INTRODUCTION

In 1991, the U.S. Department of Justice’s Antitrust Division (“the Government”) sued the Massachusetts Institute of Technology (“MIT”) and the eight colleges and universities in the “Ivy League”—Brown University, Columbia University, Cornell University, Dartmouth College, Harvard College, Princeton University, the University of Pennsylvania, and Yale University. According to the Government, the nine schools violated Section 1 of the Sherman Act by engaging in a conspiracy to restrain price competition for students receiving financial aid. The Government claimed that the schools conspired on financial aid policies in an effort to reduce aid and thereby raise their revenues.

The schools responded that the Sherman Act did not apply to them because they are not-for-profit institutions. Furthermore, they justified their cooperative behavior by explaining that it enabled them to concentrate aid only on those in need and thereby helped the schools to achieve their socially desirable goals of “need-blind” admission coupled with financial aid to all needy admittees. Without collective action, the schools argued, there would be less financial aid available to needy students, with a resulting decrease in the number of lower-income students attending those schools.

Dennis Carlton testified as an expert witness on behalf of MIT. Gustavo Bamberger assisted in the development of the economic analysis underlying Carlton’s testimony. This chapter is based in part on Carlton et al. (1995). We thank Greg Pelnar for his assistance and John Kwoka, William Lynk, and Larry White for helpful comments.
All of the Ivy League schools signed a consent decree agreeing to stop the challenged cooperative activity. MIT refused to sign and went to trial. In September of 1992, MIT was found to have violated the Sherman Act.\(^1\) Government investigations against several schools outside of the Ivy League continued. Soon after the trial ended, Congress passed the Higher Education Act of 1992, allowing colleges and universities to engage in certain cooperative conduct aimed at concentrating aid only on needy students. In September of 1993, the court of appeals overturned the district court’s verdict and ordered a new trial.\(^2\) The Government subsequently dropped all investigations against other schools and reached a settlement with MIT that allows MIT to engage in most of the conduct that the Government had challenged.

This case raises several interesting and important issues about the treatment of not-for-profit institutions under the antitrust laws. Should the antitrust laws apply to not-for-profits, and if so, how? Specifically, how should the application of the antitrust laws to not-for-profit firms differ, if at all, from their application to for-profit firms?

This chapter describes the economics of not-for-profit schools and the schools’ actions that were challenged by the Government, with the economic arguments and evidence relied on by each side. It then discusses the findings of the district court and the court of appeals. It also summarizes the settlement reached by MIT and the Government. It concludes with a discussion of the issues raised by this case and more recent developments in the application of the antitrust laws to not-for-profit institutions.

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**THE ECONOMICS OF NOT-FOR-PROFIT SCHOOLS**

In the standard models of firm behavior used by economists, firms are assumed to have a simple objective—maximize profits. These profits are enjoyed by the owner or owners of the firm. A not-for-profit firm, however, typically is barred from paying out any profits it may earn (and there are no “owners” to whom profits could be paid). In the United States, not-for-profit firms typically are organized under IRS Regulation 501(c)3.\(^3\) This regulation legally constrains the actions of a not-for-profit firm, specifically preventing the disbursement of any excess revenues over costs. Under the IRS code, private donations made to a not-for-profit institution can be deducted from the donor’s taxable income and thus reduce the donor’s tax. In this way, both the donor and the general tax-paying public support not-for-profit institutions.

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\(^3\) MIT and the other Ivy League schools are 501c(3) corporations.
Although not-for-profit firms are relatively rare in the U.S. economy, several sectors of the economy are dominated by not-for-profits. Most higher education in the United States is provided by not-for-profit institutions. These institutions are either public, such as state universities, or private not-for-profit schools. In addition to most institutions of higher education, most religious and cultural institutions are not-for-profit. Similarly, most hospitals in the United States are organized as not-for-profits.4

Not-for-profit firms often are created to achieve (or attempt to achieve) a particular goal or goals that the firm’s founders believe are socially desirable.5 Some not-for-profit firms, such as educational institutions, solicit donations. Donors who would be reluctant to donate to a for-profit firm for fear that the owners would simply keep the donation do not face that concern in the case of not-for-profits because of the legal constraint on distributing funds.6 Because for-profit firms may not have incentives to achieve certain goals that are considered socially desirable, not-for-profit firms can be viewed as a response to a “market failure.”7

In the case of colleges and universities, the institution likely is interested in achieving various goals. For example, colleges and universities typically are thought to be interested in:8

- providing a quality education
- enhancing the general welfare of their students
- enhancing the general welfare of their faculty and administrators
- sponsoring high-quality and innovative research
- providing innovative teaching programs
- satisfying alumni and other potential donors’ preferences.9

Because these institutions have various goals (not all of which are mutually consistent), it is difficult to specify precisely the “objective function” of the institution—that is, it is difficult to specify what exactly a particular school is attempting to maximize.

The not-for-profit nature of schools explains many school practices that would be unusual in a for-profit world. Schools maintain many prohibitions on transactions that would be inefficient in a profit-maximizing context. For example, schools such as MIT and the Ivys do not allow students

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5However, some not-for-profit firms may be formed to maximize the profits of other firms. For example, a not-for-profit trade organization likely takes actions intended to increase the profits of the firms it represents.

6Of course, donors are concerned that their donations will be well spent.


8See, for example, Hopkins (1988).

9The MIT Alumni Association filed a brief in support of MIT in this case.
to buy admission (or at least there is no formal procedure for doing so) if they have poor grades. It seems likely that MIT and Harvard as well as many other schools could abandon need-blind admissions and profitably auction off their last five admission spots without a material decline in either their reputation or quality of the student body, but with a significant increase in revenue.\(^\text{10}\) Since constraints on trading are generally undesirable, the behavior of schools can be reconciled with reasonable behavior only because of the complicated nature of each school’s not-for-profit objective function.\(^\text{11}\)

**THE CHALLENGED CONDUCT**

The history and development of the challenged conduct was not a disputed issue during the trial. Unlike most alleged price-fixing cases, both sides agreed on the basic facts.

In the 1950s, members of the Ivy League met to discuss the desirability of not bidding for “star” athletes. These meetings were called “Overlap meetings” (because they discussed students who were admitted to “overlapping” schools), and the schools participating in the meetings were called the “Overlap schools.” Schools adopted the rule that no athlete could receive aid beyond that justified by financial need, and financial need was calculated according to a common formula. The meetings soon took up the issue of whether such a rule was sensible for nonathlete students. The schools reasoned that if they were forced to bid for star students who had no financial need, the schools would have less money to give out to other students who had such need. Before the 1950s, few schools had significant scholarship programs, and the Ivys were accessible primarily to the wealthy.\(^\text{12}\) The purpose of the Overlap meetings, according to the participating schools, was to concentrate scarce financial aid only on needy students to enable such students to attend.

A student’s aid package consists of two components. One is called “self help,” which represents what a student contributes and is based on loans or jobs that the school may provide or help the student get.\(^\text{13}\) The other is grants (also known as scholarships), which are outright gifts to students. For most schools, grants and scholarships come primarily from either the Government (primarily through Pell grants) or the institution itself. A student pays for his or her education from grants, self help, and “family

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\(^{10}\)It is undoubtedly true that many schools do show preference to alumni and large donors and that this is a rough way of “selling” admission. MIT gives applicants of alumni and donors no preference.

\(^{11}\)See Rothschild and White (1993) for a discussion of other school practices that are inconsistent with profit maximization.


\(^{13}\)There often may be a subsidy component to a loan that a student receives.
The number of schools participating in Overlap meetings grew over time. By the 1970s, there were regular meetings among the Ivys plus MIT and fourteen other prestigious schools. The schools participating in Overlap meetings: (a) agreed to give aid based only on need; (b) agreed on a common methodology to define need; and (c) met to discuss individual cases of commonly admitted students.

At the Overlap meetings, a listing of commonly admitted students was circulated among the schools together with each school’s proposed family contributions for each student. In cases of significantly differing proposals

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14The Ivys and MIT met together. The other fourteen schools also met together and some of these schools also met with certain members of the Ivy/MIT group. The other fourteen Overlap schools were Amherst College, Barnard College, Bowdoin College, Bryn Mawr University, Colby College, Middlebury College, Mount Holyoke College, Smith College, Trinity College, Tufts University, Vassar College, Wellesley College, Wesleyan University, and Williams College.

15A valid inquiry is whether the Overlap schools could have market power in view of their small share of total undergraduate enrollments in the United States (less than 1%). For example, the total undergraduate enrollment of all the Overlap schools was less than that of the total undergraduate enrollments of the Universities of Illinois, Michigan, and Wisconsin. If the Overlap schools lacked market power, it would be hard to explain why the Overlap process existed.
(ones that differed by more than several hundred dollars), the schools would discuss their justification for the family contributions and would agree to compromise on a common figure or (less often) agree to disagree. There were initial disagreements on about 10 to 20 percent of the commonly admitted students applying for financial aid. The initial disagreements usually arose either because schools had different information (e.g., if an applicant had an older sibling at a school, one school could have more complete information than another about family finances) or because the schools had varying degrees of sophistication in analyzing complicated financial holdings (e.g., the treatment of a low reported income that took advantage of various tax shelters).

ECONOMIC ARGUMENTS AND EVIDENCE

The Government’s Claims

According to the Government, there was little need for economic evidence in this case—the undisputed facts were enough to condemn MIT’s conduct under Section 1 of the Sherman Act. The Government offered five arguments. First, the Government argued that the Sherman Act applied to MIT’s financial aid policies because the collecting of fees from students and their families is a commercial activity governed by the antitrust laws. According to the Government, “financial aid is a discount from the list price that is offered to certain customers. Universities grant discounts in their own self-interest, just as do other businesses that compete in the market place.” The Government also argued that “[t]he selling and discounting of educational services involves a fundamentally commercial aspect of the higher education industry.”

Second, the Government argued that because MIT’s financial aid policies constituted commercial activity, “MIT’s status as a ‘non-profit’ corporation does not shield its anticompetitive conduct from the Sherman Act” and that the “higher education industry” has no antitrust immunity.

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16See Dodge (1989).
17Memorandum of Law in Support of Government’s Motion for Summary Judgment, Civil Action No. 91-CV-3274, United States District Court for the Eastern District of Pennsylvania, (“Government’s Memorandum”), at 87.
18Government’s Memorandum, at 86. The Government distinguished the “commercial nature” of MIT’s financial aid policies from the issues involved in Marjorie Webster Junior College, Inc. v. Middle States Association of Colleges and Secondary Schools, Inc., 432 F.2d 650, 654 (D.C. Cir.), cert. denied, 400 U.S. 965 (1970), which, according to the Government, stood for “the fairly unremarkable proposition that non-commercial activities, not related to pricing, are outside the scope of the Sherman Act” (at 92).
19Government’s Memorandum, at 88.
20Government’s Memorandum, at 92.
stead, the Government contended that an analysis of a challenged practice “must focus on the conduct in question, not on the nature of the industry involved or the organizational form of the actors.”

Third, given that the challenged conduct constituted commercial activity, the Government argued that the Overlap process was “garden variety price fixing.” The purpose of the price fix was to agree on the number and amount of discounts (grants) from list price (tuition) that the schools would offer. However, the Government did not allege a conspiracy to fix the list price, that is, the gross tuition level charged by the schools.

Fourth, the Government further claimed that the inevitable consequence of the collective behavior of the Overlap schools was to increase the schools’ net tuition revenues. Indeed, the Government argued that even in the absence of evidence that average net tuition actually rose, the consequences of the school’s actions were so inevitable that the conduct should be condemned as a per se violation of the antitrust laws. The Government argued that “[t]he critical issue in applying the per se rule is whether the court has had experience with the type of restraint in question, not whether it has had experience in a particular industry.” According to the Government, although the terminology used by MIT and the Ivys differed from that used in most industries, it was easy to translate that terminology into “standard economic terms”:

> “Tuition, Room and Board” and other compulsory charges is the list price of college attendance; “financial aid” and “merit scholarships” are selective discounts offered to some students. The “family contribution” is the net price for college attendance, that is, the list price minus the discount. By agreeing to fix family contributions . . . and to ban merit scholarships, MIT and the Ivy League institutions have engaged in a trade practice that the courts have experience with and have prohibited time and time again—price fixing.

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21Government’s Memorandum, at 91.

22District Court Trial Transcript, at 725.

23The Government’s theory implied that the schools increased revenues by colluding on the net tuition charged to needy students, but not to rich students. The Government did not explain why conduct allegedly intended to extract higher tuition payments ignored the students with the most money.

24The Government did not allege that the challenged conduct reduced the schools’ output. For example, the Government did not claim that the Overlap process had reduced enrollments at the Overlap schools.

25Conduct that courts have found almost always harms competition is condemned as a per se violation without any analysis required of the effect in the specific case at hand. Conduct that might or might not harm competition is analyzed under a “rule of reason,” where analysis of the effects of the conduct determine its legality. (In practice, however, the distinction between per se and rule-of-reason analyses often is not sharp.)

26Government’s Memorandum, at 82.

27Government’s Memorandum, at 84.
Finally, the Government argued that “social policy” justifications for the challenged conduct were irrelevant even under the rule of reason: “[N]o justification for price-fixing is allowed and no analysis of the specific factors involved in a particular industry is required.”28 According to the Government, the Supreme Court “has consistently rejected social or quality-based justifications for anticompetitive conduct” under the rule of reason.29

MIT’s Position

Unlike most defendants in a price-fixing case, MIT did not dispute that it engaged in the challenged conduct—MIT readily admitted that it met with the other Overlap schools and discussed financial aid packages for individual students. However, MIT vigorously disputed the Government’s characterization of its conduct as an attempt to raise net tuition revenues.

MIT had four responses to the Government. First, MIT argued that, as a threshold matter, the challenged conduct did not constitute “trade or commerce” and thus was not proscribed by the Sherman Act. MIT argued that it and the other Overlap schools “engaged in Overlap to advance educational access and socioeconomic diversity and to maximize the effective use of private charitable funds. In so doing, they neither sought nor obtained any financial or commercial benefit,” and therefore MIT’s conduct should not be subject to the antitrust laws.30 Furthermore, MIT argued that because the actual cost of an MIT undergraduate education exceeded the total revenue received from every student (even those receiving no financial aid), all grants of financial aid constituted a form of charity, not a reduction from “list price.” Thus, according to MIT, the conduct at issue “involved the coordinated distribution of private, charitable funds to qualified but needy students to help them defray the expenses of an education at MIT.”31

MIT argued that the legislative history of the Sherman Act showed that it was not intended to apply to the charitable activities of not-for-profit educational institutions. For example, in 1890 Senator Sherman argued that there was no need to amend his proposed act to exempt temperance unions:

I do not see any reason for putting in [an exclusion for] temperance societies any more than churches or schoolhouses or any other kind of moral or educational associations that may be organized. Such an association is not in any sense a combination or arrangement made to interfere with interstate commerce . . . I do not think it is worth while to adopt the

28Government’s Memorandum, at 79.
29Government’s Memorandum, at 79.
30Massachusetts Institute of Technology’s Brief in Opposition to the Antitrust Division’s Motion for Summary Judgment (“MIT’s Brief”), at 44.
31MIT’s Brief, at 40.
amendment [relating to] temperance societies. You might as well include churches and Sunday schools."32

Second, MIT argued that if the court decided that the Sherman Act did apply to the challenged conduct, that conduct should not be condemned as a per se violation but instead should be analyzed under the rule of reason. MIT argued that the per se rule should be applied only to types of conduct where “a court can look back upon unambiguous judicial experience demonstrating that the challenged practice is a ‘naked restraint of trade with no purpose except stifling of competition.’”33

MIT argued that the court did not have unambiguous judicial experience with the type of challenged conduct because the firms acting collectively were not-for-profit institutions, whereas most antitrust cases involve for-profit firms. According to MIT, the court should not condemn conduct practiced by not-for-profits simply because that same conduct when practiced by for-profit firms would harm competition. That is, even though the court’s experience shows that when profit-maximizing firms meet to set price, they almost always intend to increase prices and profits (and thereby harm consumers), the same is not necessarily true when not-for-profit schools meet to set financial aid policy collectively.

In particular, MIT argued that the Government’s claim that net tuition revenues inevitably would increase as a consequence of the collective action was wrong as a matter of economic theory. Even if the Government’s argument generally were true for profit-maximizing firms, it was not true for not-for-profit firms. Because not-for-profit firms maximize a multiattribute objective function, it simply is not possible to predict inevitable consequences from cooperative price setting. As a matter of economic theory, the cooperative efforts of the Overlap schools could indeed be to conserve their financial aid so as to achieve their stated goal of enabling greater numbers of needy students to attend their schools.

Third, MIT argued that the challenged conduct was justified on “social welfare” grounds that the Government endorsed. In particular, MIT argued that the challenged conduct was needed to conserve aid for only the truly needy and claimed that the Overlap conduct helped the Overlap schools achieve their goals of need-blind admissions with a guarantee of full aid if admitted. Moreover, the schools believed that their policies were entirely consistent with the Federal Government’s financial aid policy. With minor exceptions, federal money can be given only to needy students. A meritorious high-income student generally cannot receive any federal aid. Moreover, students receiving any federal aid usually cannot receive supplemental awards from a school beyond demonstrated financial need.

32MIT’s Brief, at 40 (citations omitted).
MIT pointed out that the Government seemed specifically to endorse collective behavior by MIT and the Ivys when used to make aid decisions for student-athletes. The consent decree signed by the Ivys provided that:

Nothing in this Final Judgment shall prevent defendants that are members of a common athletic league from: (1) agreeing to grant financial aid to recruited athletes or students who participate in athletics on the sole basis of economic need with no differentiation in amount or in kind based on athletic ability or participation, provided that each school shall apply its own standard of economic need.\(^{34}\)

MIT argued that if the Government believed that such agreements were reasonable for athletes, it made no sense to argue that similar agreements were per se illegal when applied to nonathletes.\(^{35}\)

Finally, MIT argued that if the challenged conduct were evaluated under the rule of reason, the empirical evidence showed that the Overlap agreements produced no antitrust harm. MIT argued that the economic rationale for a per se rule against collective price setting is that price typically rises as a result of the collective action. Because this underlying rationale does not apply necessarily to not-for-profit schools, MIT claimed that the only way to determine whether the collective agreements on aid raised price is to study what happened as a result of the agreements. MIT’s expert economist performed such a study and found no statistically significant basis for the claim that the collective action raised average net tuition per student at the Overlap schools.\(^{36}\) Thus, MIT argued that the statistical evidence did not support the Government’s hypothesis that the collective action inevitably must have increased the Overlap schools’ net tuition revenues.\(^{37}\)

MIT’s expert investigated through a multiple regression analysis whether average net tuition per student was higher at schools that engaged in the challenged conduct. A multiple regression analysis is a well-accepted standard statistical procedure used to examine the factors influencing a variable of interest, such as average net tuition per student. Through a multiple regression analysis, it is possible to isolate the effect of a single variable in a complex factual environment containing multiple variables. In the regression analysis offered by MIT, other characteristics of a school that could affect average net tuition per student in addition to participation in the

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\(^{34}\) MIT’s Brief, at 78 (quoting consent decree entered into by the Ivy League schools).

\(^{35}\) Similarly, the Government has not opposed the NCAA’s collective enforcement of limits on athletic aid packages.

\(^{36}\) The Government’s expert economist agreed that average net tuition per student was the appropriate variable to study.

\(^{37}\) In the typical alleged price-fixing conspiracy, the conspiring firms are accused of raising price and restricting output. Because a school’s “output” is multidimensional, measuring the effect of Overlap on output is difficult. The Government provided no evidence nor made any claim that the challenged behavior reduced the Overlap schools’ output.
Overlap agreement were accounted for. For example, whether a school is a private or public institution or whether a school has a religious affiliation could influence average net tuition. By accounting for these other factors, an analyst can obtain estimates of the effect of Overlap membership on the average net tuition per student charged by a school.

The variables used to explain average net tuition per student at a particular school were:

1. Whether the school had a religious affiliation (this variable is labeled NONRELIG in the regression analysis)
2. Percentage of students scoring more than 700 on the SAT verbal or math test (SAT)
3. Real state per-capita disposable income in the state where the school is located (YDPC)
4. Percentage of applicants accepted (PCTACC)
5. Percentage of undergraduates not receiving need-based aid (PCT-NOAID)
6. Percentage of class completing a degree (COMPDEG)
7. Type of school, as determined by the Carnegie Foundation for the Advancement of Teaching (DOCTOR1, DOCTOR2, RSRCH1, RSRCH2)
8. Real endowment per full-time equivalent student (ENDOW)
9. Whether mandatory fee information was unavailable (FEEMISS)
10. Whether the school was MIT or in the Ivy League (IVY)
11. Whether the school was one of the non-Ivy League Overlap schools (NONIVY)

The analysis was based on annual data for each of these variables for the years 1984–1990 for approximately 160 private schools. Adding public schools to the analysis did not have a substantial impact on the results.\(^38\)

MIT’s expert analyzed yearly data as well as an average over the entire 1984–1990 period, and found that the results were unambiguous—there was no statistically significant evidence that membership in Overlap was associated with higher average net tuition per student. A typical result is presented in Table 7-1, which shows, for example, that

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\(^38\)Experiments with different models and estimation techniques found substantially similar results—the Overlap conduct did not result in statistically significant higher average net tuition per student at the Overlap schools, holding constant school characteristics.
TABLE 7-1
Weighted Average Net Tuition Regression Results, 1984–1990 (standard errors in parentheses)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2299.47</td>
<td>(2429.07)</td>
</tr>
<tr>
<td>IVY</td>
<td>−322.42</td>
<td>(678.72)</td>
</tr>
<tr>
<td>NONIVY</td>
<td>130.37</td>
<td>(463.81)</td>
</tr>
<tr>
<td>RSRCH1</td>
<td>1042.21</td>
<td>(435.09)</td>
</tr>
<tr>
<td>RSRCH2</td>
<td>1062.57</td>
<td>(514.05)</td>
</tr>
<tr>
<td>DOCTOR1</td>
<td>545.66</td>
<td>(551.02)</td>
</tr>
<tr>
<td>DOCTOR2</td>
<td>−1143.27</td>
<td>(493.21)</td>
</tr>
<tr>
<td>FEEMISS</td>
<td>−540.82</td>
<td>(294.78)</td>
</tr>
<tr>
<td>PCTACC</td>
<td>−27.89</td>
<td>(11.97)</td>
</tr>
<tr>
<td>PCTNOAID</td>
<td>43.58</td>
<td>(9.44)</td>
</tr>
<tr>
<td>SAT</td>
<td>2.31</td>
<td>(11.16)</td>
</tr>
<tr>
<td>YDPC</td>
<td>0.36</td>
<td>(0.07)</td>
</tr>
<tr>
<td>COMPDEG</td>
<td>45.68</td>
<td>(16.64)</td>
</tr>
<tr>
<td>NONRELIG</td>
<td>1343.18</td>
<td>(250.19)</td>
</tr>
<tr>
<td>ENDOW</td>
<td>−5.95</td>
<td>(3.77)</td>
</tr>
<tr>
<td>R²</td>
<td>0.726</td>
<td></td>
</tr>
<tr>
<td>Number of Observations</td>
<td>162</td>
<td></td>
</tr>
</tbody>
</table>

1. All else equal, MIT and the Ivy League schools charged slightly less than non-Overlap schools (i.e., the estimated coefficient on IVY is negative but not significantly different from zero).

2. All else equal, schools that were not religiously affiliated charged, on average, roughly $1,350 more than schools that were religiously affiliated (i.e., the estimated coefficient on NONRELIG is about 1350).

3. Highly selective schools were more expensive, all else equal, than less selective schools. For example, a school that accepted 25 percent of its applicants charged roughly $1,400 more on average than a school that
accepted 75 percent of its applicants (i.e., the coefficient on PCTACC times 50 equals about 1400).

Thus, MIT argued that the evidence provided no statistically significant support for the Government’s position that the Overlap agreements raised the average net tuition per student charged by the Overlap schools.39

THE RESULTS

The District Court

After a ten-day bench trial, the District Court for the Eastern District of Pennsylvania found that MIT had violated Section 1 of the Sherman Act. The court rejected MIT’s contention that the challenged conduct did not constitute commercial activity: “[t]he court can conceive of few aspects of higher education that are more commercial than the price charged to students.”40

Although the court accepted the Government’s position that the Overlap conduct affected commerce and thus was susceptible to attack under the Sherman Act, the court refused to find the Overlap process per se illegal. The court observed that “[m]erely because a certain practice bears a label which falls within the categories of restraints declared to be per se unreasonable does not mean a court must reflexively condemn that practice to per se treatment.”41

The court did not, however, undertake an in-depth rule-of-reason analysis of the Overlap conduct. Instead, the court ruled that the challenged conduct should be examined using an abbreviated rule-of-reason analysis. The court deemed that a full-scale rule-of-reason analysis was not needed because the Overlap conduct was “so inherently suspect” that “no elaborate industry analysis” was required to demonstrate its anticompetitive character.42

The court ruled that “[since] the Ivy Overlap Agreements are plainly anticompetitive, the Rule of Reason places upon MIT ‘a heavy burden of establishing an affirmative defense which competitively justifies this apparent deviation from the operations of a free market.’”43 The court held that

39At trial, the Government’s economist presented regression studies that he claimed showed that the Overlap conduct did increase average net tuition per student at those schools. These results were based on a small subset of the data used in MIT’s analysis. MIT argued that the Government’s studies were flawed.
Case 7: MIT Financial Aid (1993)

evidence that the challenged conduct did not affect the prices charged by
the Overlap schools did not provide an affirmative defense for the conduct.
“Even accepting MIT’s premise that Overlap was revenue neutral [i.e., did
not affect average net tuition per student], to say that a restraint is revenue
neutral, by itself, says nothing of its procompetitive virtue.”

The court rejected MIT’s justification for Overlap and concluded:

The court is not to decide whether social policy aims can ever justify an
otherwise competitively unreasonable restraint. The issue before the court
is narrow, straightforward and unvarnished. It is whether, under the Rule
of Reason, the elimination of competition itself can be justified by non-
economic designs. The Supreme Court has unambiguously and conclu-
sively held that it may not.

The Court of Appeals

Both the Government and MIT appealed certain portions of the district
court’s ruling. In September 1993, the court of appeals for the Third Circuit
ruled (by a 2-to-1 majority) that the district court had erred in several re-
spects and remanded the case to the district court for retrial.

The court of appeals first examined whether the challenged conduct
constituted trade or commerce. The court of appeals upheld the district
court’s finding and ruled that providing educational services in return for
payment (whether discounted or not) is a commercial activity that subjects
MIT to the antitrust laws. However, the court of appeals noted that “[a]
though MIT’s status as a nonprofit educational organization and its ad-
vancement of congressionally recognized and important social welfare
goals does not remove its conduct from the realm of trade or commerce,
these factors will influence whether this conduct violates the Sherman
Act.” Thus, the court of appeals ruled that the social goals of MIT’s pol-
icy were relevant in an antitrust analysis.

The court of appeals also addressed whether the district court erred by
using a rule of reason, instead of a per se, approach in evaluating Overlap.
The court of appeals upheld the district court’s ruling that Overlap was not
per se illegal and held that Overlap’s “alleged pure altruistic motive and al-
leged absence of a revenue maximizing purpose contribute to our uncer-

46 In dissent, Judge Weis argued that the Sherman Act should not apply to the challenged conduct because MIT was a not-for-profit firm and argued that the district court should have granted judgment in favor of MIT.
48 MIT argued that the district court erred by not using a full-scale (as opposed to an abbreviated) rule-of-reason analysis; the Government argued that the district court erred by not finding Overlap to be per se illegal.
tainty with regard to Overlap’s anti-competitiveness, and thus prompts us to give careful scrutiny to the nature of Overlap, and to refrain from declaring Overlap per se unreasonable.”

The court of appeals disagreed with the district court’s ruling that the effect of Overlap on average net tuition per student was irrelevant. The court of appeals ruled that “the absence of any finding [by the district court] of adverse effects such as higher price or lower output is relevant, albeit not dispositive, when the district court considers whether MIT has met [its burden of establishing an affirmative justification for Overlap].”

The court of appeals also ruled that the district court erred by not investigating more fully MIT’s procompetitive and noneconomic justifications for the Overlap conduct. The court of appeals noted that MIT had proffered procompetitive economic justifications for Overlap. For example, the court of appeals explained that if Overlap increased consumer choice (by allowing needy but able students to attend MIT who otherwise would not have attended), then “rather than suppress competition, Overlap may in fact merely regulate competition in order to enhance it, while also deriving certain social benefits. If the rule of reason analysis leads to this conclusion, then indeed Overlap will be beyond the scope of the prohibitions of the Sherman Act.” The court of appeals ruled that “[t]he nature of higher education, and the asserted pro-competitive and pro-consumer features of the Overlap, convince us that a full rule of reason is in order here.”

Finally, the court of appeals held that “[e]ven if anticompetitive restraint is intended to achieve a legitimate objective, the restraint only survives a rule of reason analysis if it is reasonably necessary to achieve the legitimate objectives proffered by the defendant.” If, on remand, the district court found that MIT could persuasively justify Overlap, then the Government would have an opportunity to prove that a reasonable but less restrictive alternative existed that could meet Overlap’s objectives.

The Settlement

The new trial called for by the court of appeals did not take place because the Government and MIT reached a settlement in December of 1993. Under the terms of the settlement, MIT and other schools are allowed to engage in Overlap-type behavior, including pooling of student information. Agreements not to give merit aid and to use common principles to determine aid are allowed, but discussions about individual students’ financial aid are not.

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Audits to detect schools that deviate significantly from the agreed-upon common principles for awarding aid are allowed.

DISCUSSION

Economic Efficiency

To many economists, the economic content of the antitrust laws is simple: prevent inefficiency. Did Overlap affect economic efficiency? If the Overlap process left the schools’ revenues and class size unchanged and prevented the use of merit aid at those schools, then the Overlap process likely transferred income that otherwise would have gone to meritorious non-needy students toward other students. The Overlap conduct also probably resulted in a different allocation of students to schools than otherwise would have occurred—a larger number of needy students attended the Overlap schools.

There is no necessary inefficiency generated by Overlap; instead, its major effect is better characterized as income redistribution. The Government argued that there was a class of consumers harmed by the Overlap conduct—namely, meritorious high-income students. But if Overlap primarily redistributed income, then for every winner, there was an equal loser. There is no necessary efficiency loss from income transfers.

The general hostility that most economists (including us) have toward cooperative price setting in the profit-maximizing sector should not lead to an automatic condemnation of a practice that is focused primarily on equity
concerns and appears to have few if any efficiency consequences and that would never arise (at least, for the motives claimed by MIT) in the profit-maximizing sector.\textsuperscript{57} No cartel of profit-maximizing firms would cooperate solely to redistribute income among its customers.

If one articulates goals for the antitrust laws other than economic efficiency, one can justify condemning many practices. For example, if one assumes that the antitrust laws guarantee unrestricted competition under all circumstances, then by assumption the Overlap conduct violates this goal. But that standard would condemn many practices generally viewed as procompetitive. For example, policies that reduce information costs or that allow a manufacturer to use vertical restrictions on distributors to encourage the provision of services often are considered procompetitive. Yet in each case some individuals may be harmed. Consumers with low search costs or consumers with no need for service would benefit if the antitrust laws forbade such policies, even if, overall, consumers gain from these policies. Thus, any sensible antitrust policy must involve some balancing of harms and benefits to consumers.

**Social Goals**

Was the Overlap conduct necessary to meet MIT’s and the other schools’ social goals? In particular, does assisting needy students require collective action, or would it be possible for each school to meet the same goal by unilaterally implementing its own financial aid policy?

MIT presented expert testimony that without Overlap, competition for star students would break out in the future and financial aid to needy students would be reduced.\textsuperscript{58} The adverse consequences of such an effect on the needy could be especially pronounced in light of recent trends in financing higher education.\textsuperscript{59} Federal support for higher education declined substantially since its high point in the 1970s. For example, real federal aid (grants plus loans) per enrolled undergraduate student dropped by about 15 percent between 1975 and 1988 (see Table 7-2). Real federal grants per enrolled undergraduate student fell by about 60 percent over the same time period. Furthermore, the real cost of a college education increased by almost 40 percent during the same period. The combined effect of reductions in total aid and increases in tuition caused the real price paid per student to rise by at least 50 percent between 1975 and 1988.\textsuperscript{60} To offset the decline in federal grants and aid, states and schools have expanded their grant and aid.

\textsuperscript{57}Even in the profit-maximizing sector, cooperation can sometimes be efficient, e.g., among firms in a network industry. See Carlton and Klamer (1983). Cooperation among competing (profit-seeking) teams in a sports league also may be efficient; see, e.g., Noll (1982).

\textsuperscript{58}The demise of Overlap apparently led to some bidding for students by at least some former Overlap members. See, for example, Carlson and Shepherd (1992, p. 569).

\textsuperscript{59}See McPherson and Schapiro (1991) for a detailed study of financing trends.

### TABLE 7-2
Ratio of Aggregate Merit Aid to Need Aid by Carnegie Classification

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>Number of Schools</th>
<th>1984 Ratio Merit Aid to Need Aid</th>
<th>1989 Ratio Merit Aid to Need Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research I</td>
<td>11</td>
<td>0.1467</td>
<td>0.1730</td>
</tr>
<tr>
<td>Research II</td>
<td>8</td>
<td>0.1880</td>
<td>0.1946</td>
</tr>
<tr>
<td>Doctoral I</td>
<td>4</td>
<td>0.1426</td>
<td>0.2139</td>
</tr>
<tr>
<td>Doctoral II</td>
<td>9</td>
<td>0.3032</td>
<td>0.3758</td>
</tr>
<tr>
<td>Liberal Arts I</td>
<td>40</td>
<td>0.0759</td>
<td>0.1313</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>0.1339</td>
<td>0.1800</td>
</tr>
</tbody>
</table>

*a Based on schools with available information.

Sources: Peterson’s Annual Survey of Undergraduate Institutions and the Carnegie Foundation for the Advancement of Teaching.

awards. Data show that merit aid has generally become increasingly important as a fraction of institutional aid. As schools grant more aid, they grant it increasingly to meritorious non-needy students. In the early 1990s, several schools (including Brown University and Smith College, former participants in Overlap) announced that they would no longer maintain “need-blind” admissions policies.61

Since 1998, financial aid competition among at least some of the Ivies appears to have increased. In 1998, for example, Princeton announced that it would no longer consider the value of a student’s family home when it determined financial need; the change in Princeton’s policy effectively increased aid to applicants from relatively wealthy families. Princeton also eliminated loans for students from families earning less than $46,500. According to press accounts, other top schools, including Harvard, Stanford, and Yale, responded by increasing their aid offers.62 In February 2001, Princeton announced that it would replace all student loans with grants, thereby reducing a student’s payment to the school (see Figure 7-1).63 According to Ronald Ehrenberg, director of Cornell’s Higher Education Research Institute, Princeton’s new policies have resulted in competitive responses from other Ivies, such as Harvard, Yale, and MIT (Seaman and Tesoriero 2000).

Two recent studies confirm our prediction that Overlap did not increase the Overlap schools’ average net tuition. Because the Overlap meet-

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62 See Clayton (2001). Netz (2000, p. 7) reports that “[b]eginning in January 1998, [financial aid] competition did heat up immensely, in both the methods used to determine a student’s financial need and the form in which such need would be met. However, this increase in competition did not occur until four years after the case was finally settled, and seems likely to have been triggered by something other than the lawsuit.”

63 In July 2001, the presidents of twenty-eight private colleges, including Stanford and Yale, adopted standards for calculating a family’s “ability to pay” (e.g., is home equity considered?). Princeton and Harvard did not agree to adopt the standards. See Marcus (2001).
ings ended in 1991 and the Overlap process was not subsequently reinstalled, post-Overlap information not available at the time of our study is now available. This new information can be used to analyze the effect of Overlap by comparing the schools’ Overlap and post-Overlap average net tuitions. Hoxby (2000, pp. 35–36) finds that the demise of Overlap did not reduce tuition revenues received by the Overlap schools. Netz (2000) also finds that the average net tuition received by the Overlap schools did not change significantly after Overlap meetings ended.64 Neither of these studies included information from the period after the change in Princeton’s aid policies, and the impact of the post-1998 changes is not clear. Some observers, however, argue that the new policies have increased the competition for top students, with the result that lower-income students will receive less financial aid. Ehrenberg, for example, argues that “low-income kids, those not at the top academically and students who do not have as much information on how to play the game” will be harmed by the new policies (Seaman and Tesoriero 2000).

Did Overlap achieve its goal of increasing access of the needy to Overlap schools? It is difficult to measure quantitatively whether Overlap did achieve its social goal, and little systematic evidence was presented at trial. Ideally, one would want evidence on the family income of entrants to examine whether Overlap affected the income distribution of its entrants by allowing a larger number of needy students to attend. Though such income data are not available in sufficient detail to perform a study, data are available on the percentage of the entering class that is black or Hispanic, a variable that likely is roughly related to income. Although these percentages are only rough proxies for income, they should provide some indication of Overlap’s effect.

Studies performed by the authors found evidence that Overlap increased black enrollment by a statistically significant amount.65 The magnitude indicates that for the typical school, Overlap increased black enrollment to about 5 percent during the period 1984–1990 from the about 3 percent that would otherwise be predicted. These results provide indirect evidence to support MIT’s claim that Overlap did achieve its social goal. The evidence is weaker for Hispanics than for blacks that Overlap improved access.66

Hoxby (2000) confirms the finding that Overlap achieved its goal of increasing access of the needy to the Overlap schools. Based on a compa-

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64 Netz (2000, fn. 20 and table 5) reports that the estimated coefficient on an “Overlap dummy” in the post-Overlap period is “statistically significantly unchanged from the value before the meetings ended.”


66 Although these results provide evidence that Overlap did increase access to these schools, it is not clear that the collective setting of financial aid awards by a group of schools is an optimal way for society to ensure access to higher education.
ison of outcomes in the last five Overlap years to the first five years after Overlap ended, Hoxby finds that the demise of Overlap resulted in fewer relatively needy, black, and Hispanic students at the Overlap schools.\textsuperscript{67}

Recent Developments

The relevance of the difference between for-profit and not-for-profit firms in an antitrust analysis has emerged as a factor in other contexts. For example, in 1996, the Federal Trade Commission (FTC) filed suit to block a proposed merger between two not-for-profit hospitals in Grand Rapids, Michigan.\textsuperscript{68} The district court denied the request.\textsuperscript{69} First, the court found that the usual assumptions made in an analysis of a proposed merger of for-profit firms should not apply automatically to an analysis involving not-for-profit firms. Second, the court relied on empirical evidence that mergers of not-for-profit hospitals do not lead generally to price increases.\textsuperscript{70} Finally, the court ruled that the fact that some consumer groups could be harmed by the proposed merger should not automatically lead it to block the merger if other groups of consumers could benefit significantly from the merger.

Not-for-Profits and Antitrust Law

If Overlap did provide the needy with increased access to the Overlap schools, then it would seem that such an effect could be relevant to MIT’s defense under a rule of reason.\textsuperscript{71} But is such a defense possible under the antitrust laws?

The antitrust laws and most economists generally are hostile to collective price setting. In numerous cases, the Supreme Court has not allowed profit-maximizing firms to justify their cooperative actions to set prices on the basis of reasonableness of the prices that have been set.\textsuperscript{72} Only when the

\textsuperscript{67}See Hoxby (2000, pp. 31–33).

\textsuperscript{68}FTC v. Butterworth Health Corporation and Blodgett Memorial Medical Center, (W.D. Mi., Southern Division, 1996). The not-for-profit status of hospitals also was considered in (among other cases) an earlier hospital merger challenged by the U.S. Department of Justice. See U.S. v. Carilion Health System, 707 F. Supp. 840 (W.D. Va., 1989), discussed by Eisenstadt (1999).

\textsuperscript{69}The FTC appealed the district court’s ruling. The court of appeals for the Sixth Circuit affirmed the district court in July of 1997.

\textsuperscript{70}The court relied on the writings and testimony of William Lynk. Lynk and Lexecon were retained by the defendants.

\textsuperscript{71}A related question is whether MIT or the Government should have the burden of proving the effect of Overlap on access of the needy to schools. In NCAA v. Board of Regents of University of Oklahoma, \textit{et al.}, 468 U.S. 85 (1985), the Court ruled that the NCAA bore “a heavy burden” to prove the procompetitive effects of its action because of the elevated price and reduced output of its actions. See the discussion by Horowitz (1999). Here the evidence does not support such overall adverse price and output effects, so it is unclear whether MIT should bear such a “heavy burden.”

collective actions generate unusual efficiencies has the Court allowed collective price setting.\textsuperscript{73} Although it is possible to label the greater access of the needy to Overlap schools as an unusual efficiency and thereby fit this case within existing antitrust precedent, we think it clearer to ask and answer the question of whether the antitrust laws leave room for a not-for-profit firm to use the achievement of social goals as a valid defense for collective behavior.

The most relevant precedent is \textit{Professional Engineers}, where the Court struck down an agreement by a not-for-profit trade association that restricted price competition for the stated purpose of assuring quality.\textsuperscript{74} The trade association, composed of profit-maximizing members, promulgated restrictions on bidding to raise price and increase safety. In that case, the Court’s concern was clearly that, as a result of the agreement, price would be raised to all consumers. The Court suggested that any ethical rule with an overall anticompetitive effect is forbidden.\textsuperscript{75} We believe that there are two features of the MIT case that distinguish it from \textit{Professional Engineers}. First, unlike \textit{Professional Engineers}, there was no alleged output restriction and, as already described, no finding of a price effect. Second, the membership of the Overlap group, unlike the trade association, consisted of not-for-profit firms.

With no effect on total output or average price, the achievement of desirable social goals can, we believe, provide an economic defense of MIT’s conduct without violating the logic of existing antitrust precedents.\textsuperscript{76} We believe that this result is sensible because these 501(c)3 institutions receive that special status in return for the performance of valuable social goals presumably not achievable through competition of profit-maximizing firms.\textsuperscript{77} Indeed, if the achievement of social goals is not a justification under the rule of reason for competing not-for-profits to engage in collective action— and only the more traditional justification of improved efficiency is recog-

\textsuperscript{73}Broadcast Music Inc. et al. v. CBS et al., 441 U.S. 1 (1979). The Supreme Court does not characterize its decision in this way but instead says that the price action was “ancillary” to the production of a new product. Indeed, in other cases, the Supreme Court specifically states that it will not consider efficiency in a “price fixing” case. Such a view simply replaces the question of whether there are unusual efficiencies with the question of what is “price fixing” and what is “ancillary.”

\textsuperscript{74}National Society of Professional Engineers v. U.S., 435 U.S. 679 (1978). The Supreme Court has recognized the distinction between for-profit and not-for-profit firms in applying the antitrust laws. See, e.g., Goldfarb v. Virginia State Bar, 421 U.S. 773, 788–9, n. 17 (1975). It is unclear how much of this distinction has been preserved after \textit{Professional Engineers}. See Justice Blackmun’s concurring opinion in \textit{Professional Engineers}. The dissent by Justices White and Rehnquist in \textit{NCAA} recognizes explicitly the need for schools to be able to defend their conduct by referring to non-economic goals.

\textsuperscript{75}See the concurring opinion of Justice Blackmun in \textit{Professional Engineers}, who does not endorse such a suggestion.

\textsuperscript{76}If there were an output restriction or elevated average price, \textit{Professional Engineers} would condemn the behavior.

\textsuperscript{77}For profit-maximizing firms and perhaps for not-for-profits composed of profit-maximizing members, the achievement of social goals would not seem an appropriate defense for collective price setting because the achievement of social goals is not what those firms are intended to do.
nized—then no collective action of competing not-for-profits is likely possible under the antitrust laws, because economists’ notions of improved efficiency usually will not apply to collective action of not-for-profits engaged in aspects of income redistribution or achievement of social goals.\footnote{For a different view, see Salop and White (1991); Morrison (1992); Carlson and Shepherd (1993); and Shepherd (1995).}

**REFERENCES**


Seaman, B., and H. Tesorio. “How Much Do I Hear for This Student?” *Time*, April 16, 2001, p. 44.


