

## LUMPS IN ANTITRUST LAW

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The framework of aggregation and division that Lee Fennell develops in *Slices and Lumps* is both elegant and encompassing. Through the simple device of questioning how ideas and individuals are grouped together, or split apart, Fennell is able to explain and challenge concepts from diverse areas of law. While few subject areas would not benefit from the clarity of the framework Fennell has developed, it is especially tailored to the study of modern antitrust law.

The importance of aggregation and division in antitrust cannot be overstated. Illegal acts of collusion are defined by the agreement of separate competitors to join together in acting as though they were a single firm in a collusive scheme. Tying arrangements are anticompetitive only when the tying and tied products could be sliced apart, such that a consumer might purchase one without the other. Anticompetitive concerns with mergers arise from the combination of separate competitors into a single firm. The inability of a parent company to collude with its wholly owned subsidiary reflects a unity of economic interest that is masked by the legal formality of separate incorporation.

Though any of these examples (and many more) could be productively developed within Fennell's framework, I wish to use the following pages to consider two more fundamental questions. First, how far does the lumpiness of trading partners dictate the limits of antitrust policy? Second, what does antitrust miss under the common practice of lumping price, consumer welfare, and allocative efficiency together? Discussion of these questions is clarified and sharpened by the vocabulary of Fennell's framework.

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## I. LUMPS AS ANTITRUST DELIMITERS

Imagine voluntary exchange as taking place somewhere on a two-dimensional field defined by the number of potential trading partners on either side of an exchange. Though these dimensions are in principle continuous, we can limit discussion to the four coarse conditions illustrated in Table 1, below.

Table 1. Buyer/Seller Numerosity and Related Economic Theories

|                 | Large # Buyers         | Small # Buyers            |
|-----------------|------------------------|---------------------------|
| Large # Sellers | Classical Price Theory | Monoposony,<br>Oligopsony |
| Small # Sellers | Monopoly,<br>Oligopoly | Bargaining Theory         |

One way to understand Fennell’s concept of lumpiness is in terms of market concentration. A small number of large sellers constitutes a lumpy supply side of the market. A large number of small sellers is a smooth supply side. This form of lumpiness delimits much of the scope of antitrust law—and also highlights a quiet weakness at its core.

Start with the top-left quadrant of Table 1. This reflects a transaction that could take place between any pair of a large number of potential buyers and sellers. All else equal, antitrust has little to contribute here, since trade in this setting usually works well enough on its own.

The reasoning comes directly from economic price theory. In classical price theory models, a single commodity is traded between a large number of potential buyers and sellers. Assuming away certain externalities and transaction costs, economic theory predicts that market-clearing prices will maximize allocative efficiency in this setting. This is a strong claim, but empirical studies largely back it up.

A nice illustration is a “pit market” experiment described by Charles Holt,<sup>1</sup> in which large numbers of buyers and sellers are cast into a trading pit to try to organically find and negotiate trades. The process is noisy and

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<sup>1</sup> Charles A. Holt, *Classroom Games: Trading in a Pit Market*, 10 J. ECON. PERSP. 193 (1996).

chaotic, but even with minimal information about market conditions and little time to find and negotiate trades, subjects in this experiment often achieve results close to the efficiency predictions of classical perfect competition models.

The point is that, for all their artificial properties, textbook models of perfect competition appear to be quite robust, at least when there are many potential trading partners on both sides of a transaction. Problems only emerge—and antitrust only becomes important—when lumps develop on either side of the potential transaction.

Start with a lumpy seller side: the bottom-left quadrant of Table 1. In monopoly and oligopoly models, trade takes place between a large number of buyers and a small number of sellers. A mature literature in industrial organization economics shows that trade in this setting does not generally exhibit the allocative efficiency of perfect competition. Often, but not always, lumpy sellers maximize their profits by driving prices up above the allocatively efficient level. Compared to a perfect competition benchmark, the sellers do better, the buyers do worse, and overall social welfare goes down.

Roughly the same holds true when lumps form on the buyer side of the transaction. In the top-right quadrant, a large number of sellers attempts to trade with a small number of buyers. The efficiency implications of monopsony and oligopsony models are the mirror image of monopoly and oligopoly. Here, the lumpy buyers will often, though not always, drive prices down below the allocatively efficient level. Compared to a perfect competition benchmark, the buyers do better, the sellers do worse, and overall social welfare again goes down.

Among other things, antitrust law protects the less lumpy side of a transaction from the lumpier side. It does not go so far as to regulate trade or require efficient prices in doing so. Rather, many antitrust policies can be seen as efforts to prevent too much lumpiness from forming in the first place. Thus, the efforts of oligopolists to lump together in a collusive scheme may be illegal under Section 1 of the Sherman Act.<sup>2</sup> Actions that would drive a competitor from the market (on grounds other than competition on the merits) may be illegal under Section 2 of the Sherman Act.<sup>3</sup>

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<sup>2</sup> 15 U.S.C. § 1.

<sup>3</sup> 15 U.S.C. § 2.

Mergers that would combine previously separate competitors into a single firm may be illegal under Section 7 of the Clayton Act.<sup>4</sup>

More could be said about antitrust policy in the three quadrants discussed so far, but I would rather shift focus to the fourth category of trade. The often overlooked lower-right quadrant of Table 1 involves exchange between small numbers of potential buyers and small numbers of potential sellers. In the limit, this converges to negotiated trade between a single buyer and a single seller: a condition termed bilateral monopoly in the law and economics literature. What role, if any, can antitrust law play in this quadrant?

The answer is complicated by the uncertain economics of this form of trade. In the case of bilateral monopoly, simple bargaining models can rationalize any division of the benefit of trade that does not make either side worse off than he or she would be if the transaction had not occurred at all. Put another way, there is no clear prediction about the division of buyer and seller surplus in the lower-right quadrant. Allocatively efficient trade can occur at an infinite number of potential “prices” in this setting. But is allocative efficiency reached at all?

Again, the answer is uncertain. As a matter of economic theory, most basic bargaining models predict that mutually beneficial exchange will occur wherever feasible. But this turns out to be empirically doubtful. Impasse and failed exchange are common in experimental research on bilateral bargaining—at least when it takes place between individuals. Indeed, the holdout problem, the subject of much concern in law and economics, is at root an empirical prediction that beneficial exchange may not take place at all if it must be negotiated between a small number of potential trading partners.

The uncertainties hanging about individually negotiated exchange are profound. At least for now, economics simply has more to say about the properties of trade in aggregate (the first three quadrants of Table 1) than it has to say about trade in specific (the fourth quadrant of Table 1). But where does this leave antitrust law in the lower-right quadrant?

There are plausible arguments that antitrust has little to offer here. First, in contrast to the bottom-left and top-right quadrants, there is no asymmetry of lumpiness to create a disadvantaged side of the transaction in warrant of protection. Indeed, roughly equal lumpiness might protect each

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<sup>4</sup> 15 U.S.C. § 18.

side of an exchange against attempted exercises of market power by the other. The treatment of “powerful buyers” as a mitigating influence on anticompetitive effects in the current Merger Guidelines exemplifies this thinking.<sup>5</sup> Second, as will be discussed in greater detail in the next section, allocative inefficiency does not necessarily follow from surplus appropriation in this setting.

But there are plausible arguments that antitrust law is needed in the bottom-right quadrant as well. First, and most importantly, there is no principled reason to think that traditional antitrust injuries cannot occur in transactions with few potential participants. A recent example is the Federal Trade Commission’s move to prevent Staples from acquiring Office Depot on grounds that the merger would weaken the negotiation posture of large business-to-business buyers of office supplies.<sup>6</sup> To the extent that antitrust law already protects the negotiation posture of large corporate entities as they negotiate multi-million dollar supply contracts, it may already reach far into the fourth quadrant of Table 1.

Second, the empirical evidence on bargaining failure may suggest an independent basis for opposing extreme lumpiness under antitrust law. Past a certain point, a reduction in the number of potential trading partners might lead to allocative inefficiency simply as a result of increasing the likelihood of bargaining impasse and failed exchange. This is admittedly not a traditional basis for antitrust enforcement, but it tracks some of the underlying concerns of traditional theories, and may warrant consideration in very heavily concentrated markets and industries.

The point of this discussion is not to suggest that antitrust policy must take any specific course of action in situations like the lower-right quadrant of Table 1. Neither economics nor antitrust law are mature enough to recommend or exclude any approach as a rule. But trade between small numbers of potential trading partners is a common and important form of commerce, and clear antitrust policy in this area is something to aspire to in years to come.

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<sup>5</sup> U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, 2010 HORIZONTAL MERGER GUIDELINES § 8, <http://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf>.

<sup>6</sup> *FTC v. Staples, Inc.*, 190 F. Supp. 3d 100, 118 (D.D.C. 2016).

## II. LUMPING PRICE, OUTPUT, AND EFFICIENCY

Many antitrust textbooks start by comparing the economic models of perfect competition and single-price monopoly, roughly paralleling some of the discussion of the previous section. Relative to the many small sellers that make up the supply curve in perfect competition, a monopolist internalizes the effect of each incremental price reduction on all units sold. This gives the monopolist a profit motive to raise the price of a good or service above the competitive level.

In the typical comparison, the consequences for consumers and society also parallel parts of the previous discussion. The market price is higher under monopoly than under perfect competition. Some consumers pay the higher monopoly price: their benefit of trade is reduced in exact proportion to the enhanced profit margin of the monopolist. Other would-be consumers refuse to trade at the higher monopoly price. This leads to a lower total quantity of trade, which implies the existence of allocative inefficiencies. The good or service could have been supplied to these would-be customers (as evidenced by their ability to buy in perfect competition), but the profit maximizing behavior of the monopolist obstructs these trades and deprives society of beneficial exchanges.

In this textbook treatment, price correlates with many variables. Price and output are directly related. There is a single price which determines a single quantity traded (and vice versa). For the same reason, price correlates with allocative efficiency. Any price above (or below) the competitive price implies fewer trades than would have occurred under competitive pricing, which implies a less efficient allocation of resources than was feasible under a different competitive structure.

Finally, many texts and antitrust scholars draw an additional correlation between consumer welfare and total welfare. In the textbook comparison of single-price monopoly with perfect competition, the reduction in consumer welfare is brought about by a higher-than-competitive monopoly price; this monopoly price prevents some beneficial trades from occurring, an allocative inefficiency; and this allocative inefficiency (combined with a welfare neutral redistribution of the gain of trade among those who continue to trade at the monopoly price) implies a net reduction in society's overall gains from trade, lower total welfare.

This chain of inferences, linking reductions in consumer welfare to reductions in total welfare, may help to explain Robert Bork's infamous conflation of the two concepts in the *Antitrust Paradox*.<sup>7</sup> That and some uncertainty about the differences may help explain the willingness of many judges, practitioners, and scholars to lump together notions of price elevation and output reduction; reduced consumer welfare and reduced total welfare.

But there is a problem with lumping these ideas together too freely. The chain of inferences that links price to output and consumer welfare to total welfare does not generalize to many settings more complicated than the simple comparisons in which it is often presented. For one thing, the baseline of perfect competition is rarely, if ever, the appropriate benchmark for measuring competitive injury. But beyond this, the removal of one important assumption throws the entire chain into doubt.

The critical assumption is that a firm with market power sets a single per-unit price for the good or service it provides. In perfect competition, this assumption aligns with intuition. When fiercely competitive price-taking agents sit on either side of a commodity exchange, it is hard to imagine anything other than a single per-unit price emerging as the market equilibrium. But monopolists are not price takers. And unless some external force prevents it, the monopolist's power to set prices will generally include the power to set *different* prices for different transactions. This raises an obvious question: what does the comparison to perfect competition look like if the monopolist does not charge a single per-unit price?

The answer depends on what pricing model the monopolist adopts—and there are *many* possibilities. To take one extreme, suppose the monopolist charges each customer a customized price. In a model of perfect price discrimination, the seller is assumed to be able to accurately predict the willingness-to-pay of every consumer and to be able to prevent arbitrage by technical or legal constraints (foreclosing resale among consumers). A monopolist in such a position could charge each consumer the most that this person would possibly pay for the quantity of the good or service that he or she wants. The effect is complete appropriation of consumer welfare by the monopolist: the value of trade to all consumers is driven down to almost nothing. But the effect is also complete preservation of the allocative efficiency of perfect competition. The monopolist has a strong profit

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<sup>7</sup> ROBERT BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 68–69 (1978).

motive to make sure that every last efficient trade occurs in this setting, so the total quantity traded is the same for perfect price discrimination as it is for perfect competition, and total welfare is the same as well. In short, the effect of perfect price discrimination is to unlink consumer welfare and total welfare.

Other possibilities span the spectrum. A monopolist may engage in imperfect price discrimination, setting different prices in different locations or providing goods in different quantity or quality brackets. These strategies increase the monopolist's profits, but their implications for consumer and total welfare are complicated. Often, the imperfect discrimination scheme makes one group of consumers better off than if the monopolist had set a single price while making another group of consumers worse off. Total welfare may be higher or lower than under single price monopoly depending on how much each group benefits and loses. This is to say nothing of other types of price discrimination, or the many pricing strategies that are the subject of the growing economics of nonlinear pricing: quantity discounts, peak-load pricing, two-part tariffs, various forms of bundling, etc.<sup>8</sup> As discussed in the previous section, individually negotiated exchange also disturbs the link between price and efficiency implications.

The point of this discussion is not to suggest that antitrust should necessarily encourage or discourage any particular pricing scheme. It is also not to suggest that antitrust law cannot handle cases involving nonlinear pricing. The point is simply to highlight the dubious theoretical basis for uncritically lumping changes in price, consumer welfare, and allocative efficiency together as though they were equivalent.

The danger in doing so is more than academic. Uncritical lumping of price, consumer welfare, and allocative efficiency stunts the growth of antitrust and obscures the principles upon which cases are being decided. In the Supreme Court's recent decision of *Ohio v. American Express*, for example, did the majority actually mean what it said in defining market power as "the ability to raise price profitably *by restricting output*"?<sup>9</sup> If so, then it would seem to be motivated by concern for allocative efficiency and total welfare, not consumer welfare as it elsewhere suggests.<sup>10</sup> If not, then it confuses readers with a mistaken lumping of allocative efficiency and

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<sup>8</sup> See generally Robert B. Wilson, *Nonlinear Pricing* (1993).

<sup>9</sup> *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2288 (2018) (emphasis in original) (quoting PHILLIP E. AREEDA & HERBERT HOVENKAMP, *FUNDAMENTALS OF ANTITRUST LAW* (4th ed. 2017) with emphasis added).

<sup>10</sup> See, e.g., *id.* at 2290. *Leegin Creative Leather Prod., Inc. v. PSKS, Inc.*, 551 U.S. 877, 906 (2007).



consumer welfare. In the other direction, when the Eleventh Circuit held that to defend a merger on efficiency grounds any cost savings needed to “benefit competition and, hence, consumers,”<sup>11</sup> did the court really mean to articulate a consumer welfare standard? Or was it mistakenly assuming that lower consumer welfare always means lower total welfare as well?

There are arguments for adopting a consumer welfare standard just as there are arguments for a total welfare standard. There are reasons to focus attention on price effects just as there are reasons to let price take a second seat to efficiency. These options, and the tradeoffs between them, are obscured by the common practice of lumping together all of these concerns. Perhaps that is even a serviceable approximation in many cases. Perhaps, empirically, the link is often good enough. This still would not justify the practice. The case will eventually emerge in which price is clearly unrelated to efficiency. When it does, it will present a choice to be made about the future of antitrust law. To make sure it is an *informed* choice, we need to start slicing apart these different concerns today.

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<sup>11</sup> F.T.C. v. Univ. Health, Inc., 938 F.2d 1206, 1223 (11th Cir. 1991).