Distributive Justice and Consumer Welfare in Antitrust

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DISTRIBUTIVE JUSTICE AND CONSUMER WELFARE IN ANTITRUST

Herbert Hovenkamp

Introduction: Identifying Distributive Concerns in Antitrust

The dominant view of antitrust policy in the United States is that it is intended to promote some version of economic welfare. More specifically, antitrust promotes allocative efficiency by ensuring that markets are as competitive as they can practicably be, and that firms do not face unreasonable roadblocks to attaining productive efficiency, which refers to both cost minimization and innovation. That is to say, a highly competitive market containing small firms with high costs and little incentive to innovate is not desirable. Such a market might be allocatively efficient in the sense that prices are close to marginal cost, but costs would be too high. At the other extreme, however, antitrust would not prefer a world of dominant firms unless the dominance is essential to maintaining technological progress or cost reduction. Tradeoffs between allocative and productive efficiency may occasionally be necessary, but the overall goal is markets in which output, whether measured by quantity or quality, is maximized. Finally, antitrust in the United States is generally dedicated to the proposition that markets usually work by themselves to attain these results, provided that property and contract rights are adequately defined. As a result, intervention must be episodic and applied only when good reason exists for thinking that antitrust will make a market perform more consistently with these goals.

The term “distributive justice” has a variety of meanings, including some that emphasize fair distribution of opportunity and others that emphasize fair distribution of result.¹ Distributive justice may involve an obligation to take care of society’s weakest

members, or it may simply require guarantees that everyone will have an equal opportunity to fend for themselves, or perhaps some combination of the two. If one thinks of life or fortune as a race, some forms of distributive justice concentrate on the evenness of the starting line, others on the rules of the race, and others on the final outcome.

Even an antitrust policy concerned exclusively with efficiency is likely to include some rules that are desirable on distributive grounds. For example, antitrust policy is opposed to grants of monopoly or privilege that give one firm advantages over others, or that keep some firms out of a market altogether even though they are otherwise able to compete. Likewise, a rule against the formation of naked cartels is distributively fair, because it penalizes conduct generally acknowledged to be socially harmful and applies equally to everyone. Antitrust rules that govern the filing of frivolous lawsuits, such as improper patent infringement claims, increase welfare in the traditional sense, but they may also protect a conception of distributive justice that is concerned about uneven access to the court system. Indeed, even antitrust rules that reward entrepreneurial inventiveness or risk taking are fair to the extent they are evenly applied and society values these activities.

Giving weight to distributive justice in antitrust becomes harder to defend when we consider what happens further down the race course or at the end. For example, antitrust generally does not guarantee a firm the right to earn a profit, not matter how inefficiently it operates. But perhaps it could do things that are less extreme. It might try to ensure the viability of small businesses, even if they have higher costs or greater vulnerability to market fluctuations. However, in doing so it might have to weigh the rights of these small businesses against those of consumers, who ultimately pay the price of inefficiency. So we might wish to have an offsetting rule that says this antitrust duty to protect smaller, higher cost businesses should arise only when it will not result in higher prices for consumers. However, that limitation may remove most of the opportunities for applying the rule in the first place. A very strong criticism of this view is that antitrust law – certainly not the very sparse language of the Sherman and Clayton Acts – provides no calculus for determining how much help should be given to less efficient firms. So even if such concerns were desirable, they could probably be implemented only if we produced a detailed code describing which firms qualified for such assistance and how much of it they should receive.

2 As in JOHN RAWLS, A THEORY OF JUSTICE (1971).

3 For example, Aristotle defined distributive justice in terms of a fair system for awarding merit. See ARISTOTLE, NICOMACHEAN ETHICS 112 (David Ross trans., Oxford Univ. Press 1972).
It is also critical to distinguish questions about distributive justice from questions about market fragility or failure. Even among people who believe that efficiency should be the exclusive goal of antitrust law, wide difference of opinion exists about particular practices. Good examples are, whether prices above cost should ever be regarded as anticompetitive? whether antitrust should prohibit some unilateral refusals to deal? whether resale price maintenance or tying should be governed by harsh rules, such as per se illegality, or very benign rules including per se legality? These differences of opinion typically do not reflect variant concerns about distributive justice, but rather different assumptions about the robustness of markets and the usefulness of antitrust intervention in improving them. For example, even the strongest version of the “leverage” theory of tying purported to condemn it because it led to higher prices. The theory incorporated a fallacious belief that one could easily enlarge monopoly profits by tying a monopoly and a nonmonopoly good and charging independent monopoly prices for both.4 Most of those arguing in favor of stronger dealing obligations upon dominant firms do so not out of a sense of fairness to small business, but rather because they believe that certain markets will perform better in the neoclassical sense of higher output and lower prices if a certain amount of dealing is compelled.

By the same token, merger policy may show a certain solicitude for some small firms where innovation is concerned. This is not because of a distributive concern for protecting inefficient firms. Rather it flows from a belief that innovation is likely to come from relatively small outsiders in certain markets. Thus, for example, the United States government’s 2010 Horizontal Merger Guidelines are concerned with acquisitions that eliminate highly innovate independent firms. The 2010 Guidelines have largely taken the Arrow side of the famous Schumpeter-Arrow debate over market structure and innovation. They have concluded that in many instances nondominant firms have greater incentives to innovate, but that acquisition by a dominant firm could eliminate these incentives.5 In sum, when one takes longer run concerns into account a limited

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type of protection of small business may be appropriate, but this would be an efficiency
goal of encouraging long run progress rather than a distributive one of helping out small
businesses simply because they are struggling.

Relatedly, it is important not to confuse distributive justice with the long run/short
run question. For example, current merger policy in the United States will generally not
recognize a defense that although the merger increases the post-merger firm's market
power and produces higher immediate prices, it will also produce efficiencies that are
greater than the consumer losses. Rather, it must be shown that the merger will not
result in a price increase at all, even in the short run. One might interpret this as a
redistribution policy of favoring consumers even when permitting the merger is efficient.
That is one possible explanation, although an equally plausible one is that the Merger
Guidelines do what they do for administrative reasons. Economics has technical
reasons for distinguishing short and long run performance, but law additionally has
administrative reasons. Predicting long run outcomes is a highly speculative venture,
while in this case the consumer losses are more-or-less a sure thing. Predicting post-
merger efficiencies has proven to be an extraordinarily difficult task, but the "efficiency
defense" is offered by defendants in a very large proportion of merger cases where the
structural case for competitive harm appears to be high.

The history of antitrust is filled with overly speculative appraisals about long run
effects, and these have cut in both directions. Such speculation explains extreme
deferece to the possibility of efficiencies that will be realized only far in the future, but it

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6 See Horizontal Merger Guidelines, §10 (Aug. 19, 2010) ("The Agencies will not challenge a
merger if cognizable efficiencies are of a character and magnitude such that the merger is not
likely to be anticompetitive in any relevant market. To make the requisite determination, the
Agencies consider whether cognizable efficiencies likely would be sufficient to reverse the
merger’s potential to harm customers in the relevant market, e.g., by preventing price increases
in that market."). The 2010 Horizontal Merger Guidelines were released jointly by the Antitrust
Division of the Department of Justice and the Federal Trade Commission. They can be found at

7 See 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶970-976 (3d ed.
2009).
also accounts for much of the 1960s era jurisprudence that applied “incipiency” tests to mergers, tying arrangements and other forms of vertical integration, and attempt to monopolize. The result was often to condemn these practices when defendants had very small market shares or their markets were not conducive to monopoly at all. The courts feared that if the challenged practice were permitted to run its course or was duplicated by others, monopoly would emerge. These decisions should not be regarded as intentionally redistributing wealth to smaller firms, however, even though that may have been their effect. Rather, they should be faulted for having exaggerated views about the fragility of markets and their proneness to monopoly.

One argument in favor of a general welfare test is that in the long run it becomes a consumer welfare test. As a result, the argument goes, the tests are not really different at all. That is to say, while a practice that produces gains to suppliers creates these profits in the short run, eventually they will be competed away and consumers will receive the benefits. For example, if a practice reduces costs but also facilitates higher prices, rivals will adopt the cost reducing practice as well and competition will eventually drive the price down.

But this argument proves too much and amounts to a much more general attack on application of antitrust at all. The long run equilibrium of all markets that are not subject to market failure is competitive. Antitrust, however, is concerned with bringing about the benefits of competition sooner rather than later. The long-run argument is a little like saying that because in the long run we are all dead anyway, there really is no point in criminalizing murder.

The long run/short run argument is relevant mainly as a reality check about the costs and benefits of antitrust adjudication. Antitrust generally approaches long run

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concerns with a reasonableness test that is driven by three factors: degree of speculation, enforcement costs, and likelihood of success. If there is good reason for thinking that the effects of a practice will dissipate almost immediately as a result of market forces, then it is probably not worth the considerable costs of bringing antitrust’s machinery to bear. For example, this is why we require substantial, durable power in a well-defined market as a condition for the illegality of certain practices. That is also why entry barrier analysis is so important when considering exclusionary practices by dominant firms. But if the effects of a practice appear to be at least moderately durable, then antitrust tribunals almost never engage in speculation about whether they will be dissipated in favor of consumers down the road.

The Triviality of the Consumer Welfare Debate

The distribution concern that has dominated debates over United States antitrust policy over the last several decades is whether antitrust should adopt a “consumer welfare” principle rather than a more general neoclassical “total welfare” principle. “Total welfare” refers to the aggregate value that an economy produces, without regard for way that gains or losses are distributed. For example, if a product costs $5 to make and is sold for $8, the $3 surplus goes to the seller. On the other side, if a customer would have been willing to pay $10 for a product but is able to purchase it for $8, then this $2 surplus is value added to the consumer. A perfectly competitive market maximizes total welfare, at least when we are not concerned about innovation. Significantly, however, a perfectly competitive market also gives most of the surplus to consumers, because firms compete to the point that price equals marginal cost.

Formally, “consumer welfare” looks only at the surplus that goes to consumers, ignoring that which goes to sellers. The consumer welfare principle must be counted as “distributive” to the extent that it mandates outcomes that shift wealth or resources in favor of consumers even though an alternative outcome would produce greater total wealth. These outcomes can result from both “overenforcement” and “underenforcement,” assuming that the wealth maximizing position is accepted as the baseline.

Suppose, for example, that a joint venture among the firms that dominate a market simultaneously (1) facilitates a collusive output reduction that raises consumer prices, but (2) reduces the firms’ variable costs by permitting them to share production or distribution processes. In some cases the cost reduction might be so great that even the cartel price is lower than the pre-venture price.\(^\text{11}\) In that case this joint venture

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should be approved under general welfare grounds because it increases total wealth. It would also be approved under the consumer welfare principle because consumers actually benefit.\textsuperscript{12}

Suppose, however, that the joint venture produces significant gains in production costs of, say, $100; however, it also facilitates a price fix that raises the overall price level by $80. In that case the joint venture would be efficient under total welfare criteria because the productive efficiency gains exceed the allocative efficiency losses that result from the collusion.\textsuperscript{13} The gains to the firms are described as “productive” efficiency gains because they result from economies in producing or distributing. The losses to consumers in this case are described as “allocative” efficiency losses because they result from a decrease in market competitiveness. In this situation the general welfare criterion would approve the restraint because gains are larger than losses, while the consumer welfare criterion would condemn it because consumers are worse off. Or to say this differently antitrust under the consumer welfare principle could be used to condemn an efficient practice, provided that “efficiency” is equated with maximization of total welfare.

In the \textit{Antitrust Paradox} Robert Bork famously argued that antitrust law should adopt what he termed a “consumer welfare” standard for illegality, but then equated this standard with general welfare.\textsuperscript{14} Bork’s observations started a debate that is ongoing

\textsuperscript{12} A likely example is Broadcast Music, Inc. v. Columbia Broadcast System, Inc., 441 U.S. 1 (1979), where the Supreme Court upheld a nonexclusive “blanket license” agreement under which thousands of artists agreed to the same royalty rates for electronic performances of their music. The reduced transaction costs of blanket licensing almost certainly resulted in lower output prices to consumers. See \textsc{Bhnhannan and Hovenkamp, Creation Without Restraint}, ch. 12.


and has produced hundreds of articles. The debate has both historical, or positive, as well as normative aspects. The historical debate concerns mainly whether the original intent of the framers of the Sherman Act was a general welfare test for legality, a consumer welfare test, or perhaps some alternative test.\textsuperscript{15} The normative debate is concerned with whether general welfare or consumer welfare should be the antitrust goal.

The simple version of the consumer welfare test is not a balancing test, in the sense that one must attempt to measure productive efficiency gains and allocative efficiency losses and net them out. Under the test, if consumers are harmed (either by reduced output or product quality, or by higher prices resulting from the exercise of market power), then this fact trumps any offsetting gains to producers and, presumably, to others. Theoretically, even a minor injury to consumers outweighs significant efficiency gains. In this sense the consumer welfare test is easier to administer on a case by case basis than general welfare tests. For example, under a simple rule of reason test employing the consumer welfare principle one would have to consider whether the challenged practice creates a sufficient inference of lower market wide output and higher prices. If so it is presumptively unlawful. At that time the defendants will have an opportunity to show that the output model ignores efficiencies that are produced by the challenged practice, and also that these efficiencies are of sufficient magnitude that the profit-maximizing cartel price under the venture is lower than the competitive price prior to the venture.

By contrast, a general welfare test requires a cardinal assessment of net gains or losses. To be sure, some cases are not particularly difficult. For example, naked price fixing, unaccompanied by any integration of research, production, or output, produces no measurable efficiency gains and leads directly to higher prices. So total welfare “balancing” is relatively easy. On the other side, many purely vertical practices, including vertical territorial restraints and many instances of tying or exclusive dealing,

may not result in higher consumer prices at all and have efficiency benefits that serve to explain them. Once again, balancing should be easy.

In the middle, however, are joint ventures with some integrative function, mergers, many unilateral practices, and at least a few vertical practices, including some instances of resale price maintenance, exclusive dealing, and tying. What these practices have in common is that under the right circumstances they can serve as an opportunity for exercising market power, but they can also produce considerable efficiencies. In these cases the market power requirement, which applies in some fashion to all of them, serves to distinguish cases where there is no consumer harm because a market wide output reduction is impossible. If market power is present, then the case is much more difficult.

The volume and complexity of the academic debate on the general welfare vs. consumer welfare question creates an impression of policy significance that is completely belied by the case law, and largely by government enforcement policy. Few if any decisions have turned on the difference. In fact, antitrust policy generally applies both tests in the following sense. First, the economic analysis from the dominant Harvard and Chicago schools of antitrust is consistently concerned with general welfare, although the schools entertain different assumptions about the robustness of markets and the merits of intervention. Harvard School antitrust economists began to look at total welfare consequences at least as early as the 1930s.16 The Chicago School has likewise consistently followed a total welfare approach, ignoring distributional concerns and focusing on the extent to which an assortment of practices are likely to impose welfare losses in the neoclassical sense.17


The principal historical difference between the Harvard and Chicago School approaches is that Chicago has been somewhat more optimistic about the robustness of markets and their corrective mechanisms, and somewhat more pessimistic about the value of government intervention. As a result, Chicago School writers have seen more room for rules of per se legality, particularly in the areas of unilateral restraints and vertical practices. Harvard theory observes the same issues but typically prefers a rule of reason approach, making violations difficult to prove but not ruling them out altogether. The economic thinking of the two schools is much closer together today, however, than it was in the 1960s and earlier. Significantly, where there are differences the Supreme Court has almost uniformly followed the Harvard rather than the Chicago School approach.  

For example, the Harvard School literature on such complex practices as exclusionary pricing, mergers, refusals to deal or license, and joint ventures generally applies a total welfare approach, trying to identify circumstances when these practices are competitively harmful on balance and what are the evidentiary criteria for evaluating them. For complex practices this literature generally serves to create a kind of opening state of mind with respect to certain practices. For example, today the dominant views, which are those of the Harvard School, are that anticompetitive predatory pricing is rare, but perhaps not impossible; that most instances of resale price maintenance are competitively benign, but there may be specific instances of anticompetitive RPM at the behest of a powerful dealer or cartels of dealers, that


19 See generally PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW (3d ed. 2011), vols. 3, 3A, 3B (unilateral exclusionary practices including pricing and refusal to deal), 4, 4A & 5 (mergers), 8 (vertical intrabrand restraints including resale price maintenance), 9, 10 & 11 (tying and exclusive dealing), 12 & 13 (joint ventures, standard setting and related horizontal collaborative conduct).

20 3A ANTITRUST LAW, Ch. 7C (3d ed. 2008).

21 8 ANTITRUST LAW ¶1604 (3d ed. 2010). To be sure, resale price maintenance may lead to higher prices, but in a case of manufacturer initiated RPM the higher prices are not the
unilateral refusals to deal rarely lead to marketwide output reductions. The practices are controversial. Commentators take a variety of positions on them, irrespective of “school,” but the aggregation of these views leads to a set of presumptions about the general class of cases, and the amount and nature of the proof that plaintiffs must produce. In the case law, presumptions are generally assigned and weighted depending on the court’s opening assessment of the degree of danger that a restraint imposes. If a category of practices is strongly regarded as benign, plaintiffs will have stringent proof requirements, and vice-versa.

Second, however, if the evidence in a particular case indicates that a challenged practice facilitates the exercise of market power, resulting in output that is actually lower and prices that are actually higher, then tribunals uniformly condemn the restraint without regard to offsetting efficiencies. Indeed, I have not been able to find a single appellate decision that made a fact finding that a challenged practice resulted in lower market wide output and higher prices, but that also went on to approve the restraint because proven efficiencies exceeded consumer losses.

To be sure, many cases approve restraints after finding likely or possible efficiencies, without detailed inquiry into output effects. But these cannot be read as indicating that the restraint would be lawful even if consumer harm had been shown. Rather, they indicate that proof of efficiencies will be sufficient to justify a venture in situations where actual consumer effects are unknown and the theorizing about the

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22 But for important qualifications in network industries, see Christina Bohannan & Herbert Hovenkamp, Creation Without Restraint: Promoting Liberty and Rivalry in Innovation, ch. 11 (2011, in press).

23 This is reflected in the Supreme Court decisions setting standards for pleading requirements, as well as for summary judgment without a trial. See Bell Atlantic Corp. v. Twombly, 550 U.S. 544 (2007) (pleading requirements); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574 (1986) (summary judgment). See also 2 Antitrust Law ¶307 (pleading), and ¶308 (summary judgment) (3d ed. 2006).

24 See, e.g., California Dental Assn. v. FTC, 526 U.S. 756 (1999) (requiring full rule of reason for professional association’s restrictions on price and quality advertising and requiring showing of competitive impact; case ultimately dismissed when such impact could not be proven); Texaco, Inc. v. Dagher, 547 U.S. 1 (2006) (approving production joint venture; no inquiry into whether prices increased)
class of restraints in question is probabilistic and dependent on case specific assumptions. Indeed, in many of these cases the courts cite factors such as nonexclusivity, indicating that an output reduction is highly unlikely even if the firms wished to have one.\textsuperscript{25} That is to say, the courts do not balance proven consumer harm against likely or even proven producer gains. Rather, they insist on a showing of actual consumer harm, and if they find it they condemn the restraint.

This approach is consistent with the one taken in the 2010 Horizontal Merger Guidelines, as well as previous versions of the Guidelines. First, the Agency applies a variety of tests for unilateral or collusive market effects to see if the merger is likely to result in a market wide output reduction and price increase. If the answer is no, the query is abandoned. If the answer is yes, then the proponents of the merger will have an opportunity to show compensating efficiencies. But as noted previously, the magnitude of the efficiencies was be sufficiently large to offset any predicted price increase. In sum, the merger will be permitted only where there is no consumer harm, regardless of the size of the efficiencies.

Even the Chicago School theory of optimal sanctions, which would base damages on the sum of the overcharge plus the deadweight loss,\textsuperscript{26} indicates a modified consumer welfare approach. By measuring damages as it does, the optimal sanctions approach permits conduct to proceed when efficiency gains are greater than the deadweight loss, but terminates the conduct if efficiency gains are less.\textsuperscript{27} That is, it permits efficient conduct but forecloses inefficient conduct. However, assuming that the damages are actually paid to consumers, they are made whole by this approach – that is, the theory resembles Kaldor-Hicks, or potential Pareto, efficiency in that it requires that the gains be large enough to compensate for the losses, but in this case it also


\textsuperscript{26} This number must be adjusted by the inverse of the probability of detection. For example, United States antitrust law’s mandatory treble damages are correct on the premise that the probability of detection and successful prosecution is one in three.

requires actual compensation for the losses out of the gains. As a result, consumers will be no worse off and sellers will be able to pocket the gains to the extent they exceed consumer harm.

In sum, antitrust policy in the United States follows a consumer welfare approach in that it refuses to permit restraints that actually result in monopoly output reductions, whether or not there are offsetting efficiencies and regardless of their size. To the extent damages rather than an injunction are appropriate, the approach may permit efficient restraints that harm consumers, but only after consumers are adequately compensated.

This approach to antitrust welfare is very likely justified on administrative grounds. A total welfare approach would require courts routinely to balance out consumer injuries from allocative inefficiencies against firm gains attributable to production efficiencies. Importantly, this balance would not measure the overcharge, which is a wealth transfer, but rather the allocative efficiency, or "deadweight" loss. This loss results from unmade sales and inefficient substitutions and is much more difficult to assess than simple overcharges. This loss must then be balanced against the production efficiency gains. In contrast, the current system requires one to show only higher prices resulting from the exercise of market power. It requires a complex calculation of the magnitude of resulting efficiencies only in a very few cases. Indeed, the set of cases that have done so appears to be empty. When courts do dismiss antitrust complaints, it is because they have concluded that there is very likely no deadweight loss at all.

Finally, protection of consumer welfare is probably most consistent with the "disaggregation" rule that United States courts apply in certain cases, particularly those involving collaborative activity such as joint ventures. Some so-called joint ventures are nothing more than fronts for cartels, and in these cases the venture itself can be enjoined. Often, however, the venture as a whole is quite beneficial, but particular rules or practices seem unreasonably anticompetitive. Good examples are the NCAA rule restricting nationally televised college football games, which the Supreme Court condemned in 1984, and the Supreme Court's more recent American Needle decision, which concluded that an exclusive marketing agreement covering all NFL teams' individually held trademarks should be treated as a collusive rather than unilateral act. Both the NCAA in collegiate sports and the NFL in professional football are highly efficient joint ventures. No one in these cases was urging that they be dismantled.

Rather, in such situations courts isolate the challenged practice, determine whether it is likely to harm consumers, and then consider whether the practice is reasonably necessary to the operation of the venture. If not, then the court can enjoin the practice while leaving the balance of the venture intact. If the practice is necessary to the venture’s operation, however, then the court has no choice but to consider whether the venture as a whole is competitively beneficial or competitively harmful. Once again, I do not know of a single case that has upheld such a venture after a fact finding to the effect that the venture actually raised consumer prices by facilitating a market wide output reduction.

Complexities in Assessing Consumer Harm

One phenomenon that greatly complicates consumer welfare analysis is the practice that affects different classes of consumers in different ways. As a result, net consumer harm may be exceedingly difficult to measure. A good example is the variable proportion tying arrangement, which benefits some customers while it harms others.  

In a variable proportion tie a firm typically sells a durable good that uses one or more consumable complements in variable proportions. For example, in famous old cases the defendant sold a mimeograph copy machine subject to a requirement that purchases buy its ink and stencils, or a refrigeration box on the condition that customers use only the seller’s dry ice. These firms are engaging in a type of second degree price discrimination by dropping the price of the primary, or tying, good, and increasing the price of a tied good. The firm then earns a higher return from those who purchase a great deal of the tied good than from those who purchase smaller amounts. Such


33 E.g. Xerox Corp. v. Media Sciences, Inc., 660 F. Supp. 2d 535, 539 (S.D.N.Y. 2009) (printer/ink tie – “As is true of other printer manufacturers, Xerox generally sells its printers at a low margin or a loss, hoping to earn a profit through later sales of high margin ink”).
tying arrangements have produced voluminous private antitrust litigation in the United States, including some that is ongoing. These cases are also ubiquitous in the franchise industry, where variable proportion tying is a common mechanism for reducing franchisee entry costs and enlarging franchisor profits through price discrimination. The price of the franchise (the tying product) is often zero, but is in any event much lower than the standalone value of the franchise. For example, a nondominant franchisor may give franchises to firms at no charge but then tie food products or other consumables and place an overcharge on these. Once again, the franchisor earns more from higher volume franchises.

**Figure One**

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35 E.g., Siegel v. Chicken Delight, 448 F.2d 43, 46-47 (9th Cir. 1971), cert. denied, 405 U.S. 955 (1972) (franchise fee of zero, tying consumable products at overcharge).
Figure one illustrates the complex consumer impact of variable proportion ties. The vertical axis measures consumers’ surplus, while the horizontal axis measure the number of tied units that the consumer purchases. The solid line gives consumers’ surplus under tying and the dotted line without tying. Consumers are divided into three categories arrayed along the horizontal axis.\(^{36}\) The low preference category consists of consumers who would not be in the market at all at standalone pricing, but who enter the market in response to the tying product price cut. For example, a firm selling computer printers at a standalone price of $400 might cut the price to $200, but then charge $20 for an ink cartridge that would otherwise sell for $10. For these low preference consumers the tie is an unqualified welfare gain, because they would not be in the market at all under single product pricing. The magnitude of their gains depends on the size of the printer output increase in response to the price cut, and this can be very large when the demand curve is convex to the origin and is fairly shallow in the higher output reaches.

The middle group of customers consists of those who would have been in the market under standalone pricing, but for them the price decrease in the printer is greater than the price increase in the cartridges. For example, if someone in our illustration used fewer than 20 printer cartridges over the printer’s lifetime he or she would come out ahead under tying.\(^{37}\) The size of this group depends on a number of factors. One factor is the durability of the tying product and the amount of tied product used during its lifetime. Another is whether the tie is air tight. For example, many printer manufacturers attempt to tie cartridges but their success is limited to the extent that customers or third parties can refill cartridges or produce generics.\(^{38}\) A third factor is the depth of the tying product price cut and the height of the tied product price increase.

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\(^{36}\) They are actually divided into four categories. At the extreme left next to the origin the unnamed space consists of consumers who do not even purchase the tying product at the reduced price under the tying arrangement. Since they are out of the market under both tying and independent sales, they are indifferent to the tie.

\(^{37}\) A user of nineteen cartridges over the lifetime of the printer would spend $190 additional on cartridges but would have saved $200 on the printer itself.

\(^{38}\) This is a principal issue in the ongoing Lexmark litigation, cited above, in which Lexmark attempted to use a microprocessor that required the printer to be able to “read” a particular cartridge before it would work, but third parties were able to emulate the microprocessor. See Lexmark Intern., Inc. v. Static Control Components, Inc., 387 F.3d 522 (6th Cir. 2004) (third party’s evasion of microprocessor lock very likely did not violate the Digital Millennium Copyright Act, which can bar the circumvention of technological locks on copyrighted material).
The third group of “high” intensity buyers are made worse off by the tie. They are the ones that use more than twenty cartridges in our illustration. As a result the higher cartridge prices more than offset the lower printer price.

Whether consumers in the aggregate are better or worse off would be extraordinarily difficult to assess. Further, two additional elements of consumer benefit may need to be considered. First, for a manufactured good such as a printer there are likely to be economies of scale in production that enable the manufacturer to achieve lower costs at higher volume. Conceivably even the high preference users could be better off if the tie plus printer price cut brings enough new customers into the market.

Second, if both the tying and tied good are sold in markets that are not strongly competitive the tie is likely to eliminate a certain amount of double marginalization, which occurs when two sellers supply vertically related or complementary goods that are consumed together and each of them has some market power. 39

**Alternative Distribution Concerns**

Distributive justice is an important concern that society cannot ignore. That does not entail, however, that antitrust is a necessary or even useful tool for obtaining it, or at least certain versions of it. One can achieve the greatest amount of distributive justice under a wide variety of definitions by using a two stage process. First, competition policy and related regulatory policies can be directed toward making the economy as large as realistically possible by rules that encourage both competition and the attainment of technological efficiency. Having made this pie as large as it can be, a secondary set of policies can then be used to re-allocate some of the resulting wealth in ways that satisfy a certain conception of fairness, but without doing excessive harm to the efficiency encouraging goals of the first set of policies. For example, if formation of a cartel is thought to be necessary to protect less efficient firms from bankruptcy, it would be quite easy to justify a policy of using antitrust to prevent the cartel by ignoring the bankruptcy defense, but then permit tax or welfare policy to shift some resources to employees and perhaps owners of the bankrupt firms.

Can antitrust appropriately recognize other distributive concerns that do not implicate either general or consumer welfare? Many practices that are challenged

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39 On double marginalization in tying, see BOHANNAN & HOVENKAMP, CREATION WITHOUT RESTRAINT, *supra*, ch. 2; Hovenkamp & Hovenkamp, *Tying Arrangements and Antitrust Harm*, 52 Ariz.L.Rev. at 958-961. In the case of complementary products the theory of double marginalization is sometimes referred to as “Cournot Complements,” because Cournot applied his theory of oligopoly pricing to producers of complements as well as competitors.
under the antitrust laws produce dislocations in the economy, as do many practices that have no antitrust relevance whatsoever. Plant closings can yield loss of jobs, as can consolidation of distribution chains, whether brought about by merger or simple internal reorganization. Further, these injuries can result in competitive as well as noncompetitive markets.

Consider, for example, the merger between competing gasoline producers who have a sufficiently small market share that no price impact results. To the extent the merger produces any efficiencies the producers will be better off and consumers will be either better off or indifferent.\textsuperscript{40} However, one consequence of the merger is that the two firms consolidate various gasoline stations and eliminate some jobs.\textsuperscript{41} Should antitrust policy intervene in this case in order to protect these jobs?

The injury in this case has absolutely nothing to do with \textit{competition policy} in the sense we ordinarily understand it. Even if two tiny restaurants in Manhattan or London should merge, with no market wide consequences whatsoever, the result might very well be some consolidation of chefs and other personnel. Indeed, if a single owner of two restaurants should close one of them and consolidate its operations that result could follow, even if the market shares involved are trivial.

\textsuperscript{40} In a perfectly competitive market the efficiencies produced by a merger are not “passed on” to consumers through the price mechanism, because the market price is invariant to the costs of any single firm. Rather, the firm will increase its production at the market price.

\textsuperscript{41} Cf. Reibert v. Atlantic Richfield Co., 471 F.2d 727 (10\textsuperscript{th} Cir. 1973) (denying standing to sue to fuel distributor who lost its position after consolidation brought about by Atlantic/Texaco merger).
Suppose we permit a merger to monopoly in order to sustain a faltering firm. In Figure Two, the rectangle over the left side of the marginal cost function (MC) represents a wealth transfer from consumers to the post-merger monopoly. The triangle over the right side of MC represents a deadweight loss which accrues to neither producers nor consumers. The figure illustrates the rare but pedagogically helpful situation where demand is linear and marginal costs are constant. In that case the wealth transfer is precisely double the deadweight loss, so we can measure them as 2X and X, respectively. In the figure the wealth transfer is 16 and the deadweight loss is 8. Under ordinary assumptions of demand curves that are convex to the origin and rising marginal costs this ratio will be different and typically the deadweight loss will be larger than half the wealth transfer.

So this merger provides the merging firms with gains of 16, assuming that the market was competitive prior to the merger. However, it does so at a cost to consumers of 24. The tax and transfer system is not costless either, so the mere fact that there is a 50% premium on the financial support to these merging firms is not dispositive against it. However, the administrative cost in the tax system is paralleled in this case by acquisition costs as well as the administrative expenses of the merger investigation, which could be quite costly given that we wish to measure employment or other effects
as well as the competitive effects of the merger. The deadweight loss must be added on top of these administrative costs.\textsuperscript{42}

Further, there is no reason for thinking that the private gains of 16 which this merger facilitates are the correct amount to deal with the potential loss of employment in this market. The gains to be had from monopoly are a function of market structure, market share and consumer behavior. The potential employment losses are a function of firm specific factors or the state of the economy as a whole that have little to do with these numbers. That is, giving the post merger firm 16 may be too much, just right, or too small an amount to address the employment issue.

Further, because the merger creates a monopoly the gains run across the post-merger firm’s entire output, even though the only output that was at risk for loss of jobs is that of the acquired firm. Permitting the merger effectively pays a subsidy to all the firms in the industry even though only a small portion of them are in financial distress.

In sum, permitting the anticompetitive merger in order to protect employment in the post-merger market seems seriously wasteful of resources. And this analysis considers only short run consequences. In the process of permitting this merger we might also be reducing the incentive to innovate or placing a price umbrella over obsolete technology or inefficient administration, which explains why the acquired firm was in financial distress in the first place. All of these losses would be overhead on our financial assistance to the distressed firm or its employees.

As a second example, consider a dominant firm that acquires a superior technology that operates at lower variable costs than other firms in the market. This firm can engage in exclusionary pricing by charging a price above its own costs which is nevertheless too low to permit rivals to survive. In the short run, jobs and other resources could be lost. Antitrust could respond by (1) doing nothing, provided that the prices are above cost, which is more-or-less what we currently do; (2) force the firm to increase its price sufficiently to permit the rivals to survive; or (3) require the firm to share its technology with smaller rivals.

\textsuperscript{42} One factor to be considered is the incidence and shifting of any tax and transfer system. If the tax is nothing more than a price increase by another name (with part of the revenue going to the government and then paid back to the firms), then the impact of the tax may not be all that different from permitting the merger to monopoly, with the important differences that the government can choose who and how much will be paid out. Direct taxes such as income taxes, however, ordinarily, cannot be shifted.
Setting aside distributive concerns, we are now in somewhat ambiguous territory on the competition policy questions. Reasonable people disagree about whether above cost pricing should ever be predatory, and also whether and when dominant firms should be required to share technology with rivals. However, to the extent that these questions relate to concerns about competition and total market output they are not addressed to wealth distribution as such. Our question is whether competition policy should favor such constraints on dominant firms in favor of smaller competitors even when they are acknowledged to be inefficient in the neoclassical sense. Their appeal is that they protect a class of persons (presumably small business) that we deem worthy of protection.

Forced sharing of an essential input might be thought justified on distributive grounds, even though it cannot be shown to lead to higher output and lower prices. Assuming the forced sharing was completely welfare neutral, perhaps that argument would have one kind of force. But the arguments against forced sharing rules such as the essential facility doctrine argue that forced sharing reduces welfare, at least in the long run, because it eliminates incentives for independent development or innovation.\textsuperscript{43} Firms that have a legal entitlement to procure a resource from the dominant firm have a reduced incentive to develop alternatives for themselves.

The analysis for productive efficiency is roughly similar. For example, we might use competition law in order to preserve an obsolete technology or to protect inefficiently small businesses who have higher costs than dominant firms. A good example of such a use is the Brown Shoe decision, which condemned a merger in an industry where market shares were so small that monopoly or cartel pricing was not plausible. What the merger did, however, was exacerbate a trend toward larger production facilities and vertical integration that was driving smaller shoe stores out of business. The government argued that the merger was unlawful because these smaller firms would have to compete either against lower priced or higher quality shoes.\textsuperscript{44}

\textsuperscript{43} See 3B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶771-772 (3d ed. 2006).

\textsuperscript{44} See, Brief for the United States at 48, Brown Shoe, 370 U.S. 294 (1962):

[T]he integration of manufacturer-retailer Brown with the large Kinney retail organization will seriously aggravate the difficulties that independent retailers are already having in competing with the substantial and ever-expanding retail chains. The manufacturer-owned or controlled retail outlet can sell its own product at a significantly lower price than the nonintegrated independent retailer can obtain for a comparable product . . . . The conclusion
In every one of these cases, use of antitrust policy seems like a socially costly way of getting to a result that might be perfectly defensible on ethical grounds but that imposes high direct costs and a plethora of indirect and unforeseen costs. That is to say, while redistribution is a worthy goal, using antitrust law to support it does not seem sensible, given the costs and uncertainty of the benefits. Further, as the illustrations suggest, these criticisms apply to both underuse and overuse of antitrust – that is, both to situations such as the merger case where antitrust is not applied for distributive reasons, and to the unilateral pricing or dealing case, where it is applied for purely distributive reasons.

Conclusion

In the 1970s the electronic calculator destroyed the entire slide rule industry, which had provided calculating devices to engineers and scientists for three centuries. Under the guise of “competition” policy perhaps the government could have paid subsidies to keep the slide rule industry in business and its employees engaged, with all the slide rules taken out to the garbage dump when production was finished. It would be a little like Blackstone’s support of a statute passed during the reign of Charles II that required corpses to be dressed in wool before burial, because it “encouraged the staple trade.” Using antitrust policy to maintain inefficient businesses differs only in degree. Making employees whole for lost jobs requires only the replacement of wages, not the wasted production of an entire industry. Further, the employees can be redeployed after retraining.

It bears re-emphasis that economic dislocations caused by firm-specific events such as plant closures or dealer terminations relate only indirectly to antitrust policy and in most cases do not implicate competition policy concerns at all. Firms close plants for many reasons, including declining market fortunes or technological obsolescence. These employees lose their jobs just as certainly as those who are made superfluous by an anticompetitive merger. To be sure, if we wished we could redefine “competition” policy

was inevitable that the advantages the merged company would have over its smaller retailing competitors would be so great as to threaten to become decisive.

(Archibald Cox, Solicitor General, writing for the United States).

45 See BOHANNAN & HOVENKAMP, CREATION WITHOUT RESTRAINT, ch. 9.

46 1 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAW OF ENGLAND 122 (1765) (praising the law for “encourage[ing] the staple trade, on which in great measure depends the universal good of the nation”).
so as to include all of these concerns, even applying this set of rules to the unilateral plant closure by a nondominant manufacturer. But in so doing we will have turned antitrust into a global regulator of perceived economic evils, and with no specific guidelines about where the countless lines will have to be drawn.

Antitrust is difficult enough when it keeps its eye on the ball, which is preserving a version of competition that identifies it with consumer welfare and maximum achievable output and innovation. Compensation of competition’s victims may be a highly desirable goal, but it is one best achieved outside of the competitive process.