REVISITING THE REVISIONIST HISTORY OF STANDARD OIL

CHRISTOPHER R. LESLIE*

I. INTRODUCTION

As the contributions to this symposium prove, the Standard Oil case continues to inform many aspects of current antitrust policy. Part of Standard Oil’s significance, however, has been lost over time. The Supreme Court condemned a range of conduct by Standard Oil as anticompetitive, including predatory pricing. Predatory pricing occurs when a firm prices its product below cost in order to drive its competitors from the market. Once enough rivals have exited the market, the predator raises price and earns a stream of monopoly profits.

In the decades following the opinion, the conventional wisdom held that Standard Oil had engaged in predatory pricing. The Standard Oil opinion stood for the proposition that using predatory pricing to acquire or maintain a monopoly violates Section 2 of the Sherman Act. The opinion did not define the contours of predatory pricing, neither explicitly saying that a predatory price is a price below cost nor specifying what measure of cost courts should use. Nevertheless, the opinion laid the groundwork for future federal courts to address these questions and to provide more structure to the predatory pricing cause of action.

This symposium piece proceeds as follows. Part II briefly reviews Standard’s pricing strategy, the government’s case against Standard, and the Supreme Court’s holding that monopolization through predatory pricing violates the Sherman Act. Part III presents the revisionist history of Standard Oil generated by John McGee’s 1958 article, which argued that Standard did not engage in predatory pricing. Part III then explores how

---

* Professor of Law, University of California Irvine School of Law. The author thanks Barak Orbach, Danny Sokol, and Ed Swaine, the symposium organizers, as well as the symposium participants for helpful comments.
McGee’s work has affected antitrust jurisprudence. Part IV challenges McGee’s interpretation of the trial record in *Standard Oil*. Finally, Part V explains that McGee’s work is theoretical, not empirical, and has had undue influence. Part VI concludes.

II. PREDATORY PRICING IN THE STANDARD OIL CASE

In her exposé of Standard Oil, journalist Ida Tarbell reported that, depending on the presence or absence of competitors in a particular market, Standard sold its product at a loss or at a significant profit. While basic economic theory explains that a firm will charge more in a market where it enjoys market power than in a competitive market, Tarbell showed that Standard did not merely charge the competitive price in the latter. Rather, it charged a price below cost in order to drive competitors from the market. The particular form of predatory pricing that Standard employed relied on the fact that Standard operated in a number of local markets. In those markets where Standard had no competitors, the company acted like a monopolist, charging a monopoly price. In those markets where rivals constrained Standard’s monopolistic ambitions, Standard reduced its price dramatically in a bid to drive the rivals from the market.

Tarbell provided evidence from state investigations, showing numerous instances from around the country of Standard engaging in predatory pricing. Standard also studied its competitors to see which dealers had placed orders with them, and it approached those dealers, demanding that they countermand their orders from Standard’s competitors or else Standard would reduce “the price of oil down to such a price that they cannot afford to handle the goods.” When one Pennsylvania-based independent refinery began shipping “Sunlight”-brand oil into South Bend, Washington, Standard’s Portland-based agents threatened South Bend dealers: “We do not purpose to allow another carload to come into that territory unless it comes and is put on the market at one-half its actual cost.” After Standard Oil used predatory pricing to drive a competitor from a regional market, Tarbell explained, “the price of oil has always gone back with a jerk to the point where it was when the cutting began, and not

---

2. *Id.* at 42–62.
3. *Id.* at 43 (quoting testimony of Peter Shull, of Independent Oil Company of Mansfield, Ohio, before the Ohio Investigative Committee).
4. *Id.* at 50. *See also id.* at 47 (“Waters-Pierce Oil Company [Standard’s Texas agents] would cut below cost on” oil (quoting letter from dealer)).
infrequently it has gone higher—the public pays.”

Tarbell’s book proved a sensation. Many Americans had already resented Rockefeller’s control over petroleum. Tarbell provided more structure and substance to these criticisms by demonstrating the pattern of Standard’s abuses in a comprehensive and accessible manner. Daniel Yergin has opined that Tarbell’s tome was “[a]rguably . . . the single most influential book on business ever published in the United States.” In many ways, Tarbell’s work informed the government’s antitrust case against Standard Oil.

In challenging Standard Oil’s conduct as a violation of the Sherman Act, the government argued that Standard Oil engaged in predatory pricing in over one hundred local markets. In its brief before the Supreme Court, the government explained that the predator

puts the price of the commodity handled so low, at the point where his victim is in business, as to make it impossible to meet such price except at a loss, and, to offset what loss he suffers at that point, he raises prices at one or more other points.

The Supreme Court sided with the government and ordered the company dissolved. In finding that Standard Oil had violated the Sherman Act, the Court held that the firm had engaged in illegal predatory pricing, which it described as “local price cutting at the points where necessary to suppress competition.” The dissolution of Standard Oil did not turn solely on the finding of predatory pricing. The Supreme Court’s ruling rested on a litany of anticompetitive conduct. Nevertheless, the Standard Oil opinion held that using predatory pricing to monopolize a market violates the Sherman Act.

Subsequent courts treated Standard Oil as a predatory pricing case.

5. Id. at 59. See also id. (“Several of the letters already quoted in this chapter show the immediate recoil of the market to higher prices with the removal of competition.”).


8. See Reply Brief for the United States, Standard Oil Co. v. United States, 221 U.S. 1 (1911) (No. 398), 1911 WL 19167, at *44.

9. Id. at *46 (quoting State v. Cent. Lumber Co., 123 N.W. 504, 509 (S.D. 1909)).

10. Standard Oil Co. v. United States, 221 U.S. 1, 43 (1911). In the vernacular of the time, “local price cutting” meant pricing below cost. See William S. Stevens, Unfair Competition, 29 Pol. Sci. Q. 282, 284 (1914) (“Local price-cutting has been a frequent and familiar weapon of the trusts. As here used the term means that an organization cuts the prices of its products to a point below the cost of production in one or more of the localities where competition exists.”).

11. For other significant economic issues in the Standard Oil case, see Daniel A. Crane, Were
For example, lower courts cited *Standard Oil* for the proposition that in the quest for monopoly power “price cutting became perhaps the most effective weapon of the larger corporation. These cases are controlled by the second section of the Sherman Anti-Trust law.” Price cutting in this context referred to what today would be characterized as price predation.

Following the Supreme Court’s opinion in *Standard Oil*, Congress, too, continued to show concern about firms pursuing Standard’s strategy of charging a high price in a monopolized market in order to subsidize predation in a competitive market. In 1914, Congress enacted Section 2 of the Clayton Act largely in response to the predatory pricing practices of Standard Oil. Nearly two decades later, Congress enacted Section 3 of the Robinson-Patman Act, which amended Section 2 of the Clayton Act. The legislative intent, however, remained the same: prohibit the predatory pricing practices observed in the *Standard Oil* case. In explaining the history of Section 3, the Court has cited *Standard Oil* for the fact “[t]hat sales below cost without a justifying business reason may come within the proscriptions of the Sherman Act has long been established.” In short, *Standard Oil* was a predatory pricing case. Courts, Congress, and commentators all saw it as such.

---


13. See Biddle Purchasing Co. v. FTC, 96 F.2d 687, 689 (2d Cir. 1938); Nat’l Ass’n of Regulatory Util. Comm’rs v. FCC., 525 F.2d 630, 638 (D.C. Cir. 1975) (citing *Standard Oil*, 221 U.S. at 43 for proposition that “[c]utting prices below marginal cost in order to discourage competition is the most blatant form of predatory behavior and, at least where the price cutter holds significant market power, is subject to attack under Sherman Act § 2”); Outboard Marine Corp. v. Penezet, 461 F.Supp. 384, 400 (D.C. Del. 1978) (citing *Standard Oil*, 221 U.S. at 43 for proposition that “predatory pricing” is “an antitrust violation generally manifested by selling below one’s own cost for the purpose of effectuating long term domination of the market”).


16. Id. at 33 (citing *Standard Oil*, 221 U.S. 1).

III. THE CHICAGO SCHOOL REWRITES ANTITRUST HISTORY

_Standard Oil_ stood as a predatory pricing case for over forty years, until the emergence of the Chicago School of Law and Economics challenged the rationality of the practice. This, in turn, led John McGee to question the factual accuracy of the _Standard Oil_ opinion. McGee revisited the trial record and proclaimed,

I can not find a single instance in which Standard used predatory price cutting to force a rival refiner to sell out, to reduce asset values for purchase, or to drive a competitor out of business. I do not believe that Standard even tried to do it; if it tried, it did not work.18

McGee argued that predatory pricing was irrational, and he posited an alternative explanation: Standard acquired its competitors during an era of weak merger law.19

McGee’s indictment of the Supreme Court’s predatory pricing holding in _Standard Oil_ gained serious traction. Almost thirty years after the publication of McGee’s original article, the Supreme Court considered the issue of predatory pricing in _Matsushita Electric Industrial Co. v. Zenith Radio Corp._20 The Court held that the defendants accused of participating in a predatory pricing conspiracy were entitled to summary judgment because predatory pricing—by a single dominant firm, let alone pursuant to a conspiracy—is inherently irrational. The _Matsushita_ Court cited McGee, among others, for the proposition that “there is a consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful.”21

In the aftermath of _Matsushita_, antitrust plaintiffs generally lost predatory pricing claims during the pre-trial motions phase of litigation, as lower courts invoked the _Matsushita_ Court’s assertion that predatory pricing does not occur because it is irrational.22 The influence of McGee’s

19. _Id._
21. _Id._ at 589 (citations omitted).
article is seen in the Third Circuit’s *Advocacy, Inc. v. Philadelphia Newspapers*, *Inc.* opinion rejecting a predatory pricing claim:

While it once was believed widely that turn-of-the-century “robber barons” commonly practiced predatory pricing to eliminate competitors, research over the last few decades has exposed this belief as a myth. For instance, a seminal article demonstrated that John D. Rockefeller invariably used mergers, and not predatory pricing, to lessen competition in the oil industry.²³

The *Advocacy* opinion noted that the *Matsushita* Court “has cited approvingly the empirical work of McGee and others.”²⁴

It is surprising that the *Matsushita* Court and later courts used *Standard Oil*—through McGee—to assert that predatory pricing is not tried and does not succeed given that the Supreme Court’s own precedent in the *Standard Oil* case showed the opposite. The Supreme Court in *Matsushita* adopted the revisionist history of *Standard Oil* instead of the Supreme Court’s own opinion in the case. In essence, the Supreme Court in *Matsushita* followed McGee and not *Standard Oil*.²⁵ The Supreme Court never explicitly repudiated its predatory pricing holding from *Standard Oil*, but such repudiation is the thrust of the *Matsushita* opinion and its invocation of McGee.²⁶

---

²⁴ *Id.* at 1196 n.5 (citing Matsushita, 475 U.S. at 588–90). *See also* Richard J. Pierce, Jr., *Is Post-Chicago Economics Ready for the Courtroom? A Response to Professor Brennan*, 69 GEO. WASH. L. REV. 1103, 1117 (2001) (“McGee’s analysis was instrumental in persuading the Supreme Court to issue two opinions in the past fifteen years in which it has expressed an extremely skeptical attitude toward predatory pricing complaints.” (footnote omitted)).
²⁵ James A. Dalton & Louis Esposito, *Predatory Price Cutting and Standard Oil: A Re-Examination of the Trial Record*, 22 RES. L. & ECON. 155, 156 (2007) (“This single publication appears to serve as a foundation of the U.S. Supreme Court’s position on the issue of predatory pricing, as well as the basis for the assertion by many economists that predatory pricing is irrational and rarely occurs.”).
²⁶ Before *Matsushita*, and after McGee, many courts continued to cite the *Standard Oil* case for the proposition that predatory pricing by a monopolist can violate Section 2. *See, e.g.*, Janich Bros. v. American Distilling Co., 570 F.2d 848, 855 (9th Cir. 1977) (“[P]redatory pricing” may be a means of obtaining or maintaining a monopoly position in violation of section 2 of the Sherman Act . . . .” (citing United States v. Am. Tobacco Co., 221 U.S. 106, 160, 182 (1911); Standard Oil Co. v. United States, 221 U.S. 1, 43 (1911)); J.H. Westerbeke Corp. v. Onan Corp., 580 F. Supp. 1173, 1188 (D.C. Mass. 1984) (“Conduct unnecessary for the competitive process, by comparison, includes merging to monopoly, long term exclusive supply contracts, exploitation of purchasing leverage, predatory pricing, etc.” (citing Standard Oil, 221 U.S. 1)). That is less common after *Matsushita*, though some state courts continue to cite Standard Oil’s conduct as an example of
In many ways, McGee’s account of Standard’s pricing is now considered the conventional wisdom. Many economists accept the Chicago School’s premise that predatory pricing does not happen. The source of this perspective is McGee’s 1958 article:

Despite the widespread belief that Rockefeller maintained his position by selling oil below cost in order to drive competitors out of business, a careful study of the record of the antitrust case that led to the breaking up of Standard Oil found no evidence that he had ever done so. The story appears to be the historian’s equivalent of an urban myth.27

Commentators routinely accept without question McGee’s assertion that Standard Oil did not engage in price predation.28

IV. A CASE STUDY IN OVERCLAIMING

John McGee was wildly successful in spinning an alternative narrative of Standard Oil’s pricing strategy. McGee’s article is an important case study that helped establish the Chicago School of Law and Economics. Unfortunately, it is also a case study in overclaiming. The article stands for three related propositions. First, Standard Oil did not engage in predatory pricing. Second, firms do not attempt predatory pricing. Third, predatory pricing is inherently unprofitable. None of these conclusions flows from McGee’s investigation into the trial record of the Standard Oil case.

A. CLAIM: STANDARD OIL DID NOT PRICE BELOW COST

From his review of the trial record, McGee concluded that Standard did not engage in predatory pricing. His conclusion on this point has been accepted as historical fact in many circles.29 Scholars continue to cite McGee for the proposition Standard “never actually used” predatory pricing.30

This claim, however, is problematic. McGee examined the trial record predatory pricing. See, e.g., Caller-Times Pub. Co. v. Triad Commc’ns, Inc., 826 S.W.2d 576, 598 (Tex. 1992).


and found no evidence of predatory pricing and concluded, therefore, that Standard did not engage in price predation. This is logically flawed because McGee’s inability to find evidence to prove the affirmative case does not prove the negative case. The only way to prove that Standard did not engage in below-cost pricing would be examine Standard’s actual costs and prices and show that Standard’s price exceeded its costs. McGee never did this analysis. Instead, he jumped to concrete conclusions based on ambiguous evidence, as the following section explains.

1. Hasty Conclusions

McGee was too quick to conclude that no evidence of predatory pricing existed and that Standard must not have engaged in price predation. Three examples illustrate this point. First, the government presented evidence of Standard’s local price cutting in Georgia. McGee’s presentation of that case reads in its entirety:

H.C. Boardman worked for Standard in Augusta, Georgia from 1886—1904, and testified that during that period Standard cut prices to drive out competitors. Boardman said that one marketer, J. T. Thornhill, “finally abandoned business”; and that other major integrated competitors of Standard withdrew from the territory. These allegations were controverted. Even Boardman admitted that Standard cut prices only “as [a] last resort.”

This constitutes McGee’s complete discussion of the incident. Maybe Standard engaged in predatory pricing in Augusta, and maybe it did not. But McGee’s recitation of the facts provides few insights and no proof. The fact that the allegations were controverted does not mean that Standard’s version of the facts was true. Similarly, the belief that Standard only reduced prices “as a last resort” does not disprove the predatory pricing hypothesis. If, “as a last resort,” Standard charged a price below cost in order to drive competitors from the market, then Standard engaged in predatory pricing. Standard might have preferred other strategies, but using predatory pricing “as a last resort” would still constitute using predatory pricing.

Second, the trial record included evidence that Standard may have priced below cost in Paris, Illinois. McGee disagreed with that assessment: “Maywood Maxon, once a Standard employee, testified that in 1899 an unnamed independent oil dealer at Paris, Illinois was forced out of business

after a year of rebating and price war. Collings [a current Standard employee] denied the whole affair." These two sentences are McGee’s entire discussion and analysis of the Paris affair. However, the fact that a current Standard employee denied the claims of a former Standard employee does not automatically disprove allegations of wrongdoing. McGee has proven nothing except that a government witness and a Standard witness disagreed with each other. Whether or not Standard engaged in predatory pricing in Paris, Illinois, McGee’s two sentences do not disprove the claim that it did.

Third, the trial record contained evidence suggesting that Standard engaged in predatory pricing in Youngstown. Longer than his Paris exposition, McGee’s discussion of this instance reads as follows:

C.M. Lines testified that he ran a string of bogus peddling wagons for Standard between 1900 and 1903. He said he thought that these concerns lost money. George Lane, who worked for Lines, said that in Youngstown Lines made a “drive” on another peddler’s business, and drove everybody out of business except the man he was after. On the other hand, Vahey, the peddler who was alleged to be the object of Lines’ warfare, testified that he did a land office business when the Standard group attacked him. Far from going out of business, he apparently flourished.

This is the whole of McGee’s analysis of predatory pricing in Youngstown. It is stunning that McGee believed his recitation of the facts proved that Standard did not engage in predatory pricing. The key fact is that the Standard employee in charge of the bogus firms testified that he believed Standard was pricing below cost in order to drive its competitors from the market. That is reasonably persuasive evidence of predatory pricing. McGee ignored the significance of this evidence and instead focuses on the detail that one competitor survived. The fact that the target of the alleged predation endured in no way proves that Standard did not charge a price below cost.

McGee seemed to exhibit confirmation bias. When facts were “controverted,” he took that as proof that his interpretation of events was...
correct. McGee ignored evidence that was inconsistent with his theory that predatory pricing does not happen. For example, many of the government witnesses were former Standard employees who testified about Standard’s predatory pricing. McGee discounted their testimony without actually refuting it. McGee notes that Mr. Castle, who worked for Standard for fourteen years, “told several other stories about Standard’s predatory price cutting during the period in which he worked for them. Nevertheless, I think it is significant that when he left Standard in 1900 he was clearly unafraid: he immediately started a rival oil marketing firm.” The fact that he eventually opened his own oil marketing firm does not disprove his testimony about price predation by Standard. Castle may have had reason to know that Standard would not price predate in the particular market that he was entering, or it may have been a market in which Standard allowed small competitors to have a modest share of the market, which the monopolist sometimes did. And as a fourteen-year-veteran of Standard, Castle would likely have some insights into Standard’s market practices.

In discussing some cases, McGee incorrectly placed great importance on which firm started a given price war. McGee strongly implied that if Standard did not start a particular price war, then Standard did not engage in predatory pricing if a competitor exited the market as a result of that pricing. For example, when examining whether Standard used predatory pricing to drive the Red C Oil Manufacturing Company (“Red C”) from the market, McGee argued that Red C started the price war against Standard. From this, McGee asserted that Standard did not engage in predatory pricing. But that conclusion does not follow. Red C could have entered the

37. McGee, supra note 18, at 153.
38. In some cases, McGee discounted evidence of predatory pricing as hearsay. See, e.g., id. at 145. While McGee may have been appropriately skeptical about hearsay, he seemed to believe that characterizing an account as hearsay necessarily disproves its validity. A secondhand account of predatory pricing may be accurate. The proper way to disprove such an account is to present the data that shows Standard charged a price above cost.
39. Id. at 148 (footnote omitted).
40. U.S. BUREAU OF CORPS., REPORT OF THE COMMISSIONER OF CORPORATIONS ON THE PETROLEUM INDUSTRY, Pt. II, Prices & Profits 443 (1907) [hereinafter U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY] (“In some cases competitors substantially work in harmony with the Standard interests, while in other cases the Standard permits them to live, provided they keep their sales within what it considers reasonable limits.”).
41. See, e.g., McGee, supra note 18, at 155 (“Todd said Standard started it, but acknowledged that Corrplanter had started a price-cutting campaign around Boston.”); id. at 162 (“Hisgen initiated price cuts against Standard.”).
42. Id. at 147 (“Emery’s sole allegation of local price cutting concerns his Philadelphia marketing business, which he ultimately leased to Pure Oil Co. He admits he did not know who really started the Philadelphia price war.”).
market in response to Standard’s monopoly prices, charging a competitive
price. Standard could have responded by charging a price below cost in
order both to drive Red C from the market and to send a signal to any other
would-be rivals that entry would prove unprofitable. McGee never provides any evidence about either Standard’s price or cost in
the market. In sum, it is irrelevant who started a particular price war or
whether Standard might have pursued predatory pricing in response to a
rival’s price cut. What matters is whether Standard charged a price below
cost during the price war in order to drive its competitor from the market.

McGee also made false extrapolations, by assuming that predatory
pricing is mutually exclusive with other activities, such as cartelization. For
example, Standard and Complanter were rivals in the Boston market. A
fierce price war between the firms ensued, during which Standard was
alleged to have engaged in predatory pricing. McGee noted that although
“Mr. Todd, Complanter’s Manager, testified that Standard had threatened
Complanter with extinction, . . . it never materialized.” Instead, the price
war between Standard and Complanter in Boston was settled with a truce
in the form of a market-sharing agreement. Within a few days of the
agreement, the price of oil rose from 6.5 to 10 cents. McGee concluded
from this that Standard must not have engaged in predatory pricing. McGee
incorrectly treated cartelization and predatory pricing as mutually exclusive
hypotheses. McGee was apparently unaware that dominant firms have
historically used predatory pricing to rein in “rogue” firms so that they
behave more cooperatively. For example, during the early twentieth
century, the bromine cartel used explicit threats of price wars to force other
bromine firms to cooperate. Also, firms in cartels will sometimes use

43. In discussing the Red C situation, McGee credits Standard’s testimony while discounting
opposing testimony. Id. at 154 (discounting testimony by Standard competitor that Standard’s bogus
companies “sold regardless of price, in order to secure our business”). This can be seen as an example
of confirmation bias.

44. McGee, supra note 18, at 155.
45. Id. at 155.
46. Id.
47. Similarly, there was evidence of predatory pricing against the Rocky Mountain Oil
Company. Id. at 149. McGee hypothesized that Rocky Mountain had been a mechanism for two
refiners, the Florence Oil and Refinery Company and the United Oil Company, to cheat on a cartel
agreement with Standard. Id. at 150. McGee seems to think that his cartel hypothesis disproves the
predatory pricing hypothesis. Id. at 151. This cartel argument fails to recognize that cartel ringleaders
sometimes use predatory pricing as a mechanism to discipline defectors and to stabilize a cartel.

48. Malcolm R. Burns, Outside Intervention in Monopolistic Price Warfare: the Case of the
“Plug War” and the Union Tobacco Company, 56 BUS. HIST. REV. 33, 41–44 (1982).
49. Margaret C. Levenstein, Do Price Wars Facilitate Collusion? A Study of the Bromine Cartel
Before World War I, 33 EXPLORATIONS ECON. HIST. 107, 108 (1996) (“The internal correspondence of
price wars to punish defectors in order to stabilize the cartel.\textsuperscript{50}

Most importantly for our purposes, evidence indicates that Standard pursued this very strategy. Daniel Yergin explained that

Rockefeller and his colleagues had often instituted a ‘good sweating’ against their competitors by flooding the market and cutting the price. Competitors were forced to make a truce according to the rules of Standard Oil, or, lacking the staying power of Standard Oil, they would be driven out of business or taken over.\textsuperscript{51}

The U.S. Bureau of Corporations’s (“the Bureau’s”) 1907 report explained that Standard “undertook a price-cutting campaign to render [new competitors] business unprofitable and either to destroy them or to force them into an alliance on conditions favorable to the Standard’s domination.”\textsuperscript{52} In particular, Standard employed this tactic against Cornplanter.\textsuperscript{53} The fact that Cornplanter survived and was profitable does not mean that Standard Oil never engaged in price predation directed against its rival. In short, the Cornplanter episode potentially may illustrate Standard using predatory pricing as a tool to negotiate a profitable, albeit illegal, cartel relationship.

None of this establishes that Standard did, in fact, employ predatory pricing against Cornplanter. Rather, it shows that McGee failed to prove his hypothesis because the mere existence of a cartel does not negate the possibility of predatory pricing.

In sum, given the evidence and arguments that McGee presents, the most that his study could show is that there was insufficient evidence to support a finding of antitrust liability based on predatory pricing in individual instances he examined. But that is a far cry from proving that Standard never engaged in predatory pricing.
2. Countervailing Evidence of Standard’s Price Predation

While McGee’s work may raise questions about whether the trial evidence sufficed to establish predatory pricing, more recent research suggests that Standard did price below cost. Economists James Dalton and Louis Esposito reexamined the trial record from Standard Oil and concluded that “the Record contains considerable evidence of predatory pricing. Simply stated, the Record does not support McGee’s conclusion that Standard Oil did not engage in predatory pricing.” Their research reopens the question of whether Standard Oil represents an example of predatory pricing or an example of an antitrust false positive.

The first hurdle in determining whether Standard engaged in predatory pricing is definitional. Despite the fact that predatory pricing has been an antitrust violation for a century, antitrust jurisprudence still lacks a uniform definition of below-cost pricing. The Supreme Court has consistently avoided the issue. As of the mid-1970s, the Areeda-Turner test, which uses average variable cost as a proxy for marginal cost, has been the starting point for most discussions about measuring cost, but it is not the final word. In his 1958 article, however, McGee never defined predatory pricing. He proffered no measure of cost, and he never attempted to show that Standard’s prices always exceeded a defined measure of cost.

In their response to McGee’s article, Dalton and Esposito employed a broad definition of predatory pricing. Their characterization included “lower[ing] price in the short run below the price of the entrant . . . [until] the price cut . . . eliminated a rival . . . and then increas[ing] the price.” This definition of predatory pricing is problematic because it also captures monopolization by an efficient firm that never charges a price below its cost. The monopolist in this scenario has not engaged in predatory conduct to acquire its monopoly, and antitrust law does not condemn monopoly

54. See, e.g., id. at 171–83 (describing Standard’s pricing below cost in a number of specific instances).
55. Id. at 158.
56. See Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222 n.1 (1993) (“Because the parties in this case agree that the relevant measure of cost is average variable cost, however, we again decline to resolve the conflict among the lower courts over the appropriate measure of cost.” (citations omitted)).
58. McGahee v. N. Propane Gas Co., 858 F.2d 1487, 1495 (11th Cir. 1988) (describing the Areeda-Turner test as like the Venus de Milo: “much admired and often discussed, but rarely embraced” (citations omitted)).
59. Dalton & Esposito, supra note 25, at 164.
pricing by a legal monopolist.\textsuperscript{60}

Despite these definitional deficiencies, Dalton and Esposito identified several instances in which Standard charged a price below cost.\textsuperscript{61} For example, in order to eliminate a major competitor in the South, Red C, “Standard reduced its price below its variable costs.”\textsuperscript{62} Dalton and Esposito also showed that testimony from Standard’s own managers and salesmen demonstrated some instances of Standard pricing below variable cost in the Midwest.\textsuperscript{63} Similarly, the general manager in charge of setting Standard’s prices in Minnesota noted that Standard lost money on sales in Minneapolis in order to defeat its competitors there.\textsuperscript{64} Standard’s sales agent for the state of New York also “testified that Standard priced below its own costs ‘if we were forced to.’”\textsuperscript{65} Moreover, Dalton and Esposito presented evidence of Standard pricing below cost in Boston\textsuperscript{66} and Colorado.\textsuperscript{67}

In particular, Dalton and Esposito provided a different interpretation of Standard’s relationship with Cornplanter. As noted above, McGee asserted that Standard merely responded to Cornplanter’s low prices. Dalton and Esposito, though, concluded:

Our analysis of the evidence in the Record indicates that Standard did engage in predatory pricing against Cornplanter in Minnesota, Troy, and Boston. Standard’s executive in charge of sales testified that Standard priced below its costs when it encountered Cornplanter in Minnesota. Standard’s agent in Troy testified that Standard used selective pricing below its costs after Cornplanter tried to enter the Troy market. Standard


\textsuperscript{61} See \textit{Dalton} \& \textit{Esposito}, supra note 25, at 171–83 (describing several specific instances in which Standard charged a price below cost).

\textsuperscript{62} \textit{Id.} at 171.

\textsuperscript{63} \textit{Id.} at 174 (discussing the testimony of Standard managers and salesmen which showed Standard pricing below variable cost in Missouri and eastern Kansas). Some data also provide implicit evidence of price below cost. For example, in the Midwest, “Standard’s manager at St. Joe instructed G. Kuenster to get [Standard competitor] SS&T’s business by reducing price, and on one occasion he reduced price from 12 cents a gallon to 5 cents a gallon when the cost of freight alone was 2 cents a gallon.” \textit{Id.} at 175 (citation omitted).

\textsuperscript{64} \textit{Id.} at 180. See also \textit{id.} (“Crenshaw broadened the geographic scope of predatory pricing to the state of Minnesota when he acknowledged that Standard had sold oil at a loss in the state of Minnesota for most of 1903 and 1904.” (citation omitted)).

\textsuperscript{65} \textit{Id.} at 181 (citation omitted).

\textsuperscript{66} \textit{See id.} at 182.

\textsuperscript{67} \textit{See id.} at 184.
disciplined Cornplanter when Standard priced below its costs when Cornplanter entered Boston-area markets, causing Cornplanter to yield significant sales to Standard after which Standard raised the price. Once again, Standard’s pricing behavior in the Cornplanter case can best be understood using a simple model of selective price cutting aimed at disciplining or eliminating a rival.68

Examining the trial record, Dalton and Esposito concluded that in order to regain its customers from Cornplanter, Standard charged a price “below its own variable costs.”69

In addition to Dalton and Esposito’s reexamination of the trial record, other sources provide evidence of Standard’s predatory pricing that goes beyond the trial record. For example, Ida Tarbell’s investigation found evidence of price predation.70 When Standard’s powerful director H.H. Rogers heard that McClure’s magazine was planning an extensive report on Standard, he asked his good friend Mark Twain to approach McClure’s publisher—also a friend of Twain’s.71 Twain provided the necessary introductions between Rogers and Tarbell, who was writing the report.72 Daniel Yergin noted that for two years, Tarbell “met regularly with Rogers.... She was sometimes even granted the use of a desk [at Standard’s offices] at 26 Broadway. She would bring case histories to Rogers, and he would provide documents, figures, justifications, explanations, interpretations. Rogers was surprisingly candid with Tarbell.”73 Thus, Tarbell is a credible source on the issue of price predation because she had substantial access to Standard’s records. Tarbell reported numerous instances of Standard charging a price below its cost.74

On the heels of Tarbell’s exposé, the Bureau published its own multi-volume study of the American petroleum industry, with special emphasis on Standard’s pricing strategy.75 The study controlled for date, grade of product, method of delivery, and accuracy of data.76 With hundreds of pages of data, the government report demonstrated how Standard charged monopoly prices in markets where it faced no meaningful competition and engaged in price wars against rivals to drive them from competitive

68. Id. at 183.
69. Id. at 181.
70. TARBELL, supra note 1, at 1, 31–63.
71. See YERGIN, supra note 7, at 103.
72. See id.
73. Id. at 104.
74. See TARBELL, supra note 1, at 1.
75. U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 70, 523–67.
76. Id. at 491–92.
markets. The study noted that “[w]hen necessary, [Standard] puts the prices in a given locality down even below its own cost of manufacture, transportation, and delivery.” For example, the study presented data to show that in 1896, Standard’s arm in St. Louis, the Waters Pierce Oil Company, launched “a bitter attack upon certain new independent concerns” and reduced the price so low that the previous 2.4 cents per gallon profit was converted into a 1.3 cents per gallon loss. This would appear to be a classic case of predatory pricing. Surprisingly, McGee never mentioned the Bureau’s study.

More recently, in his biography of John D. Rockefeller, Ron Chernow reported much evidence of Standard’s predatory pricing. Despite assertions that Standard only rarely priced below cost, Chernow concluded that “Rockefeller’s files are so rife with references to this practice” of predatory pricing that the record suggests widespread price predation by Standard.

Taken together, these multiple sources suggest two conclusions. First, McGee was too quick to assert that the trial record lacked any evidence of predatory pricing. Second, evidence beyond the trial record indicates that Standard engaged in predatory pricing and thus it is inappropriate to conclude that Standard did not do so based solely on a reading of the trial record.

B. CLAIM: PREDATORY PRICING DOES NOT HAPPEN

From his study of the Standard Oil case, McGee suggested that predatory pricing is rare if it occurs at all. Scholars invoke McGee for the propositions that predatory pricing is “seldom used,” “extremely rare,” and “does not exist.” Courts, including in the Matsushita opinion, have

77. Id. at 438.
78. Id. at 438. See also id. at 438. (“Sometimes, however, the prices to retail dealers have also been cut far below the Standard’s own cost.”).
79. Id. at 441.
80. See RON CHERNOW, TITAN: THE LIFE OF JOHN D. ROCKEFELLER, Sr. 258 (1998) (quoting 1886 letter from Standard executive to J.D. Rockefeller, suggesting that Standard sold a quarter of his oil at cost or below).
81. Id.
82. See McGee, supra note 18, at 157.
85. Yeomin Yoon, The Korean Chip Dumping Controversy: Are They Accused of Violating an
employed McGee’s article about *Standard Oil* to assert the non-existence of predatory pricing. McGee’s work, however, simply does not prove such a sweeping proposition. If Standard actually engaged in predatory pricing, then that shows that predatory pricing is something that dominant firms attempt and can use to successfully monopolize a market. If, in contrast, Standard did not engage in predatory pricing, that does not prove the broad thesis that firms do not engage in predatory pricing or that predatory pricing is not a mechanism to monopolize a market. At most, the revisionist history could support the hypothesis that predatory pricing claims are susceptible to false positives.

In addition to this logical fallacy, McGee’s theoretical arguments—presented in the guise of an empirical case study—86—are also suspect. Led by McGee, scholars have made several arguments to support their position that predatory pricing is inherently irrational and, therefore, must not occur. In particular, McGee advanced three arguments: (1) predatory pricing should not occur because the targets of predation can re-enter the market after prices rise again; (2) firms do not engage in predatory pricing because the predator will have to sustain losses several times greater than the losses imposed on its rivals; and (3) Standard would not have engaged in predation because mergers were cheaper.87

Far from proving the irrationality of predatory pricing, an examination of Standard’s practices undermines McGee’s theoretical arguments.

1. Re-Entry and New Entry

McGee argued that predatory pricing cannot succeed because even if Standard successfully drove a rival from the market, that rival would simply re-enter the market once Standard began charging a supracompetitive price.88 McGee speculated that “at some stage of the game the competitors may simply shut down operations temporarily, letting the monopolist take all the business (and all the losses), then simply resume operations when he raises prices again.”89 McGee, in turn, influenced Robert Bork, who also asserted that the target of predation can stop operation temporarily, paying its fixed costs and waiting until the price

---

86. See infra notes 128–46 and accompanying text (explaining why McGee’s work is theoretical, not empirical).

87. See McGee, supra note 18, at 138–43.

88. Id. at 140.

rises again, and then re-enter the market. Bork argued that predatory pricing cannot succeed, in part, because “ease of entry will be symmetrical with ease of exit.”

The facts of Standard Oil undermine McGee’s and Bork’s theoretical arguments. Both assert that targets of price predation will re-enter the market after the predator increases the price. That assertion is a theory that is subject to empirical proof. In his study of Standard, McGee opines, if price does not cover average variable costs, the operation is suspended. This will often leave the plant wholly intact. . . . [P]hysical capacity remains, and will be brought back into play by some opportunist once the monopolizer raises prices to enjoy the fruits of the battle he has spent so much in winning.

Despite his assertions that predation “often” leaves a competitor’s capacity intact and that rivals “will” re-enter the market, McGee provides no empirical evidence of this actually happening. Standard’s history, by contrast, shows examples of successful predation followed by no re-entry. Standard successfully signaled its rivals that if they re-entered the market in response to Standard’s post-predation monopoly pricing, Standard would slash prices again until the entrant was driven from the market at a loss. For example, when the Pure Oil Company entered the New York market, Standard reduced its price from 9.5 cents to 5.5 cents per gallon.

Except for this example, the Pure Oil Company faced “a similar experience . . . when it entered the Philadelphia market[,] which was] merely typical of what has occurred over and over again when an independent refiner has entered a market in competition with the Standard Oil Company.” Because Standard could

91. Id. at 149. See also id. at 153 (“The easier it is to drive a firm from the market, the easier it will be for that firm or another to reenter once the predator begins to collect his monopoly profits. Conversely, the more difficult entry is, the more difficult and expensive it will be to drive a rival out.”).
92. See McGee, supra note 18, at 140; BORK, supra note 90, at 151.
93. McGee, supra note 18, at 140–41.
94. Neither does Bork.
95. See Dalton & Esposito, supra note 25, at 170 (“Standard successfully signaled Red C that immediate re-entry was not a feasible strategy.”).
96. See U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 668 (“For the independent to attempt to establish himself in another town or section merely because prices are high there would involve additional expense, only to invite another disastrous conflict.”).
98. Id.
easily render re-entry unprofitable, Standard could simultaneously charge a monopoly price while deterring re-entry.  

Similarly, despite Bork’s unsubstantiated assertion to the contrary, ease of entry is likely to be asymmetrical with ease of exit. It is far easier to sell one’s assets and to exit a market than to create capacity and enter a market. In particular, it is simpler to sell a refinery than to build one. The history of Standard Oil shows this lack of either re-entry by vanquished firms or new entry by would-be competitors. For example, Dalton and Esposito discuss how one Standard subsidiary used price predation to drive a rival, the Rocky Mountain Oil Company, from the market. After Rocky Mountain’s exit, Standard again charged the monopoly price. McGee made much of the fact that two new refineries—Spring Valley and Boulder—entered the market, and he asserted that this entry “suggests either that memories are short; or that those who were familiar with the episode did not regard the Rocky Mountain incident as a case of predatory price cutting.” But McGee glosses over the fact that this new entry occurred eleven years after Standard’s successful predation. The target exited the market and re-entry by the target did not occur. New entrants did not arrive until eleven years later. Exit was swift and easy; entry was considerably harder, or at least more time consuming. And in the ensuing decade, Standard profited handsomely.

In short, the targets of Standard’s predation did not temporarily suspend operations and re-enter once Standard raised the price. Furthermore, Standard’s monopoly pricing did not induce rapid entry that would render price predation not cost beneficial.

2. Disproportionate Losses

McGee argued that Standard would not have charged a price below cost because, even if it had greater financial reserves than its smaller

---

99. U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at xli (“Competitors, while theoretically able, in view of these high prices, to reenter such markets, were practically prevented from doing so, owing to the fact that the Standard, by reason of its advantage in rail rates, could, and would, at any time when necessary, again depress prices to a point where such competitors would again be forced to conduct their business at a loss.”).

100. Id. at 185–86 (“In fact, the market price returned to 15 cents per gallon after Rocky Mountain exited the market, the exact same price that existed prior to Rocky Mountain’s entry into the market.”).

101. McGee, supra note 18, at 151.

102. See Dalton & Esposito, supra note 25, at 183–87.

103. See Dalton & Esposito, supra note 25, at 186 (“With respect to the question of entry, it is true, as McGee asserts, that two new independent refineries were built in the region. However, those refineries, in Spring Valley and Boulder, were built in 1905–1906, 11 years after the price war that eliminated Rocky Mountain Oil.” (citation omitted)).
competitors, it would suffer disproportionately higher losses.\textsuperscript{104} He asserted that the predator would be
in the position of selling more—and therefore losing more—than his competitors. Standard’s market share was often 75 per cent or more. In the 75 per cent case the monopolizer would sell three times as much as all competitors taken together, and, on the assumption of equal unit costs, would lose roughly three times as much as all of them taken together.\textsuperscript{105}

Later economists signed on to McGee’s reasoning and made the numbers even more stark: “If I am selling 90 percent of all petroleum, a particular competitor is selling 1 percent, and we both sell at the same price and have the same average cost, I lose $90 for every $1 he loses.”\textsuperscript{106} Bork embraced McGee’s assertion and popularized it even further, declaring that “price cutting, though conventionally viewed with grave suspicion, does not provide a likely means of predation because it requires the predator to bear losses that are much larger, both absolutely and proportionally, than those inflicted on the intended victim.”\textsuperscript{107}

The revisionist history assumes that the predator reduces the price below cost for all of its sales.\textsuperscript{108} Yet Standard implemented its pricing strategy so as to not reduce price across its entire output. First, Standard identified those buyers who were using a particular seller that Standard had targeted for elimination. Standard engaged in substantial industrial espionage to collect this information. Chernow explained

Rockefeller fostered an extensive intelligence network, assembling thick card catalogs with monthly reports from field agents, showing every barrel of oil sold by independent marketers in their territory. From 26 Broadway, the titan could peer into the most distant corners of his realm. Standard Oil spies collected much of this information from grocers and railway-freight agents. One Cleveland refiner discovered that Standard paid his bookkeeper twenty-five dollars a month to provide information on his shipments.\textsuperscript{109}

\begin{itemize}
\item \textsuperscript{104} See McGee, supra note 18, at 140.
\item \textsuperscript{105} Id.
\item \textsuperscript{106} FRIEDMAN, supra note 27, at 249.
\item \textsuperscript{107} BORK, supra note 90, at 148.
\item \textsuperscript{108} See id. at 151.
\item \textsuperscript{109} CHERNOW, supra note 74, at 256. See also U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 58 (“Again, the Standard maintains an elaborate system of espionage on the business of independent concerns, in particular securing almost complete reports of their receipts and shipments of oil, by bribing railroad employees. This practice enables the Standard to direct its
Standard maintained databases so that it knew which particular customers it should entice with below-cost prices. According to the testimony from Standard’s own agents, Standard offered lower prices or rebates only to those buyers making purchases from independent refiners, not to Standard’s own customers.

Standard, however, did not simply reduce the price to non-Standard customers, perhaps because this could result in resentment from its current customers. Instead, Standard created a series of fake oil companies that appeared to be independent refiners. Standard created these new companies as fighting brands; each was “merely a Standard jobbing house which makes no oil, and which conceals its real identity under a misleading name.” These bogus companies would sell oil to customers of Standard’s competitors at prices below cost. Dalton and Esposito describe how Standard used shell firms to deploy its pricing strategy in the South:

Standard Oil used as many as seven bogus companies during its competition with Red C to implement this type of selective price cutting: Eureka, Eagle, Southern Oil Company of Richmond, Dixie Oil Works, Davidson Oil Company, Paragon Oil, and Home Safety Oil Delivery. Generally speaking, a bogus wagon was owned by Standard Oil but was perceived by customers as representing a marketing company independent of Standard. The purpose of a bogus wagon was to undercut the prices to customers of Standard’s rivals while allowing Standard to sell at higher prices to its own customers in the same geographic market.

This strategy allowed Standard to engage in price discrimination within a single market, charging higher prices to customers who purchased...
Standard-brand oil and lower prices to its rivals’ customers.115

After Standard succeeded in driving its rival from the market, the bogus company would also depart, leaving buyers with but one option: purchase oil from Standard. McGee’s failure to consider Standard’s ability to minimize losses associated with predation is surprising given that it was well known that Standard Oil created bogus companies to engage in targeted predation. Ida Tarbell explained Standard’s entire operation for targeted predation:

The marketing department of the Standard Oil Company is organised to cover the entire country, and aims to sell all the oil sold in each of its divisions. To forestall or meet competition it has organised an elaborate secret service for locating the quantity, quality, and selling price of independent shipments. Having located an order for independent oil with a dealer, it persuades him, if possible, to countermand the order. If this is impossible, it threatens “predatory competition,” that is, to sell at cost or less, until the rival is worn out. If the dealer still is obstinate, it institutes an “Oil War.” In late years the cutting and the “Oil Wars” are often intrusted to so-called “bogus” companies, who retire when the real independent is put out of the way.116

For McGee, Bork, and others to insist that a monopolist attempting price predation must incur losses over all of its sales is empirically wrong. McGee noted the existence of the bogus companies.117 But he failed to appreciate how their existence undermines his argument about disproportionate losses. In particular, McGee never explained why Standard’s bogus firms would sell at a loss118 or why the bogus companies would cease to exist once Standard had driven its rival from the market, as Tarbell described. In short, McGee did not understand how Standard used targeted price cuts by shell companies to drive competitors from the market and then raised price after its rivals exited.119

115. Id. at 175 (“E. M. Wilhoit had been an agent for Standard in Kansas City. He used the information from the database on competitors to reduce prices to customers of competing wholesalers while charging the higher price to Standard’s customers.”); U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 668–69 (explaining that by using bogus firms, Standard “can cut prices to the particular customers of independents without being under the necessity of reducing the profits on its entire volume of business in the locality by a general cutting of prices”).

116. TARBELL, supra note 1, at 60–61.

117. McGee, supra note 18, at 158.

118. See U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 438 (“Instances have been known where the Standard has virtually given oil away to destroy the business of independent concerns. These extraordinary cuts are perhaps most often made in the form of sales to consumers by bogus-independent concerns.”).

119. See, e.g., Dalton & Esposito, supra note 25, at 175 (“Waters-Pierce [a Standard subsidiary]
In sum, Standard price discriminated both across geographic markets and within geographic markets. Standard’s exploits show how even within a single geographic market, a monopolist can target a rival’s customers through fighting brands, while not charging a predatory price to its current customers at a loss.

3. Standard Oil and Mergers

McGee argued that instead of using predatory pricing, Standard merged its way to market dominance by acquiring independent refiners. He believed that merger to monopoly was far more cost effective than predation. McGee asserted that compared to predatory pricing, “[a] simpler technique did exist, and Standard used it. Unless there are legal restraints, anyone can monopolize an industry through mergers and acquisitions, paying for the acquisitions by permitting participation of the former owners in the expected monopoly gains.”¹²⁰ In essence, Standard and its former adversary would simply share the monopoly profits, with the exiting rival getting its take on the front end.

While McGee is correct that Standard did acquire many formerly independent refineries, the fact of these acquisitions does not negate the evidence that Standard also employed predatory pricing. There are several problems with McGee’s analysis on this point. First, McGee suggested that “instead of fighting, the would-be monopolist bought out his competitors directly.”¹²¹ But Standard did fight. There is no question that Standard reduced its prices considerably when it faced competition. Standard did forego substantial profits prior to merger. Whether these dramatically lower prices were below an appropriate measure of cost determines whether Standard’s conduct constitutes predatory pricing, but Standard did in fact sacrifice sizeable amounts of money in the lead up to its acquisitions.¹²²

Second, McGee simply assumed a nationwide assemblage of independent refiners willing to sell out to Standard. McGee asserted that “[a]nything above the competitive value of their firms should be enough to buy them.”¹²³ But businesspeople do not generally build their empires in the hopes of selling their company at “anything above” market value to the
gave rebates to these customers and then raised the market price once [competitor] SS&T had been suppressed.”

¹²⁰ See McGee, supra note 18, at 139.
¹²¹ Id.
¹²² See supra text accompanying note 118.
¹²³ McGee, supra note 18, at 139.
first willing buyer. Elizabeth Granitz and Benjamin Klein have explained why Standard’s rival “refiners had no incentive to sell out to Standard” because they could free ride on the price umbrella created by Standard. Perhaps anticipating this response, McGee suggested that “Even supposing that the competitors would not sell for competitive value, it is difficult to see why the predator would be unwilling to take the amount that he would otherwise spend in price wars and pay it as a bonus.” Depending on the size of this “bonus,” acquisition costs can dwarf the competitive value of the target. For example, in its quest to monopolize the market for tin cans, American Can paid upwards of twenty-five times the market value of independent can-making factories. At a certain point, the expected cost of acquisition exceeds the expected cost of predation. More importantly, McGee focused on the wrong decisionmaker. The issue is not the predator’s willingness to pay extra; it is the target's unwillingness to sell its business concern. If an independent refiner does not wish to be acquired, Standard would need to “soften it up,” as the following paragraph argues.

Third, McGee failed to appreciate how predatory pricing can play a critical role in convincing unwilling targets to sell out to a monopolist. Price predation and acquisition of rivals work in tandem. The threat of price predation can convert an intransigent rival into a willing seller and “[t]he price at which smaller competitors could be bought out would be driven down by the very threat of ruin, if it appeared likely that the threat would be carried out.” For example, in his study of the consolidation of the tobacco industry that took place contemporaneously with the building of Standard’s monopoly, Malcolm Burns has demonstrated that predatory pricing can reduce the price that a dominant firm must pay to acquire a competitor.

124. Some targets would not sell out to Standard. Indeed, McGee noted that Standard had “twice tried to purchase the Red C group but failed.” Id. at 154.
125. Elizabeth Granitz & Benjamin Klein, Monopolization By “Raising Rivals’ Costs”: The Standard Oil Case, 39 J.L. & ECON. 1, 2 (1996) (“Contrary to McGee’s analysis, however, refiners had no incentive to sell out to Standard. Once they recognized that Rockefeller was likely to succeed, individual refiners would be better off holding out and remaining outside the Standard consolidation, ‘free riding’ on the higher industry price that Standard would create by its monopolistic restriction of output.”).
McGee rejected this explanation as “not at all likely.”\textsuperscript{130} Bork, too, asserted that a Standard Oil strategy of predatory pricing followed by acquisition is “unattractive and improbable.”\textsuperscript{131} Neither scholar, however, presented any empirical evidence; more importantly, neither discussed Standard’s pricing prior to acquisitions.

Much evidence suggests that Standard used targeted price cuts to render its rivals unprofitable and subject to easier and less costly acquisition.\textsuperscript{132} When firms refused to be acquired, Standard could respond with predatory pricing. Standard turned reluctant targets into public examples of what would happen to refiners who resisted acquisition.

For example, Rockefeller wrote,

[Refiners] failing to sell out [to Standard] on good high prices . . . will be sick unto death now having failed in their wicked scheme. A good sweating will be healthy for them and they ought to have it, and it is not money lost to us to have other people see them get it.\textsuperscript{133}

Standard was essentially purchasing a reputation for predation, which would make its future threats more credible and make other rivals more amenable to acquisition.\textsuperscript{134}

In short, McGee and his subsequent supporters overclaimed by suggesting that McGee’s study proves that predatory pricing does not happen. In reality, a close examination of Standard’s practices undermines McGee’s theoretical argument against predatory pricing taking place.

C. Claim: Predatory Pricing Inherently Fails

McGee’s third claim is perhaps his most bold. After concluding that

\textsuperscript{130} McGee, supra note 18, at 141.

\textsuperscript{131} BORK, supra note 90, at 153.

\textsuperscript{132} See Granitz & Klein, supra note 125, at 38 n.100. The fact that firms were driven from the market does not prove that Standard charged a price below cost as opposed to Standard taking advantage of the secret railroad rebates. See infra text accompanying notes 138–41. But this does show that Standard used a carrot-and-stick approach—the stick being a threat to impose losses on its rivals until they sold out to Standard, the carrot.

\textsuperscript{133} 2 ALLAN NEVINS, JOHN D. ROCKEFELLER: THE HEROIC AGE OF AMERICAN ENTERPRISE 68 (1940) (quoting Letter from John D. Rockefeller, Founder, Standard Oil (Mar. 11, 1878)).

\textsuperscript{134} Leslie, supra note 36, at 298 (“A dominant firm may employ predatory pricing to purchase a reputation for aggression.”); Richard A. Posner, The Chicago School of Antitrust Analysis, 127 U. PA. L. REV. 925, 939 (1979) (“There is, however, a deeper problem with the McGee argument: it neglects strategic considerations. Assume that it is lawful to buy a rival. It does not follow that a firm will never resort to predatory pricing. After all, it wants to minimize the price at which it buys its rivals, and that price will be lower if it can convince them of its willingness to drive them out of business unless they sell out on its terms. One way to convince them of this is to engage in predatory pricing from time to time.”).
Standard never used predatory pricing to drive rivals from the market, McGee asserts that “if [Standard] tried, it did not work.” Subsequent scholars have invoked McGee’s article for the following propositions: “predation is rarely, if ever, a profitable strategy”; “attempted predation is extremely rare, and successful predation even rarer still”; “successful predatory pricing is rare or nonexistent”; “predatory pricing . . . has failed whenever it has been tried.” These are empirical statements of fact for which McGee’s article simply provides no empirical support.

This third claim rings particularly hollow. First, it is a bald assertion that is inconsistent with McGee’s underlying thesis that there is not “a single instance in which Standard used predatory price cutting.” If this central thesis of McGee’s article is true, then it is impossible for its author to claim that when Standard employed predatory pricing, the strategy failed. If Standard never attempted predatory pricing, it could neither have failed nor succeeded. Both of McGee’s assertions cannot simultaneously be true. Arguing in the alternative may be an acceptable legal strategy, as when a defendant in a breach of contract lawsuit argues that there was no contract but, if there was a contract, the defendant did not breach. But this form of argumentation is less persuasive in the context of factual, as opposed to legal, questions. McGee is wrong to assert both that Standard never engaged in predatory pricing and that “if it tried, it did not work.” McGee in no way shows that Standard’s efforts at predatory pricing were empirically unprofitable. Instead, he argues that there were no attempts at predatory pricing.

Second, if Standard did engage in predatory pricing, by what measure did it “not work”? McGee never puts forward criteria or a metric for judging whether an attempt at predatory pricing has “worked.” Standard Oil was a highly profitable monopolist that earned high profits in the local markets that it dominated. If Standard engaged in predatory pricing, it

139. Yoon, supra note 85, at 263–64 (citing McGee). In a similar vein, another commentator asserted that “Professor McGee demonstrated that predatory pricing can never be implemented profitably in a manner that harms consumers.” Pierce, supra note 24, at 1106.
140. McGee, supra note 18, at 157.
141. Id.
would seem to have succeeded. After all, it monopolized the market and earned considerable profits as a result.\textsuperscript{142} If Standard Oil used predatory pricing, then a case study of the company shows that predatory pricing could be profitable, not the opposite as claimed by McGee and his followers.

V. THEORY VERSUS EMPIRICISM

McGee’s article has been one of the most influential in antitrust law.\textsuperscript{143} This part asks why. One response might be that the article is an important empirical study of a major early Supreme Court antitrust opinion. The belief that McGee’s article is empirical is widespread. Scholars refer to McGee’s article as an “empirical study,”\textsuperscript{144} as do courts.\textsuperscript{145} That description is generous.

At base, McGee’s article is not an empirical case study. An empirical predatory pricing study would have examined Standard’s actual price and cost in each of these markets and used that data to determine whether Standard charged a price below cost. In asserting that Standard never engaged in below-cost pricing, McGee never defined cost, never enumerated Standard’s actual prices, and never actually compared cost to price. As Joseph Brodley has explained, McGee presented “essentially ad hoc case studies that rely on impressionistic readings of case records,”\textsuperscript{146} McGee’s article is a theoretical polemic masquerading as an empirical case study.\textsuperscript{147} McGee provided no empirical evidence to support his theoretical assertions. For example, McGee provides no examples of re-entry in response to Standard’s post-predation price hikes.

Perhaps the general lack of empiricism in McGee’s article is best

\textsuperscript{142} Dalton & Esposito, supra note 25, at 161.
\textsuperscript{143} See supra Part III.
\textsuperscript{147} See Chris Sagers, “Rarely Tried, and . . . Rarely Successful”: Theoretically Impossible Price Predation Among the Airlines, 74 J. AIR L. & COM. 919, 927–28 (2009) (“The case against predation remains almost exclusively theoretical. It rests heavily on John McGee’s seminal paper, which is said to have been ‘empirical’ insofar as he reviewed extant historical evidence about the Standard Oil monopoly. [T]he paper’s influence has followed almost exclusively from its theoretical underpinnings.”).
illustrated by his conclusion that “Standard did not systematically, if ever, use local price cutting in retailing, or anywhere else, to reduce competition.” McGee appears to be talking about price discrimination, as opposed to predatory pricing. Again, McGee presents no data. His assertion is completely at odds with the hundreds of pages of actual price data analysis in the Bureau of Corporations’ reports on petroleum markets. The study found the evidence of Standard’s local price cutting to be “absolutely conclusive.” For example, Standard sold oil in San Francisco, across the bay from its refinery, at 12.5 cents while it charged 7.5 cents (delivery included) in Los Angeles for oil from that same Bay Area refinery. Standard thus charged significantly less for oil that had to be transported over 300 miles more. McGee never mentioned the Bureau of Corporations’ study or addressed its data.

Yet if McGee’s unqualified assertion about local price cutting is clearly wrong, that should cast doubt on his assertion about Standard’s alleged predatory pricing, for which McGee also presents no actual price data to support his sweeping conclusions. The evidence shows that Standard did reduce its price to drive competitors from the market, only to raise price considerably once it had the market to itself. The issue remains, however, whether the lower prices during these price wars were below Standard’s cost. McGee argued that Standard reduced its price but did not engage in predatory pricing. Plentiful evidence—much of it unexamined by McGee—exists that Standard did price below cost.

Ultimately, the trial record in Standard Oil does not lend itself to easy characterization. It is possible that Standard could have charged a low price at which it could earn a profit, but independents could not. In many
markets, the railroads that transported oil gave Standard secret rebates and this practice makes it especially hard to calculate the price-to-cost ratio in such markets. The secret rebates facilitated Standard’s ability to slash price to the point where competitors could not profitably remain in the market, but Standard could.\footnote{U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at xli; U.S. BUREAU OF CORPS., REPORT ON TRANSPORTATION OF PETROLEUM supra note 97, at 303, 320.} Absent the railroad rebates, Standard’s price would have been below its cost in some markets.\footnote{U.S. BUREAU OF CORPS., REPORT ON PETROLEUM INDUSTRY, supra note 40, at 438 (“In many instances, where the Standard has cut prices in particular localities sufficiently to completely destroy the profits of a competitor, the Standard has undoubtedly been able to make a profit. Often the unfair advantage of the Standard in freight rates alone has more than equaled a fair profit.”); U.S. BUREAU OF CORPS., REPORT ON TRANSPORTATION OF PETROLEUM, supra note 97, at 402.} This raises the legal issue of whether a monopolist who charges a price below cost has not predatorily priced so long as its sales are profitable due to secret rebates.\footnote{McGee diminished the significance of the secret rebates: “Although this subject [railroad rebates] lies outside the present inquiry, I am convinced that the significance of railroad rebates has also been misunderstood.” McGee, supra note 18, at 139 n.3. Beyond this cryptic footnote, McGee did not explain the relationship between the rebates and predatory pricing. In particular, he does not suggest how the rebates should affect the determination of whether Standard Oil charged a price below cost. At one point, McGee asserted that railroad rebates were available to Standard’s competitors, implying that the rebates had little to do with Standard’s acquisition of monopoly power. Id. at 145 n.22. The government’s 1906 report suggests McGee was incorrect. U.S. BUREAU OF CORPS., REPORT ON TRANSPORTATION OF PETROLEUM, supra note 97, at 17.}

Even if the secret rebates were deducted from Standard’s costs, however, evidence shows that Standard still charged a price below cost in some cases. The Bureau reported that even after factoring in its rebates, Standard sometimes “put[] the prices in a given locality down even below its own cost of manufacture, transportation, and delivery.”\footnote{U.S. BUREAU OF CORPS., REPORT ON TRANSPORTATION OF PETROLEUM, supra note 97, at 402.} Thus, despite the railroad rebates, Standard suffered net losses in some markets.

If Standard sometimes did price below cost, that still leaves the issue of how frequently it did so. McGee suggested that Standard, at most, rarely predatorily priced its oil\footnote{The government’s report, too, states that “it is comparatively seldom the case that [Standard’s prices] are so low as to leave no profit to the Standard.” Id. at 43.} and that this meant that predatory pricing played no role in Standard’s acquisition of monopoly power. McGee, however, failed to recognize the strategic significance of predatory signaling. A firm need only engage in the practice just enough to make the threat of future price predation credible.\footnote{Leslie, supra note 36, at 298 (“[T]he firm engaging in predatory pricing only has to take this loss of profits until it establishes sufficient credibility that its threats to engage in predatory pricing will deter firms from entering the market.”.)} Standard successfully used the threat of predatory pricing to deter entry, as the Bureau reported:

Id. at 438.
Independent concerns fear to enter new markets, however tempting the prices. . . . They know that, after going to all this expense, there is great risk that the Standard will put prices down below their cost of production and delivery, possibly even below the Standard’s own cost. They know that the Standard can afford this price-cutting and that they can not. 160

Similarly, Standard’s reputation as a price predator played a role in its acquisitions. Standard’s offers to acquire competitors were made in the shadow of predatory threats. The firm would only have to carry out the threat a few times in order to acquire a credible reputation for predation and this could encourage rational refinery owners to sell out to Standard. A few public instances of loss-inducing price predation could both deter new entry and facilitate less expensive acquisition of rivals. Rockefeller thought so;161 it is odd that McGee did not.

VI. CONCLUSION

Ultimately, the trial record may not tell us with certainty whether Standard engaged in predatory pricing, as we define it today. But even if the facts of Standard Oil do not prove that the oil company engaged in predatory pricing, the record in that case cannot stand as proof that predatory pricing does not occur or that it fails when attempted.

Examining the question in a legal framework, the evidence in the trial record and other sources establishes a prima facie case for predatory pricing by Standard. If predatory pricing skeptics wish to refute this case, they can attempt to do so, but they face an evidentiary burden. If they want to rewrite the history of the Standard Oil case, they must demonstrate that the numbers presented by Tarbell, the U.S. Bureau of Corporations, and others are wrong or misleading or support an alternative conclusion. This rebuttal must be done with facts, not theory. 162

Given that McGee’s article is not truly empirical, why is it so widely embraced by scholars and judges as proving that predatory pricing does not occur and cannot succeed? The answer is most likely because McGee’s conclusions fit with the economic theory that those who cite it were advocating. McGee argued against antitrust enforcement as part of a larger political, legal, and academic movement against strong antitrust law.

160. U.S. BUREAU OF CORPS., REPORT ON THE PETROLEUM INDUSTRY, supra note 40, at Pt. 1, 330. See also Dalton & Esposito, supra note 25, at 187 (“The Record also suggests that Standard's pricing behavior discouraged new entry for a substantial period of time.”).
161. See supra notes 51, 133.
McGee’s analysis was consistent with the Chicago School’s policy goals, which include not condemning predatory pricing due to the risk of false positives.  

McGee’s scholarship, however, risks distorting antitrust jurisprudence because predatory pricing law, as shaped by McGee’s work, creates a risk of false negatives. The Matsushita Court asserted that predatory pricing simply does not occur. Some lower courts have treated the Matsushita Court’s proclamation as a quasi-statement of law.  

Thus, predatory pricing claims fail as a matter of law because the Supreme Court has held that predation is neither tried nor successful. Much evidence, though, suggests that predatory pricing does occur.

The question of how antitrust law should treat predatory pricing—particularly in light of the relative dangers of false positives and false negatives—is a policy debate. The results of an empirical case study of Standard might inform this policy debate. Unfortunately, it would appear that the direction of influence was reversed in McGee’s study and his theoretical assumptions drove the study’s conclusions. Revisiting the history of Standard Oil provides evidence against the economic theory that argues that predatory pricing is irrational and never attempted. This undermines the theoretical argument that antitrust law should not be concerned with predatory pricing.

---


164. See United States v. AMR Corp., 335 F.3d 1109, 1114 (10th Cir. 2003) (“Chicago scholars argued that lowering prices could only be pro-competitive and any prohibition on such conduct could ultimately deter firms from engaging in conduct that is socially beneficial.”); Morgan v. Ponder, 892 F.2d 1355, 1358–59 (8th Cir. 1989) (“Indeed, there is a real danger in mislabeling such practices as predatory, because consumers generally benefit from the low prices resulting from aggressive price competition.”).


166. Bolton, Brodley and Riordan have argued that studies claiming to not find predatory pricing were flawed by systematic underreporting. Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, Predatory Pricing: Strategy Theory and Legal Policy, 88 Geo. L.J. 2239, 2245–46 (2000).
