OVERSHOT THE MARK? A SIMPLE EXPLANATION OF THE CHICAGO SCHOOL'S INFLUENCE ON ANTITRUST

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Overshot the Mark? A Simple Explanation of the Chicago School's Influence on Antitrust

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I. "IT TAKES A THEORY TO BEAT A THEORY"

In his Nobel lecture, economist George Stigler declared this proposition as "the fundamental rule of scientific combat," asserting that: "No amount of skepticism about the fertility of a theory can deter its use unless the skeptic can point to another route by which the scientific problem of regulation can be studied successfully."[1] These rules of engagement are to scientific and intellectual combat in the marketplace of ideas as antitrust is to competition in product markets. Stigler argued that this form of intellectual rivalry should be resolved by evidence of the explanatory power of the competing theories.[2] Of course, the proposition that the selection of theoretical models for application to policy problems should be guided by consistency with the phenomena the models attempt to explain is not original to Stigler. It is a principle that is fundamental not only to economics, but science generally.[3]

It is with Stigler's rules of intellectual engagement as my guide that I set forth on my current task: a critical review of former Federal Trade Commission Chairman Robert Pitofsky's

How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust, a collection of essays devoted to challenging the Chicago School's approach to antitrust in favor of a commitment to Post-Chicago policies.

The Post-Chicago School challenge to the previous dominant model, often described as the "Chicago School,"[4] is well known. The developments of the past 25 years, especially the new game theoretic tools applied to vertical contracting problems to generate possibility theorems, have considerably changed the landscape of antitrust economics. The important debate between whether the existing body of economic knowledge or the new Post-Chicago contributions provide the best guide for antitrust policy has always been one concerning which "models" offered a more predictive and robust account of antitrust-relevant behavior. Unfortunately, much of the "Chicago versus Post-Chicago" debate (and yes, Harvard too) has not been fought on scientific terms.

Overshot the Mark is a new and important contribution to this debate. The book is clear that its purpose is to marshal arguments and evidence resulting in the rejection of the Chicago School, in favor of an antitrust regime founded on the Post-Chicago alternative. Professor Pitofsky usefully describes the essential theme of *Overshot the Mark* in the introduction's concluding sentence: "Because extreme interpretations and misinterpretations of conservative economic theory (and constant disregard of facts) have come to dominate antitrust, there is reason to believe that the United States is headed in a profoundly wrong direction."[5]

In support of its purpose, the essays center on an attempt to demonstrate that the Chicago School: (1) is wrong on the economics; (2) ideologically ignores facts and evidence when convenient; and (3) has mislead courts into extreme interpretations of the antitrust laws to the detriment of consumers.[6] While much effort is expended throughout the volume on asserting and

defending these and other claims, *Overshot the Mark*'s most glaring weakness is that insufficient attention is paid to supporting not only these claims, but also the implicit corollary that Post-Chicago possibility theorems outperform the models of their predecessors on scientific terms relating to theoretical robustness or empirical support.[7]

To be sure, *Overshot the Mark* is an important book and one that will be cited as intellectual support for a new and "reinvigorated" antitrust enforcement regime based on Post-Chicago economics.[8] Its claims about the Chicago School's stranglehold on modern antitrust, despite the existence of a superior economic model in the Post-Chicago literature, are provocative. If the premise is accepted that the Post-Chicago School provides a sounder economic basis for antitrust than that offered by the incumbent Chicagoans, the puzzle is to explain why the Chicago School continues, by all accounts, to dominate modern antitrust discourse, particularly in the courts, in the face of this obviously superior alternative?

Overshot the Mark offers an implicit (and sometimes explicit) answer to this question, an answer which should be familiar to antitrust readers: allegations of (at least) tacit collusion. For reasons to be explained in a moment, I am skeptical that these conspiracy allegations would survive the Supreme Court's new "plausibility" test.[9] This supposed cartel consists of Chicago-oriented antitrust lawyers, economists, enforcement agency officials, and both conservative *and* liberal judges.

The central task of this review will be to evaluate the underlying premise that Post-Chicago economics literature provides better explanatory power than the "status quo" embodied in the existing body of theory and evidence supporting Chicago School theory. I will conclude that the premise is mistaken. However, the mistaken premise only partially obviates the need to solve the puzzle of the hypothetical adoption and persistence of inefficient economic norms. A

review of the empirical evidence overwhelmingly demonstrates that Chicago School economic insights and policy prescriptions remain the best available foundation for modern antitrust policy. As will be discussed in Part III, the most fundamental weakness of *Overshot the Mark* is the failure to acknowledge, and grapple with, the substantial body of empirical evidence in support of Chicago School views while simultaneously failing to provide empirical support for Post-Chicago anticompetitive theories.

In short, *Overshot the Mark* does not offer a persuasive account for Chicago's continued dominance. Following Stigler's admonition, I offer a simple alternative hypothesis to explain the Chicago School's continuing dominance of antitrust law: It provides a more robust theoretical and empirical account of the business practices we observe in the real world along with their competitive effects.

Overshot the Mark accepts the premise that the Chicago School provided antitrust its intellectual foundation, and subsequently saved it from the state of incoherence that would motivate Robert Bork's seminal effort to incorporate the economic reasoning emanating from the University of Chicago, and Aaron Director in particular, into the Sherman Act.[10] While a precise definition is elusive, the Chicago School of antitrust economics can be defined in a reasonable though imperfect manner.[11] However, *Overshot the Mark* is unsuccessful in its attempt to locate the body of economic knowledge that it aims to target, in large part because it equates the Chicago School with something called "conservative economics."

This label generates more questions and confusion than clarity. The most intuitively plausible explanation for this choice is that the label is a rhetorical device designed to score some easy political points and frame the relevant policy debate as one centered around ideology rather than economic science. This is not to claim that antitrust debates have ever been or ever will be

invariant to ideology. My claim here is that the ideology-to-economics ratio has become too high, and that the framing of Chicago School economics as "conservative" is evidence in support of that proposition. But the choice to frame the debate in this manner also comes with costs. In this case, the "conservative" label leads to an inevitable imprecision in many of the claims pressed throughout the book.

The label is also misleading when one considers the scope of the well-known contributions of Chicago School scholars. Consider, for example, that the theoretical underpinnings of the "raising rivals' cost" theories of anticompetitive conduct at the core of the Post-Chicago movement are based on the work of Aaron Director, the father of the Chicago School.[12] Moreover, Chicago-affiliated scholars have made significant contributions to our understanding of anticompetitive behavior and are responsible for documenting foundational empirical examples of Post-Chicago phenomena in the real world.[13] Perhaps the lesson to be learned from a more accurate economic history of the Post-Chicago movement, whether one likes it or not, is that we are all Chicagoans now.

Overshot the Mark does make an important and provocative claim: That conservative economic analysis has, in recent years, had a pernicious effect on consumers. Throughout the various essays these claims are pressed in different forms, but boil down to the following essential theme: Chicago School economics have caused courts to adopt erroneous economic principles, get specific cases wrong, develop sub-optimal legal rules, and otherwise influenced antitrust policy in the wrong direction.[14] One of the most valuable contributions of economics to law is that it introduces rigor by demanding hypotheses that can be tested against real world data. Ideological policy disputes in antitrust, unlike in other fields of law unencumbered by any attachment to scientific method or economic methodology, can be settled with evidence rather

than by assertion. When the claims in the book are held up to data, it becomes evident that *Overshot the Mark* does not carry its burden of rejecting the simple null hypothesis that the Chicago School's persistence is owed to its superiority on economic terms.

In Part II, I will offer a set of definitional principles that guides Chicago School antitrust economics, in order to set the stage for evaluating specific claims that contributions from Chicago have "gone too far." A more rigorous examination of the actual body of knowledge produced by Chicago School lawyers and economists suggests a much more detailed picture than the "conservative" label allows. While these shorthand labels make for good slogans, they come at the significant cost of inviting conclusory and superficial evaluations that facilitate misleading descriptions of their targets, and can lead to mistaken policy recommendations.[15]

In Part III we take a scientific approach to evaluating the claim that Post-Chicago economics have greater explanatory powers than the approaches of the Chicago School. Specifically, we evaluate claims about the relative merits of Chicago and Post-Chicago approaches to resale price maintenance and exclusive dealing in light of the existing empirical evidence.

In Part IV, the focus shifts from economics to law. We evaluate *Overshot the Mark's* claim that courts, driven by the undue influence by Chicago economics, have adopted extreme interpretations of the law to the detriment of consumers. Part V concludes.

II. DEFINING THE CHICAGO SCHOOL[16]

The Chicago School of Economics has been described many ways. David Wall once described three basic characteristics of the Chicago School of economics: "First, that theory is of fundamental importance; second, that theory is irrelevant unless set in a definite empirical

context; and third, that in the absence of evidence to the contrary, the market works."[17] To others, to invoke the term Chicago School is to describe a reflexively anti-interventionist position that typically involves irrational disdain for government regulation. While current financial times make it somewhat fashionable to casually toss around caricatured versions of entire schools of economic thought without regard to accuracy or evidence, antitrust commentators have generally avoided such style of commentary in favor of careful analysis of competing theories and evidence.[18]

The history of the Chicago School's influence on antitrust analysis has been well documented. Professors Jonathan Baker and Timothy Bresnahan divide the Chicago School's influence on antitrust into two separate components: "the Chicago School of industrial organization economics," and "the Chicago School of antitrust analysis."[19] The Chicago School of industrial organization economics consists of the work in industrial organization economics that aimed, and succeeded, at debunking the structure-conduct-performance paradigm and its hypothesized relationship between market concentration and price or profitability.[20] Especially influential in the dismantling of the structure-conduct-performance hypotheses was UCLA economist Harold Demsetz.[21] Demsetz's work was central to exposing the misspecification of this relationship in previous work by Joe Bain and followers, as well as offering efficiency justifications for the observed correlation that firms with large market shares could earn high profits as a result of obtaining efficiencies, exploiting economies of scale, or creating a superior product.[22]

The second component, "the Chicago School of antitrust analysis," primarily contributed empirical work in the form of case studies demonstrating that various business practices previously considered to be manifestly anticompetitive could, in fact, be efficient and pro-

competitive. Perhaps the most well known contribution of the Chicago School of antitrust is the "single monopoly profit theorem," which is built upon the observation that only a single monopoly profit is available in any vertical chain of distribution. It is now understood that the theorem applies only under limited conditions. Nonetheless, this theoretical insight placed significant pressure on economists to think more rigorously about explaining the efficiency justifications for various vertical contractual arrangements as well as the conditions under which they prove to be anticompetitive.

The basic features of this second component are generally attributable to the work of Aaron Director[23] and others from 1950 to the mid 1970s.[24] A group of eminent antitrust scholars including Richard Posner, Robert Bork, and Frank Easterbrook followed in Director's footsteps, building on these studies and on economic analysis, and advocating bright-line presumptions, including *per se* legality, which reflected the growing consensus that most conduct is efficient most of the time.

This is not to say that the Chicago School's contributions to antitrust economics were completed by the 1970s, or that they were limited to the ultimate rejection of the structure-conduct-performance paradigm. For example, "Chicago School" industrial organization economists have continued to contribute to our economic understanding of various business practices, despite the fact that developments in industrial organization economics for the past 20 years have relied primarily on game-theoretic modeling techniques.[25] Recent Chicagoan contributions to antitrust economics include work on exclusive dealing,[26] slotting contracts,[27] and vertical restraints theory.[28]

There is little doubt that the Chicago School's influence on antitrust law and policy has been substantial, particularly in the Supreme Court. Important Supreme Court precedents have

been influenced by Chicago School thinking, including *Continental T.V., Inc. v. G.T.E. Sylvania, Inc.*, *State Oil Co. v. Khan*, *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*, *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, *Leegin Creative Leather Products, Inc. v. PSKS, Inc.,* and *Pacific Bell Telephone Co. v. linkLine Communications, Inc.*, in addition to the development of the 1982 *Horizontal Merger Guidelines* by Assistant Attorney General William Baxter.[29] The 1970s and 1980s were marked by a dramatic shift in antitrust policies, a significant reduction in enforcement agency activity, and calls from Chicago School commentators for the use of bright line presumptions,[30] *per se* legality for vertical restraints,[31] and even repeal of the antitrust laws altogether.[32] Perhaps the Chicago School's most important and visible victory has been the assault on the *per se* rule of illegality, which, at least for now, exists only in naked price-fixing cases and, in a weakened form, in tying cases.

The leading alternative to the Chicago School approach is the Post-Chicago School.[33] The Post-Chicago approach challenges the conditions under which Chicago results hold, such as the single monopoly profit theorem. Indeed, authors in the Post-Chicago movement have been able to produce a series of models in which a monopolist in one market has the incentive to monopolize an adjacent product market.[34] Post-Chicago economists also have created literature focusing on the possibility of vertical foreclosure. This raising rivals' costs strand of literature has become the most influential Post-Chicago contribution, and has provided a theoretical framework for a number of theories that explore the possibility of anticompetitive effects from various exclusionary business practices.[35] For example, such theorems have demonstrated that it is possible for tying, exclusive dealing, and predatory pricing to generate anticompetitive effects under certain conditions, including an assumed absence of any pro-competitive justifications for the conduct examined.[36]

Despite the Post-Chicago School's dominance in modern economics departments, its ownership of the dominant share of pages in top economics journals relative to any other category of antitrust, and its successful infiltration of antitrust policy in the European Union, the Post-Chicago economic framework has only had a modest impact on U.S. competition law. The watershed mark of Post-Chicago analysis is the Supreme Court's decision in *Eastman Kodak Co. v. Image Technical Services, Inc*., which seemed to open the door, if only for a moment, to Post-Chicago arguments.[37] However long *Kodak* held open a window that would have facilitated a paradigm shift in the federal courts from Chicago School antitrust to Post-Chicago principles, the antitrust jurisprudence of the Roberts Court appears to have closed it.

The standard contrast between the Chicago and Post-Chicago Schools often tempts commentators to adopt a "pendulum narrative" when describing the history of antitrust thought.[38] The narrative account is that the Chicago School supplanted the "pre-economics" antitrust era, but then went "too far" in immunizing various business practices from liability before the Post-Chicagoans exposed the Chicago "everything is efficient" myth by generating models debunking Chicago assertions that various business practices could never be inefficient or anticompetitive. Because Chicagoans ignore the possibility theorems produced by the Post-Chicago literature, it is argued, the Chicago School necessarily "went too far." This convenient narrative that portrays Post-Chicago antitrust economics as a reasonable compromise between the pre-economics era and the policies generated by Chicago School insights pervades *Overshot the Mark*.

Unfortunately, the Chicago/Post-Chicago narrative has also tempted commentators to adopt extreme and misleading descriptions of one camp or the other. Several commentators in *Overshot the Mark* succumb to this temptation by describing the Chicago School economists as a monolithic entity that always favors free markets over regulation, allows ideology to trump

evidence, and is not interested in advancing the discourse of antitrust economics in a scientific manner.[39] This is a gross mischaracterization of the Chicago School.

Indeed, Chicagoans are well known to have anticipated the raising rivals' cost literature by recognizing the insight that a dominant firm might harm competition by foreclosing rivals from distribution,[40] and have contributed to the economic literature by documenting some of the only empirical examples of raising rivals' costs theories[41] and economically rational predation theories.[42] They have also contributed to the theory of collusion,[43] and explored the use of tying and other practices to monopolize adjacent markets.[44] These caricature-like descriptions of the Chicago School, however, threaten to nonsensically turn "Chicago School" into a pejorative term, and do little other than mislead and discourage meaningful discourse. The aim of this section is to offer an alternative definition of the Chicago School of antitrust which turns on the following three methodological commitments: (1) rigorous application of price theory; (2) the centrality of empiricism; and (3) emphasis on the social cost of legal errors in the design of antitrust rules.

A. Rigorous Application of Price Theory

The first defining characteristic of the Chicago School is a rigorous application of economic theory, especially (but not exclusively) neoclassical price theory, to problems of antitrust analysis. Richard Posner once stated that the key distinguishing attribute of the Chicago School of antitrust was that it "view[ed] antitrust policy through the lens of price theory."[45] Because I suspect that most commentators will agree that the application of price theory is indeed a distinctive characteristic of the Chicago School of antitrust, I will not expand on this point here.[46]

B. The Centrality of Empiricism

The second defining feature is the centrality of empiricism to the research agenda of Chicago antitrust analysis. There is at least one set of generally undisputed empirical contributions from Chicago School economists—the debunking of the purported relationship between concentration and price that was asserted by proponents of the structure-conduct-performance paradigm.[47] However, even setting aside the contributions of these "early" Chicagoans, it is clear that the relative weight attached to empirical evidence by later Chicago antitrust scholars was also relatively high.

Perhaps the most striking example of a Chicago School scholar who offered substantial empirical contributions to antitrust literature was George Stigler. Seminal Chicago School figures Ronald Coase and Harold Demsetz have both noted Stigler's dedication to empiricism with a note of admiration. Coase describes Stigler as moving effortlessly "from the marshaling of high theory to aphorism to detailed statistical analysis, a mingling of treatments which resembles, in this respect, the subtle and colourful Edgeworth. It is by a magic of his own that Stigler arrives at conclusions which are both unexpected and important."[48] Demsetz eloquently elaborates on this theme:

> Housed in Stigler's mind, neoclassical theory had more than the usual quality of material with which to work. It was coupled with a joy in verification and with a strong work ethic and sense of duty to his profession. Intelligence, insight, wit, and style were evident in his writings. His articles and essays could not be ignored. They provoked readers to think and often to follow his lead. For some readers, they simply provoked. Stigler's passion for evidence gathering is also evident in his work, and he made no secret of it.[49]

Stigler's work exemplified the billing described by these prominent Chicagoan colleagues and displayed an unmistakable passion for empirics. It is the empirical flavor of his economic analysis that landed Stigler the Nobel Prize in 1982 for his "seminal studies of industrial structures, functioning of markets and causes and effects of public regulation."[50] However, in an ironic twist, Stigler was initially rejected by the University of Chicago

economics department for being "too empirical." In his 1964 presidential address to the American Economic Association, Stigler announced that the "age of quantification is now full upon us," and noted that this age would be characterized by policy analysis informed by empirical evidence.[51]

Stigler's body of work in industrial organization economics, which he often referred to as "microeconomics with evidence," is powerful proof of the centrality of empiricism to his approach. Stigler offered an early study of the effects of the antitrust laws,[52] an empirical assessment of block booking practices,[53] and a study of the economies of scale[54] introducing the survivorship principle. Perhaps the strongest evidence of Stigler's dedication to the role of empirical evidence in the development of antitrust policy was his change in position in favor of deconcentration policy in the early 1950s. This change was in response to empirical evidence that debunked the consensus views concerning the relationship between concentration and profitability.[55] Former FTC Chairman Timothy Muris has recognized the contributions of Benjamin Klein's case studies emphasizing the role of vertical restraints in facilitating dealer supply of promotional services, when performance is difficult to measure.[56]

C. Adoption of the Error-Cost Framework

A third defining feature of the Chicago School of antitrust analysis is its emphasis on the relationship between antitrust liability rules and judicial error, along with the social costs of those errors. From an economics perspective, it is socially optimal to adopt the rule that minimizes the expected cost of false acquittals, false convictions, and administrative costs. Not surprisingly, the error-cost approach is distinctively Chicagoan because it was pioneered by Judge Frank Easterbrook of the U.S. Court of Appeals for the Seventh Circuit, who is a

prominent Chicagoan.[57] Subsequently, several commentators have adopted this framework as a useful tool for understanding the design of antitrust rules.[58]

The error-cost framework begins with the presumption that the costs of false convictions in the antitrust context are likely to be significantly larger than the costs of false acquittals, since judicial errors that wrongly excuse an anticompetitive practice will eventually be undone by competitive forces. Conversely, judicial errors that wrongly condemn a pro-competitive practice are likely to have significant social costs, because such practices are abandoned and not offset by market forces.

The insights of Judge Easterbrook's error-cost framework, combined with the application of price theory and a sensitivity to the state of empirical evidence, can be a powerful tool for improving antitrust policy. For example, David S. Evans and Jorge Padilla demonstrate that such an approach to tying favors a modified *per se* legality standard, in which tying is deemed pro-competitive unless the plaintiff presents strong evidence that the tie was anticompetitive.[59] Their conclusion is based upon the formulation of prior beliefs concerning the likely competitive effects of tying, and grounded in an assessment of the empirical evidence evaluating both Chicago and Post-Chicago economic theories.[60]

The Chicago School possesses an exclusive claim on the placing of significant weight on error and administrative costs in the design of antitrust standards. Indeed, FTC Commissioner Kovacic has persuasively demonstrated that the Harvard School has played an integral role in promoting the administrability of antitrust rules, which is a predecessor of the error-cost framework discussed above.[61] Perhaps the most well known proponents of this position are Professors Phillip Areeda and Donald Turner, who have consistently argued that antitrust rules should be administrable.[62] Judge Stephen Breyer incorporated the insights of the Harvard

approach into antitrust doctrine in *Barry Wright Corp. v. ITT Grinnell Corp.*, noting that "antitrust laws very rarely reject . . . 'beneficial birds in hand' for the sake of more speculative . . . 'birds in the bush.'"[63] Again, the Harvard School's sensitivity to the possibility of deterring pro-competitive conduct as a result of judicial error is largely related to the Chicago School's error-cost framework. The powerful intellectual foundations of the error-cost framework, grounded in basic decision theory and accepted by Chicago, Harvard, and most economists, is one reason why the framework has become a building block for modern competition policy.

III. A SIMPLE EXPLANATION OF THE CHICAGO SCHOOL'S PERSISTENT DOMINANCE OF U.S. ANTITRUST POLICY

Having defined the Chicago School and its methodological commitments, a central challenge from *Overshot the Mark* remains to be answered. *Overshot the Mark*'s critiques of the Chicago School literature have one theme in common: That the Chicago School's preference for theory and ideology rather than empirical evidence has led to antitrust policy that is too lenient compared to policy informed by the more predictive Post-Chicago economic theories.[64] Fortunately, assertions that Chicago School economics "gets it wrong" can be evaluated with objective data. Moreover, so can the relative predictive power of Chicago and Post-Chicago theories. We do so in this section. Specifically, motivated by *Overshot the Mark*'s claims about the failures of Chicago School economics in these areas, we evaluate the state of available theoretical and empirical knowledge concerning resale price maintenance ("RPM") and exclusive dealing.[65]

A. Resale Price Maintenance: Economic Theory and Evidence

One of the most persistent debates in antitrust has been over the appropriate antitrust treatment of RPM. *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*[66] was a major event in

this debate. Relying extensively on the existing theoretical and empirical economic literature, the Supreme Court overturned *Dr. Miles*' century old *per se* prohibition against minimum RPM in favor of a rule of reason approach.[67] Justice Kennedy's majority opinion concluded that the *per se* rule was inappropriate because, while there was universal agreement among economists that RPM could be anticompetitive, the theory and evidence simply did not demonstrate that the practice "always or almost always tend[s] to restrict competition and decrease output."[68]

The result was unsurprising on economic grounds. Economists nearly universally agree that while RPM can generate anticompetitive outcomes in some instances (for example as part of a manufacturers' cartel) it is generally pro-competitive.[69] However, despite this consensus, many legal commentators continue to take the position that *Dr. Miles,* or some truncated rule of reason approach placing an initial burden on firms adopting the practice to demonstrate that their RPM contracts fit into a specified list of acceptable uses, is more appropriate.[70] These commentators argue that the efficiency justifications most frequently offered for RPM either don't fit the existing cases or are logically invalid.[71] Indeed, proposed legislation which would revive the *per se* rule against RPM under the Sherman Act currently awaits Congressional attention.[72]

One side of the debate views *Leegin* as a long overdue symbol of the Chicago School's continued attack on anachronistic antitrust rules from the "pre-economics" era of competition policy. Advocates of a Post-Chicago approach to antitrust enforcement view *Leegin* quite differently. Post-Chicagoans, and authors in *Overshot the Mark*, point to the death of the *per se* prohibition against RPM as a primary example that the Supreme Court has favored ideology over sensible economic theory and empirical evidence.

Much of this debate has revolved around the economic concept of free-riding. Particularly in the context of RPM, the debates have focused on the potential for free-riding on

the promotional efforts of retailers—that were funded by manufacturers—by ensuring a higher margin with RPM. Advocates of the *per se* rule argue that the free-riding concept has spun out of control and now is used to attempt to justify the use of vertical restraints in areas where the concept clearly does not apply. Further, they argue that the empirical literature demonstrates conclusively that RPM generates higher retail prices. They are right on both counts. But on both counts, they've also asked the wrong questions.

Let us start with the objection to the overuse of the free-riding prevention justification for the use of RPM and other vertical restraints. Since the Supreme Court's watershed decision in *Sylvania*, it has been widely recognized that RPM can prevent the problem that "discounting retailers can free-ride on retailers who furnish services and then capture some of the increased demand those services generate."[73] This form of "discount dealer" free-riding takes place when consumers first visit the full-service retailer to obtain valuable promotional services (such as obtaining product information) before purchasing the product from a "discount dealer" who does not provide those services and, therefore, can sell at a lower retail price. RPM is used to prevent this form of discounting by eliminating retail discounting.[74]

While this efficiency justification for RPM is now well accepted, Robert Pitofsky and other commentators have noted that many of the observed uses of RPM do not fit the "discount dealer" story.[75] Chicago School economists have agreed that the "discount dealer" free-riding story is not, by itself, sufficient to explain the prevalence of RPM. For instance, Benjamin Klein observed that "the attempt by defendants to place all cases of resale price maintenance within the prevention of free-riding framework has led to absurd, clearly pretextual explanations."[76] The failure of the "discount dealer" free-riding justification to explain many instances of RPM has

led many commentators to conclude that where this narrow explanation does not apply, it is appropriate to conclude that RPM is likely to generate anticompetitive results.[77]

The Post-Chicago commentators who have correctly noted the overuse of the "discount dealer" justification, and therefore concluded that a *per se* rule is appropriate, have made a fundamental error. They have either ignored or failed to understand the role of RPM in facilitating the provision of efficient promotional services in the absence of free-riding. Because they fail to understand the pro-competitive role of RPM in the absence of free-riding, they have incorrectly concluded that either *per se* analysis or a truncated rule of reason, allowing a limited defense to defendants if their use of RPM appears to fit the narrow "discount dealer" story, is appropriate.

These commentators are in distinguished company. Justice Breyer's dissent in *Leegin* concedes confusion about what possible efficiency gains might derive from the use of RPM in the absence of free-riding:

> I do not understand how, in the absence of free-riding (and assuming competitiveness), an established producer would need resale price maintenance. Why, on these assumptions, would a dealer not 'expand' its 'market share' as best that dealer sees fit, obtaining appropriate payment from consumers in the process? There may be an answer to this question. But I have not seen it. And I do not think that we should place significant weight upon justifications that the parties do not explain with sufficient clarity for a generalist judge to understand.[78]

In *Overshot the Mark*, Warren Grimes and Marina Lao echo Justice Breyer's view that RPM either cannot or does not solve free-riding on promotional services. Both argue that *Leegin* is misguided because it misunderstands the economics of RPM, granting too much deference to the "discount dealer" free-rider theory espoused in *Sylvania*. For example, Professor Grimes claims that "[a] manufacturer's desire to limit free-riding by its dealers cannot provide a justification for either upstream or downstream power vertical restraints."[79] Professor Lao

similarly asserts that RPM simply cannot provide incentives for the supply of retailer promotional services in the absence of dealer free-riding, calling the very idea "fundamentally flawed" and observing that "it is not clear how free-riding can plausibly occur, much less become a severe problem that must be remedied through distribution restraints."[80] Professor Lao goes on to conclude that "as long as free-riding is not a likely risk, then, in a free market, we would expect dealers to voluntarily invest to provide the enhancements truly valued by consumers."[81] Justice Breyer, as well as Professors Lao and Grimes, are mistaken in their understanding of the economics of RPM and its role in facilitating the provision of efficient promotional services in the absence of free-riding.

The fundamental economic question is why, in a competitive retail market with zero free-riding, retailers lack a sufficient incentive to adequately promote the manufacturer's product?[82] In other words, why don't retailers in a competitive retail market, when left to their own devices, provide the efficient level of promotional services? Professors Lao and Grimes conclude that they do. Justice Breyer searches for an answer. Interestingly, Justice Kennedy's majority opinion in *Leegin* provides one, citing Klein and Murphy's seminal article on the economics of vertical restraints which provided the answer to this question 20 years ago.[83]

Klein and Murphy demonstrate that retailers will undersupply promotional services because manufacturers do not take into account the incremental profit margin earned by the manufacturer on promotional sales when some, but not all, consumers value the promotional service. There is an important incentive conflict between manufacturers and retailers with respect to retailer supply of point-of-sale promotional effort. The conflict derives from two economic factors common in markets where RPM is observed. The first is that manufacturers' profit margin (difference between wholesale price and marginal cost of production) on an incremental

sale induced by retailer promotion is generally much larger than the retailer's profit margin (difference between retail price and wholesale price paid). This is highly likely to be the case where manufacturers produce branded, differentiated goods and face substantially less elastic demand than retailers. Because retailers do not take into account the additional profit margin earned by the manufacturer on promotional sales, they will generally have an insufficient incentive to provide promotion from the manufacturer's point of view.[84]

The second factor is that the manufacturer's incremental sales produced by the retailer's manufacturer-specific efforts are often greater than the retailer's overall incremental sales. When a retailer provides incremental services to promote a specific manufacturer's product, there isn't a larger retail increase in total sales that is capable of offsetting the lower retail profit margin. In fact, when a multi-product retailer supplies promotional services for a specific brand, for example Coca-Cola, the primary effect is demand-shifting among manufacturers.[85] In other words, promotion-induced sales of Coca-Cola are likely to be at least partially offset by a decrease in the sales of other soda products.

Given these general economic conditions—manufacturer profit margins that exceed retailer profit margins on promotional incremental sales, the absence of significant inter-retailer demand effects from the supply of promotional effort, and promotion that results primarily in manufacturer "brand-shifting"—retailers will not have an adequate incentive to supply manufacturer-specific promotional efforts. It is critical to note that these conditions are pervasive in the modern economy of differentiated products, downward sloping demand curves, and competitive retail industries. Under these conditions, whether or not there is also "discount dealer" free-riding, manufacturers and retailers have a strong economic motivation to solve this

incentive conflict by devising contractual arrangements supplying the jointly profit-maximizing level of promotional services.

While these conditions provide the incentives for manufacturers to compensate retailers for the supply of promotional services, there are a number of possible contractual arrangements the parties might adopt. For example, manufacturers might compensate retailers with a per unit time slotting payment, a wholesale price reduction, or RPM. The fundamental objective of these payments is to provide a premium stream to retailers for the provision of promotional services. This premium stream facilitates performance and is self-enforcing in the economic sense.[86] In other words, because the desired performance might include promotional services that are difficult and costly to specify, manufacturers ensure performance not by litigating but by monitoring retailer efforts and then terminating retailers that the manufacturers determine are not performing adequately or in accord with the specified and unspecified elements of the parties' agreement.[87] The self-enforcing nature of these contractual arrangements, and the costs associated with contracting for difficult-to-specify retailer promotional effort, also expose the flaw in economic arguments that compensation arrangements, other than those that would completely specify desired performance, should be suspect under the antitrust laws.[88]

Understanding the economic role of RPM in resolving incentive conflicts between manufacturers and retailers in the absence of dealer free-riding does not imply that RPM is always pro-competitive. The anticompetitive theories of RPM are well known—facilitating cartels or allowing manufacturers to compensate retailers in a manner that excludes rivals from access to efficient distribution. But if it does indeed "take a theory to beat a theory," it makes sense to completely understand the underlying economics of both the pro-competitive and anticompetitive theories at issue with respect to RPM before choosing which economic model

has the greatest predictive power. RPM skeptics, however, have largely justified their position—that the anticompetitive theories are more likely to explain RPM—by assertion. But what does the empirical evidence actually show?

In *Overshot the Mark*, Professor Lao assesses the state of economic evidence, both theoretical and empirical, and concludes that "the procompetitive case that is made for minimum RPM is largely theoretical, with at most some weak supporting empirical evidence. In contrast, the anticompetitive effects of RPM are real, significant, and sometimes well-documented."[89] Professor Lao also notes that "there is virtually no dispute that RPM almost always leads to higher consumer prices,"[90] and argues that despite the fact that higher prices could be consistent with both pro-competitive and anticompetitive theories of RPM, this finding supports application of a truncated rule of reason approach.[91]

From a consumer welfare perspective, it is true that measuring the impact of RPM on prices tells us little about the competitive effects of RPM, since both pro- and anti-competitive theories predict higher prices. Analyzing the impact of RPM on output, where the theories offer predictions in opposing directions, would resolve this problem. It is also important to note that a prohibition on RPM will not necessarily result in lower retail prices because manufacturers and retailers will substitute more inefficient distribution arrangements (often using other vertical restraints or vertical integration).[92]

While measuring the welfare effects of vertical restraints can be especially difficult in the absence of a natural experiment, over the last 25 years there has been a concerted effort to add empirical knowledge to our large menu of theoretical models.[93] Two recent empirical surveys summarize the existing empirical literature. The first, authored by a group of Federal Trade Commission and Department of Justice economists, reviews 24 papers published between 1984

and 2005 providing empirical effects of vertical integration and vertical restraints.[94] The second, by Francine Lafontaine and Margaret Slade, reviews 23 papers with some overlap with the Cooper et al. survey.[95] While the reader is referred to these surveys for methodological details concerning individual studies, a careful review of both surveys offers a synthesis of the evidence. Cooper et al. observe that "empirical analyses of vertical integration and control have failed to find compelling evidence that these practices have harmed competition, and numerous studies find otherwise," and while "some studies find evidence consistent with both pro- and anticompetitive effects," "**virtually no studies can claim to have identified instances where vertical practices were likely to have harmed competition**."[96][emphasis added].

Lafontaine and Slade reach a similar conclusion. Summarizing and synthesizing the evidence they reviewed, the authors conclude that

> it appears that when manufacturers choose to impose restraints, not only do they make themselves better off, but they also typically allow consumers to benefit from higher quality products and better service provision . . . the evidence thus supports the conclusion that in these markets, manufacturer and consumer interests are apt to be aligned.[97]

In a more recent analysis of the vertical restraints literature, Dan O'Brien notes that three additions to the literature provide new evidence that vertical restraints mitigate double marginalization and promote retailer effort.[98] O'Brien goes on to conclude that "with few exceptions, the literature does not support the view that these practices are used for anticompetitive reasons," and supports "a fairly strong prior belief that these practices are unlikely to be anticompetitive in most cases."[99]

In *Overshot the Mark*, Professors Lao and Grimes do not confront this literature. Perhaps sensing the overwhelming empirical evidence stacked against them, Lao and Grimes attempt to recast the theoretical debate and even go so far as to claim that the empirical evidence favors the

anticompetitive theories. These attempts fail. A scientific, Bayesian approach to the design of optimal antitrust policy requires that we update our prior beliefs based on the available empirical evidence. In order to select the best performing economic models from those available, antitrust decision-makers must rigorously examine the existing evidence. In the context of RPM and vertical restraints, it is impossible to evaluate the existing empirical literature without reaching the conclusion that these practices are nearly always efficient. Applying explanatory power as our selection criteria for the proper economic model, the evidence overwhelmingly rejects replacing the Chicago School approach to vertical restraints with a more interventionist approach. As O'Brien concludes, "if there were a Hippocratic Oath among antitrust practitioners, this is where a scientific approach would lead."[100]

B. Exclusive Dealing: Economic Theory and Evidence[101]

The primary anticompetitive concern with exclusive dealing contracts is that a monopolist might be able to utilize exclusivity to fortify its market position, raise rivals' costs of distribution, and ultimately harm consumers. In *Overshot the Mark*, Steven Salop usefully summarizes the raising rivals' cost ("RRC") principle (which he originated) and its application to exclusionary contracts, distinguishes it from predatory pricing theories, and then places the RRC principle in the context of Post-Chicago economics.[102]

The most common scenario of antitrust relevance involving exclusive dealing contracts concerns an upstream supplier, *S*, entering into an exclusive dealing contract with retailers, *R*, who, in turn, sells the product to final consumers. The potentially anticompetitive motivation associated with exclusive dealing contracts is clearly related to the limitation placed by that contract on R's ability to sell rival products to final consumers. The possibility of anticompetitive exclusion occurring from these types of contracts generally arises only if S is

able to foreclose rival suppliers from a large enough fraction of the market to deprive those rivals of the opportunity to achieve minimum efficient scale.[103]

The well known critique of that line of reasoning comes from the Chicago School argument that R will not have the incentive to agree to contracts that facilitate monopolization upstream, because they will then suffer the consequences of facing that monopolist in their chain of distribution.[104] As a general matter, one can think of this criticism as drawing the analogy to a conspiracy among retailers, R, organized by the monopolist S to exclude S's rivals from access to distribution.[105] Like any other conspiracy, it is generally the case that each R has the incentive to deviate and remain outside the agreement by contracting with S's rivals and expanding output at the expense of rival retailers.[106] In other words, retailers have the incentive to avoid entering agreements that will ultimately harm them, and S will generally not be able to compensate retailers enough to enter into the anticompetitive exclusive contract.[107] The critique goes on to argue that observed exclusive dealing contracts must generate efficiencies rather than anticompetitive effects.

The economic literature has grown in recent years to include a series of theoretical models that contemplate scenarios where S can sufficiently compensate retailers to join and remain within the conspiracy, and therefore accomplish an anticompetitive purpose. These anticompetitive theories of exclusive dealing generally assume that S supplies a product that is essential to R's viability and that there are substantial economies of scale in manufacturing.

One such theory considers the case where the monopolist S adopts exclusive contracts rather than merely collecting its monopoly profit from the sale of the essential product, and relies on the existence of dynamic economies of scale such as network effects.[108] Under this dynamic theory of exclusion, S's exclusive contracts prevent S's rivals or potential entrants from

developing into future rivals, thereby protecting S's future market power. Because S's rivals must operate at a cost disadvantage that drives them out and prevents entry, S is able to increase the duration and scope of its market power.[109]

A second set of models explores the possibility that coordination problems between buyers prevent the foiling of S's anticompetitive use of exclusive dealing contracts. There is substantial industrial organization literature analyzing the conditions under which these types of coordination problems between buyers generate the possibility of anticompetitive exclusion. The seminal article of this type is by Rasmussen, Ramseyer, and Wiley ("RRW"),[110] and later refined by Segal and Whinston ("SW").[111] The unifying economic logic of these models is that the potential entrant (or current rival) must attract a sufficient mass of retailers to cover its fixed costs of entry, but S's exclusive contracts with retailers prevent the potential entrant from doing so. It is then necessary to work out the conditions under which such exclusion is not possible, possible, or probable.

A number of factors, in addition to the degree of downstream retail competition, have been identified in the exclusive dealing literature as either favoring the theoretical possibility of exclusion or rendering it less likely or impossible. Significant economies of scale in distribution militate against exclusion because, in that case, a potential entrant may need to attract only a single buyer in order to achieve minimum efficient scale. Similar logic suggests that a small number of buyers will be able to coordinate in order to support the excluded rival. Further, the exclusionary equilibrium in these models is relatively fragile, and the models also often generate multiple equilibria in which buyers reject exclusivity.[112]

Recent extensions of these models that focus on the case where buyers are competitive downstream retailers rather than final consumers have produced a wide range of conflicting

results under various conditions.[113] Fumagalli and Motta consider the role of retail competition in the RRW-SW framework and demonstrate that the incentives to exclude can disappear in this setting as one buyer becomes large enough to support the entry or viability of a rival.[114] Simpson and Wickelgren derive a model that produces the opposite result, arguing that downstream competition enhances the incentive to exclude because the benefits to a single buyer of resisting exclusion are minimal if all retailers are equally disadvantaged, because retail competition will allow retailers to pass those costs on to consumers.[115]

The development of this literature has increased our knowledge about the potential theoretical impact of exclusive dealing contracts. However, the models generating anticompetitive exclusion generally rely on strict assumptions concerning the existence of significant economies of scale, barriers to entry, the nature of both upstream and downstream competition and, importantly, the complete absence of efficiency justifications for the contracts. Like RPM, exclusive dealing has become an area of antitrust debate in which possibility theorems of anticompetitive vertical contracting practices challenge the pre-existing "Chicago School" economic view. The approach in this review has been to resolve such competing theoretical claims with the empirical evidence.

First, however, we must turn to the potential efficiency justifications for exclusive dealing. Exclusive dealing contracts are frequently observed between firms that lack any meaningful market power, implying that there must be efficiency justifications for the practice. Indeed, the economics literature is replete with pro-competitive explanations for exclusives and partial exclusives.[116]

The standard pro-competitive account of exclusive dealing contracts involves use of those contracts to prevent free-riding dealers from using manufacturer-supplied investments to

promote rival products.[117] Among others, manufacturer-supplied investments may take the form of purchasing display fixtures or training salespeople. Dealer free-riding on these investments involves using these investments to promote rival brands. The classic example of this type of free-riding in the antitrust context is *Ryko Manufacturing Co. v. Eden Services*,[118] where a manufacturer of car wash equipment used exclusive territories and exclusive dealing contracts to prevent its dealers from switching consumers to other brands. By facilitating dealer performance, the exclusive dealing contract allows manufacturers to collect a return on their investments and increase output.

Benjamin Klein and Andres Lerner expand this standard account by demonstrating how exclusivity minimizes free-riding in two cases where there are no manufacturer-supplied investments: first, free-riding on manufacturer-financed promotions in order to sell rival products; and second, free-riding in the form of failing to supply the promotion paid for by the manufacturer altogether, even in the absence of dealer switching.[119] Since manufacturers often compensate retailers for the provision of promotional services such as premium shelf space,[120] dealers have incentives to use these additional promotional efforts to switch consumers to other products upon which the dealer earns a greater profit. Exclusive dealing can be used to prevent this type of free-riding in an analytically identical manner to the way it prevents free-riding on manufacturer-supplied investments.[121]

The second type of free-riding examined by Klein and Lerner also involves manufacturer-financed promotion. Because dealers are being compensated for promotional effort on the basis of total sales (both marginal and infra-marginal), and non-performance is costly to detect, dealers have an incentive not to supply the agreed upon promotional inputs.[122] Exclusive dealing mitigates the incentive to free-ride in this way by increasing the dealer's incentive to

promote the manufacturer's product. Courts have recognized this somewhat intuitive justification for the use of exclusive dealing in *Joyce Beverages*[123] and *Roland Machinery,* noting the incentive effects of "dedicated" or "loyal" distribution.[124] Klein and Lerner provide an economic basis for understanding the mechanism by which dealers more actively promote the manufacturer's product in this case, and consider whether *Dentsply*'s "dealer loyalty" justification for its use of exclusive dealing was improperly rejected.[125]

There are other efficient uses of exclusive dealing unrelated to free-riding of any sort. One such use involves the role of exclusive dealing by individual retailers, including those without any market power, in order to intensify competition by manufacturers for their business and to improve purchase terms. By offering manufacturers access to the retailer's loyal customer base, a retailer is able to commit a substantial fraction of its customers' purchases to the "favored" supplier and thereby dramatically increase each supplier's perceived elasticity of demand by making rival products highly substitutable.[126]

In *Overshot the Mark*, Professor Calkins argues that courts have responded inadequately to the lessons to be gleaned from the Post-Chicago literature.[127] Without a rigorous critique of the available evidence, Professor Calkins appears to assume that the Post-Chicago possibility theorems, which demonstrate that exclusive dealing contracts can generate anticompetitive effects under some conditions, are the best available models in terms of predictive power. Without such an analysis, it is difficult to identify the empirical basis for Professor Calkin's claims that the various obstacles facing plaintiffs bringing exclusive dealing claims are bad for consumers.[128] To be fair, in the closing sentences of Professor Calkins' article, he acknowledges that there is not "nearly enough empirical work" and that "we need all the help we can get about how the world really works."[129] Our approach would differ by first incorporating the existing

evidence into our analysis and then asking which theoretical approach to exclusive dealing best fits the data.

Existing empirical evidence of the impact of exclusive dealing is relatively scarce, but generally favors the view that exclusive dealing is much more likely to be output-enhancing than anticompetitive. Heide et al. conducted a survey of managers responsible for distribution decisions and found that the incidence of exclusive dealing was correlated with the presence of "free-ridable" investments.[130] Both Asker and Sass separately examine the welfare consequences of exclusive dealing in the beer market by observing the effect of exclusive dealing on total market output, as well as the output and prices of rival distributors, concluding that exclusive dealing is output increasing and does not generate foreclosure.[131] Lafontaine and Slade's survey of the existing empirical literature, including both exclusive dealing contracts and vertical integration, concludes that the practices are generally efficient and not associated with anticompetitive outcomes.[132]

While we have limited our analysis to RPM and exclusive dealing contracts for the purposes of this review, our approach points towards firm conclusions with respect to the optimal antitrust approach to both practices. Rather than providing support for *Overshot the Mark*'s hypothesis that Post-Chicago economics' possibility theorems provide a sounder basis for antitrust policy than the pre-existing body of economic knowledge associated with the Chicago School, the empirical evidence on RPM overwhelmingly rejects the hypothesis. The empirical evidence on exclusive dealing also does not support *Overshot the Mark*'s hypothesis, with the scarce evidence pointing in favor of the pro-competitive economic accounts of exclusivity.

The burden of persuasion lies with the Post-Chicagoans to demonstrate both that the Chicagoans did indeed overshoot the mark and that the newer theoretical contributions can produce an antitrust enforcement policy much closer to the ideal target. *Overshot the Mark* fails to satisfy its burden of proof. The simple hypothesis that the persistence of Chicago School economic models and ideas in the courts is motivated by their superior explanatory power not only cannot be rejected, but finds substantial support in the data. This finding is fatal to *Overshot the Mark*'s primary mission: To explain why inferior Chicago School economics persists in the face of a superior challenger.

IV. THE CHICAGO SCHOOL AND THE SUPREME COURT

In addition to *Overshot the Mark*'s overstated and, as we've shown, unsupported claims about the predictive superiority of the Post-Chicago economic models, the volume also presses the proposition that conservative economic analysis has, in recent years, had a pernicious effect on consumers by causing courts to adopt erroneous economic principles, get specific cases wrong, develop sub-optimal legal rules, or otherwise influence antitrust policy in the wrong direction.[133]

Because all parties agree that the early Chicago School contributions gave intellectual coherence to antitrust, and at least started moving it in the "right" direction for consumers, the burden lies with the challengers to demonstrate persuasively that the efficient evolutionary path of antitrust was stalled as the result of the Chicago School's influence on the courts. The challenger must gather enough evidence to reject the simple alternative hypothesis that the persistence of the Chicago School's economic legacy in the federal courts is explained by the proposition that the judges have relied on the body of economic knowledge with the greatest

explanatory power. Our analysis thus far does the bulk of the work toward undermining the intellectual predicate for this rejection.

To be sure, if the underlying economic claim was correct and supported by the existing empirical evidence, *Overshot the Mark* would present an interesting puzzle concerning the persistence of antiquated Chicago School economics in the face of a superior alternative. *Overshot the Mark* answers the puzzle with a conspiracy theory positing that at least one significant reason for the persistence of what the Post-Chicagoans perceive to be inefficient legal rules is a supposed cartel consisting of Chicago oriented antitrust lawyers, economists, enforcement agency officials, and both conservative *and* liberal judges. Conservative economists, it appears, have successfully and even knowingly misled the Supreme Court of the United States over the past several decades into the adoption of inefficient legal norms based on inferior economic foundations.

While claims that the Supreme Court has fallen victim to this conspiracy appear throughout *Overshot the Mark*, the most notable proponent of this conspiracy theory explanation for the persistence of the Chicago School in the federal courts, and the Supreme Court in particular, is Professor Fox.[134] Professor Fox accepts that the Court was headed in the "right" direction, but asserts that for the past several decades "a conservative Court swung the pendulum from one inefficient position (too much antitrust because it disregarded incentives and efficiencies of dominant firms) to another (too little antitrust because it disregards incentives and efficiencies of firms without power)."[135]

As evidence in favor of this proposition, Professor Fox walks readers through four Supreme Court cases: *Brooke Group,*[136] *California Dental Association*[137]*, Trinko,*[138] and *Leegin*,[139] concluding that each was decided not by efficiency but rather a commitment to

conservative economics, which allows theory and ideology to trump evidence and efficiency. In *Brooke Group*, Professor Fox argues that the Court's presumption that predatory pricing was rare was "based on theory only, as adumbrated by conservative economists," while other "scholarship establishes, to the contrary, that selective price predation is a recurring phenomenon; it is used effectively to eliminate young rivals and to deter potential entry into noncompetitive markets."[140] Professor Fox presumes, based on her assessment of the relative frequency of anticompetitive predatory pricing, that a plaintiff victory would have been efficient but did not occur because of "conservative economics, which consistently privileged theory over facts."[141]

Professor Fox criticizes the Court's *Brooke Group* decision for relying on economic literature that suggests the rarity of anticompetitive predatory pricing and emphasizes the benefits of low prices because it is too theoretical and insufficiently empirical. By way of contrast, Professor Fox points to scholarship that "establishes" and presumably does not favor theory over facts. One might expect to see a citation here to an empirical study documenting the anticompetitive effects of predatory pricing. But that is not the case. To criticize the theoretical nature of the Chicago School critique of predatory pricing, Professor Fox cites a well known discussion of *game theoretic models* which suggests various conditions under which price predation might be plausible.[142] A rigorous examination of the empirical evidence in order to establish the frequency of anticompetitive predation, as well as the social costs of both false positives and false negatives, would be required to understand whether the rule announced in *Brooke Group* was indeed inefficient. Professor Fox does neither, which is particularly troublesome when advocating that predation policy be based upon strategic agency models which are notoriously difficult to administer, highly stylized, and formal, and whose application is likely to substantially increase the probability of false positives.

Professor Fox makes similar arguments with regard to *Cal Dental* and *Trinko*, arguing that the tie-breaking vote in the former was due to conservative economics. With respect to *Trinko*, Professor Fox asks "was *Trinko* efficient? The principles it recites certainly had efficiency properties," as would a "judgment more sympathetic to the abused rivals."[143] Nonetheless, Professor Fox argues that we can attribute "Justice Scalia's remarkable and unprecedented formulation of pro-dominant-firm antitrust law principles" to "conservative economics."[144] Finally, channeling volume contributors Professors Lao and Grimes' views on RPM and *Leegin*, Professor Fox describes the decision as driven by "conservative economics-based theory rather than fact."[145]

While a complete defense of each of the Supreme Court's decisions over the past 25 years is beyond the scope of this review, a critique of the theme emerging from Professor Fox's view of the Supreme Court's antitrust jurisprudence is not. We've already discussed *Leegin* and suggest that rule of reason approach to RPM is mandated by overwhelming empirical evidence showing that RPM is generally efficient.[146] An alternative theory, and the one explored by Professor Fox in *Overshot the Mark*, is that *conservative* economics' pernicious influence on the Supreme Court has misled its members into favoring inferior economics upon which to base antitrust policy. While a rigorous quantitative empirical test of this ideological conspiracy theory may be difficult to execute, the theory does generate some testable implications. Perhaps the most obvious of these testable implications is that Supreme Court jurisprudence of the past several decades ought to be split among ideological lines, with decreasing consensus as conservative judges push the conservative economic agenda against their unwilling liberal counterparts.

The data tells a different story, which is impossible to reconcile with Professor Fox's simple tale of ideological conspiracy. In an excellent analysis of Supreme Court antitrust decisions from 1967-2007, Leah Brannon and Judge Douglas Ginsburg examine recent trends in Supreme Court voting patterns.[147] Contrary to the predictions that ideological adoption of conservative economics in the Supreme Court would reduce consensus and produce voting along ideological lines, Brannon and Ginsburg find a remarkable degree of consensus in antitrust decisions.[148] In the benchmark period from 1967-1976, the Supreme Court decided 44 antitrust cases. Eighty percent of these decisions were decided by a supermajority of two-thirds or more. In this initial time period, 55 percent of the supermajority decisions favored plaintiffs and 25 percent favored defendants. From 1977 to 2006, approximately 77 percent of the 73 antitrust decisions were decided by a supermajority with 34 of these decisions favoring defendants and 22 for plaintiffs.[149] If one focuses on the most recent time period from 1997-2006, 85 percent of all antitrust decisions were decided by a supermajority margin, and each in favor of the defendant. Conservative and liberal Supreme Court justices alike are apparently equally persuaded by the economic logic of Chicago School arguments.

Is this the voting pattern of an ideological antitrust court? Consider the vote counts for the decisions during the Bush administration from 2004-2008. The total vote count for these decisions was 77-9. Six of ten decisions were decided unanimously with only one, *Leegin*, attracting more than two votes for the dissent.[150] Including the Supreme Court's recent and unanimous *Linkline* decision,[151] these numbers change to 86-9, with seven of the eleven decisions unanimous. Of course, these voting counts are not evidence that the Supreme Court does not consider political ideology when deciding antitrust cases. Nor does this data reject the possibility that political ideology explains the persistence of the Chicago School's influence in

lower courts. It does, however, suggest that the simple conspiracy story, which alleges that the judiciary is an active participant in an ideologically motivated program to produce inefficient antitrust rules that harm consumers, is not supported by the data.

Both the voting behavior of the Supreme Court's conservative and liberal justices as well as the available empirical economic evidence on specific business practices such as RPM and exclusive dealing support the simple hypothesis that the persistence of the Chicago School's influence can be explained by the robustness of the economic models and their explanatory power. This simple story may not satisfy those searching for a more exciting explanation, but it is the story supported by the data.

V. CONCLUSION

Overshot the Mark is an important collection of essays presenting a challenge to the Chicago School's dominating influence on United States antitrust jurisprudence. It offers a proposal to supplant the Chicago School theoretical foundations of modern antitrust in favor of a Post-Chicago enforcement regime. Applying Stigler's admonition that explanatory power must determine the winner of a battle of competing theories, I conclude that despite a valiant effort well worth reading for any party interested in the future of antitrust policy, *Overshot the Mark* falls short of hitting its own.

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[1]George Stigler, Graduate School of Business, University of Chicago, Nobel Memorial Lecture: The Process and Progress of Economics (Dec. 8, 1982), in NOBEL LECTURES, ECONOMICS 1981-1990 (Karl-Göran, Mäler ed., Singapore 1992) at 67.

[2]*Id*. at 67-69.

[3]Rhetorical battles over whether economics qualifies as a science aside, there is no serious debate that the antitrust economics literature conforms to the scientific method and that there is universal agreement that economics should inform antitrust analysis.

[4]*See* Daniel P. O'Brien, The Antitrust Treatment of Vertical Restraints: Beyond the Possibility Theorems, in REPORT: THE PROS AND CONS OF VERTICAL RESTRAINTS 40, 80 Konkurrensverket, Swedish Competition Authority,

2008), available at http://www.konkurrensverket.se/upload/Filer/Trycksaker/Rapporter/Pros&Cons/rap_pros_and_cons_vertical_restraints.pdf. O'Brien refers to this body of literature as the "1984 Synthesis," rather than the "Chicago Synthesis," because the latter has mistakenly come to be associated with an unscientific, non-interventionist view toward the antitrust treatment of vertical practices." While O'Brien's point is well taken, because one purpose of this review is to confront these mistaken associations directly, we elect to use Chicago School without loss of generality.

[5]Robert Pitofsky, Introduction: Setting the Stage, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST, at 3, 6 (Robert Pitofsky ed., 2008).

[6]*See id.* at 5-6, for the assertions that conservative economic analysis has impacted U.S. antitrust enforcement such that it is characterized by "preferences for economic models over facts…[and] outright mistakes in matters of doctrine," and that "extreme interpretations and misinterpretations of conservative economic theory (and constant disregard of facts) have come to dominate antitrust," to the detriment of consumers.

[7]*See* O'Brien, *supra* note 4.

[8]President Obama, for instance, has promised to "direct my administration to reinvigorate antitrust enforcement." Posting of Joshua D. Wright to Truth On The Market, http://www.truthonthemarket.com/2008/11/05/antitrust-under-president-obama-i-will-direct-my-administration-to-reinvigorate-antitrust-enforcement/ (Nov. 5, 2008, 9:53 EST). President Obama's respective nominee to head the Federal Trade Commission, Commissioner Leibowitz, has already cited favorably to OVERSHOT THE MARK in a policy speech. Jon Leibowitz, Commissioner, FTC, Remarks at Section 5 Workshop (Oct. 17, 2008) (available at http://ftc.gov/speeches/leibowitz/081017section5.pdf). Similarly, Christine Varney has publicly applauded the American Antitrust Institute Transition Report, which adopts an explicitly Post-Chicago vision of antitrust enforcement, noting that "“a great framework that starts it and I do endorse the conclusion." Posting of Joshua D. Wright to Truth On The Market, http://www.truthonthemarket.com/2009/02/22/doj-aag-designate-christine-varney-on-section-2-europe-google-a-puzzling-statement-about-error-costs/ (Feb. 22, 2009 21:10 EST).

[9]*See* Bell Atlantic Corp. v. Twombly, 550 U.S. 544 (2007) (for discussion of plausibility standard).

[10]For discussions of Bork's efforts, *see* Frank H. Easterbrook, *The Chicago School and Exclusionary Conduct*, 31 HARV. J.L. & PUB. POL'Y 439 (2008); Douglas H. Ginsburg, Judge Bork, *Consumer Welfare, and Antitrust Law*, 31 HARV. J.L. & PUB. POL'Y 449 (2008); George L. Priest, *The Abiding Influence of The Antitrust Paradox*, 31 HARV. J.L. & PUB. POL'Y 455 (2008).

[11]Joshua D. Wright, *The Roberts Court and the Chicago School of Antitrust: The 2006 Term and Beyond*, 3 COMPETITION POL'Y INT'L 24 (2007) (arguing that Chicago School economic principles successfully characterize the Roberts Court antitrust jurisprudence).

[12]*See* Steven C. Salop, *Economic Analysis of Exclusionary Vertical Conduct: Where Chicago Has Overshot the Mark*, in OVERSHOT THE MARK, *supra* note 5, at 141, 144 (for the claim that "it is important to recognize that [the Post-Chicago] approach has its root in the economic analysis of Chicago School commentators," referring to the work of Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 NW. U. L. REV. 281 (1956); Peter C. Carstensen, *Director and Levi, After 40 Years: The Anti-Antitrust Agenda Revisited*, 17 MCLR 37, 40 (1996) (for the proposition that Director and Levi's analysis was a precursor to the raising rivals' costs hypothesis); Comment, *Vertical Forestalling Under the Antitrust Laws*, 19 U. CHI. L. REV. 583 (1952).

[13]*See*, e.g. Elizabeth Granitz & Benjamin Klein, *Monopolization by "Raising Rivals' Costs": The Standard Oil Case*, 39 J.L. & ECON. 1 (1996); Dennis Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON. 194 (2002).

[14]For claims that Chicago School economics caused courts to adopt erroneous economic principles and get specific cases wrong, *see* e.g. Richard Schmalensee, *Thoughts on the Chicago Legacy in U.S. Antitrust*, in OVERSHOT THE MARK, *supra* note 5, at 19, 20; Thomas E. Kauper, *Influence of Conservative Economic Analysis on the Development of the Law of Antitrust*, in OVERSHOT THE MARK, *supra* note 5, at 40, 44; Herbert Hovenkamp, *The Harvard and Chicago Schools and the Dominant Firm*, in OVERSHOT THE MARK, *supra* note 5, at 109, 113; Harvey J. Goldschmid, *Comment on Herbert Hovenkamp and the Dominant Firm: The Chicago School Has Made Us Too*

Cautious About False Positives and the Use of Section 2 of the Sherman Act, in OVERSHOT THE MARK, *supra* note 5, at 123, 126; Warren S. Grimes, *The Sylvania Free Rider Justification for Downstream-Power Vertical Restraints: Truth or Invitation for Pretext?*, in OVERSHOT THE MARK, *supra* note 5, at 181, 191; Marina Lao, *Free Riding: An Overstated, and Unconvincing, Explanation for Resale Price Maintenance*, in OVERSHOT THE MARK, *supra* note 5, at 196, 201. For claims that the Chicago School caused courts to develop sub-optimal legal rules, see e.g. Schmalensee, *id*. at 19; Kauper, *id.* at 42; Eleanor M. Fox, *The Efficiency P*aradox, in OVERSHOT THE MARK, *supra* note 5, at 77, 79-80; John B. Kirkwood & Robert H. Lande, *The Chicago School's Foundation is Flawed: Antitrust Protects Consumers, Not Efficiency*, in OVERSHOT THE MARK, *supra* note 5, at 89, 90; Hovenkamp, *id*. at 111. For claims that the Chicago School influenced antitrust policy in the wrong direction, see e.g. F.M. Scherer, *Conservative Economics and Antitrust: A Variety of Influences*, in OVERSHOT THE MARK, *supra* note 5, at 30, 36-37; Daniel L. Rubinfeld, *On the Foundations of Antitrust Law and Economics*, in OVERSHOT THE MARK, *supra* note 5, at 52; Fox, *id*. at 81; Kirkwood & Lande, *supra*, at 90; Hovenkamp, *id*. at 111.

[15]Posting of Joshua D. Wright to Truth On The Market, http://www.truthonthemarket.com/2007/07/25/chicago-post-chicago-post-post-chicago-on-using-shorthand-labels-responsibly/ (July 25, 2007, 13:07 EST).

[16]This section relies on my earlier work on the influence of the Chicago School on the Roberts Court's antitrust jurisprudence. *See* Wright, *supra* note 11.

[17]CHICAGO ESSAYS IN ECONOMIC DEVELOPMENT vii (David Wall, ed., 1972).

[18]For remarks on how the current financial crisis demonstrates that the Chicago School is "on life support, if it is not dead," *see* J. Thomas Rosch, Comm'r, Fed. Trade Comm'n, New York Bar Association Annual Dinner: Implications of the Financial Meltdown for the FTC (Jan. 29, 2009), http://ftc.gov/speeches/rosch/090129financialcrisisnybarspeech.pdf.

[19]Jonathan B. Baker & Timothy F. Bresnahan, Economic Evidence in Antitrust: Defining Markets and Measuring Market Power 23-26 (Stanford Law School, Working Paper No. 328, 2006).

[20]*See*, e.g., YALE BROZEN ET AL., CONCENTRATION, MERGERS, AND PUBLIC POLICY (1982) (questioning the causal link between market concentration and price, and providing alternative efficiency-based explanations for the correlation); HARVEY J. GOLDSCHMID ET AL., INDUSTRIAL CONCENTRATION: THE NEW LEARNING (1974).

[21]Professors Demsetz and Armen Alchian are frequently associated with the Chicago School despite the fact that both spent the bulk of their careers at the University of California, Los Angeles (UCLA). As any UCLA economist should note, the antitrust community has sometimes allowed the Chicago School to take credit for many of the contributions from UCLA economists such as Alchian, Demsetz, Benjamin Klein and others. The contributions of the UCLA economists to antitrust analysis are discussed by former FTC Chairman, and UCLA alumnus, Timothy J. Muris. *See* Timothy J. Muris, *Improving the Economic Foundations of Competition Policy*, 12 GEO MASON L. REV. 1 (2003).

[22]Harold Demsetz, *Two Systems of Belief About Monopoly*, in INDUSTRIAL CONCENTRATION, *supra* note 20. The contributions of Demsetz and other participants in the famous Airlie House Conference are discussed in Timothy J. Muris, *Economics and Antitrust*, 5 GEO. MASON L. REV. 303 (1997).

[23]*See* THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 227-33, 601-05 (Peter Newman ed., Macmillan Reference 1998); *see also* Sam Peltzman, *Aaron Director's Influence on Antitrust Policy*, 48 J.L. & ECON. 313 (2005).

[24]Seminal contributions from the Chicago School literature include, but are not limited to, Robert H. Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconce*ption, 22 U. CHI. L. REV. 157 (1954); Aaron Director & Edward H. Levi, *Law and the Future of Trade Regulation*, 51 NW. U. L. REV. 281 (1956) (reprinted in 3 COMPETITION POL'Y INT'L 253 (2007); Ward S. Bowman, *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19 (1957); John S. McGee, *Predatory Price Cutting: The Standard Oil (NJ) Case*, 1 J.L. & ECON. 137 (1958); Lester G. Telser, *Why Should Manufacturers Want Fair Trade*?, 3 J.L. & ECON. 86 (1960).

[25]*See*, e.g., Louis Kaplow & Carl Shapiro, *Antitrust*, in 2 HANDBOOK OF LAW AND ECONOMICS 1073 (A. Mitchell Polinsky & Steven Shavell eds., Elsevier B.V. 2007) available at http://faculty.haas.berkeley.edu/shapiro/antitrust2007.pdf.

[26]Howard P. Marvel, *Exclusive Dealing*, 25 J.L & ECON. 1 (1982); Benjamin Klein & Andres V. Lerner, *The Expanded Economics of Free-Riding: How Exclusive Dealing Prevents Free-Riding and Creates Undivided Loyalty*, 74 ANTITRUST L.J. 473 (2007); Benjamin Klein & Kevin M. Murphy, *Exclusive Dealing Intensifies Competition for Distribution*, 75 ANTITRUST L.J. 433 (2008).

[27]Benjamin Klein & Joshua D. Wright, *The Economics of Slotting Contracts*, 50 J.L. & ECON. 473 (2007); Joshua D. Wright, *Slotting Contracts and Consumer Welfare*, 74 ANTITRUST L.J. 439 (2007); Joshua D. Wright, *Antitrust Law and Competition for Distribution*, 23 YALE J. ON REG. 169 (2006).

[28]Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L & ECON. 265 (1988).

[29]Cont'l T.V., Inc., v. GTE Sylvania, Inc., 433 U.S. 36 (1977); State Oil Co. v. Khan, 522 U.S. 3 (1997); Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004); Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993); Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877 (2007); Pac. Bell Tel. Co. v. linkLine Commc'ns., Inc., No. 07-512, 2009 U.S. Lexis 1635 (U.S. Feb. 25, 2009).

[30]*See,* e.g., Frank Easterbrook, *The Limits of Antitrust*, 65 TEX. L. REV. 1 (1984).

[31]Richard A. Posner, *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Lega*lity, 48 U. CHI. L. REV. 6 (1981).

[32]*See*, e.g., DOMINICK. T. ARMENTANO, ANTITRUST POLICY: THE CASE FOR REPEAL (Ludwig von Mises Institute 2007) (1986).

[33]On the Post-Chicago approach to antitrust, *see* Jonathan B. Baker, *A Preface to Post-Chicago Antitrust*, in POST-CHICAGO DEVELOPMENTS IN ANTITRUST LAW 60 (Antonio Cucinotta et al. eds., 2003).

[34]A seminal paper in this literature is Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (2000).

[35]*See* Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, 96 YALE L.J. 209 (1986).

[36]*See*, e.g., Whinston, *supra* note 34; Carlton & Waldman, *supr*a note 13; *see also* Bruce Kobayashi, *Does Economics Provide A Reliable Guide to Regulating Commodity Bundling By Firms? A Survey of the Economic Literature*, 1 J. COMPETITION L. & ECON. 707 (2005) (surveying the bundling literature); Eric B. Rasmusen, Mark J. Ramseyer, & John Shepard Wiley Jr., *Naked Exclusion*, 81 AM. ECON. REV. 1137 (1991); Douglas Bernheim & Michael Whinston, *Exclusive Dealing*, 106 J. POL. ECON. 64 (1998); John Simpson & Abraham L. Wickelgren, *Naked Exclusion, Efficient Breach, and Downstream Competition*, 97 AM. ECON. REV. 1305 (2007); Patrick Bolton, Joseph F. Brodley, & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239 (2000).

[37]Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451 (1992). In aftermarket "lock-in" cases most closely resembling the Post-Chicago theories in Kodak, lower courts have "bent over backwards to construe Kodak as narrowly as possible." *See* Herbert Hovenkamp, *The Reckoning of Post-Chicago Antitrust*, in POST-CHICAGO DEVELOPMENTS IN ANTITRUST, *supra* note 33, at 8; *see also* David A.J. Goldfine & Kenneth M. Vorrasi, *The Fall of the Kodak Aftermarket Doctrine: Dying A Slow Death in the Lower Courts*, 72 ANTITRUST L.J. 209 (2004); Bruce H. Kobayashi & Joshua D. Wright, *Federalism, Substantive Preemption, and Limits on Antitrust: An Application to Patent Holdup*, J. COMPETITION L. & ECON. (forthcoming 2009) (extending Goldfine and Vorrasi's analysis through 2007 and confirming their results).

[38]William E. Kovacic, *The Modern Evolution of Competition Policy Enforcement Norms*, 71 ANTITRUST L.J. 377 (2003).

[39]*See*, e.g., Pitofsky, *supra* note 5, at 4-5; Irwin M. Stelzer, *Some Practical Thoughts About Entry*, in OVERSHOT THE MARK, *supra* note 5, at 24, 28-29; Fox, *supra* note 14, at 82, 86, 88; Lao, *supra* note 14, at 199.

[40]*See supra* text accompanying note 12.

[41]*See* Granitz & Klein, *supra* note 13.

[42]Tom Hazlett, *Predation in Local Cable TV Markets*, 40 ANTITRUST BULL. 609 (1995).

[43]George J. Stigler, *The Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964).

[44]Carlton & Waldman, *supra* note 13.

[45]Richard A. Posner, *The Chicago School of Antitrust*, 127 U. PA. L. REV. 925, 928 (1969); ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 117 (The Free Press 1993) (1978).

[46]*See* Wright, *supra* note 11.

[47]*See* Brozen, *supra* note 20; Demsetz, *supra* note 22.

[48]R.H. COASE, *George J. Stigler*, in ESSAYS ON ECONOMICS AND ECONOMISTS (University of Chicago Press 1995).

[49]Harold Demsetz, *George J. Stigler: Midcentury Neoclassicalist with a Passion to Quantify*, 101 J. POL. ECON. 793 (1993).

[50]Press Release, The Royal Swedish Academy of Sciences, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1982 (Oct. 20, 1982), http://nobelprize.org/nobel_prizes/economics/laureates/1982/press.html.

[51]*See*, e.g., George J. Stigler, *The Economist and the State*, 55 AM. ECON. REV. 1, 17 (1965):

> It will become inconceivable that the margin requirements on securities markets will be altered once a year without knowing whether they have even a modest effect. It will become impossible for an import-quota system to evade calculus of gains and costs . . . . Studies will inevitably and irresistibly enter into the subject of public policy, and we shall develop a body of knowledge essential to intelligent policy formation.

[52]George J. Stigler, *The Economic Effects of the Antitrust Laws*, 9 J.L. & ECON. 225 (1966).

[53]George J. Stigler, *United States v. Loew's: A Note on Block Booking*, 1963 SUP. CT. REV. 152 (1963).

[54]George J. Stigler, *The Economies of Scale*, 1 J.L. & ECON. 54 (1958).

[55]GEORGE J. STIGLER, MEMOIRS OF AN UNREGULATED ECONOMIST 97-100 (1988).

[56]*See* Muris, *supra* note 21, at 17. The seminal article from Klein & Murphy, *supra* note 28, includes a detailed discussion of Coors' use of vertical restraints to solve dealer free-riding problems.

[57]Easterbrook, *supra* note 30.

[58]*See*, e.g., David Evans & Jorge Padilla, *Designing Antitrust Roles for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73 (2005); C. Frederick Beckner III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41 (1999); Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 ANTITRUST L.J. 469 (2001); Luke Froeb et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005).

[59]Evans & Padilla, *supra* note 58. Others have applied the error-cost framework in a similar manner. *See supra* note 71.

[60]*See id*. at 88.

[61]*See* William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago-Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1 (2007).

[62]PHILLIP AREEDA & DONALD TURNER, ANTITRUST LAW 31-33 (1978).

[63]Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 234 (1st Cir. 1983).

[64]*See* Fox, *supra* note 14, at 79-80, 82, 86, 88; Lao, *supra* note 14, at 199, 208. *See also* Stephen Calkins, *Wrong Turns in Exclusive Dealing Law*, in OVERSHOT THE MARK, *supra* note 5, at 156, 165-67.

[65]We exclude mergers from our analysis here for a number of reasons. The first is that OVERSHOT THE MARK largely ignores mergers with the exception of Baker & Shapiro. One of the primary points made in their article is that, during the George W. Bush administration, the Department of Justice did not vigorously enforce the Clayton Act. Jonathan B. Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, in OVERSHOT THE MARK, *supra* note 5, at 235, 246-7. Baker & Shapiro offer some evidence that the percentage of merger challenges relative to transactions identified by the Hart-Scott-Rodino filing requirements fell. *Id*. at 246. The second is that others have defended against, discussed, and picked apart these claims in great detail. *See,* e.g., Timothy J. Muris, *Facts Trump Politics: The Complexities of Comparing Merger Enforcement over Time and Between Agencies,* ANTITRUST, Summer 2008, at 37; John D. Harkrider, *Antitrust Enforcement During the Bush Administration—An Econometric Estimation*, ANTITRUST, Summer 2008, at 43. The third reason is that, even if one accepts the questionable statistical foundation of Baker and Shapiro's claims that the Bush II Department of Justice (and to a lesser extent the FTC) gave a pass to anticompetitive mergers, there is little evidence to support that such a result (including the split between the DOJ and FTC on merger enforcement) is attributable to Chicago School economics. Finally, there is growing convergence on the relevant antitrust economics of mergers. This literature focuses on empirical methods designed to improve post-merger pricing predictions and is not inherently ideological. For a survey of the state of empirical evidence on the competitive effects of mergers, *see* Matthew Weinberg, *The Price Effects of Horizontal Mergers*, 4 J. COMPETITION L. & ECON. 433 (2008); Dennis W. Carlton, *Why We Need to Measure the Effect of Merger Policy and How to Do It* (Nat'l Bureau of Econ. Research, Working Paper No. 14719, Feb. 2009); Paul Paulter, *Evidence on Mergers and Acquisitions*, 48 ANTITRUST BULL. 119 (2003); Kaplow & Shapiro, *supra* note 25, at 1152-57. See also Orley Ashenfelter & Daniel Hosken, *The Effect of Mergers on Consumer Prices: Evidence from Five Selected Case Studies* (Nat'l Bureau of Econ. Research, Working Paper No. 13859, Mar. 2008); Graeme Hunter, Gregory K. Leonard, & G. Steven Olley, *Merger Retrospective Studies: A Review*, ANTITRUST, Fall 2008, at 34.

[66]Leegin, 127 S. Ct. 2705. On Leegin and its antitrust implications, see Wright, *supra* note 11.

[67]*See* Thomas A. Lambert, *Dr. Miles is Dead. Now What?: Structuring a Rule of Reason for Evaluating Minimum Resale Price Maintenance*, WM. & MARY L. REV. (forthcoming 2009).

[68]Leegin, *supra* note 66 at 2709. The Supreme Court overruled the per se rule against maximum RPM ten years earlier in State Oil v. Khan, 522 U.S. at 3. *See* Benjamin Klein, *Distribution Restrictions Operate by Creating Dealer Profits: Explaining the Use of Maximum Resale Price Maintenance in State Oil v. Kahn*, 7 SUP. CT. ECON. REV. 1 (1999).

[69]*See* Brief of Amici Curiae Economists in Support of Petitioner at 16, Leegin Creative Leather Prods. V. PSKS, Inc, 127 S. Ct. 2705 (No. 06-480), 2007 WL 173681 (stating that "[i]n the theoretical literature, it is essentially undisputed that minimum RPM can have procompetitive effects and that under a variety of market conditions it is unlikely to have anticompetitive effects"). The best estimate of the prevalence of collusion allegations in RPM cases is no greater than 15 percent. *See* Pauline Ippolito, *Resale Price Maintenance: Empirical Evidence from Litigation*, 34 J.L. & ECON. 263, 270 (1991).

[70]Warren S. Grimes, *The Path Forward After Leegin: Seeking Consensus Reform of the Antitrust Laws of Vertical Restraints*, 75 ANTITRUST L.J. 467 (2008).

[71]*See*, e.g., Grimes, *supra* note 14, at 182, 189, 191, 195; Lao, *supra* note 14, at 199, 203, 209.

[72]Discount Pricing Consumer Protection Act, S. 148, 111th Cong. (2009).

[73]Sylvania, 433 U.S. at 55.

[74]This economic rationale for RPM is typically associated with Telser, *supra* note 24.

[75]Robert Pitofsky, *Why 'Dr. Miles' Was Right*, 8 REGULATION 27, 29 (1984). Robert Pitofsky, *Are Retailers Who Offer Discounts Really "Knaves"?: The Coming Challenge to the Dr. Miles Rule*, ANTITRUST, Spring 2007, at 61, 63; Grimes, *supra* note 14, at 187.

[76]Benjamin Klein, Competitive Resale Price Maintenance in the Absence of Free-Riding (Feb. 10, 2009) (draft for FTC Hearings on Resale Price Maintenance, Feb. 17, 2009), available at http://ftc.gov/opp/workshops/rpm/docs/bklein0217.pdf.

[77]*See*, e.g. Robert L. Hubbard, *Protecting Consumers Post-Leegin*, ANTITRUST, Fall 2007, at 41.

[78]Leegin Creative Leather Products., Inc. v. PSKS, Inc., 127 S. Ct. 2705, 2733 (2007).

[79]Grimes, *supra* note 14, at 195.

[80]Lao, *supra* note 14, at 203.

[81]*Id*.

[82]A second critical economic question is why the compensation for the desired promotional services takes its particular form, e.g. RPM, a lump sum per unit time payment such as a slotting fee, or a wholesale price discount. For a discussion of the relative merits of volume based payment schemes such as RPM and wholesale price discounts in comparison to slotting fees, *see* Klein and Wright, *supra* note 27.

[83]Leegin, 127 S. Ct. at 2716 (citing Klein & Murphy, *supra* note 28, at 295. Klein has recently revisited the economics of resale price maintenance as first articulated by Klein and Murphy, in Klein, *supra* note 76.

[84]This is not the case where the services desired have significant inter-retailer demand effects and consumers shift their purchases from one retailer to another in response to the retailer's supply of the service. However, these large inter-retailer demand effects are not likely to be present for many desired services, such as the provision of premium shelf space. A more complete economic analysis of the incentive conflict based inter-retailer demand effects is presented in Ralph Winter, *Vertical Control and Price Versus Nonprice Competition*, 108 Q. J. ECON. 61 (1993), and in Klein & Wright, *supra* note 27.

[85]*See* Wright, *supra* note 27.

[86]*See* Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981).

[87]*See* Klein, *supra* note 76 (describing how RPM facilitates self-enforcement).

[88]*See*, e.g., Grimes, *supra* note 70, at 477-78.

[89]Lao, *supra* note 14, at 209.

[90]*Id*. at 210.

[91]*Id*. at 211.

[92]*See* Klein, *supra* note 76, at 42.

[93]*See* Dan O'Brien, *supra* note 4, for an excellent and extensive discussion of the relevant theoretical and empirical literature on RPM and vertical restraints generally.

[94]James C. Cooper, Luke M. Froeb, Dan O'Brien, & Michael G. Vita, *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005).

[95]Francine Lafontaine & Margaret Slade, *Empirical Assessment of Exclusive Contracts*, in HANDBOOK OF ANTITRUST ECONOMICS (Paolo Buccirossi ed., 2008).

[96]Cooper et al., *supra* note 93, at 18 (emphasis added).

[97]Lafontaine & Slade, *supra* note 94, at 22.

[98]O'Brien, *supra* note 4, at 72-73 (citing Sofia Berto Villas-Boas, *Vertical Relationships between Manufacturers and Retailers: Inference with Limited Data*, 74 REV. ECON. STUD. 625 (2007); Julie H. Mortimer,

Vertical Contracts in the Video Rental Industry, 75 REV. ECON. STUD. 165 (2008); Giorgio Zanarone, *Vertical Restraints and the Law: Evidence from Automobile Franchising*, 52 J.L. & ECON. (forthcoming 2009)).

[99]*Id*.

[100]O'Brien, *supra* note 4, at 82.

[101]This section relies on the discussion in Alden F. Abbott & Joshua D. Wright, Antitrust Analysis of Tying Arrangements and Exclusive Dealing (George Mason Law & Economics Research Paper No. 08-37) (forthcoming in ANTITRUST LAW AND ECONOMICS, Keith N. Hylton, ed., Edward Elgar Publishing, 2009).

[102]Salop, *supra* note 12, at 142-44. Salop also acknowledges that the RRC concept has its roots in the work of earlier Chicago commentators such as Aaron Director and Edward Levi, who recognized the potential for anticompetitive effects arising from exclusive dealing contracts. *Id*. at 144.

[103]This anticompetitive strategy using exclusive contracts belongs to the more general class of strategies analyzed in the raising rivals' costs literature. *See* Krattenmaker & Salop, *supra* note 35; Stephen C. Salop & David T. Scheffman, *Raising Rivals' Costs*, 73 AM. ECON. REV. 267 (1983).

[104]This line of reasoning is conventionally associated with Robert Bork. *See*, e.g., BORK*, supra* note 45, at 309 ("A seller who wants exclusivity must give the buyer something for it. If he gives a lower price, the reason must be that the seller expects the arrangement to create efficiencies that justify the lower price. If he were to give a lower price simply to harm his rivals, he would be engaging in deliberate predation by price cutting, and that, as we have seen in Chapter 7, would be foolish and self-defeating behavior on his part").

[105]This analogy is explored and used to derive the economic conditions necessary for exclusive contracts to cause anticompetitive effects in Benjamin Klein, *Exclusive Dealing as Competition for Distribution on the Merits*, 12 GEO. MASON L. REV. 119, 122-28 (2003).

[106]*See* Granitz & Klein, *supra* note 13.

[107]Bernheim & Whinston, *supra* note 36, formally derive this result.

[108]*See* Carlton & Waldman, *supr*a note 13.

[109]An alternative, but related, theory of exclusion operates by driving out competing retailers and allowing S to monopolize distribution and also collect its monopoly price on the distribution of rival products. *See* Whinston, *supra* note 34. This alternative theory also requires substantial economies of scope or scale in the supply of distribution services. Economies of scope in distribution may be present if, for example, S's product is essential to the economic viability of R.

[110]Rasmussen, Ramseyer, & Wiley, *supra* note 36.

[111]Ilya R. Segal & Michael D. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296 (2000).

[112]*But see id*., and MICHAEL D. WHINSTON, LECTURES ON ANTITRUST ECONOMICS (2008), for arguments that the ability to make discriminatory or sequential offers to buyers increases the support for exclusion.

[113]*See*, e.g., Chiara Fumagalli & Massimo Motta, *Exclusive Dealing and Entry When Buyers Compete*, 96 AM. ECON. REV. 785 (2006) (exclusion is not likely with downstream retail competition where potential entrant can achieve scale through distribution with a small number of retailers); Simpson & Wickelgren, *supra* note 36 (exclusion is possible with downstream retail competition because each individual retailer has little to gain from holding out from the exclusive and the increased benefits of upstream competition are largely passed on to final consumers); John Simpson & Abraham L. Wickelgren, Exclusive Dealing and Entry, When Buyers Compete: Comment (mimeo, June 2005) (same).

[114]Fumagalli & Motta, *supr*a note 112.

[115]Simpson & Wickelgren, *supra* note 112.

[116]A description of other commonly accepted justifications for exclusive dealing is presented in Jonathan M. Jacobson, *Exclusive Dealing, "Foreclosure," and Consumer Harm*, 70 ANTITRUST L.J. 311, 357-60 (2002).

[117]Marvel, Exclusive Dealing, *supra* note 26.

[118]823 F.2d 1215 (8th Cir. 1987). *See* also Klein & Lerner, *supra* note 26, at 481-83 (discussing Ryko as an example of this type of free-riding).

[119]Klein & Lerner, *supra* note 26.

[120]*See* Klein & Wright, *supra* note 27, which extends the original analysis of inadequate dealer incentives to promote and the use of vertical restraints in solving this dealer incentive problem in Klein & Murphy, *supra* note 28.

[121]Klein & Lerner, *supra* note 26, at 497-502.

[122]*Id*. at 502-04.

[123]Joyce Beverages of N.Y., Inc. v. Royal Crown Cola Co., 555 F. Supp. 271, 276-77 (S.D.N.Y. 1983). *See* also Hendricks Music Co. v. Steinway, Inc., 689 F. Supp. 1501 (N.D. Ill. 1988) ("it is perfectly legitimate and, in fact, procompetitive, for manufacturers to insist that their dealers devote undivided loyalty to their products and not to those of their competitors").

[124]Roland Mach. Co. v. Dresser Indus., Inc., 749 F.2d 380 (7th Cir. 1984).

[125]Klein & Lerner, *supra* note 26, at 507-18. *See generally* United States v. Dentsply Int'l, Inc., 277 F. Supp. 2d 387 (D. Del. 2003), *rev'd*, 399 F.3d 181 (3d Cir. 2005), *cert. denied*, 126 S. Ct. 1023 (2006). Klein and Lerner conclude that creating "undivided dealer loyalty" was a plausible justification in Dentsply, but that "we do not know if a more complete analysis would have found the net effect of Dentsply's exclusive dealing to be procompetitive or anticompetitive," and "what is clear is that further analysis of the undivided loyalty rationale for exclusive dealing should have been undertaken." Klein & Lerner, *supra* note 26, at 518.

[126]*See* Klein & Murphy, *supra* note 26. This explanation is related to, and provides the economic basis for, the argument that exclusives "instigated" by customers should enjoy a presumption of legality. *See* also Richard M. Steuer, *Customer Instigated Exclusive Dealing*, 68 ANTITRUST L.J. 239 (2000). For an application of this theory in the context of supermarket category management contracts when performance is difficult to specify, *see* Joshua D. Wright, *Antitrust Analysis of Category* Management: Conwood Co. v. United States Tobacco Co., 17 SUP. CT. ECON. REV. (forthcoming 2009).

[127]Calkins, *supra* note 64, at 156-57.

[128]For example, Professor Calkins criticizes the trend in lower courts toward presuming legality for distribution contracts of less than one year. *See* also Salop, *supra* note 12. *But see* Wright, *supra* note 27 (providing a defense of presumptive legality for short term contracts).

[129]Calkins, *supra* note 64, at 167.

[130]Jan B. Heide et al., *Exclusive Dealing and Business Efficiency: Evidence from Industry Practice*, 41 J.L. & ECON. 387 (1988).

[131]*See* John Asker, Diagnosing Foreclosure Due to Exclusive Dealing (NYU Working Paper No. EC-04-36, 2005); Tim R. Sass, *The Competitive Effects of Exclusive Dealing: Evidence from the US Beer Industry*, 23 INT'L J. INDUS. ORG. 203 (2005).

[132]Lafontaine & Slade, *supra* note 94.

[133]*See supra* text accompanying note 14.

[134]Fox, *supra* note 14, at 83. See also Robert Pitofsky, *supra* note 5, at 6 ("Because extreme interpretations and misinterpretations of conservative economic theory (and constant disregard of facts) have come to dominate antitrust, there is reason to believe that the United States is headed in a profoundly wrong direction").

[135]Fox, *supra* note 14, at 81.

[136]Brooke Group, 509 U.S. 209.

[137]California Dental Ass'n v. FTC, 526 U.S. 756 (1999).

[138]Trinko, 540 U.S. 398.

[139]Leegin, 127 S. Ct. 2705.

[140]Fox, *supra* note 14, at 82.

[141]*Id*.

[142]Fox, *supra* note 14, at 82 (citing Joseph F. Brodley, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239 (2000)). *But see* Kenneth G. Elzinga & David E. Mills, *Predatory Pricing and Strategic Theory*, 89 GEO.. L.J. 2475, 2475 (2001) ("Although strategic theories of predatory pricing are exemplary in their coherence and rigor, their potential to add value to antitrust policy is much more modest than the authors admit."). Indeed, the economic literature does provide some evidence of profitable predation. See, e.g., U.S. DEP'T OF JUSTICE, COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT (2008), at 56, note 85 (collecting studies). *See generally* Bruce H. Kobayashi, *The Law and Economics of Predatory Pricing* (forthcoming in ANTITRUST LAW AND ECONOMICS, *supra* note 100).

[143]Fox, *supra* note 14, at 84.

[144]*Id*.

[145]*Id*. at 86.

[146]*See supra* text accompanying notes 81, 82.

[147]Leah Brannon & Douglas H. Ginsburg, *Antitrust Decisions of the U.S. Supreme Court, 1967-2007*, 3 COMPETITION POL'Y INT'L 3 (2007).

[148]*Id*. at 20.

[149]*Id*. at Table 4.

[150]*See* Einer Elhauge, *Harvard, Not Chicago: Which Antitrust School Drives Recent U.S. Supreme Court Decisions?*, 3 COMPETITION POL'Y INT'L 59, 64 (2007) (speculating that the fact that "Breyer's dissent referred no less than six times to the stare decisis considerations that were cited in an abortion case made it hard to avoid the conclusion that this case had gotten mixed up with abortion politics."

[151]Linkline, No. 07-512, 2009 U.S. Lexis 1635.