

REMEDY ISSUES IN SECTION 2 CASES

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The question of how to design remedies in Section 2 cases is not an easy one. Unlike prospective mergers, which can be blocked, or price-fixing and other collusion cases, where actions can be enjoined, single-firm monopoly cases even when won on liability can founder on remedy design. Structural relief can be seen as too drastic, and injunctive relief can simply turn into an effort to prohibit actions already in the past and already obsolete or can require continued (and perhaps continual) judicial supervision.

Too often in the past, the antitrust authorities have failed adequately to consider the problem of remedies, and I am glad to see this set of hearings taking place.

In these remarks, I first discuss the desirable objectives that a Section 2 remedy (or, perhaps, any antitrust remedy) should have, and then go on to a discussion of the Microsoft case.¹

1. Principles and Objectives

Please note that the following objectives are not necessarily listed in order of importance. Further, be aware that, even if an objective is obtainable considered alone, it may conflict with other objectives.

A. Restore competition. A primary objective should surely be the undoing of the anticompetitive effects of the violation. If possible, a remedy should restore the market or markets to the state in which they would have been had the violation not taken place. Of course, this may not be possible. Indeed, it may not be clear what would have happened in the absence of the violation. This is particularly true in innovative industries.

B. Fit the remedy to the violation. It is natural to require that the remedy be reasonably consonant with the liability findings. In particular, it is natural to require that the remedy be such that, had it been in place at the time, the violations would not have occurred. Note, however, that while the latter requirement may satisfy proceedings in consent-decree cases under the Tunney Act, it is *not* guaranteed to satisfy the important objective A. Again, this is particularly true in innovative industries.

¹ *United States of America v. Microsoft Corporation*, Civil Action No. 98-1232 (TPJ); *United States v. Microsoft* 87 F. Supp. 2d 30 (D.D.C. 2000)

A broader remedy that prohibits violations similar to those found liable may do better, but may still not satisfy objective A. This is likely to happen (as in the Microsoft case discussed below) if the defendant used the anticompetitive actions to ward off a threat to its monopoly power at a crucial moment, with similar threats unlikely to arise soon again (or perhaps ever).

C. Disgorge monopoly profits. The violator must not be permitted to profit from the violation. Otherwise, there will be no disincentives for it or others to repeat such violations. But fines are unusual in Section 2 cases.

On the other hand, fines may not be necessary. The treble-damage provision of the Clayton Act certainly encourages private suits. The loss of such a suit can result in more than the disgorgement of monopoly profits.

I do not really like this answer, however. Treble damages also encourage reasonably basic private suits – sometime suits that follow a federal investigation even though that does not result in an actual case and finding of liability. Particularly in large class-action suits, this can result in a kind of legalized piracy, with the mere certification of the class enough to produce settlement by defendants greatly at risk. Of course, this is most likely in Section 1 cases, but the whole issue of treble damages is too complex to simply assume that they should continue and will result in the disgorgement of monopoly profits.

One possible answer is to require the defendants to compensate those who were injured as well as paying something above that (since otherwise they or others may be tempted to take advantage of a no-lose situation). In return, the compensated victims must give up their rights to sue for treble damages.

D. Make the remedy self-enforcing. If possible, a remedy should be self-enforcing. A situation should be created in which market forces prevent a recurrence of the same or similar violations. As opposed to injunctive relief, such a remedy ideally does not require continued and long judicial supervision and the continued wrangling and litigation that can go with that supervision.

Of course, accomplishing this will require some form of structural remedy. This is not easy to do. In the first place, courts are traditionally reluctant to grant structural relief which usually means divestment or break-up. In the second place, crafting a really good structural remedy is not easy (and may sometimes be impossible).

Too often in the past, the antitrust authorities have simply assumed that a somewhat arbitrary divestment is what is called for. That may have gone hand-in-hand with the naïve belief that monopoly power equals large market share, so that simply breaking up the defendant would be sufficient – whatever the relation of the breakup to the nature of the violation.

Certainly that was true in the great fiasco of the IBM case of the 1970s in which I was the principal economic witness for IBM.² The government's remedy proposal never reached the court but was discussed at deposition by an economist. He proposed breaking up IBM into 4 successor companies each of which would have one and only one disk plant or tape plant. No consideration was given to whether computer companies with only one such plant and not at least one of both types were likely to be viable. The focus was exclusively on reducing IBM's supposedly very large market share which was measured by the government in truly peculiar ways having little to do with market power.³ Structural remedies need to be better thought through than this.

E. Avoid prolonged and complicated judicial oversight. On the other hand, as I have already suggested, injunctive relief can lead to a situation in which extensive and long-lasting judicial oversight is required. That is particularly true if the injunction is complicated. It is particularly burdensome if the injunction is to hold for long periods of time in a changing industry.

2. Remedies in the Microsoft Case

I now exemplify at least some of the above points by discussing the remedies suggested and adopted in the Microsoft case. (I was the principal economic witness for the Antitrust Division in the liability proceeding, but was not at all involved in remedy issues until after the remedy phase had been remanded, and then only superficially.) To understand what was involved, I must first review the general economics of the case as they stood in the mid-to-late 1990's.

- a. Application programs written to run on one operating system would not run on any other. To "port" them to another required rewriting them almost from scratch – a large undertaking.
- b. Software application writing is subject to large economies of scale. This is because most of the expense lies in the original writing, debugging, and documenting of the application program. These are fixed costs that do not vary with the number of copies licensed. By contrast, the marginal cost of producing additional copies is extremely low.

² *United States v. International Business Machines Corporation*, Docket No. 69 CIV. (DNE) Southern District of New York.

³ See Chapter 4 of F.M. Fisher, J.J. McGowan, and J.E. Greenwood, *Folded, Spindled, and Mutilated: Economic Analysis and U.S. v. IBM*, (Cambridge: MIT Press), 1983. At his deposition, the witness in question was prevented from answering the question as to the number of successor firms on the grounds that "it might upset the stock market." He was permitted to do so only after the deposition had been cleared of audience, and the specific number remained sealed and referred to as "X" in the deposition transcript until the end of the trial some 8 years later (despite IBM's never-decided motion to unseal it). But the fact that IBM had exactly 2 disk plants and 2 tape plants told anyone who thought about it for a minute that X = 4. That conclusion was substantiated when I hear the witness say it explicitly at a cocktail party a few weeks after his deposition. Alas, the IBM case was replete with such bizarre happenings.

These two facts implied:

- c. Application writers naturally preferred to write (or at least write first) for the operating system used by the greatest number of computer-users. By doing so, they could spread the fixed cost over a large number of customers.
- d. But computer users prefer to acquire operating systems for which large numbers of applications are written.

The result of all this was (and is) that if one operating system becomes more popular with users than others, then software writers will write more applications for it. In turn, this increases its attractiveness to users. As the number of users increase, the operating system becomes even more attractive to users, and so forth, in a snow-balling effect. Eventually, one operating system becomes far more preferred than its rivals. Further, its rivals find it more and more difficult or expensive to attract application writers, creating the so-called “applications barrier to entry”, as it was known in the case.

Microsoft was the beneficiary of these phenomena, first with Windows 95, then Windows 99, and its successors. The applications barrier to entry enabled it to achieve monopoly power in the market for operating systems for PCs.⁴

Note, however, that such power followed from the underlying economics of the market. Indeed, had Microsoft been content with that, no Section 2 antitrust case would have been successfully brought.

But, of course, Microsoft was not so content. There arose two innovations, Netscape’s internet browser and Sun Microsystem’s Java, that threatened greatly to weaken the applications barrier to entry. Microsoft set out to destroy or contain these. For present purposes, the details do not matter. It is enough to say that Microsoft was found to have violated the antitrust laws by its actions.

This was a great victory for the government. But the events relating to the remedy eventually turned that victory into another fiasco. What remedies were suggested and what were the problems with them? With perhaps one exception, not really considered seriously by the government, every suggested remedy had important defects in terms of the objectives listed above.

I begin with conduct remedies.

Remedy 1. The government eventually settled for a remedy prohibiting Microsoft from doing what it had done to the browser and to Java. While that remedy does make some attempt at prohibiting similar conduct, it basically only satisfies Objective B above (Fit the remedy to the violation). That would (and presumably did) permit it to pass muster in

⁴ I use the term “PCs” to refer to personal computers that are IBM-compatible, using Intel processors. For present purposes (and for most others having to do with the case), it does not matter whether or not Apple computers are included in the market.

a Tunney Act proceeding. If it had been in place in 1995, the specific bad acts would not have occurred.

That is not enough, however. The settlement here occurred *after* a lengthy trial in which Microsoft was found to have violated the law. There had been an appeal in which the liability findings were substantially upheld and a petition for *certiorari* that was denied. While the Tunney Act standard as it has developed may be appropriate for a consent decree before trial, it is far from obvious that it is appropriate after the trial has taken place and appeals from the liability finding have been exhausted.

The major problem here was the failure to satisfy Objective A (Restore competition). We cannot know with certainty what would have happened without Microsoft's bad actions. Would the weakening of the applications barrier to entry have resulted in substantially greater competition in operating systems than has in fact occurred? Or would Microsoft continued to have monopoly power naturally gained? The settlement would have been a good one if we could roll back the calendar. But we cannot.

Further, the attempt in the settlement to rule out similar acts to those actually committed by Microsoft is not obviously enough. The appearance of the browser and of Java may have offered a one-time opportunity to get round the applications barrier. If it is not obvious that the attempt to do so would have succeeded, it is at least as doubtful that, with that attempt beaten back, there will be other innovations that could accomplish the same end. If not, then the remedy in the settlement is basically useless.

Remedy 2. There was another conduct remedy suggested while the case was pending. This would have required Microsoft to make available its application programming interfaces (API's) to other purveyors of operating systems. Since the APIs are the "hooks" which application programmers use to attach their work to the underlying operating system, this would, if successful, have meant that any application that ran on Windows would also run on any operating system whose maker availed itself of the opportunity offered.

This remedy, if successful, would certainly have destroyed the applications barrier to entry. In some sense, then, it might be said to satisfy Objective A (Restore competition). There are two serious difficulties, however.

In the first place, we do not know the extent to which the browser and Java would have been successful in weakening and possibly destroying the applications barrier. Thus the remedy in question, while it would certainly have increased competition, might have gone well beyond restoring the world that would have existed save for Microsoft's actions. This might not have been a bad thing, punishing the violator and deterring others, but it might be said to be too extreme.

Even apart from this, however, the remedy under discussion would surely have violated Objective E (Avoid prolonged and complicated judicial oversight). As anyone who has written even a moderately complicated software program knows, the process of

transferring it to other programmers in a usable form is fraught with difficulty, even if that attempt is made with good will on both sides. In the case of the proposed remedy, that goodwill would surely have been lacking, and there was a substantial likelihood that there would have been a steady stream of disputes as to whose fault it was. Those disputes would probably have resulted in further litigation on matters not really suited for judicial decision.

This brings me to the discussion of structural remedies. The first of these was, perhaps, the most obvious.

Remedy 3. It was proposed to break Microsoft up into three successor companies, each of which would have the rights to Windows. Those companies (termed the “Baby Bills”) would then compete with each other.

There were several problems with this suggestion:

- a. It was said that there could be no assurance that the successor companies would keep their versions of Windows compatible with programs written for the original one. This would disadvantage consumers that already had large program libraries.

This objection did not have much force, however, since the three successor companies would each have a powerful incentive to remain compatible with the program libraries of existing users so as not to abandon those users to the other two.

- b. There was the serious and difficult question of how to decide which successor would retain the services of Bill Gates, a considerable asset. Whichever successor company got Gates might well have a major advantage over the others.
- c. Although the following objection was not much discussed at the time (at least publicly), it seems to me to be the most serious one. Because of the underlying economics that had led to the applications barrier to entry, there was likely to come a time when one of the successor companies began to outdistance the others and again achieved monopoly power in PC operating systems. So the return to competition would be relatively short-lived.

Moreover, since the three successor companies would all be owned at the outset by the stockholders of the original Microsoft, the gains from the return to monopoly power would be largely (and, with perfect foresight, totally) reaped by those stockholders. This would partly be contrary to Objective C (Disgorge monopoly profits).

Remedy 4. Perhaps to avoid such difficulties, the Antitrust Division initially proposed a different form of dissolution, one that was accepted by the trial court without a hearing

but then remanded by the Court of Appeals. That proposal would have broken Microsoft into two successor companies. The first, the “operating systems company” would have retained the rights to Windows. The second, the “applications company” would have retained the rights to Microsoft applications program, in particular Microsoft Office, the suite of popular programs including Word, Excel, Outlook, and Outlook Express. The rationale for this proposal was the view that the applications company – very large and important – would have an incentive to foster competition among operating systems. Further, since the Office programs had API’s of their own, application writers could be induced to write software to run on those very popular programs rather than on an underlying operating system, thus providing competition for the operating systems company.

This remedy had the merit that it would have achieved Objective D (Make remedy self-enforcing). Further, if successful, it would have achieved Objective A (Restore competition). One might even argue that the uncertainty of success of the remedy might appropriately reflect the uncertainty as to what would have happened to competition had Microsoft not acted to suppress it.

Nevertheless, the suggested remedy seemed round about and complicated. Certainly, an extensive hearing was required to evaluate it. That hearing never took place, in large part because, with the change in administration in 2001, the Antitrust Division abandoned it and went on to settle for what I believe to have been the totally inadequate conduct remedy discussed as Remedy 1, above.

Remedy 5. Although the final remedy that I shall discuss is not without flaws, it seems to me to be the best of the lot. It was suggested by Herbert Hovenkamp of the University of Iowa, but, while I know that members of the Antitrust Division knew of it, I do not believe that it was ever the subject of serious analysis and discussion among the higher-ups. (Certainly, this was the case when I brought it up during my brief participation in remedy work after the remand and before the settlement.) If so, that seems regrettable.

The Hovenkamp remedy was as follows. The Antitrust Division should (after careful analysis) select a number, N. Microsoft would then be required to auction off licenses to Windows to the N different highest bidders. Other than making sure that the licenses carried with them the requisite know-how to exploit them, no further action would be required.

This remedy – laudable for its simplicity – would certainly have satisfied Objectives D (Make remedy self-enforcing) and E (Avoid prolonged and complicated judicial oversight). It would have gone a long way towards the basic Objective A (Restore competition). Further, it would have been fair to Microsoft in the sense that it would have permitted Microsoft to receive the competitive market value of its intellectual property.

And one must not forget that the Hovenkamp remedy would not have required a complicated break-up of the defendant – something that courts are understandably reluctant to order.

On the other hand, the Hovenkamp remedy, like that of the Baby Bills (Remedy 3) might restore (or more than restore) competition in the short run, the underlying economics of software would probably lead eventually to one of the N+1 companies again becoming dominant and achieving monopoly power. As opposed to the remedy of the Baby Bills, however, the returns from that achievement would not necessarily accrue to the existing Microsoft shareholders (even with perfect foresight). In that case, putting up with the possibly inevitable and natural return of the applications barrier to entry seems more palatable.

In sum, the Hovenkamp remedy seems to me to exemplify the kind of thoughtful choice towards which the antitrust authorities should aim.

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