

# *Legal and Economic Aspects of the Microsoft Case: Antitrust in the Information Age*

PROMINENT SCHOLARS EXPLORE THE ISSUES

By Thomas Hazlett, Robert Litan, and Edwin Rockefeller



**Thomas Hazlett** is a resident scholar at the American Enterprise Institute and professor of agricultural and resource economics at the University of California at Davis. He has served as chief economist of the Federal Communications Commission, and his Ph.D. (Economics) is from UCLA.



**Robert Litan** is vice president and director of Economic Studies at the Brookings Institution. He served as deputy assistant attorney general in the Antitrust Division. He earned his B.S. in Economics from the Wharton School at the University of Pennsylvania and his J.D. and Ph.D. (Economics) from Yale University.

**Edwin Rockefeller** is in private law practice with Schiff Hardin & Waite in Washington D.C. He served on the Federal Trade Commission and Chairs the Advisory Board for Bureau of National Affairs' Antitrust & Trade Regulation Report. He holds a law degree from Yale.

*This article is based on a panel discussion sponsored by the National Economics Club Foundation.*

*The outcome of the Microsoft antitrust case may have significant effects on those businesses that use Microsoft software and set important precedents for antitrust cases in the information age. This panel discussion provides background on some of the issues associated with the case. Important concerns are whether consumers of software products have been harmed by Microsoft's actions and whether they will benefit by the judicial remedy if Microsoft is found to have violated antitrust law.*

**Rockefeller:** To begin the discussion, I will raise and answer two or three questions. First, what is antitrust? The term is not defined anywhere in the antitrust laws. I think it is appropriate to call attention, particularly in a context of people who have the benefit of academic detachment, that there is not necessarily any coherent set of discernible rules that constitute the antitrust laws. I would suggest to scholars new to the subject that the most valuable single book is Robert Bork's *The Antitrust Paradox*, published in 1978. In a new edition, published in 1993, Bork adds an additional introduction and an epilogue.

For the purposes of this discussion, we can take Sections 1 and 2 of the Sherman Act of 1890 to be the critical aspects of antitrust law. Section 1 of the Sherman Act says, "Every contract combination in the form of trust or otherwise or conspiracy in restraint of trade or commerce among the several states or with foreign nations is declared to be illegal." Section 2 of the Sherman Act says that "Every person who shall monopolize or attempt to monopolize or combine or conspire with any other person or persons to monopolize any part of the trade or com-

merce among the several states or with foreign nations shall be guilty of a felony.” Those are the words of Congress and have been interpreted by the courts and others since 1890.

Now, what is the Microsoft antitrust case? It may be useful to know that some years ago the Federal Trade Commission began to look at Microsoft to determine if it was violating the antitrust laws. Two commissioners were of the view that something should be done; two commissioners were of the view that nothing should be done; and the fifth commissioner declined to participate. Thus, nothing was done by the Federal Trade Commission. However, the Department of Justice decided that it should look into the situation and initiated a proceeding that resulted in a consent decree, prohibiting certain conduct by Microsoft. The district judge to whom the decree was submitted regarded the decree as inadequate to deal with the conduct of Microsoft.

However, the Court of Appeals said that was not the District Court’s job, but rather it was the Attorney General’s job. Thus, the Court of Appeals sent the consent decree back to the District Court but to a different judge. Further, the Justice Department then concluded that on one point Microsoft was violating that decree and went to the District Court to seek penalties for that violation. Judge Jackson, before whom the current case is pending, concluded tentatively that Microsoft was violating that decree. Microsoft appealed that conclusion to the Court of Appeals. In the meantime, the Justice Department started another, broader proceeding against Microsoft in May 1998. Only a month later, the Court of Appeals reversed Judge Jackson’s conclusion that Microsoft had violated the earlier decree. In the meantime, we have the May 1998 complaint on which Judge Jackson issued findings of fact that have received wide publicity.

Now, what has been decided? The judge issued four hundred or so findings of fact but not yet any legal conclusion. However, two of his findings of fact, I would suggest, form a good basis for this discussion. One was that Microsoft engaged in a concerted series of actions designed to erect a barrier to entry against competing software applications, and hence protect its monopoly power, from a variety of middleware threats. Microsoft thereby distorted competition. Another was that Microsoft, through its conduct toward Netscape, IBM, Compaq, Intel, and others, has demonstrated that it used its prodigious market power and immense profits to harm any firm that

---

## *Has Microsoft’s conduct been driven by considerations of efficiency or of anticompetitive exclusion?*

---

insisted on pursuing initiatives that could intensify competition against one of its core products.

The simplified issue is whether Microsoft acted in a way that we want competitors to act. Or has it engaged in anticompetitive conduct prohibited by the Sherman Act? Has Microsoft’s conduct been driven by considerations of efficiency or of anticompetitive exclusion? In other words, is the government attacking

efficiency in the name of market freedom? Now, the question I want to ask Mr. Litan to begin our education on this topic is this: What can the dismal science of economics bring to the resolution of this dispute?

**Litan:** Well, the dismal science only goes so far, and this is overwhelmingly a legal proceeding. The law says that it is acceptable to earn a monopoly. No problem with that. But the law also says that if you have a monopoly in the market you cannot use certain practices that have no commercial justification in an effort to further entrench the monopoly. The two hundred pages of Judge Jackson’s opinion are a long recitation of findings that Microsoft went beyond the boundary of normal commercial practices. He found that they withheld or threatened to withhold its operating system (Windows) or what are called “applications program interfaces” (APIs) from any other competitors. APIs are important in the operating systems market because they are the hooks that allow applications programs to mesh with operating systems software. He found that Microsoft engaged in what are called “exclusive contracts.” These, in effect, say that if any customer—whether an Internet service provider or a computer manufacturer—deals with Netscape, a principal competitor, Microsoft will withhold Windows, charge a higher price for it, or penalize that customer in some other way.

These kinds of activities are well established in the case law as unlawful for a monopolist or a firm with market power. The competition laws and antitrust laws are built on the premise that once you have monopoly power you have to be careful about exercising it. You can charge as high a price as the market would bear without violating the law. But if you do certain things that entrench the monopoly, then you cross the line and you can be punished for it. That’s what AT&T was punished for and why it was eventually broken up.

So, what do economists say about that? Some economists will say that, in the long run, market forces would win out and there is no need for an antitrust law to police these practices. However, the antitrust laws have a built-

in premise, which I think is a legitimate one, that the long run can be too long if there is a period of ten or more years during which companies may have market power that might otherwise be reduced if we enforced the antitrust laws and, in the process, served consumers.

**Rockefeller:** Professor Hazlett, doesn't every firm have some market power if it has any substantial production?

**Hazlett:** Certainly, and every firm—even a firm that has a dominant market share and that the government believes to be monopolistic—has the right to respond to competition. Overall, I agree with the economics that Bob has just discussed in terms of analyzing the case. However, I would certainly add an important missing element that economists surely can offer the court: consumers. Consumers are the focus of this case. Are they harmed or benefited by what Microsoft did? I think the evidence is overwhelming that the browser competition between Microsoft's Internet Explorer and Netscape Navigator has led to an incredible expansion of what we now call the "Net." We now sit in awe of the massive shift of resources in capital markets and the rush of consumers to embrace powerful new e-commerce technology. However, that shift did not create these benefits by half measures of regulated competition. This tremendous outburst of browserware was a robust, violent process of creative destruction. Netscape is the most successful software application in history, getting onto 38 million machines in eighteen months. The vast majority of these machines, of course, have the Microsoft Windows operating system software embedded in them.

However, the Netscape software is tremendously compatible and synergistic with the so-called Microsoft monopoly in the operating system market. I—like millions of other happy, loyal Netscape Navigator users—use a Windows-based machine with Navigator. Moreover, these Netscape users have found that it is quite possible to resist this incredible pressure to shift to Microsoft's Internet Explorer day after day, week after week, year after year and even upgrade to new versions of Netscape Navigator. And the market progresses.

Bob mentioned the issue of exclusive relationships. In some cases, exclusives can be an abuse of monopoly power. What is crystal clear in the Microsoft case is that the exclusive contracts with Internet service providers (America Online and CompuServe) that are specifically cited in the Department of Justice complaint against Microsoft were tremendously pro-consumer.

---

*...the ultimate purpose of the antitrust laws is to help the consumers.*

---

Until 1996, when eighty percent of the browser market was dominated by Netscape Navigator, Microsoft's Internet Explorer product was still under development. In 1996, however, most independent third-party reviews concluded that Internet Explorer

had caught up with Netscape Navigator in terms of value to customers. Thus, Microsoft developed a distribution strategy.

Netscape, with its big market share, attached a forty-nine-dollar price tag to Netscape Navigator, and they took the business of big companies like AOL for granted. When AOL decided to sign a bulk contract to use Microsoft's Internet Explorer, it was tremendously beneficial to the growth of AOL, a company that was only valued at somewhere under \$5 billion in March 1996. (Today, it is valued at over \$150 billion.) AOL was on the forefront of expanding the network to customers who were not technically sophisticated. That's the whole business plan for AOL. Microsoft gave away its browser without charge and customized it so that AOL could bring customers into the AOL interface and not go through Microsoft.com. Netscape, on the other hand, demanded that all AOL customers using the Netscape browser would have to go through the Netscape net center. At the time, AOL decided that it got a much better deal from Microsoft.

**Litan:** Tom and I agree that the ultimate purpose of the antitrust laws is to help consumers. Before going further, I should explain that Judge Jackson's findings have a very significant status as the case moves forward because, as a matter of law, an appellate court can only overturn the findings of fact if they are clearly erroneous. It is a very difficult standard. Having noted this, we have not seen what legal conclusions Judge Jackson will draw from the findings, and there is room for appellate courts to review legal conclusions.

Judge Jackson had two findings relating to the issue of harm to consumers. The first was based on an internal memo of Microsoft's that said that while the company could charge forty-nine dollars for their operating system and make a decent profit, they might as well go ahead and charge eighty-nine dollars. The judge inferred that there was a forty-dollar overcharge, and that it was a consequence of the activities that Microsoft engaged in—exclusive contracts, threats, and so forth. I expect you will see that forty-dollar number cited in future plaintiffs' class action litigation. If it is true, it is evidence of consumer harm.

The second and more important source of consumer

harm that the judge emphasized is that by essentially knocking down each form of competing platform to the Windows system, Microsoft was stifling innovation. There was basically a broad-reaching presumption throughout the opinion that innovation would be stifled in the long run. It will be subject to dispute once the case gets to appeal whether that presumption is supported, but the judge did find that innovation was thwarted, and that has legal status.

One point where Tom and I might share some common ground is that the weakest part of Judge Jackson's opinion was his finding that Microsoft unlawfully tied the browser to the operating system. The judge said that Microsoft denied consumers a choice because only Internet Explorer was allowed to show up on the first Windows screen that people see when they boot up their computer when they buy it. Because Microsoft sold Windows '98 as an integrated package—both the browser and the operating system together—the judge found that consumers were denied a choice. As it turns out, the circuit court laid down a different legal standard for determining whether or not there was an unlawful tie-in or not. Their legal standard, by a vote of two to one, was: Were there some consumers who benefited from Microsoft putting the operating system and the browser together? In my view Microsoft could have argued, and will argue on appeal, that they had evidence in the record that some consumers did indeed benefit by having the operating system and the browser tied together.

By emphasizing that consumers had been *denied* a choice, Judge Jackson appeared to apply a different legal standard than what was actually set down by the Circuit Court. Thus, as a matter of law, it is conceivable that this part of the opinion may be in trouble, because what it implies in the longer run is that even monopolists do not have the freedom to change their product. This is one aspect of what Microsoft is complaining about, and they may have a point.

**Rockefeller:** At the risk of being too elementary, let me get away from attempting to cite what the facts are in this contentious litigation and back to some of the terms that the judge has used in his findings of fact. For instance, Judge Jackson talks about the “applications barrier to entry.” Could the panelists define “barrier to entry” as it applies to this case and distinguish it from inefficiency?

**Hazlett:** A barrier to entry is traditionally a cost borne by an entrant that is not borne by the incumbent and tends to

---

*...this allegation of barriers to entry really does not survive the laugh test.*

---

discourage competition. In the Microsoft case, the judge is talking about certain barriers that Microsoft allegedly put in the way of essentially two products that were tied together: Netscape Navigator, the browser that worked in a complementary fashion

with Windows, and the Java programming language which was embedded in Netscape and formed a competitive threat to Windows as an operating system. The alleged barrier to entry is the competitive reaction Microsoft used to defend itself against the combined product of Netscape and Java. This reaction was to promote Windows together with Internet Explorer in a very aggressive fashion that would increase its market share—not only or even primarily in the operating system market but in the browser market. It did this by giving customers less reason to use Netscape and therefore Java, as well.

That is the essential charge, but there is also something that is sort of lurking in the back of the Department of Justice complaint filed in May of 1998. It also showed up, much to my surprise, in the judge's findings of fact. It was to my surprise because I had actually been suggesting, before the judge issued his ruling, that people go back and read the May 1998 Department of Justice complaint to see if the allegation that Microsoft had been suppressing investment in Internet-related activities passed the laugh test.

You do not need to be invested in the stock market to see that it is not the old line blue-chip stocks that are doing well today. In fact, among those doing well are exactly those companies that are in direct competition with or provide complementary services to Microsoft's operating system monopoly. Recently, there have been two giant IPOs coming out for Linux-based service providers that hope to join the start-up companies that have had tremendous support from Wall Street: Red Hat and Cobalt Networks. Moreover, billions of dollars are being thrown at entrants that come into the market against Microsoft or other service providers. In fact, there is a tremendous synergy between all these companies.

The bottom line is that the market is moving very rapidly away from the old desktop model (through which the Department of Justice sees the world) to a network-computing world. Also, it is a world of competing operating systems like Linux, Sun-Solaris, and the system devices—wireless and otherwise—that now access the Internet. Thus, this allegation of barriers to entry really does not survive the laugh test. It is a time of tumult and tremendous creative destruction in computer markets, and the overall momentum is clearly in favor of people

---

***...Microsoft overwhelmingly dominates...desktop operating systems and has erected further barriers to entry.***

---

entering this space and competing not just in computer software but across wide ranges of innovative and technically dynamic e-commerce.

**Litan:** Just a quibble on Linux, Red Hat, and the other IPOs. One of the reasons that they are red hot is because of the judge's ruling. I think people now see that the market may be more wide open than before.

**Hazlett:** I am happy to respond to that. The fact that a competitor is helped by an antitrust decision against Microsoft is absolutely no evidence that consumers are helped. The aim of the antitrust laws, to go back to the recommended bible, Bork's *The Antitrust Paradox*, is to help competition, not competitors. While some Microsoft competitors may have been helped by the anti-Microsoft proceedings, the computer sector overall has not been helped. Stock market effects on the sector have been very negative on the entire range of antitrust proceedings against Microsoft, going back a decade.

**Litan:** I raised the Linux example because Tom pointed it out as evidence that barriers to entry are not there, and I was just rebutting the narrow point that stock market activity alone does not prove that there are no significant barriers. I think the market has changed as a result of the case. However, let me get back to the larger question, which is the barrier to entry issue. Tom is right about the definition of barrier to entry, but the specific issue here is what the judge called the *applications* barrier to entry. What that means is that applications writers have to write their programs to mesh with operating systems, and Microsoft dominates the desktop operating systems market. As a practical matter, if you are an applications writer and if you have scarce resources and time, you have an overwhelming incentive to write for Microsoft's Windows as opposed, for example, to Apple's Macintosh. That in itself is not illegal. That is just a fact, which the judge cited before he found that the *additional* activities—which he specified over the next two hundred pages of his opinion—further entrenched the applications barrier to entry or in fact raised it. Linux has made progress on the

server market. There is no question about that, but the judge found as a matter of fact that Microsoft overwhelmingly dominates the market for desktop operating systems and has erected further barriers to entry.

**Hazlett:** Let me just add that if you really want to talk about the paradigmatic example of the Silicon Valley startup, you talk about Netscape, the so-called victim of the terrible Microsoft monopoly. Throughout Silicon Valley, former Netscape employees are being picked off by other startup firms trying to add some luster to their image. Netscape came out of nowhere to use the Microsoft Windows platform to become tremendously successful. It did a wonderful job and is now part of AOL, further spreading this technology.

**Rockefeller:** I would like to ask another elementary question. What is competition? Is it something that can be measured or distorted as Judge Jackson says?

**Litan:** Most microeconomics textbooks look at whether a market is competitive by the price-to-cost margin. If you see firms that are earning rates of return that are above average for that market, that *might* be evidence of an imperfection in that market. It does not necessarily mean that there is any antitrust violation. It just means that the market may be imperfectly competitive. Of course, super-normal profit can be, and often is, competed away in the real world as people come up with innovations and new ways of doing things. That happens all the time. Therefore, just saying that a market is not perfectly competitive does not by itself mean very much. Most markets are reasonably competitive.

However, there are a few markets, and desktop operating systems is one of them, where one firm has a dominant position and is not competitive. By the way, many people like it that way. One of the arguments against breaking up Microsoft—and while we have not talked about remedies, this is related to the point about competition—is that some applications consumers *like* the fact that there is a single standard. In this case, the standard is the operating system. It happens to be owned by one company, and one of the concerns about breaking up Microsoft is the fear that it could fracture the standard, making consumers worse off. I do not share this concern, but it has been expressed by a number of observers of the case.

**Hazlett:** I would like to say that there is a way to measure competition, but you have to do it at a very high hourly rate! Seriously, what you see in these kinds of cases is that the battle between economic experts really does take center stage, and the economics is very important.

Measuring the degree of competition is hard. There certainly is no single metric that is going to show you that at 64.96 you have competition and that at 64.97 you have monopoly. However, one of the interesting things that is central to this case is that the government does *not* argue that the *creation* of the monopoly by Microsoft was in any way illegal.

The investigation of Microsoft goes back to 1989, when the federal government antitrust investigators thought the deal between IBM and Microsoft and its OS/2 operating system was potentially monopolistic. There is no case over ten years that the government has won concerning Microsoft's monopoly, and certainly in the existing litigation they do not allege that Microsoft created these applications entry barriers through any illegal conduct.

In fact, it is clear that they did it in a very efficient way. During the early 1980s when the PC revolution was working its way through the markets in a rather dramatic fashion, Microsoft was not a dominant force in the industry. Certainly the dominant PC force was Apple, and Apple was actually approached by Bill Gates in 1985 in an effort to try to open up that operating system—a wonderful graphical, user-interface-based operating system—for hardware manufacturers and for other software developers. Gates' proposal was to actually make Apple's Mac OS an industry standard operating system, with thousands of compatible applications.

It makes you cry to read the Apple corporate history—having a wonderful product and absolutely mismanaging it into a ridiculously low market share, given its quality. In fact, Apple acted like a monopolist. They overpriced their product and “monopolized” the market they had. Microsoft did exactly the opposite. With low margins, it spread the software everywhere and became the standard. Their philosophy was: Put out software, and if it is not the best don't worry about it, we will fix it. The 3.0 will be great compared to the 1.0. The whole thing was letting your customers know how to debug your program. Well, this is an interesting way to do business, and Apple actually should have learned. And it should have done a much better job making the Apple operating system an industry standard, but they blew it, and Microsoft provided the efficiency of an industry-wide standard. I agree very much with Bob on that.

**Rockefeller:** If somebody achieves a monopoly position by superior efficiency, is that something we want to be concerned about?

**Litan:** No, and Tom and I totally agree. Moreover, there's no allegation that Microsoft earned its monopoly unfairly.

---

## *Microsoft provided the efficiency of an industry-wide standard.*

---

**Rockefeller:** If that's the case, what difference does Microsoft's market share make to this case?

**Litan:** The only difference it makes is that under the antitrust laws, once you have that kind of monopoly power you have to behave differently than you would if you were the corner grocery store. The best example is an exclusive contract. For example, if you are a corner grocery store and you say to your customers, “If you guys go across the street and shop at Safeway, we're not going to let you in the door,” or, “If you shop over there, we're going to charge you a higher price,” the antitrust laws would not punish you because you do not have market power. However, if you own ninety percent of the market and say to customers, “If you go to my competitor I'm going to punish you in some fashion,” that is exclusive dealing; and there is ample evidence, in Judge Jackson's opinion, that Microsoft did that. That is what was found to be illegal in this case. Furthermore, in the first case that you talked about, where I was involved in the Justice Department, we signed a consent decree aimed at Microsoft's licensing practices, through which the Department alleged Microsoft did exactly that: engage in exclusive dealing.

**Rockefeller:** Judge Richard Posner has been requested to act as a mediator between Microsoft and the government. He published a book in 1976 in which his view was that it did not make any difference whether you were a monopoly or not. The only thing the antitrust laws ought to look at is your conduct. If it is conduct that we want to prohibit, it does not matter whether you have ten percent of the market or ninety-five percent of the market. That, I guess, is not the current prevailing legal doctrine. Do you think that is still Richard Posner's view?

**Litan:** I am convinced that it is not the prevailing legal doctrine.

**Hazlett:** I have no idea what Judge Posner is going to do. Stock market speculation was that he would be favorable to Microsoft in some respect. It is hard to imagine that he will be less favorable to Microsoft than Judge Jackson, who was actually tougher on Microsoft than the Department of Justice complaint and actually found evi-

dence of discernible harm to customers, which the government's own economic witness could not find. Therefore, it is easy to see that Posner would be a move back to the middle between the parties. However, if you read Judge Posner as a judge and as a scholar you will know that there is a variance there, and he often surprises people.

**Rockefeller:** What if it is concluded that Microsoft violated the law? What should be done about it? While we cannot dispute what the facts are in this case, it might be useful to discuss what might be done. Assume that all of Judge Jackson's findings are correct. What should public policy say about what ought to happen now?

**Hazlett:** The government has a very difficult job here in that the stock market does not like this case. While there are some politics driving the case, the Department of Justice does not want the NASDAQ to plunge on the announcement of a brutal remedy that confuses the market and that creates problems. If you look at the history of this suit and the effect of the announcements on market prices, it's absolutely clear that the supposed victims of Microsoft—the Intels, the Compaqs, and so forth—are not benefited by this antitrust case moving forward. Any radical remedy, including the divestiture of Microsoft, would be a problem.

The other side of this is actually quite interesting. There is something the government—if you think of the legal system as part of the government—may have gotten very wrong, and it goes to those “look and feel” cases. There is a whole series of them, and it turns out that, despite the ideological noise around these cases, the courts may have been much too lenient in enforcing intellectual property rights to software products. Moreover, the benefit has not gone to the small startups but to the bigger companies, who can appropriate the creative talent of a lot of beneficial contributions to software markets. Regardless of whether or not the Microsoft case is a good case, there should be a revamping of property rules that currently allow companies large or small to appropriate the look and feel of various software packages that have been introduced by innovators in the marketplace.

**Litan:** Tom has an interesting idea about limiting intellectual property protection, but the courts probably do not have the power to do that. You have to get a legislative fix. Now, assume that Judge Jackson's findings survive, and there is a legal conclusion that Microsoft has violated the

law. The question is what to do about it. The source of the problem, in Judge Jackson's opinion, is Microsoft's monopoly and entrenchment of that monopoly in the operating systems market. There are two fundamental ways to go about this. One is the “conduct remedy,” where the court sets rules that Microsoft cannot do this, and they cannot do that. Also, there may be some other rules, which are more aggressive, that tell Microsoft affirmatively to do something. One example would be to force it to publish its application program interfaces. Another might even go so far as to force it to auction off its source code, its underlying property right. Thus, there can be affirmative actions that are largely conduct oriented.

The second type of remedy is divestiture. I have gradually come to favor the divestiture option, largely because I think one thing that Microsoft and the government do agree on is that they do not want Judge Jackson to be forever involved in Microsoft's business and administering any decree. It seems to me that any conduct decree will require continued judicial oversight, which I think will be bad for the market,

bad for the computer industry, bad for everybody involved except for the lawyers.

One type of divestiture is the so-called “Baby Bell” solution, splitting the company into three vertically integrated parts. I prefer instead a two stage approach: first splitting the applications company from the operating system's company in stage one, and then in stage two, splitting the operating system's company into three parts. The idea is to introduce competition in the operating systems market, where the problems that Judge Jackson identified in his opinion actually lie.

The major argument against the two-stage approach is the danger of fracturing the standard. I do not think that would happen in the short run because there will be very strong incentives for all the makers of operating systems to have common application interfaces and because they do not want to sacrifice market share. Over time you would get differences in the standards, but I think that is the price you pay for innovation. I think you get more innovation and you have basically a more competitive market.

**Rockefeller:** There you have a couple of different points of view. Now, do we have questions from the audience?

**Question 1:** Do you see this being appealed directly to the Supreme Court under the Expediting Act?

**Litan:** I see no incentive for Microsoft to do this. If there is no settlement, their incentive would be to delay this as long as possible. Moreover, if they are the losing party they are the one who is going to have to appeal, so I think they would not do that.

**Hazlett:** I agree that it would not be in Microsoft's interest to expedite this. Of course they have not dragged anything out yet. This has been a rocket-docket for big antitrust cases. If Microsoft dragged it out just two or three or four years (the normal time from the D.C. Circuit Court to the U.S. Supreme Court), you would have such a radically different network computing world that the case would move away from the Department of Justice position even more than it already has. Thus, it would appear that pushing it out a couple of years is very beneficial for Microsoft, but given their past behavior, I have no idea what they will do.

**Question 2:** If they do not decide this fairly soon, will the market for software services change enough that the whole thing becomes moot?

**Hazlett:** I do not see how one can argue with a straight face that Microsoft is suppressing investment in Internet-related businesses. Also, I think that the market is going to move further away. Certainly the success of Linux should be considered. Linux was not even mentioned in the May 1998 complaint. Last year, fifteen percent of all service software was Linux. Linux was making it in the retail markets and doing extremely nicely on a very high growth trajectory.

Moreover, network computing is the rage today. Microsoft is actually moving its software to the Internet. One of the great ironies is that this browser *jihad* made Microsoft react to Netscape by moving browserware right into the operating system—every Microsoft computer now is part of the Internet. They have done that to respond to competition, so now network computing is *really* creating the challenge to Microsoft software. That is part of the reason why Microsoft is investing like crazy all through the e-commerce world, trying to brace itself for this coming competition that is going to sap the operating system market it currently enjoys. Intel and IBM are doing the same thing. They all see it coming. This move to network computing—where you can have dumb terminals and smart computing on the Net—is already here and growing at a phenomenal rate; all the money is shifting in that direction.

**Litan:** I believe that the stock market wants a quick resolution to this, because it does not want uncertainty. Microsoft, in my opinion, has an interest in keeping the litigation going as long as possible in order to bank on exactly the kind of market forces that Tom is talking about. Moreover, Tom may be exactly right that in three years, after several appeals, Microsoft would be able to argue that the whole market has changed; and there is no need for a draconian remedy. That is clearly a strategy for the company to pursue. Time is against the Department of Justice. If there were a quick resolution, I think the states and the DOJ would be inclined to ask for a very aggressive remedy. They may still do so, but I cannot forecast this. The problem is that there are different interests on different sides.

I can give you one counter argument for why Microsoft might want a quick resolution. It is conceivable (although not likely) that—just as AT&T came to the conclusion in 1982 that it was in their interest to go ahead and break up—Bill Gates will decide

that he would rather have eighty to ninety percent of one unit of the current Microsoft that is much smaller and not a bureaucracy. That way, he could run with the smaller firm rather than to continue fight litigation for three years and suffer the loss of morale at the company in the meantime.

There was an article in *Business Week* sometime back that pointed out how Microsoft already is suffering a defection of key employees. The longer the litigation drags out, the more Microsoft faces that risk. If key people leave, the dynamics of the company may be stifled. Thus, it could be in Microsoft's own corporate interest to cut its losses and have Gates concentrate his attention on whatever core business that he thinks will be most successful.

**Rockefeller:** One final question: Do you believe that this dispute is going to be resolved on the basis of ascertainable rules, scientifically-based facts, and assisted by the science of economics, or on some other basis?

**Litan:** I think this argument about the economics of the Microsoft case will continue in the literature for years to come. Jaundiced observers will say that this proves that economics is not a hard science. They may be right to a certain extent, because there will be this continuing difference in views. This case will be settled, by definition, only if the parties decide it is in their interests to settle and short circuit the whole legal process. However, if it is decided in the courts, the case will be resolved under legal

---

***Microsoft...has an interest in keeping the litigation going as long as possible.***

---

principles that are reasonably well established, although economists may continue to disagree about them.

**Hazlett:** A few years ago, I was talking to an economist at the Federal Communications Commission about some issue they were considering in economic regulation. It was a rather interesting problem, regarding whether it was competitive or monopolistic to craft a certain rule. Right in the middle of our discussion, he sort of took a time out and said, “You know, in the end this issue is way too important to be decided on its merits.” Anybody who has worked inside a government agency has sort of a sheepish feeling about the politics that gets into these things. There is a lot of politics in this case, but the nice part about the legal system is that at some point it has to be aired in a court of law. The judges have ideological preferences, but they are much less part of the normal give and take of pol-

itics. Of course, there are appeal courts and the Supreme Court. Thus, there is going to be an adjudication to this that will have to address the economics.

One way or the other, I commend this case to anybody who is interested in the issues of competition and monopoly in the age of the information revolution. It is fascinating, and our old concepts are challenged in some fairly interesting ways. They are not necessarily overturned. You don’t throw out the textbook and start over again. Nonetheless, you do have to write a new chapter at the end that explains how the old stuff applies to the new, and I think that we will be learning from this case for a long time. ■