b]y preventing OEMs from removing visible means of user access to IE, the license restriction prevents many OEMs from pre-installing a rival browser, and, therefore, protects Microsoft’s monopoly from the competition that middleware might otherwise present.” The appeals court relied on the district court’s finding that “OEMs cannot practically install a second browser in addition to IE, the court found, in part because ‘pre-installing more than one product in a given category…can significantly increase an OEM’s support costs, for the redundancy can lead to confusion among novice users.’” The appeals court found that there were no procompetitive justifications and concluded that the restriction was anticompetitive. The district court did not cite to any evidence or analysis that showed that this restriction actually had a significant effect on Navigator. The appeals court failed to apply its own test of whether this restriction was “reasonably capable of contributing significantly” to the maintenance of Microsoft’s market power in finding that this restriction, by itself, constituted a violation of the Sherman Act.

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59 *Id.*
60 United States v. Microsoft, Civil Action Nos. 98-1232 and 98-1233 (TPJ), Findings of Fact (November 5, 1999), at 159, *quoted in Id.*
61 Direct Testimony of Kevin M. Murphy, New York v. Microsoft Corp., Civil Action No. 98-1233 (CKK), April 12, 2002.
The testimony presented by Microsoft’s expert at the remedies hearing, Professor Murphy, argued that this question could be addressed empirically. Professor Murphy examined both the individual and collective impact on Navigator usage from the set of anticompetitive acts and argued that in total they affected Navigator’s decline by “no more than a few percentage points.” For example, he considered the effect of the “no removal” restriction, as well as restrictions on the promotion of third-party browsers or IAPs through the use of unusually shaped icons, in one of his analyses. Professor Murphy compared Navigator usage among a control group of Internet users whose browser choice was unlikely to be affected by these restriction and a treatment group whose choice of a browser might have been affected. The difference would measure the collective impact of those anticompetitive acts on the distribution or usage of Netscape’s browser. Using two different data sources, he found that there was an insignificant difference in Navigator’s decline between the treatment and the control group.

Another of Professor Murphy’s analyses considered the change in the usage of Navigator for subscribers to two groups of ISPs: (1) the treatment group of ISPs that signed contracts containing terms upheld as anticompetitive by the appeals court; and (2) a control group of ISPs that signed less restrictive agreements containing no illegal terms. Navigator’s share loss was essentially identical for both groups, thus indicating an insignificant incremental impact from the terms in the ISP contracts that the appeals court condemned.

The litigating states offered no substantive rebuttal to Professor Murphy’s testimony. Regardless of the merits, however, we want to emphasize that this is a question that the appeals

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62 *Id.*, at ¶ 92. Schmalensee’s testimony at trial made similar findings regarding the lack of effect of various contested Microsoft actions.

63 *Id.*, at ¶¶ 58-67. The first comparison was between Navigator usage by IT professionals (“unlikely to be constrained by the anti-competitive acts because they are technically sophisticated, knowledgeable and can easily and cheaply acquire whatever brand of browser they wish”) versus Navigator usage generally (which could have been affected by the anticompetitive acts). The second comparison was between usage by individuals working in medium/large businesses or the government (whose “‘choice’ of browser for these users is often determined by the software configuration installed and supported by their employer”) and usage by individuals at home or working in small businesses (who were more likely to be affected by the anticompetitive acts).

64 The litigating states’ economic expert, Professor Shapiro, stated that “the Findings of Fact and the Court of Appeals decision in this case make it very clear that Microsoft’s illegal conduct had significant effects on Netscape Navigator and on Sun’s Java platform.” Direct Testimony of Professor Carl Shapiro, New York v. Microsoft Corp., Civil Action No. 98-1233 (CKK), April 5, 2002, ¶ 60-61. Professor Shapiro did not address (continued...)
court should have required the district court to address directly before a final determination of liability, especially in light of the appeals court’s “drastic” modifications to the trial court’s liability findings. This was a question that was susceptible to empirical examination, as Professor Murphy’s testimony demonstrated. Instead, the appeals court simply assumed that each of Microsoft’s challenged actions that it did not find to be legal had sufficiently reduced Navigator’s potential ability to compete with Windows so as to injure competition and thus harm consumers.

3. Harm to Competition

The appeals court decision also suffered from a second major flaw. Although the appeals court asked the right question, “whether Java and Navigator reasonably constituted nascent threats at the time Microsoft engaged in the anticompetitive conduct at issue,” it accepted the district court’s findings that Navigator was a nascent threat. The district court’s findings were based on general concerns expressed by Microsoft executives about the threat from Navigator but did not include any specific evidence indicating that Navigator would have (or could have) developed into a platform competitor even with the necessary ubiquity. Although Microsoft had been worried that Netscape would transform Navigator into a competing platform, little evidence exists from either the trial or from intensive interviews with Netscape employees conducted by Michael Cusumano and David Yoffie that Netscape

...(continued)

the issues Professor Murphy discussed in this testimony. The litigating states had the option to call Professor Shapiro to provide rebuttal testimony but chose not to.

65 At trial the Government presented some analyses of the impact on Navigator usage of a set of Microsoft contractual restrictions, but this set included restrictions that were ultimately found permissible. It is thus not possible to use the Government’s analysis to estimate the effects of the anticompetitive acts affirmed by the appeals court.

66 If there were clear evidence that a defendant believed another firm was a potential competitor and if the defendant took anticompetitive actions that eliminated that other firm, liability might be appropriate even if it turned out that the other firm was not actually a potential competitor. That is, a defendant should presumably not escape liability if it took anticompetitive actions that eliminated a firm it clearly believed was a potential competitor simply because its belief was mistaken. However, it is notoriously difficult to assess the “beliefs” and “intent” of an organization, and it is generally preferable to examine directly the extent to which a firm actually was a potential competitor. At the very least, such an examination will shed light on the plausibility of the beliefs defendant is alleged to have held. The issue Professor Murphy was addressing, whether broad remedial relief was needed to restore lost competition, is different and should turn on whether an eliminated firm was actually likely to have become a competitor, not on any mistaken beliefs of the defendant.
ever seriously planned to do so. 67 James Barksdale (Netscape’s CEO), for example, suggested in trial testimony that Andreesen’s comment about reducing Windows’ role to that of a set of “slightly buggy device drivers” reflected his youth and a “spirit of jocularity and sometimes sarcasm that have gotten us in trouble.” 68 Barksdale also testified that “we have never maintained in a serious way that [Navigator] could substitute for all of the platform characteristics of Windows.” 69 We are not suggesting that the Government should have had to, in the appeals court’s words, “confidently reconstruct a product’s hypothetical technological development.” 70 However, at a minimum, it should have had to demonstrate that its theory regarding the Navigator threat was supported by the available evidence.

The Government’s theory at trial was that, over time and with ubiquity, Navigator could have perhaps developed APIs that would attract software developers. But the Government had presented no evidence that Netscape had ever taken any significant steps to develop Navigator as a platform. Professor Murphy’s testimony during the remedies phase argued that the decisions made by Netscape and later AOL indicated that they had no plans to develop Navigator as a platform competitor. 71 (The litigating state plaintiffs offered no substantive rebuttal to this testimony.) For example, a June 1998 strategy briefing “made it clear that the company’s server products had replaced the browser as the heart of Netscape’s product plans.” 72 Consistent with this focus, Netscape and AOL have not developed the types of APIs that software developers would need to start using Navigator as a platform instead of Windows. 73 Even today, AOL uses IE, not Navigator, to provide browsing functionality. 74

67 Michael A. Cusumano and David B. Yoffie, Competing on Internet Time: Lessons from Netscape and Its Battle with Microsoft, (Touchstone, 2000).
69 Id.
73 Murphy’s testimony indicated that only a handful of APIs have been developed for Navigator and that most of those do not provide the type of functionality across operating systems that has been argued might make Navigator attractive as a platform.
74 There are reports that there is beta testing of a version of AOL’s client software that relies on Navigator’s browsing code. Direct Testimony of Kevin M. Murphy, New York v. Microsoft Corp., Civil Action No. 98-1233 (CKK), April 12, 2002, ¶ 123.
Professor Murphy noted that, by contrast, if Netscape and later AOL had serious plans to develop Navigator into a platform competitor, we would expect them to have taken very different actions.75 We would expect that they would have made much more significant efforts to develop APIs for Navigator. We would expect that they would have made Navigator more componentized and thus easier for potential partners to use, as had been urged by IBM/Lotus, Intuit, and AOL (before AOL acquired Netscape).76 We would also expect that Netscape and AOL would have taken more efforts to pay for wider distribution of Navigator, or at least to use Navigator in AOL’s client software, in light of the potential revenues from developing as a platform competitor.

Again, although we believe the evidence suggests that (1) Microsoft’s anticompetitive acts did not deny Navigator the ubiquity the Government argued it needed and (2) there was no evidence that Navigator had a significant chance to develop as a platform competitor, the point we want to emphasize here is that those are factual issues that could have been and should have been examined at the liability stage. Instead, the district and appeals courts, using a weak consumer harm standard, accepted a liability case presented by the Government that did not attempt to assess either the degree to which Navigator had been harmed or the extent to which any harm to Navigator was important to competition in the relevant market. We are not suggesting here that a plaintiff should be required to show the exact path competition would have taken in the absence of the allegedly anticompetitive acts, especially when the case involves firms that are allegedly nascent competitors. Rather, when claims of harm to competitors and to competitor can be examined to determine whether the potential harms are significant and realistic, that inquiry must be undertaken. As in the analysis of post-predation recoupment under *Brooke Group*, the plaintiff should be required to show the plausibility of the class of scenarios it puts forward, not to prove beyond a doubt the correctness of any one of them.

75 *Id.*, ¶ 123-4.
76 *Id.*, at ¶¶ 109, 117.
V. Visa

A. Introduction

Payment card systems have historically consisted of firms in two groups: proprietary systems and open systems. Of the four largest systems in the United States, American Express and Discover are proprietary systems, while Visa and MasterCard are open systems. The proprietary systems, American Express and Discover, solicit cardholders for their charge and credit cards and acquire merchants (or contract with others to acquire merchants). A proprietary system operates the necessary processing infrastructure, conducts advertising and other marketing activities, and performs research and development. It determines the prices and other terms and conditions for its cardholders and merchants, and retains the profits from its activities.

Visa and MasterCard, the open systems, are run as not-for-profit cooperatives or associations. The cooperative provides its members with a range of services. It runs the processing infrastructure, manages the brand, and engages in system-level research and development. It also provides a set of system rules that members must follow. The cooperative operates on a not-for-profit basis—member fees are set at a level that is expected to cover system costs (including funds for working capital and contingencies)—and does not set prices to cardholders or merchants. Individual members solicit cardholders and merchants, set prices and other terms and conditions, process transactions (sometimes with the assistance of third-party processors), advertise and establish the brand image for their specific cards, and develop and implement card features.

Two central issues concerned the Government in the investigation that led up to Visa. The first was the absence of any Visa or MasterCard rules that prevented banks from being members of both systems, a situation commonly referred to as “duality.” In other words, the Government wanted more separation between Visa and MasterCard. The second was the

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77 The court found that Visa and MasterCard both operated on a not-for-profit basis. United States v. Visa, 163 F. Supp. 2d 332 (2001). MasterCard completed its reorganization as a stock rather than membership corporation on July 1, 2002. It is unclear whether this will affect its operation on a not-for-profit basis. Visa continues to operate on a not-for-profit basis and set its system fees at cost.
existence of Visa and MasterCard rules that prohibited members from issuing for American Express or Discover. In other words, the Government wanted less separation between Visa (or MasterCard) and American Express (or Discover).

The Government told Visa it could not consistently defend these two contradictory positions on membership. Visa told the Government it could not consistently prosecute both duality and exclusivity as antitrust violations. Nevertheless, duality and exclusivity became Counts One and Two of the Government’s case in Visa, and Visa and MasterCard mounted a defense on both counts. The Government believed it had a way out of the contradictions. Through its economic expert, Professor Michael Katz, it put forward a theory that one could distinguish between duality in governance and duality in issuance. Katz argued that duality in governance (or overlapping governance generally) was anticompetitive and duality in issuance (or multiple issuance generally) was procompetitive. Thus, he proposed to end dual governance without ending dual issuance. Further, the repeal of the exclusivity rules could then be viewed as an extension of (procompetitive) dual issuance to multiple issuance.

Visa had been opposed to duality at its inception in the late 1970s but, as a small entity at that time, had acquiesced in the face of potential antitrust liability and what it viewed as the unwillingness of the Government to support its position against duality. Schmalensee, Visa’s economic expert, noted that he believed that having exclusive systems was best overall for system and issuer competition, although it was not clear that the Government had shown that dual governance (as opposed to duality in total) had led to anticompetitive effects. Moreover, reacting to the value of loyalty, both Visa and MasterCard had taken steps to increase the extent to which issuers were dedicated to one system or the other, thus ameliorating some of the potential harm from duality.

(...continued)

79 Two of the authors, Evans and Schmalensee, participated in discussions with the Justice Department during the three years that preceded the filing of the lawsuit.
80 We use the unmodified term “duality” to refer to duality as it now exists, encompassing duality in membership and in governance.
In its decision, the district court rejected the Government’s attempted distinction between dual governance and dual issuance. The court found some harmful effects from duality—that duality “has led to some blunting of competitive incentives” but could not ascribe the effects solely to dual governance.81 The court found that dual governance was an artificial distinction that had no foundation in the actual operation of Visa and MasterCard and that large issuers could have an important influence on association decisions even if they were not governors.

The court reasoned that it could set aside its finding that duality, in total, resulted in “some blunting of competitive incentives” because the Government’s claim related only to dual governance, so that the question of “whether or not dual issuance has been or will be the source of anticompetitive conduct is not the issue.”82 The problem, however, is that the question of whether dual or multiple issuance can be anticompetitive is relevant to evaluation of the exclusivity rules. Visa sought to prohibit the extension of multiple issuance to American Express because, among other effects, such issuance would blunt competitive incentives, as had happened with duality. The court failed to address the problem of blunted incentives in its assessment of procompetitive effects from the exclusivity rules.

As we noted above, courts should be particularly careful to require clear evidence of consumer harm in a case involving a very complicated industry structure and a novel liability theory put forward by the plaintiff. As devised by the court, the relief (1) ordered Visa and MasterCard to eliminate their exclusivity rules and (2) rescinded the existing partnership agreements already signed by banks to allow them to sign agreements with American Express or Discover. (The Government’s proposed relief differed substantially because it had sought to address both the duality and exclusivity claims.) The court’s relief could lead to dramatic changes in the structure of the payment card industry. The greater system separation that had come about in recent years through the action of Visa and MasterCard, noted with approval by the court, could be substantially undone. In the face of potential industry restructuring and the court’s own ambivalence about the impact of decreased system separation, it should have been especially important to require the Government to provide evidence on significant consumer

82 Id., at 329.
harm that related to the remedy to be imposed. As we discuss next, we believe the court failed to do this.

**B. Consumer Harm**

The Government’s case on consumer harm fit into two general categories. First, the Government argued that American Express had been harmed by the exclusivity rules and that the loss of system competition constituted consumer harm. (For convenience, we refer to American Express rather than both American Express and Discover.) Second, the Government argued that cardholders were harmed from the lost variety that would have been available from Visa or MasterCard members issuing for American Express. The court accepted both of these arguments. We discuss each of these in turn below.

The Government’s liability case on exclusivity contained the same two central flaws as in *Microsoft*. First, the Government made no attempt to assess the degree to which the competitor (in this case American Express) was harmed. Second, the Government made no attempt to demonstrate the extent to which the alleged harm to a competitor would harm competition. And, as with *Microsoft*, these were questions that could have been answered empirically. In accepting the Government’s case, the district court failed to require a showing that Visa’s exclusivity rules had caused significant harm to competition or consumers.

We also note that Visa offered procompetitive justifications for its exclusivity rule, although a full discussion is outside the scope of this paper. Visa argued that the rule was important for ensuring the loyalty of its members in furthering the growth of the cooperative. Visa argued that the exclusivity rule limited the ability of its members to take opportunistic actions that would undermine the success of the cooperative. The court rejected these offered procompetitive justifications.\(^\text{83}\) Visa also argued that the exclusivity rule was procompetitive because it helped maintain separation between the Visa and American Express systems. The court rejected this argument without any detailed discussion\(^\text{84}\) and did not appear to recognize

\(^{83}\) *Id.* We believe the court erred in its findings, but a discussion of this issue is outside of the scope of this paper.

\(^{84}\) *Id.*, at 330. The court addressed this issue briefly in the introductory section of the decision and did not consider it in its detailed analysis of procompetitive justifications.
the inconsistency with its finding that duality had led to “some blunting of competitive incentives.”\textsuperscript{85}

1. Harm to Competitors

The court found harm to American Express from the Visa and MasterCard exclusivity rules, since they prevented American Express from taking actions it claimed to want to take. But the court did not require the Government to assess the degree to which American Express had been thereby weakened as a system competitor. Harm to a competitor, even an important one, does not imply harm to competition or to consumers.

The court found that “banks provide essential attributes to network competitors” because “Visa and MasterCard banks are the sources of virtually all of the expertise in issuing general purpose cards in the United States outside of American Express and Discover themselves.”\textsuperscript{86} There is no dispute that successful issuers have certain skills and specialized knowledge that are the reasons for their success, as is true in general with any successful firm. The antitrust question, however, is how significantly American Express is harmed by not having access to these issuers.

It was unclear that Visa and MasterCard’s exclusivity rules actually prevented American Express from gaining access to important issuer skills—American Express is the largest issuer in the United States and, with 20 percent of card volume, is only slightly smaller than MasterCard, a system with thousands of issuers, with 26 percent of card volume.\textsuperscript{87,88} American Express has managed to acquire the issuing skills necessary for that success without having had access to any Visa and MasterCard members. As we mentioned above, historically American Express has chosen to operate as a single-issuer proprietary system.

Entry and expansion in the credit card issuing business also appears to be relatively easy. Many of the largest Visa and MasterCard issuers have entered or grown substantially in the past decade.\textsuperscript{89} These new or previously minor issuers were able develop the issuing skills to

\textsuperscript{85} Id., at 363.
\textsuperscript{86} Id., at 389.
\textsuperscript{87} Id., at 387.
\textsuperscript{88} Id., at 341.
\textsuperscript{89} Id., at 365.
become major issuers quickly, without gaining direct access to the issuing skills of existing card issuers. Similarly, American Express could develop additional issuing skills, or open up its system to brand new entrants, over a relatively short period of time. American Express might earn higher profits if it could gain immediate access to the issuing capabilities that Visa and MasterCard members have developed, but that does not mean it needs to do so in order to compete effectively. Moreover, American Express has a number of ways of getting access to existing issuer skills in the industry. It can contract with Visa and MasterCard members to provide any expertise it needs as long as they do not act as American Express issuers. It can even purchase and convert existing Visa and MasterCard portfolios, which American Express acknowledged after trial it can do successfully, in addition to purchasing issuer skills.90

There was no economic evidence that American Express, as a system competitor, suffered any significant cost disadvantages. American Express’s CEO, Harvey Golub, testified that there would be at best only “marginal” (i.e., small) cost savings from additional volume.91 Moreover, switching six percent of volume from MasterCard to American Express, thus reversing the size of the two systems, would simply transfer any scale economies from one system to the other. It is also worth noting that Visa was substantially larger than MasterCard, 47 percent of card volume to 26 percent.92 MasterCard would have been unable to compete

90 American Express has, in fact, purchased several bankcard portfolios, including Bank of Hawaii, BSB Bank & Trust, and Valley National Bank. See American Express Press Releases at http://home3.americanexpress.com/corp/latestnews/hawaii.asp; http://home3.americanexpress.com/corp/latestnews/bsb-bank.asp; http://home3.americanexpress.com/corp/latestnews/shopright.asp. At trial, American Express witnesses stated that purchasing portfolios was not an economically viable strategy. American Express has since directly contradicted that testimony by stating that it has successfully pursued that strategy with no significant problems.

91 Trial Testimony of Harvey Golub, United States v. Visa, 98 Civ. 7076 (BSJ), July 5, 2000, at 2770-2771. The court cited testimony from Schmalensee to support its statement that “Since the card network services business is driven by scale, increasing the scale of American Express and Discover will reduce their costs and increase their competitive strength.” United States v. Visa, 163 F. Supp. 2d 322, 382 (2001). Schmalensee’s testimony indicated that there were important scale economies at some size level—which limits the number of viable systems—but did not suggest that American Express or Discover were not at or close to the size at which additional scale economies would be marginal.

effectively against Visa, as it certainly seemed to do, if Visa had enjoyed substantial scale economies over MasterCard.

There was also no allegation by the Government or finding by the court that American Express was unable to pursue any product development or innovation initiatives because of a lack of access to Visa and MasterCard banks. For example, the “Blue” chip card that American Express touts as a significant innovation was developed without access to Visa and MasterCard issuers. Without either a significant innovation or cost disadvantage, it is difficult to see how American Express is harmed as a system by the cooperatives’ exclusivity rules.

The court’s decision stated that “additional issuers leads to increased card issuance.” It based this finding on general statements by industry executives that having more issuers is “always better.” While this is generally true, it does not answer the question of “how much better” and whether that difference is competitively significant. The court’s finding was not based on or supported by any attempt by the Government to quantify or otherwise assess the significance of any additional issuance on the American Express system. As we discuss in more detail below, the Government could have tried to estimate likely additional American Express volume from the elimination of the exclusivity rules. It could then have explained how such additional volume would have strengthened American Express as a system competitor. If the Government believed American Express would benefit from additional scale economies, that again is an issue that could be examined empirically. Without any of this evidence, it is not possible to say whether American Express has been significantly harmed by the cooperatives’ exclusivity rules.

93 Id., at 387.
94 Id.
95 The court stated that “Visa U.S.A.’s general counsel testified that By-law 2.10(e) exists because of the likelihood that the number of American Express cards issued in its absence could be substantial” as supporting evidence for its belief that the impact was substantial. Id. In fact, Mr. Allen testified that he did not have any view as to the likely number of American Express cards issued in the absence of By-law 2.10(e), noting only that the possibility that it might be substantially more than 10 cards was one of the reasons for the rule. Deposition Testimony of Paul Allen, United States v. Visa, 98 Civ. 7076 (BSJ), October 29, 1999, pp. 360-362. Moreover, the number of cards issued by American Express bank partners that might be sufficient to disrupt the Visa system is different from the number of cards that might otherwise be considered competitively significant. For example, Schmalensee’s testimony in the case suggested that disruption to Visa’s corporate card program was possible and of significant concern to Visa, even though Visa corporate cards accounted for only 9 percent of purchase volume on all Visa cards in the market defined by the court. See Direct Expert Testimony of
2. Harm to Competition

Since the trial court’s decision does not even assess the degree of harm to American Express, it falls short of providing a basis for assessing harm to competition or consumers. Here, following the court’s finding of a network services market, the banks are viewed as the consumers in that market—they pay fees to the systems for the network services used by the banks in servicing cardholders and merchants. The court did not address the question of whether banks have been harmed in the form of higher prices or lower quality for network services. As we mentioned, Visa operates on a not-for-profit basis. That is, it sets its fees to members so that it covers its costs. This structure precludes setting system fees above cost, so that more (or less) competition would not lower (or raise) Visa’s fees. The court’s finding was based, in part, on the argument that four competitors must be better than two. That presumption is typically made because prices with four competing for-profit competitors are generally likely to be lower than with two competing for-profit competitors. There could have been no concern in this case that Visa is using any market power to set supracOMPETITIVE system fees, nor did the Government attempt to make any such claim, because Visa simply sets fees at cost.

There was also no evidence presented that the cooperatives’ exclusivity rules have allowed them to limit their own innovation or product development. In fact, the court found that:

The associations have also fostered rapid innovation in systems, product offerings and services. Technological innovations by the associations have reduced transaction authorization times to just a few seconds. Fraud rates have also decreased through a number of technological innovations.

(continued)


96 In the context of non-profit hospital mergers, the courts have recognized that the standard presumption that the anticompetitive accumulation of market power will lead to higher prices, which is also the incentive for firms to engage in such anticompetitive acts, is not present. That is, “by simply doing what is in their own economic best interest, certain nonprofit organizations ensure a competitive outcome, regardless of market structure.” FTC v. Freeman Hospital, 911 F. Supp. 1213, 1222 (1995). See also FTC v. Butterworth Health Corp., 946 F. Supp. 1285, 1296-1297 (1996).

The court relied on its general finding that there would have been more volume on American Express in the absence of the exclusivity rules, which would in turn have led to greater competition in the network services market, which would have resulted in benefits to banks. But these loose statements fail to assess competitive significance and could be made regardless of whether American Express would have had 0.01 percent or 100 percent greater system volume in the absence of the exclusivity rules.

Missing in both the Government’s case and the court’s decision was any serious attempt to assess the competitive significance of any additional issuance. Contrast this to the evidence presented in *MountainWest* case, in which Sears claimed that Visa’s Bylaw 2.06, prohibiting Sears from being a member of the Visa system, was anticompetitive. In *MountainWest*, Sears claimed that, in the absence of Visa’s Bylaw 2.06, MountainWest (the Sears subsidiary seeking Visa membership) would have developed 13.9 million Visa accounts within seven years and that this would have benefited consumers. It based this claim on projections of the results of the proposed venture undertaken within Sears. Such quantitative analyses are commonly (though not universally) undertaken by large businesses before major decisions are made, and they can often shed light on issues involving quantitative significance. The fact that (as discussed further below) American Express apparently did no projections of this sort before deciding to open its system to selected Visa and MasterCard members suggests that we should be more skeptical of any claims that there would be any substantial output from such agreements.

For purposes of analyzing Visa’s conduct, Schmalensee’s testimony in *MountainWest* accepted Sears’ projections and found that even if the market did not grow, MountainWest’s issuance would account for 1.4 percent of the market (stipulated to be general purpose credit and charge cards) after two years and about five percent of the market after seven years. Based on that data, Schmalensee concluded that adding another issuer of this size to an already highly competitive market would be unlikely to lower price or increase industry output

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100 Direct Expert Testimony of Richard Schmalensee, United States v. Visa, 98 Civ. 7076 (BSJ), August 7, 2000, at 68.
significantly. The incremental issuer would primarily displace cards from existing issuers, and it thus would have little overall effect on price or output. Because issuer competition is intense and Visa and MasterCard are organized as pass-through cooperatives that do not retain profits, there are no excess profits to be squeezed out of the business to benefit consumers. The Tenth Circuit accepted that analysis in reaching its conclusion in its *MountainWest* decision.

Dennis Carlton and Alan Frankel, economic consultants to Sears, disagreed with Schmalensee’s analysis. After the trial, they published an analysis that argued that entry by AT&T and GM had resulted in lower cardholder prices, and that entry by MountainWest could have led to similar benefits for consumers. Regardless of whether they were right on the merits, Carlton and Frankel’s analysis addressed the right issue—whether there was significant consumer harm. Their analysis and Schmalensee’s analysis at trial in *MountainWest* were the types of evidence about which economists can engage in substantive debate. Without such analyses, a court would have no meaningful economic basis for finding significant consumer harm.

Nothing approaching a five percent increase in issuance or usage was demonstrated or alleged in *Visa*. The Government at one point put forward a number of 8.8 million new cards, but that estimate was dismissed by an American Express witness as “scenarios” or “speculations,” but not “projections.” The Government’s economic expert did not rely on these figures in his testimony and made no attempt to quantify the number of new cards that would be issued in the absence of Bylaw 2.10(e). Even taking this discredited number, however, the potential volume that would result from the elimination of Bylaw 2.10(e) is substantially less than Sears had projected from the elimination of Bylaw 2.06 in *MountainWest*.

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102 Id., at 2313-14.
104 Neither economist testified for Sears at trial. Sears relied on testimony from Professor James Kearl.
105 Dennis W. Carlton and Alan S. Frankel, “Antitrust and Payment Technologies”, *77 Federal Reserve Bank of St. Louis Review* 41 (December 1995). Neither this nor similar empirical analyses were presented by Sears at trial.
106 For an opposing point of view, see David Evans and Richard Schmalensee, *supra* note 78, at 257-62.
(8.8 million versus 13.9 million, a 58 percent difference, and 1.7 percent share versus 5 percent share, an almost 200 percent difference).\textsuperscript{109}

At one point, the Government’s economic expert, Professor Katz, considered a study of the experience of American Express alliances with Visa and MasterCard members in other countries (where similar exclusivity rules do not apply).\textsuperscript{110} This study would have used the international experience, with appropriate controls, to demonstrate consumer benefits from increased output or increased variety.\textsuperscript{111} But this study was not carried out or presented at trial. Nor is it clear that there were any consumer benefits to be found from the international experience—card output from the American Express alliances with banks represented less than 1 percent of industry output in the relevant countries and there was no evidence that any significant innovations came from those deals.\textsuperscript{112}

\textbf{3. Lost Variety}

The second general finding by the court on consumer harm from the exclusivity rules was that consumers were deprived of choice and variety in card offerings—that is, some consumers might want an American Express card issued by a Visa member. Any exclusivity agreement, by definition, deprives consumers of choice and variety. Therefore, any finding on consumer harm resulting from this lost choice and variety must include some assessment of the significance of these effects. For example, if an excluded manufacturer were unable to distribute its products effectively, depriving consumers of the ability to choose its products, that might constitute significant consumer harm. In this case, the evidence indicated that American Express could reach all consumers.\textsuperscript{113}

The court based its finding of consumer harm from lost variety on the following reasoning. It stated that “[b]y working with American Express, banks could develop products that provide unique benefits to their customers.” It cites the example of “Capital One and American Express in the United Kingdom, [where] it is undisputed that \textit{either} Capital One or

\begin{flushleft}
\textsuperscript{109} Professor Katz did not attempt to quantify the impact of eliminating the exclusivity rules on output or price. \\
\textsuperscript{110} Trial Testimony of Michael Katz, United States v. Visa, 98 Civ. 7076 (BSJ), July 12, 2000, at 3736-39. \\
\textsuperscript{111} \textit{Id.} \\
\textsuperscript{112} Direct Testimony of Richard T. Rapp, United States v. Visa, 98 Civ. 7076 (BSJ), July 27, 2000, at 50. \\
\textsuperscript{113} Trial Testimony of Kenneth Chenault, United States v. Visa, 98 Civ. 7076 (BSJ), June 29, 2000, at 2438.
\end{flushleft}
American Express could reach every consumer with an offer of *some* brand of credit card…yet, it is only the combination of Capital One and American Express that provides consumers the ability to take advantage of the combined skills of both entities.”

This argument proves too much. The same assertions could be made, for example, by virtually any manufacturer seeking distribution for its products by firms with some product differentiation. Every combination of manufacturer and distributor creates a product that is “unique.” Yet, we do not automatically prohibit exclusive distribution agreements simply because they, almost by definition, deprive consumers of products with “unique benefits.” For example, United Airlines has an agreement with Pepsi-Cola Company to serve Pepsi-owned soft drinks on its domestic and international flights. Consumers can no longer get Coca-Cola soft drinks on United flights.114 Certainly there are consumers with distinct preferences for United flights and Coca-Cola soft drinks. Those consumers are denied the unique benefits of flying their preferred airline and drinking their preferred soft drink, but the courts, sensibly, do not prohibit such agreements—in part, at least, because few sensible people believe that the harm involved is significant.

The Government did not attempt to demonstrate the importance of particular combinations of issuers and systems to consumers. While there may have been marketing documents that promoted the benefits of certain issuer-system combinations, that does not answer the question of how significant these benefits are (or whether it would be possible for American Express or Discover to achieve these benefits without Visa and MasterCard issuers). The Government could have asked its economic expert to examine how much consumers might value new issuer-system combinations or how much output might increase as a result of such offerings, but it apparently did not do so.

The actual decisions of industry participants indicate that these benefits may not be substantial. For example, most major Visa and MasterCard issuers have chosen to dedicate themselves to one system or the other in recent years. If there were substantial benefits from issuing both Visa and MasterCard in large quantities, it is unlikely members would have been willing to do this. Furthermore, for most of its history, American Express has had no interest in

using other banks as issuers. If there had been substantial benefits from additional combinations of issuers with the American Express system, it would have sought much earlier to enter into such agreements. It is also worth noting that the court’s findings included an extensive discussion of the wide range of choices and features available to consumers.\footnote{United States v. Visa, 163 F. Supp. 2d 322, 395 (2001).}

**VI. Conclusions**

There has always been a tension in antitrust cases over the risks of being so lenient that firms think they can get away with anticompetitive behavior and being so strict that the courts condemn practices that help consumers and thereby stifle the very competitive process the antitrust laws seek to protect. There is no way to eliminate both risks, and the courts—and ultimately society—need to choose how to minimize the expected costs of the inevitable errors. At least in the context of predatory pricing, the Supreme Court has expressed a preference for erring on the side of acquitting the guilty rather than convicting the innocent. The *Brooke Group* test requires that plaintiffs meet a strong consumer harm standard—one that necessitates showing that over time the predatory prices will reduce consumer welfare. Although the Court has not been quite so explicit about the consumer harm standard in other contexts, the logic of *Brooke Group* along with other decisions by the Court, most importantly, *California Dental*, argues for a strong consumer standard in all rule of reason cases.

We agree with this approach. An error cost analysis suggests that a strong standard of consumer harm would reduce the costs of making false convictions while—at least in the form we articulate—imposing relatively lost costs from false acquittals. Most rule-of-reason cases involve complex factual situations. Practices are frequently challenged on the basis of economic theories whose predictions have not been empirically verified by the profession and whose assumptions are highly special and often untestable. There is nothing wrong with this—it is the best the economics profession can do. The only way for the courts to determine whether the challenged practices harm consumers is to seek relevant evidence. To paraphrase the Court in *California Dental*, one needs empirics and not assumptions.
The Clinton Administration disagreed with this approach. It invited the courts to rely on a weak standard for assessing liability in antitrust cases brought against Intel, Microsoft, and Visa/MasterCard. It was enough, it argued, to show that the challenged practices had harmed the competitive process via harm to competitors. And it suggested in several cases that there was no need to show, directly or indirectly (via significant harm to competition) that the challenged practices, on balance, raised prices, lowered output, and/or reduced quality, and thereby reduced consumer welfare. In the two cases that went to trial and for which there is a complete record—Microsoft and Visa—the district court accepted the Government’s approach. In the one case that has gone to an appeals courts—Microsoft—the D.C. Circuit affirmed liability without reaching findings that the actions declared anticompetitive resulted in substantial harm to consumers, or that there was a causal relationship between those actions and any significant changes in the competitive process that could lead to substantial consumer harm. And in Visa, the district court found liability even though there was no evidence that the exclusivity rules at issue had caused any significant consumer harm in the form of significantly higher prices or lower output.

It remains to be seen whether other Circuits and ultimately the Supreme Court will adopt what is, we believe, an unjustifyably toothless standard and whether this will, indeed, become the Clinton Administration’s lasting contribution to antitrust jurisprudence. It would be a sad day for consumers if the courts did so.