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Netscape is Dead: Remedy Lessons from the Microsoft Litigation

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I. Introduction

On December 28, 2007, in a blog entry, Netscape announced that AOL would be discontinuing support for the Netscape browser, which it had acquired for $10.2 billion in 1999. By the time the entry was posted, however, AOL’s support of Netscape had already dwindled to a “handful of engineers.” AOL officially took Netscape off life support on March 1, 2008. Netscape did not live to see its fourteenth birthday.

The report of Netscape’s death was greatly exaggerated, however. Netscape actually died in May of 1998, less than a year before AOL foolishly bought it. On May 18, 1998, federal and state government antitrust enforcement agencies filed monopolization cases against Microsoft for its conduct of the “browser wars.” The key aspect of the governments’ complaints was Microsoft’s decision to integrate its own Internet Explorer browser into Windows 98 in a way that made it difficult to remove and substitute a competing alternative. As the plaintiffs were filing their complaints, Microsoft was about to ship the code for Windows 98 to computer manufacturers and the plaintiffs asked the trial judge to preliminarily enjoin the shipment lest the browser market irreversibly tip in Microsoft’s favor. Four days later, though, the trial judge denied the motion. As a result, a new generation of “Windows 98 computers” was produced, placing Microsoft’s browser and its browser icon on the desktops of millions of computer users. It would take another three years before any

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relief would be granted for bundling IE into Windows. By then the relief did not matter. IE dominated the marketplace.

Actually, Netscape did not fully die in 1998. Instead, it sowed the technological seeds for a competing browser by making its code into open source. In 2003 AOL spun off the development of this open-source software to the newly-created Mozilla Foundation, which AOL supported financially, and Mozilla then developed an independent browser, Firefox. Firefox and Netscape (based on the same underlying code) began releasing versions with features that were not available in Internet Explorer, thereby gaining users. By 2007 60 percent of users in one survey rated Firefox as the “best browser.” Only 11 percent rated IE as the best. By May of 2008—ten years after the monopolization cases were filed against Microsoft—Firefox had almost 18 percent of the browser market. But IE had nearly 75 percent of the market and Microsoft retained more than 90 percent of the desktop operating system market, the market that in 2000 the district court judge found that Microsoft had illegally monopolized.

Today, some competitors in the browser market are talking of a “second browser war” which will be won not by “monopolistic muscle but by innovation.”1 Others are not so sure that monopolistic muscle is out of the picture. On January 14, 2008, the European Commission announced that Opera, a commercial browser with less than one percent of the market, had filed a complaint alleging that Microsoft illegally tied Internet Explorer to the Windows’ operating system. In light of the Commission’s own decision against Microsoft in 2004, in which it had found that Microsoft abused its dominance by tying the Windows Media Player to Windows, the Commission decided to initiate a formal investigation into Opera’s complaint. For good measure, the Commission reported that other tying complaints had been filed against Microsoft, including a complaint involving Microsoft’s search-engine products, as well as a complaint that Microsoft was refusing to disclose interoperability information relating to its Office productivity software. The Commission announced that it will be investigating these complaints as well.2

From an antitrust standpoint the developments in the browser area are particularly disheartening. After a decade of global antitrust enforcement against Microsoft we seem to be back to where we started, worried about the

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1See Brad Stone, Open-Source Upstart Challenges the Big Web Browsers, N.Y. Times, May 26, 2008, C1 (quoting partner in a firm that has invested in a browser start-up).


same products and with Microsoft still holding a monopoly position in the operating system market. It is browser wars 2.0.

The challenge that these developments pose to antitrust is not primarily a challenge of doctrine, however. Courts on both sides of the Atlantic—indeed, relatively conservative courts—have agreed that Microsoft’s conduct violated antitrust law. Rather, the challenge is one of remedy.

In this paper I want to use the Microsoft litigation as a way to explore some of the remedial issues that antitrust faces in monopolization cases. As a general matter, I think that we have paid too little attention to remedies. My argument is that closer attention requires three things: (1) a greater consideration of potential remedies prior to bringing monopolization cases; (2) use of the full panoply of remedial options; and (3) greater attention to evaluating remedies, including articulating goals and establishing benchmarks for measuring progress.

II. The Microsoft Litigation

To give some context to the remedies debate it is useful to review briefly the monopolization litigation brought against Microsoft. There are three sets of cases, the U.S. government cases, the European Commission case, and the U.S. private treble-damages cases.

A. U.S. Government Cases

Two government suits were filed in the United States, each on the same day and each alleging similar facts and legal theories. The United States Justice Department filed one suit, 20 states and the District of Columbia filed the other. Both complaints focused on Microsoft’s self-described “‘jihad’ to win the ‘browser war,’” which included its decision to bundle Internet Explorer into the Windows operating system as well as to provide IE along with Windows at no additional charge. The complaints’ basic monopolization theory was that Microsoft fought the browser wars to maintain the applications barrier to entry that protected its monopoly in the desktop operating system market. An operating system needs compatible software applications to make the operating system attractive to consumers. At the time, most applications were written to be compatible only with Windows, but Microsoft feared that Netscape, and the Java programming language which Netscape distributed, would be able to operate across platforms. This would make it possible for applications programmers to write programs to Netscape that would run on competing operating systems, not just on Windows. One of the harms from Microsoft’s effort to maintain its monopoly position, both complaints alleged, was that innovation in browsers and operating systems would be reduced.

At trial the governments’ case broadened out beyond the bundling of Internet Explorer and Windows, showing Microsoft’s systematic pattern of behavior aimed at preserving the applications barrier to entry and its operating system monopoly. For the most part the trial judge agreed with the
governments’ case, finding that Microsoft violated Section 2 of the Sherman Act. Although some of Microsoft’s conduct did benefit consumers, the judge found that there was no reason for Microsoft’s refusal to offer an unbundled operating system, with the Internet Explorer browser removed, other than its desire to exclude Netscape from the market.

The Court of Appeals for the District of Columbia Circuit, sitting en banc, agreed with the trial judge that Microsoft had violated Section 2 of the Sherman Act. Applying a rule of reason analytical structure, the court examined each allegedly anticompetitive act that had been shown at trial, assessing whether the conduct was anticompetitive and whether there were any procompetitive justifications.

The court’s close examination of each of Microsoft’s practices resulted in its finding that most were anticompetitive and lacked any procompetitive justification. With regard to the bundling of IE into Windows, the court condemned Microsoft’s decision to commingle browser and operating system code, thereby making it difficult to remove browser code, and condemned Microsoft’s failure to provide an “Add/Remove” utility in Windows 98, which would have allowed computer manufacturers to hide IE’s functionality, thereby providing a competitive opportunity for other browsers. The court also readily characterized as anticompetitive a variety of contractual practices which resulted in the contracting party’s exclusive or near-exclusive use of IE and Microsoft’s Java Virtual Machine (“JVM”), to the exclusion of Netscape’s Navigator or Sun’s JVM. These included agreements with Internet access providers, particularly AOL, to limit distribution of Netscape, and agreements to give independent software vendors preferential access to technical information in return for making IE the default browser for software they developed and for making Microsoft’s JVM the default JVM for their software. The court condemned Microsoft’s threat to withhold support and updating of Office for the Macintosh unless Apple agreed to bundle IE into its operating system and make it the default browser. Similarly, the court condemned the threats that Microsoft made against Intel to convince Intel to stop developing a fast Sun-compliant JVM. Finally, the court condemned Microsoft’s efforts to deceive software developers by not telling them that Microsoft’s Java development tools would create programs that were not fully cross-platform with programs developed with Sun’s Java tools. This was an effort, in the words of Microsoft’s own document, to “‘Kill cross-platform Java by growing the polluted Java market.’”

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B. The European Case

The European Commission’s proceeding against Microsoft involved two distinct issues, the bundling of the Windows media player with the Windows operating system and Microsoft’s refusal to provide information about its server protocols to its rival, Sun Microsystems. In its 2004 decision the Commission found that both constituted abuses of dominant position in violation of Article 82.5

Microsoft having conceded that it had a dominant position in the PC operating system market, the Commission’s analysis of both violations explored the anticompetitive effects of the practices on the operating system market and on adjacent markets, such as the work group server operating systems market, the media player market, and media content related markets. The Commission concluded that Microsoft had followed a “leveraging strategy” to extend its dominance into these related markets. With regard to the refusal to supply violation, Microsoft had exploited “a range of privileged connections” between the PC operating system and its work group server operating system and deprived competitors in the work group server market of “interoperability information” that was “indispensable” for viable competition. On the tying violation, Microsoft’s practice assured ubiquity of its media player, foreclosing the competitive opportunities of rivals and raising the possibility that Microsoft would have the power to take a “toll” on many future content transactions.

For both violations the Commission stressed the impact that Microsoft’s behavior had on innovation. Thus, Microsoft’s tying of the media player to the operating system “sends signals” to entrepreneurs and investors as to the “precariousness” of investing in potentially complementary software products which Microsoft could “conceivably take interest in” and tie to Windows in the future. Similarly, if Microsoft came to dominate the work group server operating system market, Microsoft’s own incentives to innovate would diminish. On the other hand, had Microsoft disclosed interoperability information “the competitive landscape would liven up” as Microsoft would be forced to compete with its rivals.

The Court of First Instance upheld the Commission on both charges, substantially agreeing with the Commission’s finding that the two abuses were a “leveraging infringement.” The court agreed that the refusal to supply the

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6For the Court of First Instance’s decision, see Case T-201/04, Microsoft Corp. v. Commission of the European Commtys, Court of First Instance, 17 Sept. 2007, available at http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&lango=fr&Submit=Rechercher&docjo (continued...)
requested information was “likely” to eliminate effective competition in the work group server operating system market, pointing out that Microsoft’s refusal was “part of an overall strategy” to use its dominant position in the operating system market to “strengthen its dominant position” in that “adjacent market.” On the tying claim, the CFI pointed out (taking an approach similar to the U.S. courts) that the problem was not the integration of the media player into the operating system, but Microsoft’s refusal to offer a dis-integrated version of Windows. The court also found that the integration offered no “technical efficiencies” and that the operating system would not be “degraded” if the media player were removed. Finally, the CFI also agreed with the Commission’s finding that the bundling of the media player and the operating system deters innovation in complementary software products.

C. Private Damages Suits

Numerous private plaintiffs filed treble-damages actions in U.S. federal and state courts against Microsoft for monetary injuries arising out of the conduct at issue in the government litigation (or for similar conduct). A few of these suits were filed before the government litigation began, but most were filed after. Of the latter group, Microsoft estimates that 220 private cases were ultimately filed.⁷

1. Consumer Suits

Consumer class actions accounted for the largest group of the private suits—182 of the cases, or more than 80 percent. In addition, individuals filed thirty cases and state attorneys general filed two cases seeking damages on behalf of their non-business citizens.

Consumer cases faced a number of significant substantive and procedural hurdles. One was proving damages. At the government trial, the plaintiffs had not proved how much above the competitive price Microsoft had charged for Windows, and the district court had found that it “is not possible with the available data” to say what the monopoly price of Windows might have been. This meant that plaintiffs arguing that they had been overcharged for Windows would have to prove how much that overcharge was. Another critical problem for the consumer cases was that damages under federal law are available only for direct purchasers. Most consumers were indirect purchasers of computer

⁷Information about the consumer suits filed against Microsoft is based on emails from Rich Wallis, Associate General Counsel of Microsoft, dated Aug. 9, 2007, and June 11, 2008. Competitor suit settlement information is posted on Microsoft’s website, http://www.microsoft.com/presspass.
operating systems and browsers, having bought them preinstalled on their personal computers. This required many of these claims to be brought under state antitrust law in state court. Not every state permitted indirect purchasers to sue, however, and in some states the law was ambiguous, further complicating the litigation. A third problem was that some of those injured consumers were non-U.S. citizens, raising the question whether U.S. law would cover their claims (the claims were eventually denied). Finally, all the class actions faced difficult questions of class certification because of the different circumstances under which end-users acquired Windows.

Microsoft litigated the consumer suits vigorously, winning dismissal in eighteen states and denial of class certification in two. It went to trial in only two of the state cases, settling both before a jury returned a verdict. Settlements were eventually reached in nineteen states plus the District of Columbia. Litigation is now pending in only one state (Mississippi).

Settlements of the consumer suits typically provide vouchers to class members that can be redeemed for cash on the purchase of a personal computer and/or software that runs on a personal computer, without regard to the operating system or platform involved. Unclaimed funds are subject to a cy pres distribution in the form of vouchers to poorer K-12 schools in the state. Given the uncertainty of the voucher distribution process, Microsoft indicates that it will be unable to place a cost on the value of any of these settlements until all the distributions are concluded, a process that will take at least until 2012—more than a decade after the first of these cases was filed and nearly two decades after Bill Gates launched the browser wars.

2. Competitor Suits

The two competitors that were central to the browser wars, Netscape and Sun, both brought private antitrust cases. Netscape’s suit was brought by AOL, which had acquired Netscape’s assets, including its legal claims against Microsoft, during the government trial. AOL filed its suit in January 2002. Microsoft and Netscape settled the litigation in 2003, with Microsoft paying AOL $775 million. Sun’s complaint, filed in August 2002, included allegations related both to the U.S. government litigation and to the then on-going proceeding in the European Commission, which the Commission had begun, in part, on Sun’s complaint in 1998. On April 2, 2004, nine days after the Commission issued its decision, Microsoft and Sun settled Sun’s antitrust case for $700 million. The settlement involved all of Sun’s antitrust complaints, with Sun reporting that the agreement “satisfied” the “objectives it was pursuing in the EU actions pending against Microsoft.”

There was also some evidence at the government monopolization trial indicating that two competing sellers of PC operating systems were harmed by Microsoft’s conduct, including Microsoft’s effort to maintain the applications barrier to entry. One of these competitors—BeOs—filed suit in February 2002, settling its claim in September 2003 for $23.25 million. The other—IBM—had
a more substantial claim relating to its attempt to market an operating system called “OS/2,” which it ultimately stopped selling. IBM never filed suit, but in 2005 Microsoft agreed to pay IBM $775 million in satisfaction of all antitrust claims except those relating to server products, which IBM is still free to bring.

Original equipment computer manufacturers (OEMs) were the direct purchasers of the Windows operating system. If Microsoft, a monopolist, were overcharging for Windows, presumably the OEMs would have the direct claim for damages. In addition, there was substantial evidence introduced at the government trial indicating that Microsoft pressured OEMs in various ways to exclude Netscape, sometimes retaliating when the OEMs did not go along. Nevertheless, only two OEMs pressed claims against Microsoft. One was IBM, whose overcharge claims were included in the $775 million settlement. The other was Gateway, whose claims were settled in 2005 without filing suit, a settlement announced shortly before the IBM settlement. Under the settlement Microsoft paid Gateway $150 million.

Two competitors in markets relating only to the European Commission’s proceeding filed suit in the United States for damages. One was Novell, whose antitrust suit related to exclusion from the workgroup server market, in which it had been a major participant with its NetWare server operating system. Novell settled its server claim for $536 million, but the settlement also included Novell’s agreement to withdraw from participating in the Commission’s case and to not participate as an intervener in Microsoft’s appeal to the CFI. The other litigant was RealNetworks, whose media player was the focus of the Commission’s tying complaint. RealNetworks sued Microsoft in 2003, alleging that the tie of the media player and the operating system violated Section 1 of the Sherman Act and that Microsoft had attempted to monopolize the market for “digital media,” including digital media players. Microsoft and Real settled the antitrust claim in 2005 for $460 million. As in the Novell settlement, Real agreed to withdraw from participating in the European Commission proceeding. In addition, it agreed to withdraw from participating in the Korean Fair Trade Commission’s ongoing investigation into the bundling of Microsoft’s Instant Messenger into the Windows operating system.

One excluded competitor filed a private antitrust suit outside the United States. In 2004 Daum Communications, a major Korean Internet portal company, sued Microsoft in Korea for 10 billion won ($8.8 million) for bundling Instant Messenger and Windows. Daum had also complained to the Korean Fair Trade Commission, which subsequently found that Microsoft’s bundling violated the Korea’s antitrust law. In 2005 Microsoft settled Daum’s suit for $10 million.

Only one case remains outstanding. Novell’s lawsuit against Microsoft not only included claims relating to its NetWare server operating system, but also claims relating to the competitive problems faced by WordPerfect, a word processing software program that Novell owned for two years. Novell’s settlement did not include the WordPerfect claim, which Novell has continued
to litigate. In 2007 the Court of Appeals for the Fourth Circuit held that Novell has antitrust standing to pursue its claim that Microsoft damaged WordPerfect in a number of ways (including the withholding of interoperability information). Novell’s theory is that WordPerfect posed a threat to the applications barrier to entry because its cross-platform capability “could enable an alternative operating system to compete with Windows.”

III. Remedies in *Microsoft*

A. United States

1. Trial Court Remedial Decree

At the conclusion of the government trial, and following the district court’s liability decision, the government plaintiffs proposed a remedial decree with two major provisions. Recognizing that Microsoft’s conduct was systemic, and not just related to a single aspect of its operations, the plaintiffs proposed restructuring Microsoft into two separate companies, one to develop, license and promote operating systems for computers, the other to carry on the applications business. The theory was that the new Applications Company would have an incentive either to expand its Word software program into a platform that could challenge Windows or might team up with other operating systems (such as Linux) to challenge Windows. Similarly, the Operating Systems Company would have market incentives to provide interoperability with other office productivity suites (such as WordPerfect). The decree also included transitional conduct provisions, with nine categories of conduct covering broad areas of Microsoft’s business and behavior, including the critical issues of bundling and information disclosure. These provisions would be ended once the structural relief became effective.

The trial judge entered the remedial decree that the plaintiffs sought. He noted that the structural remedy was one that he had “reluctantly come to” but which he viewed as “imperative.” The court reached this conclusion on a number of grounds: administering injunctive relief was likely to be contentious and ineffective; Microsoft had shown itself in the past to be “untrustworthy”; the government plaintiffs, charged with crafting a decree, were presumed to be acting in the public interest; and the decree carried out the general purposes of antitrust relief including the need to “revive competition in the relevant markets.”

The court of appeals subsequently vacated the decree. Although the court did so for a number of reasons, two were most prominent. First, the district court had not held any evidentiary hearings on the proposal, hearings at which Microsoft wanted to present evidence of the proposal’s ill-effects. Second, although the court of appeals affirmed the monopolization charge, it

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also disagreed with a number of decisions the trial judge had made. Given these changes, the district court needed to rethink whether such a “sweeping” decree was warranted. Any new decree “should be tailored to fit the wrong creating the occasion for the remedy.”

2. Final Settlement Decree

On remand of the case to the district court (and the appointment of a new judge) the U.S. Justice Department, nine of the states, and Microsoft arrived at a negotiated settlement decree, which the district court judge approved a year later. The governments’ decision to settle the case reflected the narrower view of the case that the court of appeals expressed in its opinion, as well as the change in administrations from the Clinton Administration to the Bush Administration. The new administration had less concern about aggressive business behavior by monopoly firms and was more skeptical about the wisdom of structural relief or, indeed, remedial efforts that might become overly regulatory.

The settlement decree placed two basic sets of restrictions on Microsoft’s behavior. One set related very specifically to the exact conduct in which Microsoft had engaged and for which the district court had found liability (for example, dealings with OEMs). The other set was more “forward looking.” First, Microsoft was required to disclose application programming interfaces (APIs) that would allow software developers more easily to interoperate with the Windows operating system. Second, Microsoft was required to disclose protocols that Microsoft uses to control communication between desktop PCS and servers. These two provisions were considered forward looking because they did not relate to specific facts proved at trial, but, rather, were an attempt to assist in the development of cross-platform middleware. API disclosure would insure that middleware could interoperate with Windows; server protocol disclosure would do the same for server software.

The settlement decree also provided for the establishment of a three-person “technical committee,” to be paid for by Microsoft. The Committee, to be composed of “experts in software design and programming,” would help monitor Microsoft’s compliance with the decree. Including this provision in the decree recognized that technical issues were bound to arise, given the nature of computer programming and the technical disclosure obligations the decree imposed. Government antitrust lawyers would be at a disadvantage in insuring compliance unless there were experts to assist them.

3. Implementing the Remedy

Compliance with the decree has been uneven. There have been only a few complaints regarding compliance with the provisions that enjoined Microsoft from engaging in the specific conduct that had been the focus of the litigation. There appear to have been no complaints with regard to Microsoft’s compliance with the API disclosure requirement. Compliance with the protocol disclosure requirement, however, has been a major problem.
In 2006—a year before the decree was set to expire—the Justice Department and the states complained to the district court judge that Microsoft’s performance in documenting the protocols had been “disappointing” and that Microsoft needed to devote more resources to the effort and to rewrite the documentation it had produced thus far. Given this lack of progress, the parties agreed to extend the protocols disclosure part of the decree until 2009, with a possible additional three-year extension if necessary.

In October of 2007 some of the state plaintiffs filed motions to extend the entirety of the companion state decree until November 12, 2012 (the judge had entered a virtually identical decree in the states’ case). This motion was opposed not only by Microsoft but by the Justice Department, which filed an amicus supporting Microsoft’s position. The district court decided to grant a two-year extension of the full decree (rather than the five years the states sought) on the ground that Microsoft needed to be complying with all the provisions of the decree if the decree were to have a chance of achieving its potential of lowering the barriers to entry into the desktop operating system market. Microsoft’s “inexcusable delay” in complying with the protocols disclosure requirements “deprived the provisions of the Final Judgments the chance to operate together as intended [and] is entirely incongruous with the original expectations of the parties and the Court.”

Measuring the effect of the decree is more difficult than assessing compliance with the decree’s terms. No doubt there is some gain in having Microsoft comply with the injunctive provisions of the decree, ending Microsoft’s retaliatory behavior along with some of the other specific efforts in which it engaged in an effort to disadvantage challengers to its dominance in the PC operating system market. There is no indication, however, that the decree’s provisions, as complied with, have had any measurable effect on bringing competition to the browser or operating system markets. Indeed, in 2005, in response to a question from the judge overseeing the decree as to the decree’s effect in the marketplace, a Justice Department lawyer stated that there had been “no demonstrable change in the operating system market.” Most observers also agree that the browser itself has remained stagnant until the recent challenge from Firefox. To the extent that protocols have been documented and licensed, there is no indication of the emergence of a new server operating system that might challenge Microsoft (media streaming has been the most popular use of the licenses) or of any other middleware program that could serve as the cross-platform function that Netscape’s browser had threatened.

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10 Excerpts from the transcript of the hearing are reproduced in Harry First & Andrew I. Gavil, Re-framing Windows: The Durable Meaning of the Microsoft Antitrust Litigation, 2006 Utah L. Rev. 641, 742-43.
Microsoft’s share of the PC operating system market remains above 90 percent, a position it has held for nearly two decades. No remedy, not even the reorganization remedy, could assure that there would be competition in this market, of course, but the lack of any change in Microsoft’s monopoly position in the more than five years that the decree has been in effect is a good sign that the decree has not opened the operating system market to competition.

B. European Union

1. The Commission’s Order

The Commission entered three types of remedial orders. First, it fined Microsoft €497 million. Second, it enjoined Microsoft from repeating the two infringements or from engaging in “any act or conduct having the same or equivalent object or effect.” Third, it entered two conduct remedies that were directly related to the infringements and whose purpose was to restore competition. Microsoft was ordered (“within 90 days”) to offer “a fully-functioning” version of Windows without the Windows Media Player, although it was still permitted to offer a bundled version of Windows. In making its decision the Commission rejected Microsoft’s argument that removing Media Player code would “undermine the integrity of the operating system” and cause a “breakdown” in its functionality. Microsoft was also ordered to make available (“within 120 days”) the interoperability information it had previously withheld and to license the use of that information on “reasonable and nondiscriminatory terms” for the purpose of “developing and distributing work group server operating system products.” The Commission indicated that “reasonable terms” meant that pricing could not reflect the “‘strategic value’ stemming from Microsoft’s market power” either in the PC or work group server operating system markets.

Similarly to the U.S. settlement decree, the Commission established an expert monitoring mechanism, the Monitoring Trustee. The Trustee would be given responsibility to advise the Commission on Microsoft’s technical compliance with the Media Player and interoperability orders. Microsoft was required to give the Trustee full access to its technical information and to pay the Trustee’s costs, including the Trustee’s compensation.

The Court of First Instance upheld the fine and the Commission’s remedial orders. The fine was not “excessive” or arbitrarily set (Microsoft had argued that the fine should have been set at zero); the unbundling order was “proportional” to the infringement, particularly given the fact that Microsoft was still allowed to offer a bundled version of Windows and the Media Player; and the scope of the protocols disclosure order was consistent with the interoperability information that Microsoft had refused to supply.

The CFI rejected the appointment of the Monitoring Trustee, the only significant aspect of the Commission’s decision with which it disagreed. The CFI pointed out that the Monitoring Trustee is not simply an expert appointed to advise the Commission, something the Commission could have done. Rather,
the Trustee was to be independent of the Commission, was given broad power to act on his own initiative and without any time limit, and was to be paid for by Microsoft. The CFI held that the Commission’s investigative and enforcement powers did not extend that far.

2. The Effect of the Remedy

a. Unbundling

The Commission had difficulty getting Microsoft to implement its unbundling order, and it was nearly a year before Microsoft began shipping an unbundled version of Windows to OEMs (longer before it was available to consumers in Europe). First there was disagreement as to the name for the unbundled product. The Commission vetoed Microsoft’s first choice—“Windows XP Reduced Media Edition”—eventually rejecting nine names suggested by Microsoft before deciding to call it “Microsoft Windows XP Home Edition N,” the "N" standing for “not with Media Player.” Competitors then complained that the initial version had technical problems because Microsoft had deleted certain registry settings when removing the media player. Microsoft did not deny the fact that the new version did not work well (in fact, Microsoft planned to say as much on the packaging for the product), but said that the problems were “a direct result of having to comply with the commission's order.” Microsoft quickly agreed to restore the registry settings.

The most important deficiency in the unbundling requirement was not of Microsoft’s making, however, but of the Commission’s. The original order forbad Microsoft from offering a bundled version at a discount, but it did not forbid pricing the bundled and unbundled version the same. Consequently, Microsoft set the same price for the version of Windows with the Windows Media Player and the version without (Microsoft argued that the Windows Media Player was available for free downloading, so how could it charge more for its inclusion in Windows). This meant that OEMs had no incentive to offer the unbundled version to its buyers, and retail purchasers had no incentive to buy it unless they really did not want the Windows Media Player. When the unbundled version finally became available Dell announced that it would not offer it to its customers while Hewlett-Packard said that it would offer it, but expected few takers because of the lack of a price differential. By the time that the case was argued before the Court of First Instance in April of 2006 the Commission was admitting that its remedy had failed in the marketplace because there was no price difference. Indeed, according to Microsoft’s counsel, not one order had been placed by any OEM for the unbundled product and only 1,787 copies had been ordered by computer stores across Europe (which amounted to .005 percent of all sales of Windows XP). Microsoft argued that consumers simply did not want an unbundled version of Windows, but there is no way of knowing whether a reduced-price unbundled version would have been popular.

b. Interoperability
As in the United States, the European Commission has had a difficult time getting Microsoft to comply with its order to disclose the protocols allowing work group server operating systems to interoperate with Windows server operating systems and the Windows PC operating system. Compliance with the European order was further compounded by disputes over whether the royalties Microsoft sought were reasonable, as required in the Commission’s order.

In November 2005, nearly twenty months after its initial decision, the Commission decided that it was necessary to impose fines for Microsoft’s failure to comply. Reviewing Microsoft’s technical documentation, the Commission found that it was “virtually impossible” to develop interoperable work group server operating system software from the technical documentation that Microsoft had developed.11 The Commission also set out three principles to be certain that any “non-nominal” licensing rates would not reflect Microsoft’s market power: (1) the protocols had to be of Microsoft’s own creation, not simply ones taken from the public domain; (2) the protocols had to be “innovative,” in the sense that they cannot be “obvious to persons skilled in the art”; and (3) the licensing fees had to be consistent with the market valuation for “comparable” technologies. The Commission then determined that Microsoft’s proposed fees were commercially substantial and that Microsoft had not shown adequate justification for the rates, either in terms of the innovative quality of the non-patented protocols or the comparability of pricing of the patented ones.12 The Commission decided to fine Microsoft €2 million per day (about $2.6 million) if Microsoft were not in compliance with both parts of the order within a month after the Commission’s decision.

The Monitoring Trustee subsequently reviewed Microsoft’s documentation. The Trustee concluded that a November 2005 version of Microsoft’s technical documentation was “not fit for use by developers, totally insufficient and inaccurate for the purpose it is intended, namely to develop work group server operating system products able to viable [sic] compete with Microsoft’s own products.” Subsequent revisions of the technical documentation fared no better. A December 2005 version failed to fix the “serious deficiencies” found in the November version. A March 2006 version was “fundamentally flawed in its conception, and in its level of explanation and detail.” Later documentation submissions only partially revised earlier ones.

11This information is from Commission Decision of 10 November 2005 imposing a periodic penalty payment pursuant to Article 24(1) of Regulation No 1/2003 on Microsoft Corporation (Case COMP/C-3/37.792 Microsoft), available at http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/art24_1_decision.pdf..

12The Commission assumed at this time that the patented technologies were innovative. See id. para. 168.
In July of 2006 the Commission imposed penalties for Microsoft’s failure to make adequate disclosure of the interoperability information.\textsuperscript{13} It imposed a €280 million fine (about $350 million) for non-compliance for the period of December 2005 to June 2006 and then increased the daily fine from €2 million to €3 million a day (about $3.8 million at the time) if Microsoft were not in compliance within a month of the decision. The Commission imposed these fines just for Microsoft’s inadequate disclosure, leaving for later the question whether there should be an additional fine, dating from December 2005, if the Commission determined that Microsoft’s licensing fees were not “reasonable.”

Even under the threat of large daily fines it was another fifteen months before Microsoft was in compliance with its obligations. In October of 2007—three and one-half years after the Commission’s initial decision—the Commission announced that the interoperability information “appears to be complete and accurate to the extent that a software development project can be based on it.” The Commission also announced that Microsoft had changed its licensing rates: from an initial rate of 5.95% of net revenues for a worldwide license to all the protocols (including patented protocols) to .4% for a patent license, and a one-time payment of €10,000 for the rest of the protocols (about $14,000).\textsuperscript{14} The new rates, the Commission said, were now reasonable and non-discriminatory, as it had originally required. In addition, so as to satisfy open-source competitors that operate under licenses that permit copying and redistribution of software code, Microsoft agreed to publish “an irrevocable pledge not to assert any patents it may have over the interoperability information against non-commercial open source software development projects.”

Still to be determined were any additional fines for Microsoft’s noncompliance with the reasonable royalty order. In February of 2008 the Commission issued a decision reviewing the royalties Microsoft had been charging between June 2006 and October 2007 for licensing the non-patented

\textsuperscript{13}See Commission Decision of 12 July 2006 fixing the definitive amount of the periodic penalty payment imposed on Microsoft Corporation by Decision C(2005)4420 final and amending that Decision as regards the amount of the periodic penalty payment (Case COMP/C-3 / 37 . 7 9 2 M i c r o s o f t ) , a v a i l a b l e a t http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/art24_2_decision.pdf.

protocols. Adhering to the “Pricing Principles” originally set out in the November 2005 decision, the Commission first reviewed the innovativeness of the protocols. In a sixty-nine page annex the Commission listed all the protocols, along with an assessment of their innovativeness, concluding that “166 out of 173 protocol technologies disclosed” were not innovative. The Commission then compared the protocol fees to the fees for comparable technology provided by Microsoft and other companies, concluding that such technology is often provided royalty-free. The Commission accordingly concluded that Microsoft’s licensing fees for the period had not been “reasonable.” The result was a fine of €899 (about $1.3 billion), bringing Microsoft’s fines for noncompliance with the interoperability order to approximately $1.7 billion—nearly three times the amount that Microsoft was initially fined for its two abuse of dominance violations of Article 82.

As with the unbundling order, however, it is difficult to see a positive effect of the disclosure order on competition, either in the work group server operating system market or in the desktop operating system market. In its 2005 decision reviewing Microsoft’s compliance the Commission pointed out that Microsoft’s market share in the work group server operating system market had “continued to grow” since the Commission’s 2004 violation decision. In its 2008 decision imposing fines for unreasonable royalty rates, the Commission noted that no firm seeking to develop a competing work group server operating system had yet taken a license under the program; the only licenses taken had been for products that did not directly compete with Microsoft’s server operating system. In fact, the Commission noted, Microsoft’s share of the work group server operating system market had increased in 2006 and in 2007.

IV. Implications for the Remedies Debate

A. Introduction

The history of the efforts to remedy Microsoft’s monopolizing conduct and bring competition to the markets involved is, indeed, disheartening. The effort has been lengthy, marked by Microsoft’s intransigence where compliance really mattered, and with little clear payoff for consumers or for innovation.

There are a number of lessons to be drawn from this history. The lessons relate both to fundamental questions of the political aspects of antitrust remedies and to questions of craft. Indeed, the very fact that a number of jurisdictions

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15See Commission Decision of 27 Feb. 2008, Case COMP/C-3/37.792 Microsoft, http://ec.europa.eu/comm/competition/antitrust/cases/decisions/37792/decision2008.pdf. The fines it imposed were only for the period between June 2006 and October 2007 and were only for the protocols available under the non-patent license. The Commission continued to assume that the patented protocols were presumptively innovative. See id. para. 132. Microsoft has appealed the fine. See WALL ST. J., May 10, 2008, at A6.
have attempted to deal with Microsoft’s monopoly power in different ways provides us with the a window into the utility of various remedial approaches. If nothing else, these lessons show us how little we know about the efficacy of remedies and how much more attention needs to be devoted to their study.

B. The Political Economy of Remedies

There are many reasons for the wide range of remedies applied in Microsoft, but behind the variety in remedies lie some important political choices that reflect fundamental views of the nature of antitrust and of government intervention. The Microsoft case shows that these views vary not only across jurisdictions but can vary within jurisdictions over time. The fact that we do not know what remedy is “best” is not just a function of what will work. It is also a function of how different jurisdictions think of “best.”

1. The Taste for Government Intervention

Antitrust remedies in the United States have often been criticized as being too weak, creating “Pyrrhic victories” for antitrust enforcers. The tradition of such criticism dates back to the earliest days of U.S. antitrust when Louis Brandeis criticized the relief obtained in the original American Tobacco monopolization litigation.

But the real problem may not lie with the weakness of the remedy but with a distaste for the remedy business. Antitrust enforcers have actually been quite willing to propose strong remedies, particularly the remedy of dissolution, in part because such remedies end government intervention. A monopoly, once dissolved, can be let loose in the marketplace—competition has been “unfettered” and market processes take over.

What U.S. antitrust enforcers have been hesitant to propose is on-going remedies. Over time the concept has developed in antitrust that the “supreme evil” of remedies is the regulatory decree in which a judge is asked to oversee, perhaps for an indefinite period of time, aspects of the business behavior of a firm or firms that have violated the antitrust laws. U.S. antitrust laws express the political preference for private choice over government control; regulatory decrees run counter to that preference. Better to break up a unitary shoe manufacturing company than to supervise its contracts. Better to withdraw

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16The phrase dates back at least to Walter Adams, Dissolution, Divorcement, Divestiture: The Pyrrhic Victories of Antitrust, 27 Ind. L.J. 1 (1951).

17See United States v. United Shoe Mach. Corp., 391 U.S. 244 (1968) (discussing need for structural relief involving the monopolist shoe company, after ten years of supervising its business practices had not resulted in any change in the defendant’s dominant position).
antitrust remedies completely if “effective remediation” would require the court “to assume the day-to-day controls characteristic of a regulatory agency.”

This distaste for government intervention certainly shaped the remedies debate over Microsoft. One of the major concerns in crafting various remedy proposals was to avoid the regulatory enterprise in which the judge overseeing the decree settling the AT&T monopolization case had found himself. In that case the parties had agreed to a restructuring of AT&T which included a prohibition on the local Bell operating companies from entering long-distance telephone markets. Almost from the entry of the decree, however, the operating companies sought to avoid this line-of-business restriction, eventually inundating the court with requests for waivers. The judge’s ongoing oversight of the industry eventually earned him the title of “communications czar,” a pejorative political description indeed. Eventually Congress passed the Telecommunications Act of 1996, vacating the decree to which the government and AT&T had agreed and substituting in its place statutory obligations intended to open local markets to competition.

The cautious approach to government intervention also reflects the litigation context in which these problems are handled. Antitrust litigation is inherently backward looking, based on a “crime/tort” model in which the plaintiff proves illegal behavior and then seeks, as remedy, some form of correction. In this enterprise, private plaintiffs have the most direct task. They assert injury (else why sue?) and seek to recover damages. Remedy is apparent. But public litigants have a more complex task. Putting aside those antitrust violations that are considered so damaging that criminal punishment is deemed appropriate, government enforcers are engaged in a more regulatory enterprise. Litigation is brought not to punish or to compensate, but to deter future violations and to bring markets back to their competitive state. Despite this desire to ensure competition in the future, proof at trial must demonstrate that a defendant’s actions caused some violation in the past. Inevitably, remedy must be connected to what the government proves—it is difficult for a court to remedy what is not shown at trial. Thus, the court of appeals in Microsoft, when remanding the case for reconsideration of the remedial decree, cautioned the district court judge that the remedy “should be tailored to fit the wrong creating the occasion for the remedy.”

Although the need to connect the remedy to the wrong is a natural reflection of the litigation process, it is also a reflection of a deeper political calculus. Litigation requires the government to prove that the law was violated, which is a constraint on arbitrary government conduct. Tying the remedy to what was proved further limits government action because the government

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cannot use litigation as an occasion to impose its arbitrary view of economic ordering on a defendant. After all, neither federal antitrust regulators nor the judges before whom they appear are elected officials, constrained by the electoral process. Even within the litigation context, however, courts in the United States have at different times expressed more willingness than current courts to allow remedial orders that impose affirmative obligations on the firms that have violated the antitrust laws.\(^{19}\) The breadth of the permitted remedy may very well reflect varying views of the utility of government intervention and of the abilities of government enforcement agents to handle the regulatory task.

Taste for government intervention may be stronger in jurisdictions outside the United States. Europe, of course, has a stronger tradition of government planning, central economic control, and government ownership than does the United States. This relatively more positive taste for government intervention has likely affected the way in which the European Commission views antitrust enforcement and its mission. In Microsoft, for example, the Commission wrote that imposing liability for a failure to provide interoperability information would be procompetitive in part because enforcing an obligation to share could “liven up competition” in the work group server market. That is, the Commission felt it appropriate to interpret competition law in a way that would increase competition. Compare that to the Supreme Court’s view of antitrust intervention expressed in Trinko. The Sherman Act, the Court wrote, “does not give judges carte blanche to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.” That would be a “more ambitious” regulatory approach. “Section 2 of the Sherman Act, by contrast, seeks merely to prevent unlawful monopolization.” It would be a “serious mistake to conflate the two goals,” the Court warned.

2. Jurisdictional Centrism

   Approaches to remedy have also been affected by the extent to which various jurisdictions have thought their approach to antitrust law should predominate in the world. This is not necessarily a bad thing, in the sense that such views are a natural aspect of jurisdictional competition. Cartel prosecutions are perhaps the best example of where U.S. views of one particular antitrust remedy—criminal fines and imprisonment—have shaped international policy, convincing many jurisdictions to abandon their tolerance of cartel behavior. Achieving this result, however, took many years and was often met with strong hostility from other jurisdictions.

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\(^{19}\)A good example is the decree entered in the Ford/Autolite merger, which not only required Ford to divest the Autolite spark plug manufacturing assets that it was found to have acquired in violation of the antitrust laws, but also required Ford to buy fifty percent of its requirements from the divested plant for five years. This was intended to insure that the divested company could obtain a foothold in the industry and re-establish its former competitive position. See Ford Motor Co. v. United States, 405 U.S. 562 (1972) (upholding order).
The Microsoft case has had a large dose of this type of jurisdictional centrism from U.S. antitrust enforcers. Although the final settlement decree in Microsoft was much-criticized when entered, and despite the difficulties in enforcing key parts of the decree, and despite the apparent lack of any meaningful impact from the decree in terms of Microsoft’s market position, U.S. enforcers have felt free to criticize other jurisdictions for imposing remedies that U.S. enforcers considered too interventionist.

A major target has been the European case. On the day that the Commission announced its original violation decision the U.S. Department of Justice Antitrust Division issued a critical press release. Asserting that the U.S. settlement “provides clear and effective protection for competition and consumers,” it chastised the EC for the amount of the fine and for its unbundling remedy. The statement touted the U.S. settlement’s approach of simply prohibiting “anticompetitive manipulation of icons and default settings” as superior to the EC’s choice of “code removal.” Echoing a major Microsoft argument, the Department asserted that inclusion of media player in Windows was a “product enhancement” and that “[i]mposing antitrust liability on the basis of product enhancements and imposing 'code removal' remedies may produce unintended consequences.” It continued: “Sound antitrust policy must avoid chilling innovation and competition even by 'dominant' companies. A contrary approach risks protecting competitors, not competition, in ways that may ultimately harm innovation and the consumers that benefit from it.”

The Justice Department statement also criticized the amount of the fine:

While the imposition of a civil fine is a customary and accepted aspect of EC antitrust enforcement, it is unfortunate that the largest antitrust fine ever levied will now be imposed in a case of unilateral competitive [sic] conduct, the most ambiguous and controversial area of antitrust enforcement. For this fine to surpass even the fines levied against members of the most notorious price fixing cartels may send an unfortunate message about the appropriate hierarchy of enforcement priorities.

The Department broadened its attack on the Commission’s case after the CFI’s affirmance in 2007, criticizing both the tying decision and the finding of liability for failure to license interoperability information. In a press release issued the day the CFI’s decision was announced, the Assistant Attorney General in charge of the Antitrust Division said:

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We are . . . concerned that the standard applied to unilateral conduct by the CFI, rather than helping consumers, may have the unfortunate consequence of harming consumers by chilling innovation and discouraging competition. . . . U.S. courts recognize the potential benefits to consumers when a company, including a dominant company, makes unilateral business decisions, for example to add features to its popular products or license its intellectual property to rivals, or to refuse to do so.”

Similarly, the Department strongly criticized the Korean Fair Trade Commission in December 2005 when the KFTC announced its decision to order significant changes in Microsoft’s marketing practices in Korea. After a lengthy investigation, the KFTC had concluded that Microsoft abused its dominant position in violation of the Korean Monopoly Regulation and Fair Trade Act (“MRFTA”). The KFTC cited three specific practices: (1) Microsoft’s tying of its Windows Media Service to the Windows Server Operating System, “where Microsoft has market dominance”; (2) tying Windows Media Player to the Windows PC Operating System; and (3) tying its instant messaging program to the Windows PC Operating system.”

To remedy these violations, the KFTC ordered a number of changes in Microsoft’s server and desktop operating systems. First, it ordered Microsoft to unbundle Windows Media Service from the Windows Server Operating System. Second, it ordered Microsoft to produce two versions of Windows—one with Windows media player and instant messenger stripped out, and a second that would include two new features to be developed: “Media Player Centre” and “Messenger Centre,” which would permit consumers to access and download the media players and instant messaging software of their choice.

The Antitrust Division harshly criticized the KFTC’s decision to command Microsoft to unbundle its media player:

The Antitrust Division believes that Korea’s remedy goes beyond what is necessary or appropriate to protect consumers, as it requires the removal of products that consumers may prefer. The Division continues to believe that imposing ‘code removal’ remedies that strip out functionality can ultimately harm innovation and the consumers that benefit from it. We had previously consulted with the Commission on its Microsoft case and encouraged the Commission to develop a balanced resolution that addressed its concerns without imposing unnecessary restrictions. Sound antitrust policy should protect

competition, not competitors, and must avoid chilling innovation and competition even by ‘dominant’ companies. Furthermore, we believe that regulators should avoid substituting their judgment for the market’s by determining what products are made available to consumers.22

3. Jurisdictional Modesty

The political economy of remedies sometimes leads to the reverse of jurisdictional centrism—jurisdictional modesty. This finds expression in a jurisdiction’s concern for over-reaching the boundaries of its power when imposing antitrust remedies that will take effect outside of its borders.

Principles of comity have been developed to mediate the interests of multiple jurisdictions that arise in litigation. These comity concerns have affected the development of U.S. antitrust law, both in judicial decisions and in statutory limitations, specifically, the Foreign Trade Antitrust Improvements Act (“FTAIA”), which narrows the power of U.S. courts to apply antitrust law to extraterritorial conduct unless that conduct has “direct, substantial, and reasonably foreseeable effect” on U.S. commerce.23

The U.S. Supreme Court’s 2004 decision in F. Hoffmann-La Roche Ltd. v. Empagran S.A. shows how a concern about the application of antitrust remedies to parties outside a jurisdiction can affect a court’s willingness to apply its substantive antitrust law.24 In Empagran the Supreme Court closed the doors of U.S. courts to claims by foreign plaintiffs for overcharges on vitamins purchases made outside the United States, despite the acknowledged existence of a worldwide cartel condemned in numerous jurisdictions. The Court pointed out that “several foreign nations” had filed briefs in the case arguing that the application of a U.S. treble-damages remedy “would unjustifiably permit their citizens to bypass their own less generous remedial schemes, thereby upsetting a balance of competing considerations that their own domestic antitrust laws embody.”25 “Principles of prescriptive comity” counseled against allowing the


25Id. at 167. Seven countries filed amicus briefs with the Court (United Kingdom, Ireland, Netherlands, Germany, Belgium, Canada, and Japan). The European Commission did not, although soon after the Court’s decision it began its effort to increase the use of private antitrust litigation in Europe. See M. Monti, “Private Litigation As a Key Complement To...
plaintiffs to collect for their injuries, the Court concluded. “[I]f America's antitrust policies could not win their own way in the international marketplace for such ideas, Congress, we must assume, would not have tried to impose them, in an act of legal imperialism, through legislative fiat.”

_Empagran_ involved the international vitamins cartel. No one disputed the cartel’s existence, its clear violation of antitrust law in all jurisdictions in which it operated, and its adverse economic effects. If the U.S. was reluctant to extend antitrust remedies in such a case, how much more reluctant would a jurisdiction be to extend remedies in more controversial cases where extraterritoriality was involved? Indeed, experience has borne out this concern in a variety of situations, for example, the unwillingness to prosecute the OPEC cartel and the European Commission’s mild conduct remedy in the controversial Boeing/McDonnell Douglas merger.26

_Microsoft_ illustrates the potential impact that jurisdictional modesty can have on choice of remedies. The Commission did not choose to impose a structural remedy in the case. Although its power to do so was unclear at the time, a structural remedy would likely have encountered extreme political resistance from the United States. Congressmen were already criticizing the Commission just for asserting jurisdiction over Microsoft; it is hard to imagine the U.S. political response had the Commission attempted to order the restructuring remedy that the Justice Department and the states originally had proposed.

Even apart from the question of structural remedies, however, Microsoft often argued that the European Commission should craft its remedies in light of the remedies already imposed in the United States. For example, Microsoft argued that the middleware remedy agreed to in the U.S. settlement (hiding functionality rather than removing code) effectively “unbundled” the Media Player from Windows, thereby obviating the need for any further relief. Both the Commission and the CFI rejected the argument. Microsoft argued before the CFI that the Commission should have imposed a smaller fine to take account of its commitments under the U.S. settlement, but the CFI rejected this argument as well. When considering what a reasonable royalty might be for the work group server protocols, in the context of the Commission’s review of Microsoft’s compliance with its orders, Microsoft argued that the royalties

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25(...continued)
Public Enforcement Of Competition Rules And The First Conclusions On The Implementation Of The New Merger Regulation”, speech n°04/403, Speech at the 8th IBA Annual Competition Conference, September 17, 2004, Fiesole (Italy).

26For further discussion of this problem, see Eleanor M. Fox, Remedies and the Courage of Convictions in a Globalized World: How Globalization Corrupts Relief, 80 Tul. L. Rev. 571, 583-88 (2005).
agreed to in the U.S. settlement were evidence of the market value of such protocols. The Commission rejected this argument, pointing out that the agreed-upon royalties were quite high.

That the Commission and the CFI resisted treating the U.S. approach as the defining word on appropriate remedies in *Microsoft* shows that jurisdictional modesty may not be a strong constraint. Indeed, there have been other cases in which the Commission has been willing to go against the views of the United States and impose remedies on U.S. companies in the face of different U.S. views. The Commission did so in the 1980s when it rejected the importunings of the head of the Antitrust Division to drop its demand that IBM disclose computer interface specifications.27 And it did so in GE/Honeywell merger in the early 2000s when the Commission blocked the merger despite the Justice Department’s very different view of the merger’s competitive effects and despite the political concerns raised in the United States with regard to the Commission’s actions.28

With the adoption of the Commission’s Modernization Regulation, effective in 2004, it is now clear that the Commission has the legal authority to order structural relief.29 Indeed, Commissioner Kroes has even mused about the possibility of applying such relief to a company like Microsoft, particularly in light of its failure to comply with the Commission’s orders. Nevertheless, restructuring a firm whose major operating facilities are outside the jurisdiction would be a daunting legal and political task. Jurisdictional modesty would thus likely play a stronger role with regard to structural relief than it does for other remedies. There is a big difference between the conduct remedies ordered in IBM, or even a one-time decision to block a merger of two U.S. firms, and a decision to order the restructuring of a company like Microsoft.

**B. Remedial Options**

1. **Fines**

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29*See* Reg. 1/2003, Art. 7: The Commission “may impose . . . any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end. Structural remedies can only be imposed either where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy.”
The European Commission imposed large civil fines on Microsoft—€497 million for the two abuse of dominance violations and an additional €1.179 billion for Microsoft’s failure to comply with the information disclosure order. These are the largest fines the Commission has ever imposed on a single firm, although recent cartel fines have come close.

By contrast, the U.S. imposed no monetary penalties on Microsoft. At present the Department of Justice’s authority to impose fines is limited to criminal fines, but the United States has not pursued a significant Section 2 case as a criminal matter since the American Tobacco prosecution in 1940. Many states do have authority to impose civil penalties for antitrust violations, and the complaint the states filed against Microsoft raised the possibility of seeking such penalties. Nevertheless, the states never actively pursued the option.

The purpose of imposing a fine is deterrence. Economic theory supports this remedial approach because one can—in theory—calibrate an optimal fining level. That is, a fine should be set at a level that will “deter inefficient offenses, not efficient ones.”

This means that the penalty should equal the net harm to persons other than the offender divided by the probability of apprehension and conviction. If the violator’s gain then exceeds the social cost (that is, if the violation leads to efficiencies that outweigh the harm), the violator should commit the offense and pay the penalty.

Although the economic theory of optimal penalties is straightforward, its application in monopolization cases is problematic. What is the harm that Microsoft caused, for example? Once we get beyond the possible overcharge for Windows (and, perhaps, for work group server operating system software), how would we measure the damage from lost innovation—a harm stressed in both the U.S. and European cases? Equally difficult to calculate would be the “multiplier.” Although one might have a rough guess as to the probability of successful detection and prosecution for cartels (and I stress rough), one would be hard pressed to get much beyond saying that the chances of successfully prosecuting cases of monopolization or abuse of dominance is something less than 100 percent (which means that the multiplier would need to be some number greater than one).

The Commission does not follow optimal deterrence theory in setting penalties. Rather, it uses a mixture of economic impact and fault-based factors. To set Microsoft’s fine the Commission first assessed the gravity of the offense,
characterizing Microsoft’s two violations as “very serious,” in part because of their impact on future related markets; next found that Microsoft’s behavior was “particularly anti-competitive in nature” with “significant impact” on markets that are “strategically important” to the information technology sector; and then determined that Microsoft’s conduct affected the entire European Economic Area. The Commission then set the basic fine at €165,732,101. (Although it did not explain how it arrived at this number, the CFI subsequently explained that the figure was 7.5 percent of Microsoft’s EEA turnover in PC and work group server operating systems for the fiscal year 2003.) The Commission next doubled this amount to insure “sufficient deterrent effect,” the doubling reflecting the fact that Microsoft “is currently the largest company in the world by market capitalization” and that its resources and profits are “significant.” And finally it increased that amount by another half to reflect the “long duration” of Microsoft’s infringements (five years and five months). Hence the total—€497,196,304.

There is no way of knowing whether this figure is “optimal” from a theoretical standpoint, or, even, whether it is sufficient to deter similar violations in the future (i.e., for general deterrence) or to deter Microsoft from committing future abuses of dominance (specific deterrence), the basis on which the CFI approved doubling the base fine (rather than basing the increase on Microsoft’s financial size, as did the Commission). Perhaps the best that can be said is that the penalty amount might be large enough to get attention, although it was not as large as the $10 billion fine that one commentator argued should have been imposed to “make even Microsoft . . . think twice about committing a similar offense in the future.”

But one should approach even the “attention getting” theory cautiously, at least in Microsoft’s case. Apparently, the threat of daily fines (that began at €2 million but eventually escalated to €3 million) were not sufficient to produce timely compliance. After all, it took Microsoft 3-1/2 years before the Commission found it had complied.


The “get Microsoft’s attention” idea may have played a role in the U.S. trial judge’s decision to order Microsoft’s restructuring. The Judge, when discussing the Microsoft break-up with a reporter, allegedly told the following “North Carolina mule trainer” story:

He had a trained mule who could do all kinds of wonderful tricks. One day somebody asked him: "How do you do it? How do you train the mule to do all these amazing things?" "Well," he answered, "I'll show you." He took a 2-by-4 and whopped him upside the head. The mule was reeling and fell to his knees, and the trainer said: "You just have to get his attention."

Even with all the questions raised by the fines that the Commission imposed on Microsoft, the overall theoretical case for using fines as a way to increase deterrence is a good one. Indeed, I would argue that U.S. federal enforcement agencies should be given authority to impose such fines in monopolization cases. A fine may not be a stand-alone remedy, but it can be a useful tool for enforcers to have available.

2. Private Damages Claims

Private actions are an important part of the antitrust remedial system, and the private litigation brought against Microsoft (nearly all of which was in the United States) has been substantial. Announced settlements in competitor law suits add up to approximately $3.5 billion. Class actions increase that figure, although it is unclear by how much given the uncertain valuation of the vouchers included in many of these settlements, the uncertainties of the distribution process, and the need to calculate the after-tax cost of any payouts (Microsoft can deduct from its income the costs of the settlements).

Private damages suits have two purposes. Their main purpose is compensating those injured by antitrust violations. A secondary purpose (although one that has come to receive greater stress in the United States) is deterrence. From an optimal penalties theory, any money paid out to plaintiffs, just like money paid to government in the form of a fine, makes an antitrust violation less profitable and, hence, makes it less likely that it will be committed. Deterrence becomes optimal when all the pay-outs add up to the harm caused by the violation divided by the chance of successful detection and prosecution.

It is difficult to determine the extent to which the settlements perform either their compensatory or deterrent function. For example, some of the value of the settlements involving RealNetworks and Novell was “hush money,” requiring the plaintiffs to withdraw from their intervention before the European Commission and the KFTC. Such payments are not compensatory and undercut deterrence by depriving decision-makers of the views of those who were harmed by the antitrust violation (we can assume that RealNetworks was harmed given the large payment settling its claim). On the other hand, some of the settlements include licenses to Microsoft technology. To the extent that the licenses have value and are provided royalty-free, that would add to the compensatory value of the settlement.

Even if a “bottom-line” figure cannot be determined, it is clear that the existence of a private action means that victims can receive some amount of compensation for their injuries and that deterrence will be increased. Despite the large absolute value of the settlements, however, it is rash to assume that the cumulated private settlements exceed the damages the plaintiffs suffered. Even though the U.S. private right of action is for treble-damages, most observers believe that assessed damages—even in litigated cases—do not exceed actual damages. This means that if the settlements were the only payments that
Microsoft had to make, deterrence would be sub-optimal because, at most, Microsoft would be in the same position it would have been had it not engaged in the illegal conduct. Nevertheless, adding the substantial private settlements to the Commission’s large fine at least creates the possibility that the total monetary payments will have some deterrent value, that is, the total might exceed the profitability of the conduct to Microsoft.

3. Conduct Remedies

The United States entered into a detailed settlement agreement which attempted to make clear what Microsoft could and could not do. The form of this settlement was the product of many forces, but a critical aspect was the concern that absent detailed provisions, Microsoft would simply achieve the same results in different ways. It was the classic effort to block off the “untraveled roads” as well as the “worn one.”

Further, the Justice Department had experienced difficulty enforcing an earlier consent decree against Microsoft, which the Department thought forbade Microsoft from bundling the browser into the Windows operating system. The Department’s effort to hold Microsoft in contempt ultimately failed, but Microsoft’s aggressive position with regard to the earlier decree created a lasting impression that the company could not be trusted to abide by a vaguely worded decree.

The European Commission took a very different approach. Its prohibitory decree is the essence of simplicity—Microsoft was forbidden from engaging in “any act or conduct having the same or equivalent object or effect.” So far as appears, this order has gone unremarked, causing neither complaint from the Commission nor leading to any different conduct from Microsoft.

It may be that the form of the remedial orders in the two jurisdictions reflected the different litigation emphases in the two proceedings. The U.S. case was a relatively broad one, in which the browser bundling was but one component; the EC case was more closely focused on two discrete issues. Indeed, although the Commission was generally vague in its prohibitory decree, it ended up being very specific and interventionist with regard to the two specific orders it entered, unbundling the Media Player and providing interoperability information.

The experience in both jurisdictions in enforcing their conduct remedies illustrates two important points. First, the fear of regulatory decrees is exaggerated. Second, there is a substantial problem of information asymmetries between a monopolist and an antitrust enforcement agency, asymmetries which are difficult to overcome.

With regard to the fear of regulatory decrees, a review of the experience in both jurisdictions shows that conduct decrees can be enforced, although perhaps with some patience, so long as the enforcement agency is willing to

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devote at least modest resources to policing the decree (modest, at least, in comparison to litigation). Further, the Commission’s experience shows that a more interventionist approach can achieve useful results. Particularly dramatic in this regard is the Commission’s review of Microsoft’s pricing policies for the protocols it was required to license. The U.S. took a negotiated approach, relying in part on licensee complaints and discussions with Microsoft to get Microsoft to reduce its royalties. The Commission, on the other hand, came up with a structured approach to valuing the protocols, eventually publishing a review of the innovativeness of all the non-patented protocols. The result is that the Commission ultimately required Microsoft to license the server-to-server protocols at far lower rates than the U.S. had set—.4 percent of revenues for patented protocols plus a €10,000 fee for the rest, as opposed to the U.S. rate of 4 percent of net revenues.34

If the pricing effort shows that a regulatory decree can be implemented, other aspects of the conduct remedies show the difficulties such decrees present, particularly when there is great information asymmetry between the monopolist and the enforcement agency and the monopolist is resistant. Unbundling the Media Player, for example, forced the Commission not only into software engineering questions, but also into marketing issues (at which it failed dismally). More difficult, both for the Commission and the United States, has been protocol disclosure, where the information asymmetry was particularly strong. Many of the protocols had never been documented even by Microsoft and only Microsoft itself could write the protocols (although outside experts, used in both jurisdictions, could evaluate Microsoft’s efforts).

The real information problem, however, was deeper than the technical challenges presented by requiring affirmative disclosures of sensitive corporate information. The real problem was whether the required disclosures mattered competitively. In a sense, the Commission was on firmer footing here than the U.S. because the required disclosures were of a type that the Commission had already found to have mattered competitively. In the U.S., the protocol disclosures were “forward looking”; server-to-desktop links had played no part in the liability phase of the trial. Even so, the disclosure remedy seems not to have made much competitive difference in either jurisdiction. This may indicate that the real problem is not the “doing” of a conduct remedy, but the choosing of an appropriate remedy to do.

4. Structural Remedies

34 The Commission was certainly aware of the different results and was, perhaps, implicitly critical of the U.S. approach. See EC Fining Decision, Feb. 2008, supra note 15, para. 248 (“It is not for the Commission to decide on whether the royalty rates of the [U.S.] MCCP licence agreements which have apparently been agreed upon between the Plaintiffs [the United States and the nine settling states] and Microsoft can be considered reasonable in the context of the [U.S.] Final Judgment.”)
Structural remedies is the path not taken, or, more accurately, the path sketched but not taken. The question is whether Microsoft will now be seen as proof that it is a path that should not be taken. This may have been the implication of the U.S. court of appeals’ decision, when it vacated the restructuring decree and required any relief to be “tailored to the wrong” (although the court did not expressly rule out structural relief in the case).

The standard view of restructuring is the one given by Judge Learned Hand when the Justice Department sought to dissolve Alcoa. “Dissolution is not a penalty but a remedy,” he wrote; “if the industry will not need it for its protection, it will be a disservice to break up an aggregation which has for so long demonstrated its efficiency.”\(^{35}\) Although this view is often seen as a conservative one in terms of remedy—just because a defendant violated the prohibition on monopolization is no reason to force its reorganization—it is actually better understood as suggesting an affirmative approach to remedy. That is, the question is not whether the firm “deserves” dissolution, in the sense that there is a clear causal connection between the conduct that led to the suit and the defendant’s ability to maintain its monopoly. Rather, the question should be how best to “unfetter the market” so that competition is possible. To paraphrase Judge Hand, does the market need dissolution “for its protection”?

Looked at this way, the monopolizing conduct (or abuse of dominance) becomes a screen for sorting those monopolies about which we can defer government action and those monopolies which require government intervention. A finding of liability removes the concern for false positives when examining monopolies (the monopolist has already been shown to have engaged in anticompetitive conduct), allowing the enforcement agency to address the question of how best to deal with the monopoly in question.

Of course, structural relief can present extreme challenges. Although the governments’ proposed approach in Microsoft was the product of much deliberation, the exact implementation of the plan was never spelled out and the plan’s effects were inevitably speculative. Because the plan was never implemented, however, the modern case for structural relief, imposed by judicial decree rather than by settlement, thus remains untested.

C. The Craft of Remedies

1. Ex Ante Decisions v. Sequential Learning

One of the most significant questions that the Microsoft litigation poses is whether antitrust enforcers should know what remedy they want before they file suit. Should enforcers take the view that “if you can’t fix it, it ain’t broke”?

In the U.S. litigation, the Justice Department and the states did have some specific remedies in mind when they filed their complaints. Although

\(^{35}\)United States v. Aluminum Co. of America, 148 F.2d 416, 446 (2d Cir. 1945).
there is no requirement that specific remedies be pleaded, government enforcers included in their relief requests a requirement that Microsoft include with Windows both Netscape and Internet Explorer (a “must distribute” requirement), but only for three years; the states also asked that Microsoft be required to share certain interoperability information. The finally developed remedy was much more detailed, however, and made no mention of the must distribute requirement.

Neither complaint sought a structural remedy. This remedy was not really developed until after the government plaintiffs were successful in the liability phase of the litigation. Proposing Microsoft’s restructuring was based on the idea that conduct remedies would be inadequate to restore competition and difficult to enforce, and that a more fundamental approach was necessary to address Microsoft’s systemic anticompetitive behavior. If this were the case, though, why did it take until the end of the litigation for the plaintiffs to reach this conclusion?

What had happened between the filing of the complaint and the plaintiffs’ ultimate remedial proposal was that the plaintiffs learned a substantial amount about Microsoft and its business practices. Once the litigation broadened beyond bundling Netscape into Windows, the initially proposed remedy seemed inadequate to address the competition problem.

Should government enforcers have had their ultimate remedy more definitively fixed before filing suit? On the one hand, it seems inevitable that plaintiffs will refine their case as they learn more in the course of the litigation process. It may be that early notions of the problem and the remedy are misdirected and ill-informed; it would be unfortunate if government antitrust enforcers were locked into a remedial posture at too early a stage in the litigation. This is particularly the case in high technology markets, where technology is complex and technological change can compress the time within which prosecutors need to act (the situation the government plaintiffs faced when filing their initial complaints against Microsoft).

On the other hand, monopolization cases are resource-intensive enterprises. Having some relatively clear idea of remedy prior to bringing suit would seem to be a good way both to check mistakes in instituting such litigation (why bring a case if you can’t accomplish anything?) and to help shape the litigation so that the trial shows the need for the remedy that government enforcers seek. After all, in the words of an earlier Justice Department enforcer, the decree is the “raison d’etre of the whole lawsuit, for it is the only thing that binds the parties to the litigation and affords relief to an aggrieved public.”36

Perhaps the clearest thing that the Microsoft litigation teaches about crafting remedies is that some balance needs to be struck between having a good

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36 Sigmund Timberg, Equitable Relief under the Sherman Act, 1950 U. Ill. L.F. 629.
idea of the ultimate goal of the litigation and maintaining some flexibility to learn from the course of the proceedings. What is less clear is whether the balance was adequately struck in the case itself. The plaintiffs ultimately did not prevail in their effort to get structural relief. It is possible that they would have been more successful had they clearly had such a remedy in mind at an earlier stage in the proceedings and could have structured the litigation accordingly?

2. Benchmarking

Once remedies are imposed, they tend to take on a life of their own. Enforcers need to pay attention to whether they are being carried out and, of course, the monopolist needs to comply. Ultimate goals get lost because the question becomes one of compliance rather than effectiveness. This tendency has been in evidence both in the United States and in Europe, although the district court judge in the United States has, on occasion, expressed concern over the effectiveness of the remedies, a concern that played some part in her willingness to extend the decree for an additional two years. It is this tendency for remedies to continue for their own sake that has led to a strong policy in the United States to limit their duration; such a policy has apparently not yet been felt in Europe (the remedial orders in Microsoft, for example, have no express ending date).

More important than end-dates for remedial decrees, however, is setting goals for the remedies in the first place. The need for goals is another aspect of the importance of having some relatively clear idea of the desired remedy when filing a case. In the Microsoft litigation one can tease out certain goals in the remedies imposed in the United States and in Europe, but these goals are more related to the exact relief ordered (e.g., providing consumers with Windows with and without the Media Player) rather than related to more substantial competition goals (e.g., jump-start competition by giving consumers a reason to choose a competing media player rather than the Windows Media Player). Further, the goals would have looked quite a bit different depending on who articulated them and when. The current head of the Antitrust Division now describes the goal of the final settlement decree as “protect[ing] consumers by protecting competition in middleware.” It is doubtful that the Justice Department would have described this as the goal of the structural decree which it originally proposed (although that decree certainly did seek to advance the ability of middleware software to succeed in the marketplace).

Even more frustrating than the failure of the remedy decrees in Microsoft to set out clear goals is the failure of the decrees to set benchmarks for measuring success in achieving those goals. For example, even if one were to articulate a modest goal in the U.S. case of lowering the applications barrier to

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entry, one could still try to establish benchmarks for determining the extent to which API and communications protocol disclosure had reduced entry barriers, perhaps by examining the extent to which cross-platform applications had increased in the market. Nothing of this sort has been ventured, however.

Benchmarking not only offers a way to measure the effectiveness of a decree, but also offers a different approach to crafting these decrees in the first place. Both in the United States and in Europe the remedies have been of the “command and control” type. The enforcement agency has chosen to impose a specifically defined remedy (in the U.S., many remedial requirements are quite specific) and Microsoft must comply. Another approach might be to set the goals for the remedy and give the monopolist more control over how to reach those goals. This could avoid some of the information asymmetry problems inherent in ordering a monopolist to design a product in a particular way or to manage its business in a particular way. To return to the Media Player bundling example, why not provide market share benchmarks for competing players and then let Microsoft figure out a way to get consumers (or OEMs) to install them? Microsoft was quite successful in getting users to take Internet Explorer rather than Netscape, often through providing financial incentives for such decisions. Why not let Microsoft do the same for the competitor that it excluded?

D. Multiple Enforcement

1. The Benefits of Diversity

Many people have argued that diverse enforcement can increase experimentation and lead to innovation, as different jurisdictions try different approaches to solving similar problems. The Microsoft litigation would appear to be a good way to test out this theory.

On the positive side it is clear that the range of remedies would have been far narrower had only one jurisdiction been involved. The United States rejected code removal as a way to deal with the technological bundling; Europe and Korea both ordered it, without any apparent technical problems. There would have been no fines imposed on Microsoft without the European case; on the other hand, recovery for market exclusion and overcharges was possible only under U.S. law. Combining the financial penalties imposed by the two jurisdictions likely increased worldwide antitrust deterrence.

Even in the United States there was some benefit on the remedy side from diversity in enforcement. Although the effort of the nine litigating states to obtain greater relief ultimately failed to result in any different remedies, the states that negotiated the settlement along with the Justice Department were able to secure two significant remedial additions, neither of which would likely have been in the settlement decree absent state efforts. One was the establishment of the Technical Committee to assist in monitoring compliance with the decree. The judge overseeing the decree has written that the Technical Committee “has truly become one of the most successful aspects of the Final Judgments, because it has been invaluable in facilitating the Plaintiffs’ enforcement efforts.”
other was the requirement of communications protocol disclosure, which the judge described as "the cornerstone of the Court-ordered and Court-approved remedies and, as the Final Judgments’ most forward-looking provision, was the basis on which the parties and the Court aspired to have the applications barrier to entry broken down over time."38

Perhaps the most important contribution that multiple enforcement might make to remedies learning and experimentation is in the different approaches toward government intervention followed by the United States and by the European Commission. The European approach was more interventionist in its willingness to dictate results to Microsoft, the U.S. approach more constrained.

The area in which this made the most difference was in the setting of reasonable royalties. Rate regulation is considered antithetical to antitrust remedies (concern for rate regulation, for example, is one of the main reasons given for not allowing a defense of reasonableness in price fixing cases, with courts fearing the need for continuing rate supervision that such a defense might imply). Nevertheless, even the U.S. enforcers were dragged into some consideration of rates by the very fact that it would be useless to order protocol disclosure if Microsoft were then permitted to charge rates that discouraged competitors from using the protocols. U.S. enforcers dealt with the issue through negotiation, so it is difficult to tell how they decided that Microsoft’s rates were, in fact, reasonable. The Commission, however, dealt with rates more openly, although even here it is hard to tell how much the articulated principles and their application were more the product of the Commission’s power to impose penalties for non-compliance than of reasoned decision-making. In any event, if the Commission’s goal were to provide potential competitors with necessary information—and not to be so concerned with whether Microsoft was getting a sufficient reward to incentivize innovation—then the Commission’s more activist approach was plainly more successful than the Justice Department’s.39 Rates were far lower and Microsoft pledged not to enforce any intellectual property rights against non-profit open source users (who are the strongest competitors Microsoft faces).

A review of the remedies, however, also shows that the potential benefits of diversity were somewhat muted. For one, despite a remedies debate in the United States that provided a rich range of possibilities, the government plaintiffs were ultimately rather conservative in their choices, even, in some ways, in the restructuring proposal itself (for example, not breaking Microsoft up into three competing companies as some suggested). Certainly the failure to

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39Note that the Commission dealt with the incentives issue by finding that nearly all the non-intellectual property protocols were not innovative. Nevertheless, it also substantially reduced the royalty rates for the patented protocols, which it assumed were innovative.
pursue a structural remedy, whatever the legal or tactical reasons for that choice, limited the experimental value of diverse enforcement. For another, it is difficult to make great claims for experimentation when there were no hypotheses advanced and nothing was being tested. Indeed, without clearly articulated goals and observable benchmarks, it turns out to be quite difficult to say which of the “experiments” were good ones and which were not. The need for such hypotheses and benchmarks if experimentation is really to be useful is another important lesson to be learned from the remedies in the Microsoft litigation.

2. Enforcement Agency Coordination

The Microsoft litigation shows how many seekers of antitrust remedies there can be: U.S. government agencies, both federal and state, the European Commission, Korea, Japan, private plaintiffs suing in the United States or elsewhere (Korea in this case, but perhaps more private cases will be filed in the EU in the future). The litigation also shows how uncoordinated this effort was.

In the United States the Department of Justice and the states began their investigations separately and filed separate complaints. The trial judge required the two cases to be tried together, leading the Justice Department and the states to cooperate during the liability phase of the litigation. After the court of appeals decision, vacating the remedial decree, coordination issues again arose, with nine of the states joining the Justice Department settlement and nine continuing to litigate the remedies issues (to no effect). Although all the states have cooperated with the Justice Department in administering the decree (even those who opposed the settlement in the first place), the states again split with the Justice Department over the question whether the decree should be extended (this time the judge agreed with the states’ position, not with the Justice Department’s).

Europe did not have the same coordination issues with the national competition authorities in Microsoft (the national authorities could not act individually against Microsoft once the Commission initiated the proceeding), but there is no indication that the Commission coordinated its investigation with the U.S. Justice Department. There is also no indication of coordination in the remedial phase, even though there was likely some overlap in the types of protocols each was requiring.

The reasons for the lack of coordination are not clear. Coordination between the Commission and U.S. enforcement authorities is now routine in merger and cartel cases, but it is not routine in abuse of dominance cases. This may be because abuse cases are more “one-off” affairs, with unique factual settings requiring intensive investigation. Or it may be because Europe and the U.S. have fairly different views about single-firm conduct, particularly so during the Bush years. Legal differences, however, would not explain the lack of coordination in the early phases of the U.S. and EU investigations of Microsoft, when enforcement positions were more closely in synch.
Whatever the reasons for a lack of coordination, it is hard to argue that the present state of affairs is optimal. Surely antitrust investigators in multiple jurisdictions would benefit from an exchange of information when they are focused on the same dominant firm’s conduct. These exchanges will not always prevent jurisdictions from taking different views; indeed, they should not cut off diversity in enforcement or remediation. Early coordination may also make it more difficult for disappointed competitors to forum shop. As the investigation proceeds, the pooling of knowledge can help deal with information asymmetries between enforcers and private firms. It might also allow enforcement agencies to focus more clearly on the international effects of the remedies they are considering, perhaps leading to more effective remedies (or, at least, helping to avoid inconsistent ones).

V. Conclusion

The ghost of Netscape haunts the Microsoft litigation. Netscape’s competitive position at the start of the litigation underscored the rapidity of technological changes in Microsoft’s high tech industry. Even the courts worried about whether the law could move fast enough to deal with the issues under adjudication. “Legal time” was seen as too slow. “Internet Time” was seen as properly fast.

But, like most specters, the importance of Netscape and its fate is more imagined than real. Antitrust law cannot save competitors. It can only protect the competitive process, keeping it open to new entry and making sure that dominant firms do not exclude their rivals.

In truth, “Legal Time” was actually not so slow in Microsoft. The law had time to do better to remedy the monopoly problem that Microsoft presented. And “Internet Time” was not so fast. Desktop computers and servers, and operating systems and browsers, are at least as important as they were a decade

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40Before turning to the merits of the case, the court of appeals in Microsoft observed (253 F. 3d at 49):

What is somewhat problematic, however, is that just over six years have passed since Microsoft engaged in the first conduct plaintiffs allege to be anticompetitive. As the record in this case indicates, six years seems like an eternity in the computer industry. By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically. This, in turn, threatens enormous practical difficulties for courts considering the appropriate measure of relief in equitable enforcement actions, both in crafting injunctive remedies in the first instance and reviewing those remedies in the second. Conduct remedies may be unavailing in such cases, because innovation to a large degree has already rendered the anticompetitive conduct obsolete (although by no means harmless). And broader structural remedies present their own set of problems, including how a court goes about restoring competition to a dramatically changed, and constantly changing, marketplace.
ago when the litigation began. Not much has changed in the way these products work.

Much of the recent dominant firm debate has been about substantive law approaches, clearly an important topic. There is still divergence between EC law and current U.S. enforcement views. The Commission now has a very active Article 82 agenda, but things may be changing in Washington to move the Justice Department away from its wilful non-enforcement of Section 2 during the eight years of the Bush Administration. Indeed, the FTC’s announcement that it is investigating Intel’s pricing practices may be an advance warning of this change.

As important as the debate over substantive principles is, it may be even more important to pay attention to the issue of remedies in dominant firm cases. The Microsoft litigation provides a rich case study for this inquiry. From it I think we can take the following lessons:

1. Enforcers should do remedies first, not last, inverting the analytical pyramid. I do not think this means a definitive rule of “if you can’t fix it, it ain’t broke,” but it does mean that enforcers should not bring a dominant firm case where they have no good idea about the remedy. In Microsoft enforcers did have some ideas about remedy when they filed the case, but the outcome of the litigation might have benefited from greater attention to remedy at an early stage in the enforcement effort.

2. Enforcers should consider all remedial possibilities. Antitrust’s distaste for interventionist remedies has likely gone too far. The Microsoft litigation shows that ongoing conduct remedies are not impossible to carry out. Government enforcers, with technical assistance, can be effective in making sure that a dominant firm does not continue to engage in illegal practices. And conduct remedies can appropriately be used to increase competition, particularly if they make use of marketplace incentives (such as low prices), thereby reversing the effects of a dominant firm’s exclusionary efforts.

Still, conduct remedies may not be adequate in cases of systemic exclusionary behavior. As Hand wrote in Alcoa, dissolution is a remedy, not a penalty, to be employed when the market needs it “for its protection.” Business people reorganize firms all the time. Surely it is not beyond antitrust enforcers to draw on that expertise when warranted.

In carrying out any remedies in dominant firm cases, enforcers and courts should, of course, be cautious, but they need not be timid. As an examination of the range of remedies imposed in the Microsoft litigation, any remedy in a dominant firm case presents unknowns, even the computation of an appropriate fine. Some modesty is appropriate, but excessive deference to the views of outside enforcement authorities is unnecessary.

3. Enforcers need to evaluate remedies. The evaluative process requires a definition of goals and the articulation of benchmarks for measuring progress
and success (or lack of it). Absent this evaluative process, remedies will continue to be haphazard and we will learn little from past efforts.

Benchmarking offers an additional potential benefit. Using benchmarks may enable enforcers to move away from command-and-control regulation to more results-oriented decrees. Rather than worrying about whether a monopolist is carrying out the terms of what may be an ineffective decree, the parties can concentrate on giving incentives to the monopolist to make the remedy effective.

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Drawing on the Microsoft litigation to improve future remedial efforts in dominant firm cases will not only improve the effectiveness of antitrust law in dealing with monopoly issues. Closer attention to what is achieved in monopolization cases can also undercut a continuing critique of antitrust itself: that antitrust is an ineffective legal regime benefiting no one except the professionals who run it, or, perhaps, competitors who are protected by it. Proponents of antitrust believe this critique is fundamentally misguided, but it would be helpful to have more empirical support for antitrust’s positive results.