
PANEL II: TOPICS IN ANTITRUST TO WHICH PROFESSOR BRODLEY CONTRIBUTED

ANTITRUST – WHAT ROLE FOR STRATEGIC MANAGEMENT EXPERTISE?

FELIX OBERHOLZER-GEE & DENNIS A. YAO*

INTRODUCTION	1457
I. WHAT IS STRATEGY?	1458
II. HOW DOES STRATEGY DIFFER FROM ECONOMICS?	1461
III. ANTITRUST LAW AND ECONOMICS (AND STRATEGY)	1464
IV. THE (NON) INFLUENCE OF STRATEGY SCHOLARSHIP ON ANTITRUST LAW – A ROUGH CUT	1469
V. WHY HAS STRATEGY HAD LITTLE INFLUENCE IN THE AREA OF ANTITRUST?	1475

INTRODUCTION

The purpose of antitrust law is to promote competition and protect consumers from anticompetitive business practices. Enforcing antitrust rules thus requires an understanding of what constitutes an anticompetitive business practice; an understanding influenced by both legal precedent and broader knowledge of markets, companies, and competition. This Essay traces the influence of two academic fields – economics and strategic management – on antitrust law. Both fields are natural candidates to influence courts, government competition authorities, and legal scholars, but, as we will document, strategic management appears to have had little influence to date.

We begin with a brief description of strategic management and the field's most important ideas in Part I. We then compare these ideas to work done in economics (Part II) and ask what strategic management might contribute to our thinking about antitrust issues (Part III). In Part IV, we present evidence on

* Felix Oberholzer-Gee is the Andreas Andresen Professor of Business Administration at Harvard Business School. Dennis Yao is the Lawrence E. Fouraker Professor of Business Administration at Harvard Business School. We express deep gratitude to Joe Brodley whose work has greatly influenced the way we think about the application of economics to antitrust law. We also thank Julia Rozovsky for research assistance and Hillary Greene for helpful comments.

the influence of both economics and strategy on court decisions and legal scholarly writing. We conclude in Part V with some conjectures on why strategy has had only limited influence in matters of antitrust.

I. WHAT IS STRATEGY?

A company's strategy is an overarching plan that specifies in which markets the firm will operate and how it will compete.¹ Strategic plans are typically formulated relative to the performance metrics of other companies competing in the same markets.² For example, a company pursuing a strategy of cost leadership strives to achieve lower unit costs than its rivals.³ Similarly, a "differentiator" aspires to earn a price premium by distinguishing its product or service from its close competitors.⁴ The ultimate goal of strategists is to achieve superior financial performance. Companies are deemed successful if they outperform rival firms on metrics such as long-term return on invested capital, return on assets, or return on equity.

As an academic discipline, strategic management is a fairly young field of inquiry. Its primary scholarly publication, the *Strategic Management Journal*, was launched in 1980. Many strategy concepts can be traced back to older ideas in the general management field and the literature on business policy.⁵ Today, strategy scholars draw on numerous social sciences – economics and sociology in particular – to better understand persistent differences in financial performance across companies. Researchers use a variety of methods, including empirical analyses, case studies, and both formal and informal theory. Most strategy research is undertaken in business schools and leading consulting firms.

Given strategy scholars' diversity of approaches and disciplinary backgrounds, along with the breadth of factors that affect firms' success, it is not surprising that the strategy field has produced many competing theories about the precise sources of superior firm performance. Nevertheless, most strategy scholars generally concur about which broad considerations are most important for understanding sustained superior performance. In our view, the following five tenets are central to the field:

- (i) Differences in long-term performance across companies reflect more than sheer chance and fortunate circumstances.
- (ii) Firms can capture value if they create more value than competing companies ("added value").⁶ An ability to capture value confers a

¹ See MICHAEL E. PORTER, *COMPETITIVE STRATEGY* 3-5 (1980).

² See *id.* at 34.

³ See *id.* at 35-37.

⁴ See *id.* at 37-38.

⁵ Pankaj Ghemawat, *Competition and Business Strategy in Historical Perspective*, 76 *BUS. HIST. REV.* 37, 37-38 (2002).

⁶ Adam Brandenburger & Harborne Stuart, *Biform Games*, 53 *MGMT. SCI.* 537, 538 (2007) [hereinafter Brandenburger & Stuart, *Biform Games*]; Adam M. Brandenburger &

sustainable competitive advantage if the ability to create added value is scarce, other firms do not possess direct or close substitutes for it, and the ability is difficult to imitate or acquire.⁷

- (iii) Strategy differs from operational excellence. Good operations move the firm closer to the efficient production frontier, but a strategic plan does more – it provides a distinct value to customers, suppliers, and companies producing complementary products and services.⁸

A company's ability to add value emanates from two domains: the firm's external environment (e.g., the structure and characteristics of the market) and the firm's internal resources. Various characteristics of the external environment determine the nature of competition in the market and, hence, the profit potential of a given market. For example, eBay Inc. operates in a market with sizeable network effects – buyers prefer to shop on sites with many sellers, and sellers offer their wares where the buyers congregate.⁹ As a result, it is difficult for new entrants to compete with the leading e-commerce platform; the structure of the market provides a sizeable barrier to entry and confers an opportunity for supranormal profits.

Because market structure influences companies' ability to add value, it is not surprising that financial performance varies across industries. While strategy scholars agree that industry effects can help explain differences in long-run performance, the relative importance of market structure and internal resources is subject to ongoing debate.¹⁰

- (iv) Internal capabilities and resources can be a source of sustained superior performance. As described in (iii), there are a number of conditions that determine if a company's internal capabilities can provide the basis for sustainable advantage.¹¹ Consider the example of Nike. Nike Inc.

Harborne W. Stuart, Jr., *Value-Based Business Strategy*, 5 J. ECON. & MGMT. STRATEGY 5, 15-18 (1996).

⁷ See generally DAVID COLLIS & CYNTHIA MONTGOMERY, *CORPORATE STRATEGY* (2004).

⁸ Michael E. Porter, *What Is Strategy?*, 74 HARV. BUS. REV., Nov.-Dec. 1996, at 61, 61-62.

⁹ Stephen P. Bradley & Kelly A. Porter, *Case Study: eBay Inc.*, J. INTERACTIVE MARKETING, Autumn 2000, at 73, 81-82.

¹⁰ See, e.g., David G. Hoopes, Tammy L. Madsen & Gordon Walker, *Guest Editors' Introduction to the Special Issue: Why Is There a Resource-Based View? Toward a Theory of Competitive Heterogeneity*, 24 STRATEGIC MGMT. J. 889, 987 (2003); Anita M. McGahan & Michael E. Porter, *What Do We Know About Variance in Accounting Profitability?*, 48 MGMT. SCI. 834, 848 (2002); Richard P. Rumelt, *How Much Does Industry Matter?*, 12 STRATEGIC MGMT. J. 167, 167-68 (1991).

¹¹ See Margaret A. Peteraf, *The Cornerstones of Competitive Advantage: A Resource-Based View*, 14 STRATEGIC MGMT. J. 179, 186 (1993) (arguing that four conditions are necessary for competitive advantage: "Heterogeneity," which allows resources to achieve rents; "Ex Post Limits to Competition," which allows resources to sustain rents; "Imperfect Mobility" of resources, which allows rents to remain in the firm; and "Ex Ante Limits to

built its early success on a special relationship with runners.¹² Phil Knight, the company's founder, and legendary track coach Bill Bowerman better understood athletes' preferences in running shoes. Knight and Bowerman used this advantage to build a unique rapport with sport stars such as Steve Prefontaine, Jon Anderson, and Ilie Nastase. Nike's association with these star athletes increased its customers' willingness to pay for the company's products. The value of these relationships depends, of course, on whether other shoe marketers have access to similar relationships. For capabilities (insights into the making of sports shoes) and resources (the company's relationship with athletes) to be valuable on net, firms need to be able to acquire them at prices below their market value.¹³ An important question in strategy research concerns the circumstances under which resources are priced below their market value.¹⁴ Theories of innovation – Southwest Airlines understood the value of flying to secondary airports earlier than other companies – models of limited rationality and cognition that allow for disequilibrium in resource prices, as well as theories of dynamic capabilities – some firms seem to continuously outrun their rivals – offer avenues that help explain why the price of resources and capabilities might not always reflect their full market value. Moreover, rival firms must not be able to bid up the price and lure away valuable resources. For example, if Reebok and Nike compete for Yao Ming and both companies value a relationship with him similarly (no added value), Yao Ming ceases to be a resource that can be the basis for sustainable advantage.

- (v) A clear understanding of how a company will compete is necessary but not sufficient for strategic success. Managers also need to align the myriad of activities in an organization with its overall strategy.¹⁵ For instance, Industria de Diseño Textil, a Spanish fashion retailer operating the Zara chain of stores, competes with a quick-response business model that obviates the necessity to predict trends in fashion.¹⁶ Because Zara can respond flexibly to emerging fashion, it can keep

Competition," which prevents the value of the resources from being offset by the costs of originally acquiring them).

¹² See generally C. Roland Christensen & David C. Rikert, *Nike (A)*, HBS No. 9-391-238 (Harvard Business School Publ'g 1984), available at <http://hbr.org/product/nike-a/an/385025-PDF-ENG?Ntt=David+C.+Rikert> (describing the history of Nike and its economic strategy).

¹³ See Jay Barney, *Firm Resources and Sustained Competitive Advantage*, 17 J. MGMT. 99, 105-06 (1991).

¹⁴ Jerker Denrell, Christina Fang & Sidney G. Winter, *The Economics of Strategic Opportunity*, 24 STRATEGIC MGMT. J. 977, 977-78 (2003).

¹⁵ See Porter, *supra* note 8, at 62.

¹⁶ See Pankaj Ghemawat & José Luis Nuño, *Zara: Fast Fashion*, HBS No. 9-703-497, at 9 (Harvard Business School Publ'g 2003).

smaller inventories, resulting in less surplus to be sold at a discount, and thus realizing higher average prices.¹⁷ Zara's strategy has implications for the organization of its value chain (it is far more vertically integrated than its rivals), the configuration of its production facilities (it produces the most fashionable items in relatively expensive Spain), the location and design of its stores (it chooses premier locations exclusively), its promotion policies (mostly from within), and its advertising budget (which is more limited than is typical in its industry).¹⁸ In explaining Zara's success, strategy scholars point not only to the company's overall strategy that strives to achieve higher realized prices by avoiding fashion misses but also to the alignment of hundreds of activities within the organization.

II. HOW DOES STRATEGY DIFFER FROM ECONOMICS?

Many core strategy concepts are applications of microeconomic theory. For example, Michael Porter's famous Five Forces reflect standard views of competition in industrial organization.¹⁹ Similarly, theories of value-based strategy are built on cooperative game theory.²⁰ Despite numerous similarities, however, strategy differs from economics in important ways.²¹ Perhaps most importantly, given strategy's aim of explaining sustained competitive advantage, it tends to focus on differences between companies. In contrast, economics often treats firms as being the same or being differentiated by very broad characteristics (e.g., incumbents vs. entrants). This Part illustrates some characteristics of these different approaches and, by implication, their respective abilities to contribute to the antitrust discourse. We compared research on the post-deregulation airline industry that appeared in the leading publications for strategy (*The Strategic Management Journal*) and industrial organization (*The RAND Journal of Economics*). This subject and timeframe is particularly suitable because the competitive dynamics of the industry changed during this period. Not surprisingly, the themes across relevant articles in the two publications substantially overlap. Both publications

¹⁷ See *id.* at 13 ("Zara was estimated to generate 15%-20% of its sales at marked down prices, compared with 30%-40% for most of its European peers.").

¹⁸ *Id.* at 10-14.

¹⁹ PORTER, *supra* note 1, at 4. See Dennis A. Yao, *Beyond the Reach of the Invisible Hand: Impediments to Economic Activity, Market Failures, and Profitability*, 9 STRATEGIC MGMT. J. 59, 60 (1988) for a microeconomics-based view of the sources of competitive advantage which emphasizes market failures and is consistent with Porter's analysis.

²⁰ See Brandenburger & Stuart, *Biform Games*, *supra* note 6, at 537.

²¹ Richard P. Rumelt, Dan Schendel & David J. Teece, *Strategic Management and Economics*, 12 STRATEGIC MGMT. J. 5, 5-6 (1991) (discussing some key differences and addressing the increased interactions between the two fields).

covered, for example, multimarket contact,²² competition for management talent,²³ and the performance of airlines generally.²⁴ However, even when exploring the identical topic, the researchers' emphasis often varied by field. For example, when studying financial performance following deregulation, strategy-focused research emphasized *performance heterogeneity*²⁵ while economics-oriented research sought to identify the *mean effect* of entry.²⁶

Research in strategic management includes many studies of individual companies, while the focus of economists is often on specific industries or markets. As a result, strategy scholars are more likely than economists to relate firm-internal factors to a company's competitive position in the market. Not surprisingly, then, researchers in strategic management explore numerous themes that are largely ignored by economists. These include strategic fit and organizational alignment,²⁷ the strategic orientation of airlines,²⁸ and the

²² Theories of multimarket contact are applied in Joel A.C. Baum & Helaine J. Korn, *Dynamics of Dyadic Competitive Interaction*, 20 STRATEGIC MGMT. J. 251, 253 (1999); B. Douglas Bernheim & Michael D. Whinston, *Multimarket Contact and Collusive Behavior*, 21 RAND J. ECON. 1, 2 (1990); Javier Gimeno, *Reciprocal Threats in Multimarket Rivalry: Staking Out 'Spheres of Influence' in the U.S. Airline Industry*, 20 STRATEGIC MGMT. J. 101, 101-02 (1999); Rajiv Lal & Carmen Matutes, *Price Competition in Multimarket Duopolies*, 20 RAND J. ECON. 516, 517 (1989); Owen R. Phillips & Charles F. Mason, *Market Regulation and Multimarket Rivalry*, 27 RAND J. ECON. 596, 596 (1996); and Faye L. Smith & Rick L. Wilson, *The Predictive Validity of the Karnani and Wernerfelt Model of Multipoint Competition*, 16 STRATEGIC MGMT. J. 143, 143 (1995).

²³ See Brian K. Boyd, *CEO Duality and Firm Performance: A Contingency Model*, 16 STRATEGIC MGMT. J. 301, 309 (1995); Theresa S. Cho & Wei Shen, *Changes in Executive Compensation Following an Environmental Shift: The Role of Top Management Team Turnover*, 28 STRATEGIC MGMT. J. 747, 753 (2007); Ayse Karaevli, *Performance Consequences of New CEO 'Outsiderness': Moderating Effects of Pre- and Post-Succession Contexts*, 28 STRATEGIC MGMT. J. 681, 700-02 (2007) (addressing several factors that affect why most new CEOs brought in from outside the company fail); Darius Palia, *The Impact of Regulation on CEO Labor Markets*, RAND J. ECON. 165, 165-66 (2000) (finding unregulated industries tend to attract managers with better education credentials); C. Carl Pegels, Yong I. Song & Baik Yang, *Management Heterogeneity, Competitive Interaction Groups, and Firm Performance*, 21 STRATEGIC MGMT. J. 911, 922 (2000).

²⁴ See, e.g., Gordon Walker, Tammy L. Madsen & Gary Carini, *How Does Institutional Change Affect Heterogeneity Among Firms?*, 23 STRATEGIC MGMT. J. 89, 95 (2002); Michael D. Whinston & Scott C. Collins, *Entry and Competitive Structure in Deregulated Airline Markets: An Event Study Analysis of People Express*, 23 RAND J. ECON. 445, 461 (1992) (analyzing the effect of a new entrant on incumbent behavior in the airline market).

²⁵ See Walker et al., *supra* note 24, at 89.

²⁶ See Whinston & Collins, *supra* note 24, at 458-61.

²⁷ John F. Mahon & Edwin A. Murray, *Strategic Planning for Regulated Companies*, 2 STRATEGIC MGMT. J. 251, 251 (1981) (analyzing strategic planning for regulated industries); Margaret Peteraf & Randal Reed, *Managerial Discretion and Internal Alignment Under Regulatory Constraints and Change*, 28 STRATEGIC MGMT. J. 1089, 1105 (2007) (finding that effective internal alignment changes after deregulation).

origins of strategic direction.²⁹ In contrast, we learned much more from the economics literature about anticompetitive business practices, including the importance of hub-and-spoke networks as a means to deter entry,³⁰ the effects of mergers,³¹ and forms of tacit collusion such as sharing information and facilities.³² Economic researchers frequently and directly ask whether regulators ought to intervene in markets.³³ This question is largely absent from research in strategic management.

A broad generalization from our reading of this literature is that both economists and strategists see market structure (e.g., barriers to entry) as one key determinant of returns to business activities. In addition to these factors,

²⁸ Kannan Ramaswamy, Anisya S. Thomas & Robert J. Litschert, *Organizational Performance in a Regulated Environment: The Role of Strategic Orientation*, 15 STRATEGIC MGMT. J. 63, 73 (1994) (finding that strategic orientation influences firm performance even in a tightly regulated industry); Ken G. Smith, Curtis M. Grimm, Stefan Wally & Greg Young, *Strategic Groups and Rivalrous Firm Behavior: Towards a Reconciliation*, 18 STRATEGIC MGMT. J. 149, 151 (1997) (comparing rivalry within and across strategic groups).

²⁹ See Danny Miller & Ming-Jer Chen, *The Simplicity of Competitive Repertoires: An Empirical Analysis*, 17 STRATEGIC MGMT. J. 419, 434 (1996) (finding that success can lead managers to focus on a few central activities, which in turn can lead to inflexibility and vulnerability to new challenges); Henry Mintzberg & James A. Waters, *Of Strategies, Deliberate and Emergent*, 6 STRATEGIC MGMT. J. 257, 258 (1985) (discussing how strategies can be classified along a spectrum ranging from deliberate to emergent).

³⁰ See Severin Borenstein, *Hubs and High Fares: Dominance and Market Power in the U.S. Airline Industry*, 20 RAND J. ECON. 344, 360, 362 (1989) (arguing that a hub-and-spoke system creates higher fares for travelers flying through an airline's hub airport, but not on competing airlines serving the same airport); Jan K. Brueckner, Nichola J. Dyer & Pablo T. Spiller, *Fare Determination in Airline Hub-and-Spoke Networks*, 23 RAND J. ECON. 309, 331-32 (1992) (finding hub-and-spoke networks lead to increased competition and lower fares on flights to smaller cities); Ken Hendricks, Michele Piccione & Guofu Tan, *Entry and Exit in Hub-Spoke Networks*, 28 RAND J. ECON. 291, 291-92 (1997) (explaining why, if the network is sufficiently large, a hub-and-spoke network will stay in a "spoke" market even after a regional airline attempts to compete in it).

³¹ Dennis W. Carlton, William M. Landes & Richard A. Posner, *Benefits and Costs of Airline Mergers: A Case Study*, 11 BELL J. ECON. 65, 66 (1980) (arguing consolidated airlines can provide better products to consumers); Franklin M. Fisher, *Pan American to United: The Pacific Division Transfer Case*, 18 RAND J. ECON. 492, 493 (1987) (criticizing government approval of mergers where large companies create barriers to entry).

³² Olivier Armandier & Oliver Richard, *Exchanges of Cost Information in the Airline Industry*, 34 RAND J. ECON. 461, 474 (2003) (arguing that some forms of information sharing can actually benefit consumers); Zhiqi Chen & Thomas W. Ross, *Strategic Alliances, Shared Facilities, and Entry Deterrence*, 31 RAND J. ECON. 326, 328-29 (2000) (arguing that an offer by an incumbent to share facilities with a new entrant actually decreases the incentive for new entrants to develop their own resources, lessening overall competition).

³³ See, e.g., Paul Klemperer & A. Jorge Padilla, *Do Firms' Product Lines Include Too Many Varieties?*, 28 RAND J. ECON. 472, 482 (1997).

economists tend to emphasize tactics to soften price competition as an avenue to achieve superior returns. Strategists, on the other hand, emphasize organizational obstacles, cognitive limitations of managers, and market failures in factor markets as the causes of observed differences in airline performance. Both of these types of contributions are valuable for understanding firm behavior and market performance. Hence, we see the contributions of economics and of strategy as complementary.

III. ANTITRUST LAW AND ECONOMICS (AND STRATEGY)

It is not difficult to understand why economics has profoundly influenced antitrust theory and practice. Antitrust analysis strives to understand the market consequences of business actions.³⁴ Antitrust analysts examine business documents and past market conduct, then rely on accepted antitrust principles, personal experience, and, importantly, on frameworks developed from microeconomics to reach their conclusions. Economics is powerful because the theory provides a strong framework that narrows the set of possible interpretations that can be seen as consistent with the facts. Alleged theories of anticompetitive harm, for example, may be dismissed if they prove inconsistent with the actions that economics would ascribe to a profit-driven firm.³⁵ Economic understandings also influence the questions analysts ask, the lines of inquiry they develop, and the data that they gather.

The influence of economic theory has steadily grown over time. Today, few would dispute the centrality of economic analysis in making antitrust assessments. The disciplining effect of economic theory and the attendant developments in econometric methods have allowed antitrust law to deliver greatly improved outcomes. The pervasive use of economics and its central role in antitrust analysis has, of course, not been without its critics. Some of the criticism comes from those who wish to consider goals other than efficiency in antitrust analysis.³⁶ Others, while acknowledging the value of economics, see the discipline as missing, misunderstanding, or perhaps underappreciating relevant aspects of firm behavior and market interactions.³⁷ For

³⁴ Motivation is typically a lesser concern perhaps because analysts assume that firms' primary motivation is to increase profits. Although nonprofit status has been recognized as relevant, the profit motive is generally used to predict future conduct and to interpret past fact patterns, e.g., assessing the likelihood of predatory pricing or the existence of a conspiracy. More altruistic motives are generally discounted.

³⁵ For example, to establish predatory pricing it needs to be established that the predator likely will recoup the losses it sustains during the period of predation.

³⁶ See John B. Kirkwood & Robert H. Lande, *The Chicago School's Foundation Is Flawed: Antitrust Protects Consumers, Not Efficiency*, in *HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST* 89, 90 (Robert Pitofsky ed., 2008).

³⁷ See, e.g., Jonathan B. Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, in *HOW THE CHICAGO SCHOOL OVERSHOT THE MARK*, *supra* note 36, at 235,

example, FTC Commissioners Leary and Yao, both of whom have worked in the business sector, have written respectively, “[p]erhaps, we can do a better job . . . if we pay more attention to people who know how business people think”³⁸ and “[a]nother rich source of ideas that might be used to build on . . . is the business strategy literature.”³⁹ Similarly, Bert Foer of the American Antitrust Institute remarked that “[t]he third leg of the antitrust stool, which is taught and thought in the business schools, has not played its proper role in the intellectual development of antitrust.”⁴⁰

Over the past decade, many groups have shown interest in the value of strategy ideas for antitrust.⁴¹ The strategy field is best positioned to contribute to antitrust in areas where economics has difficulty predicting behavior and market outcomes. For example, while microeconomics is generally well-suited to assess the static price effects when a firm is acquired by a competitor, it is relatively less capable of analyzing how acquisitions will impact changes in product quality or the rate of innovation. An acquiring firm, for example, has a

236 (criticizing economic assumptions about mergers, and the resulting loosening of antitrust enforcement); Steven C. Salop, *Economic Analysis of Exclusionary Vertical Conduct: Where Chicago Has Overshot the Mark*, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK, *supra* note 36, at 141, 141-42 (arguing that the deleterious effects of exclusionary vertical conduct have been underappreciated).

³⁸ Thomas B. Leary, *The Dialogue Between Students of Business and Students of Antitrust: A Keynote Address*, 47 N.Y.L. SCH. L. REV. 1, 5 (2003).

³⁹ Dennis A. Yao, Commissioner, Federal Trade Comm’n, Prepared Remarks Before the Illinois State Bar Association and Chicago Bar Association (Dec. 2, 1992).

⁴⁰ Albert A. Foer, *The Third Leg of the Antitrust Stool: What the Business Schools Have to Offer to Antitrust*, 47 N.Y.L. SCH. L. REV. 21, 49 (2003).

⁴¹ For example, as part of their Task Force on Fundamental Theory (2000-2001) the ABA Antitrust Section invited Michael Porter, a leading strategy scholar, to present his ideas on how antitrust law could benefit from the use of strategy ideas. See Michael E. Porter, *Competition and Antitrust: Towards a Productivity-Based Approach to Evaluating Mergers and Joint Ventures*, 46 ANTITRUST BULL. 919, 919 n.* (2001). The Porter presentation may have proved a catalyst for the American Antitrust Institute 2002 study of the relationship between business schools and antitrust policy which culminated in a symposium published in the *New York Law School Law Review* in 2003. See, e.g., Symposium, *The Dialogue Between Students of Business and Students of Antitrust: A Keynote Address*, 47 N.Y.L. SCH. L. REV. 1 (2003); Foer, *supra* note 40, at 21; Leary, *supra* note 38, at 1. The Antitrust Section’s magazine also published two roundtable discussions in 1998 and 2006 which engaged leading strategy scholars in discussions of prominent antitrust cases. In the scholarly literature, a few authors have made the case for greater use of strategy and management knowledge in antitrust. E.g., Spencer Weber Waller, *The Language of Law and the Language of Business*, 52 CASE W. RES. L. REV. 283, 283-84 (2001). And finally, the U.S. Federal Trade Commission and the Department of Justice organized panels on business history and business strategy as part of their 2006 Single-Firm Conduct hearings. See *Hearings on Section 2 of the Sherman Act: Single-Firm Conduct as Related to Competition Before the Fed. Trade Comm’n & U.S. Dep’t of Justice* (2007), available at <http://www.ftc.gov/os/sectiontwohearings/archive.shtm#061026>.

unique capability to observe and then anticipate changing customer preferences. It uses this capability to market products that better meet customer needs. If the market is relatively concentrated, economics would predict an increase in prices due to diminished competition and the acquiring firm's history of acquisitions would show such price increases. But in such a scenario, it is far from clear that the merger, if allowed, would reduce consumer welfare because the observed price increases can either be the result of reduced competition, or a manifestation of increased consumer willingness to pay for improved products. While economists would acknowledge the latter possibility, the insights from strategy and marketing are arguably more helpful in assessing the credibility of the better consumer match argument.

Economics-grounded antitrust analysis of mergers where innovation plays a key role is particularly difficult. Consequently, enforcement agencies have been quite reluctant to intervene in mergers based solely upon innovation-related concerns. Intervention has occurred, however, in the uncommon settings where the future product markets are well defined. For instance, the drug approval process in the pharmaceutical industry makes it possible to define a future drug market and identify the likely near-term participants in this market. Similarly, the highly specialized nature of many cutting-edge defense products makes it easier to identify the likely market participants in the aerospace industry. However, despite a near-universal belief that innovative efficiency is very important, there have been very few enforcement actions in which innovation markets played an important role.⁴² This reluctance reflects the difficulty of knowing when and how to intervene in markets with significant innovation potential.⁴³ Some observers recommend a very cautious approach to intervention out of a concern that antitrust might undermine innovative capacity.⁴⁴ Others favor a more aggressive approach, with some arguing that maintaining competitive markets in the price efficiency sense will also maintain innovative (dynamic) efficiency.⁴⁵

The link between static and dynamic efficiency is poorly understood, however. Gilbert notes that "neither theory nor empirical evidence supports a strong conclusion that competition is uniformly a stimulus to innovation. There is little evidence that there is an optimal degree of competition to

⁴² See, e.g., Joseph Brodley, *The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress*, 62 N.Y.U. L. REV. 1020, 1026, 1032 (1987) (observing that a near-unanimous Congress modified antitrust laws to facilitate innovation, yet allocation of enforcement resources does not demonstrate its importance).

⁴³ Michael L. Katz & Howard A. Shelanski, *Mergers and Innovation*, 74 ANTITRUST L.J. 1, 4 (2007).

⁴⁴ See, e.g., Ilene Knable Gotts & Richard T. Rapp, *Antitrust Treatment of Mergers Involving Future Goods*, ANTITRUST, Fall 2004, at 100, 102.

⁴⁵ See, e.g., Richard J. Gilbert & Steven C. Sunshine, *Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets*, 63 ANTITRUST L.J. 569, 601 (1995).

promote R&D.”⁴⁶ Katz and Shelanski similarly find that “[t]he literature addressing how market structure affects innovation (and vice versa) in the end reveals an ambiguous relationship in which factors unrelated to competition play an important role.”⁴⁷ As a result, these authors recommend to “proceed on a more fact-intensive, case-by-case basis where innovation is at stake” following a more nuanced and conditional – possibly even industry-based – view of relationships regarding mergers and innovation effects.⁴⁸

Strategy scholars can likely add to the type of analysis that Katz and Shelanski envision. Because of their focus on the organization, strategists more readily see innovation as the confluence of multiple processes including, for example, a learning culture, tacit knowledge embedded in a firm’s formal and informal organization structure, innovation capabilities and IP portfolios, as well as shared cognitive frames.⁴⁹ The interplay between innovation and organization is important for antitrust analysis. Consider a firm with an organization structure and a set of processes that are well-matched to the characteristics of the underlying production technology. Now, suppose a modest innovation changes the linkages among the product’s components, but leaves the components themselves unaffected. How easily a firm can implement the innovation is only partially determined by the difficulties associated with the innovation itself. Even a modest and easily understood innovation can undermine the value of organizational competencies that are reflected in the linkages among the components. This concept of “architectural innovation” suggests that an understanding of the interplay between organizational structure and technological change can inform merger analysis,

⁴⁶ Richard Gilbert, *Looking for Mr. Schumpeter: Where Are We in the Competition-Innovation Debate?*, in 6 INNOVATION POLICY AND THE ECONOMY 159, 205-06 (Adam B. Jaffe et al. eds., 2006).

⁴⁷ Katz & Shelanski, *supra* note 43, at 22.

⁴⁸ *Id.* at 6.

⁴⁹ In contrast, industrial organization economics tends to black box the processes by which productive efficiency and innovation occur. In his survey of economics research which addresses the relationship between market structure and innovation, Gilbert finds that most economics research focuses on incentives for generically situated firms (e.g., incumbent monopolist or participant in a competitive market) to invest in R&D given particular assumptions regarding the technology (e.g., product or process innovation, drastic or nondrastic) and the ability of competitors to imitate (e.g., extent of intellectual property right protection). See Gilbert, *supra* note 46, at 204-05. To be sure, a minority of work in this area has explored some aspects pertaining to differences in firms, though normally on a single dimension such as marginal costs or stock of knowledge. He writes that

[m]ost economic models of the innovation process implicitly assume that firms’ proclivities to innovate are independent of the firms’ identities, although there is a small economics literature that emphasizes the effects of asymmetric firm characteristics The assumption that all firms are equal . . . is at odds with much of the competitive strategy literature, which emphasizes differences in the abilities and desires of firms to exploit technological opportunities.

Id. at 181.

particularly with respect to imitation or anticipated repositioning by rival firms.⁵⁰ Just knowing the difficulty of the technological change is not enough to assess its implications for competition.

The concept of architectural innovation can arguably fit into an economic theory as a complicating factor that affects production. Some organizational concepts, however, are harder to incorporate into economics. For example, many organizational theorists and strategy scholars see productive information as embedded in firms' organizational routines. These routines, along with other elements of the formal and informal organizational structure, may help explain why some firms learn and innovate better than their rivals. This view suggests not only that it may be difficult to transfer productive knowledge within and across firms, but also that parts of the "production function" of the firm are unknown. For example, Bruce Kogut and Udo Zander propose a theory of the firm as a community in which individual expertise is transformed, and new knowledge created, through a set of organizing principles which may, in fact, be unknown to the individuals that make up the firm.⁵¹ Lack of knowledge about these organizing principles makes it difficult for the firm to try non-local possibilities and, hence, the theory provides an explanation for why search over strategic choices is likely to be local.⁵² The importance of tacit knowledge is underscored by empirical research that indicates that firms frequently have trouble replicating the performance of one plant in a sister plant.⁵³ While mergers might allow one firm's unique knowledge to be shared with the other firm, improper management of the merger might simultaneously destroy innovation capabilities embedded in a firm's organizational structure.⁵⁴

⁵⁰ Rebecca M. Henderson & Kim B. Clark, *Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms*, 35 ADMIN. SCI. Q. 9, 10 (1990) ("[T]here are numerous technical innovations that involve apparently modest changes to the existing technology but that have quite dramatic competitive consequences."). Henderson and Clark point to the difficulties an overhead fan manufacturer might have producing a competitive portable box fan, and provide an in-depth study of architectural innovations in the photolithographic alignment equipment industry. *Id.* at 12-13, 19-27.

⁵¹ See Bruce Kogut & Udo Zander, *Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology*, 3 ORG. SCI. 383, 389 (1992).

⁵² RICHARD R. NELSON & SIDNEY G. WINTER, AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE 246-48 (1982).

⁵³ See Sidney G. Winter & Gabriel Szulanski, *Replication as Strategy*, 12 ORG. SCI. 730, 731-32 (2001).

⁵⁴ Strategy also offers organizational insights that can be used to evaluate the potential complementarity of production and innovation capabilities that are frequently claimed as merger efficiencies. Other strategy and organizational scholars have explored how social networks affect business outcomes. See, e.g., Christopher Marquis, *The Pressure of the Past: Network Imprinting in Intercorporate Communities*, 48 ADMIN. SCI. Q. 655, 656 (2003).

Teece, Pisano, and Shuen offer an organizational capabilities story for sustainable innovation that combines elements of organizational theory, strategy, and economics.⁵⁵ Teece continued to develop this work, and described “organizational and managerial processes – coordination/integrating, learning, and reconfiguring – as core elements of dynamic capabilities”⁵⁶ that enable a firm to gain competitive advantage through the creation of resources that allow a firm to sustain innovation. A key aspect of dynamic capabilities are higher-level activities which support the organization’s ability to “sense” and then “seize” opportunities and then to manage threats and transform the organization and its assets.⁵⁷ These capabilities are developed through an evolutionary process and are therefore strongly path dependent. Teece argues that in settings where innovation is key, antitrust merger analysis should focus on innovation capabilities, not on (future) product markets.⁵⁸ We believe that while direction makes sense, it likely requires more than economics alone can deliver. Unfortunately, the current state of knowledge in strategy also falls short of what is needed to produce a usable antitrust framework based on an analysis of innovation capabilities.

Both the economics and the strategy approaches to innovation have merit. Sometimes the two approaches overlap, sometimes they offer complementary knowledge, and sometimes each will suggest different interpretations of a given fact pattern. Given the potential value of strategy to antitrust analysis – and some suggestions that strategy has not had the influence one might expect – we now turn to a more systematic analysis which tries to trace the influence of economics and strategy on antitrust research and practice.

IV. THE (NON) INFLUENCE OF STRATEGY SCHOLARSHIP ON ANTITRUST LAW – A ROUGH CUT

To assess the influence of strategic management on antitrust law, it is useful to measure the prevalence of “strategy ideas” in antitrust proceedings and policy. Ideally, we would like to capture the universe of ideas in antitrust and identify which can be traced back to concepts in strategy. Such an undertaking is far beyond the limited scope of this Essay. Instead, we use a citation count

⁵⁵ David Teece, Gary Pisano & Amy Shuen, *Dynamic Capabilities and Strategic Management*, 18 STRATEGIC MGMT. J. 509, 510 (1997).

⁵⁶ DAVID J. TEECE, DYNAMIC CAPABILITIES & STRATEGIC MANAGEMENT: ORGANIZING FOR INNOVATION AND GROWTH 48 (2009).

⁵⁷ *Id.* at 48-49. This approach to thinking about sustainable advantage is rooted in the resource-based view of the firm discussed above. See C.K. Prahalad & Gary Hamel, *The Core Competence of the Corporation*, HARV. BUS. REV., May-June 1990, at 79, 79.

⁵⁸ TEECE, *supra* note 56, at 256. Dennis Yao and Susan DeSanti have also suggested that antitrust merger analysis consider core competencies of a firm. Dennis A. Yao & Susan S. DeSanti, *Innovation Issues Under the 1992 Merger Guidelines*, 61 ANTITRUST L.J. 506, 511 (1993) (“An analysis of the ‘core competencies’ of companies could result in their addition to or exclusion from consideration as participants in an innovation market.”).

to help assess the influence of strategy and management ideas.⁵⁹ Because absolute citation counts are difficult to interpret, we compare strategy and economics, focusing on their relative influence and changes in relative influence over time.

Assessing influence via citations requires, among other factors, determining what citations warrant consideration and where to look for them. We took a three-fold approach. First, we compared the number of times published judicial rulings and law reviews cited well-known strategy and microeconomics scholars. Second, we tabulated citations to the three leading strategy journals and their economic counterparts. Finally, we searched for mentions of concepts that are central to strategy and industrial organization. We separate the citation count into two categories: court rulings and law reviews. Our citation search was conducted using the LexisNexis Academic database. LexisNexis contains all published federal and state court judicial rulings as well as the full text of over 500 law reviews and related publications.⁶⁰ Our analysis focuses on the ten-year period ending in 2008.

To select our strategy scholars, we consulted the 2003 Accenture “Top 50 Management Gurus” list⁶¹ and the similar 2005 “Thinkers 50” list.⁶² These lists include many practicing managers who are perhaps admired less for their novel ideas than for their management performance. To focus on “gurus” whose ideas might have influenced antitrust theory and practice, we chose the five top-ranked scholars on these lists: Michael E. Porter, Gary Hamel, Henry Mintzberg, C.K. Prahalad, and Clayton M. Christensen.⁶³ While there are many other influential thinkers in management, we are confident that citations to this group are representative for any short list of top strategy gurus. Moreover, we found that expanding the lists produced few additional citations.

Choosing thought leaders in industrial organization economics is more difficult because the field is broader, and ideas and scholars overlap across subfields. We began our selection with a list of Nobel laureates in economics and winners of the Bates Clark medal, which is awarded to the American economist under the age of forty who is thought to have made the “most

⁵⁹ We follow a similar approach to that used in William E. Kovacic, *The Influence of Economics on Antitrust Law*, 30 *ECONOMIC INQUIRY* 294 (1992).

⁶⁰ The two Lexis databases used were Federal & State Cases, Combined and U.S. Law Reviews and Journals, Combined. A citation was counted if, in the relevant database, the scholar’s name, journal title, or key concept (in various forms) was present in an article for which “antitrust” also appeared within the Lexis generated “summary segment.” Entirely nonsubstantive references were excluded from the citation count. For example, a judicial ruling may merely mention in passing that a given expert is affiliated with a given journal.

⁶¹ See generally *Top 50 Business Gurus*, ACCENTURE OUTLOOK JOURNAL, 2003, http://www.accenture.com/NR/rdonlyres/0C501918-2C9E-4EFA-955B-DEB72EE0DEB2/0/outlook_topfifty.pdf.

⁶² THE THINKERS 50, <http://www.thinkers50.com/results-2005> (last visited Apr. 1, 2010).

⁶³ On the 2003 list, they are numbers 1, 7, 16, 24, and 49, respectively. See *supra* note 61. On the 2005 list, they are numbers 1, 14, 8, 3, and 21. See *supra* note 62.

significant contribution to economic thought and knowledge.”⁶⁴ From this group, we chose the five economists whose work is most closely associated with industrial organization economics. Note that our selection process excludes prominent economists who have not (yet) won either of these prizes, a bias that might understate the influence of economics on antitrust.

We report our results in Tables 1 and 2. The story is quite clear. Economists have many more citations both in the case law and in law reviews than do the strategy scholars. In fact, the minimal number of citations for the latter is quite astounding. One potential explanation for the stark difference is that economics gurus have likely been more active as antitrust experts. We return to this point below.

Table 1 – “Guru” Citations in Reported Federal & State Court Cases (1999-2008)

Strategy Scholars (year of doctoral degree)	Citations	Economics Scholars (year of doctoral degree)	Citations
Michael E. Porter (1973)	0	Franklin M. Fisher (1960)	9
Clayton M. Christensen (1992)	0	George J. Stigler (1938)	6
Gary Hamel (1990)	0	Oliver E. Williamson (1963)	1
C.K. Prahalad (1975)	0	Kenneth J. Arrow (1951)	0
Henry Mintzberg (1968)	0	A. Michael Spence (1972)	0
Total	0	Total	16

Table 2 – “Guru” Citations in Law Reviews (1999-2008)

Strategy Scholars (year of doctoral degree)	Citations	Economics Scholars (year of doctoral degree)	Citations
Michael E. Porter (1973)	40	Franklin M. Fisher (1960)	63
Clayton M. Christensen (1992)	5	George J. Stigler (1938)	133
Gary Hamel (1990)	1	Oliver E. Williamson (1963)	114
C.K. Prahalad (1975)	1	Kenneth J. Arrow (1951)	66
Henry Mintzberg (1968)	1	A. Michael Spence (1972)	8
Total	48	Total	384

⁶⁴ Description of the awards and lists of the award winners are available at AMERICAN ECONOMIC ASSOCIATION, http://www.vanderbilt.edu/AEA/clark_medal.htm (last visited Apr. 1, 2010) and NOBELPRIZE.ORG, http://nobelprize.org/nobel_prizes/economics/laureates (last visited Apr. 1, 2010).

In an effort to capture the influence of the two fields, rather than the influence of particular individuals, we also examined the relative rate of citation to leading strategy and economics journals. Within the strategy field, we chose three leading journals: *Strategic Management Journal*, which is the top field journal specializing in strategy research; *Administrative Science Quarterly*, the top journal for research on organizational behavior; and *Harvard Business Review*, the best known publication for practitioner-directed articles on management topics. Within the field of economics, we chose the *RAND Journal of Economics* (formerly the *Bell Journal of Economics*), which has long been the leading journal in the industrial organization field; the *American Economic Review*, a top general-economics journal that frequently publishes industrial organization articles; and the *Journal of Industrial Economics*, a leading industrial organization field journal.

This exercise reveals a pattern of citations (Table 3 and 4) virtually identical to the pattern exhibited by the guru citations. There are no citations to the strategy journals by courts. The legal scholarship cites to the economics literature at more than ten times the rate it cites to strategy literature. By both our guru and journal citations measures, the influence of strategy on antitrust has been minimal.

Table 3 – Selected Journal Citations in Federal & State Court Cases (1999-2008)

Strategy Journal (launch date)	Citations	Economics Journal (launch date)	Citations
<i>Harvard Business Review</i> (1922)	0	<i>American Economic Review</i> (1911)	10
<i>Administrative Science Quarterly</i> (1956)	0	<i>RAND Journal of Economics</i> (1984)	5
<i>Strategic Management Journal</i> (1980)	0	<i>Bell Journal of Economics</i> (1970-1983)	0
		<i>Journal of Industrial Economics</i> (1952)	0
Total	0	Total	15

Table 4 – Selected Journal Citations in Law Reviews (1999-2008)

Strategy Journal (launch date)	Citations	Economics Journal (launch date)	Citations
<i>Harvard Business Review</i> (1922)	24	<i>American Economic Review</i> (1911)	267
<i>Administrative Science Quarterly</i> (1956)	11	<i>RAND Journal of Economics</i> (1984)	119
<i>Strategic Management Journal</i> (1980)	1	<i>Bell Journal of Economics</i> (1970-1983)	57
		<i>Journal of Industrial Economics</i> (1952)	3
Total	36	Total	446

It is likely that economics and strategy scholarship also influences antitrust indirectly. Antitrust law and scholarship may have absorbed strategy concepts without explicitly recognizing the original source. Strategy concepts can be introduced through testimony by practicing managers and economists. Similarly legal academics and judges may have been influenced by law and economics concepts, but cite to law reviews rather than to economic journals. Studying the influences of strategy and economics at the level of ideas can begin to untangle these indirect influences. While our selection of specific concepts is somewhat arbitrary, this approach can contribute additional insight into the relative influence of strategy and economic concepts.

Our primary source for identifying key strategy concepts is Ghemawat's 2002 article which reviews the history of the business strategy field.⁶⁵ We used the index of two industrial organization textbooks: Carlton and Perloff, and Cabral as sources for industrial organization concepts.⁶⁶ One challenge in identifying these two sets of concepts is that some of their terms have become a part of everyday business language. Consequently, it is difficult to discern whether a given reference should be considered as reflecting influence of the academic discipline. We therefore selected words unlikely to be used except in their specialized meaning. For example, we selected "Cournot," but not "opportunity cost" as representing an economics concept because the latter term is used in many contexts. We identified fifteen key concepts in each discipline and report on those terms that were cited most frequently. Given that the strategy terms omitted from Tables 5 and 6 had no citations at all, we

⁶⁵ See generally Ghemawat, *supra* note 5. We checked the concepts we derived from Ghemawat's discussion against some web-based management sites which listed their key concepts in management. See, e.g., 12MANAGE, <http://www.12manage.com/top-10.htm> (last visited Apr. 1, 2010).

⁶⁶ See LUÍS M.B. CABRAL, INTRODUCTION TO INDUSTRIAL ORGANIZATION (2000); DENNIS W. CARLETON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION (4th ed. 2005).

are somewhat reassured that our results do not reflect poor selection of concepts.⁶⁷

Table 5 – Strategy and Economics Concepts in Federal and State Cases (1999-2008)

Strategy Concept	Citations	Economics Concept	Citations
Disruptive technology	1	Switching cost	38
Core competence	1	Willingness to pay	5
Five forces	0	Contestable market	3
Value chain	0	Cournot	2
SWOT	0	Prisoners dilemma	2
Strategic group analysis	0	Bertrand	1
Resource-based view	0	Residual demand	1
Value net	0	Multi-market contact	1
Balanced scorecard	0	Self-selection	0
Resource allocation process	0	Double marginalization	0
Total	2	Total	53

Table 6 – Strategy and Economics Concepts in Law Reviews (1999-2008)

Strategy Concept	Citations	Economics Concept	Citations
Disruptive technology	6	Switching cost	92
Core competence	6	Willingness to pay	51
Five forces	10	Contestable market	46
Value chain	7	Cournot	51
SWOT	1	Prisoners dilemma	60
Strategic group analysis	1	Bertrand	26
Resource-based view	1	Residual demand	13
Value net	0	Multi-market contact	2
Balanced scorecard	0	Self-selection	3
Resource allocation process	0	Double marginalization	21
Total	32	Total	365

⁶⁷ In addition, no citations were found from Federal and State Cases or the law reviews during the period 1999-2008 for the terms growth-share matrix, time-based competition, activity analysis, and dynamic capabilities.

As Tables 5 and 6 illustrate, even the most cited strategy concepts are cited far less frequently than the key economic concepts. We also disaggregated the overall strategy citation count for law reviews into two five-year segments (1999-2003 and 2004-2008) as a quick check to see if the citations were increasing over this time period. For two terms, there was an increase which aggregated to an overall five-citation increase. For five terms, there was a decrease that aggregated to an overall fifteen-citation decrease. This crude comparison does not suggest that the influence of strategy is increasing.⁶⁸

Finally, we note that the LexisNexis “U.S. Law Reviews and Journals, Combined” database does not include the *Antitrust Law Journal* which is an influential journal in antitrust law. Including this journal in the citation count would bias the count in favor of economics as many of the articles in *Antitrust Law Journal* are written by economists. For example, during the period 1999-2008 the raw citation count from *Antitrust Law Journal* to the strategy journals included in Table 4 was zero whereas the citations to the corresponding economic journals was 120.

While our approach in this Section has many limitations – our selection of gurus, journals, or scientific concepts involved some degree of subjectivity – our analyses yield the same consistent conclusion across different approaches: strategy has had minimal effect on thinking in antitrust.

V. WHY HAS STRATEGY HAD LITTLE INFLUENCE IN THE AREA OF ANTITRUST?

Despite its potential usefulness in antitrust analyses, our investigation suggests that strategy has had remarkably little impact on antitrust theory and practice. While numerous factors likely contribute to its limited influence, three warrant particular consideration.

First, on the most fundamental level, antitrust law is primarily concerned with consumer welfare. While economists routinely assess how business conduct affects the welfare of both consumers and producers, strategists focus almost exclusively on producer welfare. We do not believe that anything about the field of strategy dictates this narrow focus. To the contrary, the central construct in strategic management, added value, is in fact a measure of global welfare. But as a practical matter, strategists rarely measure added value. The natural benchmark in the field is the performance of rival firms, using measures such as return on equity that do not distinguish whether superior performance rests on added value or on increased market power. In this sense, there is a natural disconnect between antitrust and strategy.⁶⁹

⁶⁸ A comparison of the citations to the economic concepts showed a small net increase in the number of citations in the 2004-2008 period over the 1999-2003 period.

⁶⁹ This disconnect has arguably played a role in making it harder for ideas from strategy to gain traction in an environment already dominated by economics. Waller argues that strategy has had to fight an uphill battle for recognition given that economics was already

A second reason for strategy's minimal influence on antitrust is that it adopts multiple approaches and is, perhaps, less precise in its predictions than economics. Having multiple approaches results in more disagreement, which weakens credibility, while less precision decreases strategy's value for predictive purposes. Obviously, economists also disagree about many aspects of firm and market behavior. However, because the discipline builds on a well-understood set of assumptions and models, disagreements frequently reflect differences in emphasis rather than fundamentally different beliefs. Moreover, even where disagreements about the theory are substantive, it is easy to understand the source of the different views because present-day economics employs mathematical models that makes precise the logical arguments.

The multiplicity of approaches and the decreased precision is the price that strategists pay for the desire to better understand organizational choices and to offer actionable advice on key strategy questions. Whereas economists gain new insights by abstracting from many aspects of business, strategists are far more comfortable accepting and trying to work with complexity. Consequently, researchers in strategic management tackle many important issues that resist scientific analysis. Strategy research offers the promise of introducing further realism to market analysis, but, unfortunately, strategy research does not typically produce the clear-cut predictions that would be most helpful to courts. The above discussion of innovation-driven merger review illustrates the strengths and weaknesses of using strategy to assist in antitrust analysis.⁷⁰ Strategy's rich perspectives provide added insight into firm innovation but also makes it more difficult to devise general rules about likely welfare effects.

A third possible reason why strategic management ideas have not been taken up by the antitrust community may be antitrust's reluctance to make fine-tuned assessments of different business justifications for past and projected future conduct – a topic on which strategy potentially has much to offer. As an example of such reluctance, consider the 1992 Merger Guidelines in which the U.S. antitrust agencies stated that they would reject purported merger-related efficiencies if the merging parties could reasonably achieve comparable savings through other means.⁷¹ Most important, for our purposes, are the alternative formulations that were rejected including a proposed “related, but

established as a primary source of antitrust law and policy ideas. See Waller, *supra* note 41, at 338.

⁷⁰ See *supra* notes 42-58 and accompanying text.

⁷¹ U.S. Dep't of Justice & Fed. Trade Comm'n, 1992 Horizontal Merger Guidelines (issued Apr. 2, 1992, revised Apr. 8, 1997), 4 Fed. Trade Reg. Rep. (CCH) ¶ 13,104, at 20,569, available at <http://www.ftc.gov/bc/docs/horizmer.htm>.

more severe, least restrictive alternative test.”⁷² The selection of the weaker, rather than stronger, legal standard arguably reflected a recognition of the antitrust enforcers’ relative inability to accurately assess the merging parties’ “business decisions to merge rather than to combine in ways short of a merger.”⁷³ The unwillingness of the antitrust community to engage in second-guessing of business justifications arguably presents an inherited obstacle to the use of strategy to assess efficiencies and various business justifications, even though strategy may be reasonably well-suited to such tasks. By raising the barriers to making contributions on such tasks, the antitrust community may be undervaluing the value of strategy as a complement to economic insight.

These three reasons represent important obstacles to applying insights from strategic management to antitrust matters, though none are insurmountable. Just as antitrust authorities discovered the usefulness of concepts in law and economics, strategy offers rich insights that can be incorporated into antitrust analyses. The onus for enriching antitrust theory and practice is not on antitrust experts alone. Strategy scholars have the conceptual tools to examine consumer welfare seriously, an essential ingredient in any antitrust analysis that the strategy literature typically neglects. By refocusing strategy to consider producer and consumer welfare, not only can strategists improve their ability to influence antitrust, they can also become better at formulating strategy.

⁷² Dennis A. Yao & Thomas N. Dahdouh, *Information Problems in Merger Decision Making and Their Impact on the Development of an Efficiencies Defense*, 62 ANTITRUST L.J. 23, 36 (1993).

⁷³ *Id.* at 35.