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Market Concentration, Economic Welfare, and Antitrust Policy

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Abstract The authors review the foundation for incorporating market concentration directly into consumer utility functions, and develop a general equilibrium model to derive welfare-maximizing principles for optimal enforcement of antitrust policies toward concentrated market structures, including merger policy. An intriguing result is that increased market concentration can fail to maximize economic welfare even if a proposed merger might generate positive net efficiencies.

Keywords concentration · antitrust policy · economic welfare

JEL Classification K21 · L40

The economically legitimate role that market concentration should play in the enforcement of antitrust policies has been hotly debated in the United States for three decades, and in the European Community more recently in the wake of the Competition Commission's disapproval of the proposed merger between General Electric and Honeywell in 2001 (Commission of European Communities 2001/2005). In the U.S., the debate has focused on what importance, if any, a merger's effect in raising the share of a market collectively controlled by the largest firms ("market concentration") should be weighed as an offset against the efficiencies claimed to potentially follow from a proposed combination of firms. In the EU, a parallel debate concerns the weight that should be attached to a strengthening of a "dominant position" that might result from a proposed merger, and the degree to which this concern should counterbalance any projected efficiency gains (Journal of Industry, Competition and Trade 2002; Monti 2002).

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This article first reviews the importance traditionally accorded to concerns about market concentration in American antitrust policy. The paper then reviews the "new view" that has rejected these traditional concerns as economically illegitimate, both in the U.S. and, by extension, to the EC. The paper next examines the scope of the concept of "consumer welfare," and specifies a theoretical model from which the implications of concentration and dominant positions can be derived to obtain an antitrust policy that maximizes a more generalized conception of consumer welfare.

1 Traditional concentration concerns in American Antitrust Policy

Combating economic concentration has long been considered a paramount value of American antitrust policy. Competitively structured markets have long been considered an economic counterpart of the nation's political system of checks and balances, whereby economic decision making is dispersed among a multitude of competing organizations, with each acting as a check and balance on the others. This structural arrangement has long been considered vital, not only for its indirect effect in promoting good economic performance (efficiency, innovativeness) but, just as importantly, directly in its own right for combating the problems of arbitrary economic power and its potential for abuse.

This direct concern was clearly evidenced in the national debates triggered by the corporate mergers that spawned the great monopoly "trusts" of the 1880s, and that culminated in the Sherman Act as America's primary public policy response to the problem of concentrated market power. As comprehensive surveys of the congressional debates during that era have found, American lawmakers viewed the economic concentration problem from the perspective of a tradition "that equated excessive economic power with political corruption as well as oppression of competitors and consumers. This tradition grew out of classical liberal assumptions about the threat to individual liberty inherent in public and private power" (Millon 1988: 1287; May 1989). This focus on economic power and the fear of its abuse was a central concern of Senator John Sherman, Republican of Ohio and namesake of the nation's first antitrust statute, who observed the "popular mind is agitated with problems that may disturb social order, and among them all none is more threatening than the inequality of condition, of wealth, and opportunity that has grown within a single generation out of the concentration of capital into vast combinations to control production and trade ... If we will not endure a king as a political power we should not endure a king over the production, transportation and sale of any of the necessaries of life" (quoted in Thorelli, 1955: 180).

American courts, too, have long recognized excessive economic concentration and power as important factors in their own right in adjudicating antitrust lawsuits. Looking back from 1911, for example, Justice Harlan wrote that at the time of the Sherman Act's enactment the menace of arbitrary market power was universally perceived in "aggregations of capital in the hands of a few individuals and corporations controlling ... the entire business of the country, including the production and sale of the necessaries of life" (Standard Oil v. United States, 221 U.S. 1, 83 (1911)). Judge Wyzanski later underscored this direct concern about market power in his *United Shoe Machinery* decision: "Concentrations of power, no matter how beneficently they appear to have acted, nor what advantages they seem to possess, are inherently dangerous. Their good behavior in the past may not be continued; and if their strength were hereafter grasped by presumptuous hands, there would be no automatic check and balance from equal forces in the industrial market"

(United States v. United Shoe Machinery Corp., 110 F. Supp. 295, 347 (1953)). Justice Douglas emphasized the same central concern, pointing out that discretionary private economic power "can be benign or it can be dangerous. The philosophy of the Sherman Act is that it should not exist ... Industrial power should be decentralized. It should be scattered into many hands so that the fortunes of the people will not be dependent on the whim or caprice, the political prejudices, the emotional stability of a few self-appointed men. The fact that they are not vicious men but respectable and social-minded is irrelevant. That is the philosophy and command of the Sherman Act" (United States v. Columbia Steel Co., 334 U.S. 495, 536 (1948)).

When America's merger law was re-written in 1950, the Senate report recommending this change in policy put the concern about concentration of economic decision making power at the forefront of its deliberations, declaring : "The purpose of the proposed bill ... is to limit future increases in the level of economic concentration resulting from corporate mergers and acquisitions" (Senate Report 1775, 81st Cong., 2d sess., p. 3 (1950)). In its definitive interpretation of this new statute, the Supreme Court recognized that by enacting this new merger law, Congress resolved "competing considerations in favor of decentralization," and sought to block "what Congress saw was the rising tide of economic concentration..." (Brown Shoe Co. v. United States, 370 U.S. 294, 317–318, 344 (1962)). In its *Von's Grocery* decision, the Supreme Court observed that from the country's beginnings, there has been an abiding fundamental concern about "the concentration of economic power in the hands of a few. On the basis of this fear, Congress in 1890 ... passed the Sherman Act in an attempt to prevent further concentration ... Like the Sherman Act in 1890 and the Clayton Act in 1914, the basic purpose of the 1950 [merger law] was to prevent economic concentration in the American economy ..." (United States v. Von's Grocery Co., 384 U.S. 270, 274–275 (1966)).

This history demonstrates that the level of market concentration has long been considered an important value and consideration in its own right in American antitrust policy. Abroad, the place of this consideration in EC competition policy has been debated following the advent of an explicit community-wide merger control regulation in the 1980s and its recent revision (Martin 2007; Ilzkovitz and Meiklejohn 2003). This history suggests that if two different levels of concentration were to provide the same output from the same inputs, the less concentrated market structure would be preferred by individuals because (in Justice Douglas's terms) the fortunes of the many would not depend upon the arbitrary decisions and whims of a monopolist or oligopolists wielding concentrated market power.

2 The new view

Over the last 30 years, however, American antitrust policy's traditional concern with concentration has been attacked as "non-economic" by the proponents of a new view, who contend that maximizing "consumer welfare" is the only economically legitimate goal of antitrust policy, and that such welfare maximization affords no place for a "non-economic" factor like concentration to be considered.

This view has perhaps been most forcefully articulated by Robert Bork. "The only legitimate goal of American antitrust law is the maximization of consumer welfare," Bork declared (Bork 1978: 51). In fact, he contends that the competition which it is the goal of antitrust policy to promote must be re-conceptualized as a Pareto-optimal "term of art signifying any state of affairs in which consumer welfare cannot be increased by judicial decree" (Bork 1978: 51). Most importantly for the purposes of this article, Bork argued that this conception of welfare depends solely on two aspects of economic efficiency: "Allocative efficiency" in apportioning society's resources among the various goods and services desired by consumers, and "productive efficiency" in converting inputs into those various outputs (Bork 1978: 91). Bork charged that failure to accept the primacy of this conception of "consumer welfare" had engendered a crisis in antitrust and rendered it "so decayed that the policy is no longer intellectually respectable" (Bork 1978: 418).

This view began to influence American antitrust agencies in the 1980s. William F. Baxter, assistant attorney general for antitrust at the Justice Department, announced "a broad consensus has developed that the antitrust laws are a 'consumer welfare prescription'—that is, they are intended to promote economic efficiency," and that understood in this way, the "sole goal of antitrust is economic efficiency" (Baxter 1983: 619; Taylor 1982: 22). Mr. Baxter's successor at Justice hewed to the same view, stating that "'Consumer welfare' is the guiding principle of this Administration's antitrust enforcement policy"; he dismissed as economically illegitimate any interpretation of American antitrust laws not based on what he called "the objective criterion of consumer welfare" (quoted in Kovacic 1990: 1445). Officials at the U.S. Federal Trade Commission, too, declared this conception of consumer welfare to be the primary legitimate objective of the nation's antitrust policy, insisting that "consumer welfare should be the touchstone of antitrust enforcement" (Calvani 1984; Muris 2002).

In defining "welfare", the proponents of this new view have condemned traditional concerns about economic concentration as nothing more than "outmoded, amateur jerrybuilt, pseudo-economic propositions" (Barnett et al. 1984: 144); as "primitive folk economics" (Bork 1984: 6); as "eclectic forays into sociology and psychology" (Posner 1979: 929); and, most generally, as intellectually impermissible because they reflect non-economic considerations and non-efficiency values (Baxter 1983; Bork 1984: 15). The new view's contention that consumer welfare must be narrowly limited to physical outputs and inputs as the only economically valid guide for antitrust policy also began to influence U.S. judicial opinions: In *Reiter v. Sontone Corp*. and *NCAA v. Board of Regents*, for example, the Supreme Court began to characterize the Sherman Antitrust Act as a "consumer welfare prescription," with some lower courts following along (442 U.S. 330, 342 (1979); 468 U.S. 85 (1984); Kovacic 1990: 1447).

By the 1990s, some claimed their new view had produced a revolution in American antitrust policy. "Almost everyone professionally involved in antitrust today," Judge Richard Posner wrote in 2001, "not only agrees that the only goal of the antitrust laws should be to promote economic welfare, but also agrees on the essential tenets of economic theory that should be used to determine the consistency of specific business practices with that goal. Agrees, that is, that economic welfare should be understood in terms of the economist's concept of efficiency..." (Posner 2001: ix). A broader consequence, Bork believes, is that American "antitrust has been downsized" (Bork 1993: x)—i.e., traditional concerns about structural economic concentration largely have been drained from antitrust, ostensibly owing to the dictates of modern economic welfare theory.

The difference this new view makes in merger policy was sharply evidenced by the different fate of the proposed merger between General Electric and Honeywell in 2001 in the U.S. versus in the EU: The Antitrust Division of the American Justice Department approved the merger on the grounds of its claimed efficiency gains with only relatively minor conditions, while dismissing concerns about the merger's adverse impact on market concentration (Majoras 2001). In the EU, however, the merger was blocked by the Competition Commission on the ground that it would enhance the dominant position of the combined firms across a range of important aviation-related markets (Commission of European Communities 2001, 2005).

3 Consumer welfare and market concentration

But are traditional concerns about concentration inherently non-economic in nature and, thus, impermissible for inclusion in modern economic theory? Is “consumer welfare” confined to the physical provision of goods and services alone, or is consumer welfare a broader concept encompassing more than that? If broader, can a theoretically rigorous analysis of consumer welfare include traditional concerns about concentration? If so, how would it affect the kind of antitrust policy that truly does maximize consumer welfare?

On these important questions it is striking that economists have long construed “consumer welfare” and “consumer utility” in broad terms encompassing what individuals value, rather than narrowly limiting the concept to the production of goods and services alone. Indeed, this broad conception of “consumer welfare” was integral to the utilitarian philosophy propounded two centuries ago by Jeremy Bentham, which economists subsequently adopted, developed and extended as their primary methodology for analyzing human behavior. “By the principle of utility,” Bentham explained in 1789 in his *Principles of Morals and Legislation*, “is meant that principle which approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question: or, what is the same thing in other words, to promote or to oppose that happiness ... If that party be the community in general, then the happiness of the community; if a particular individual, then the happiness of that individual” (Bentham 1789: ii).

Two centuries later, Professor Gary Becker was awarded the Nobel Prize in economics for (according to the Nobel committee) extending the domain of microeconomic theory to a wide range of human behavior beyond the narrow consumption of material goods and services alone. “The definition of economics in terms of material goods is the narrowest and the least satisfactory,” Becker found. “It does not describe adequately either the market sector or what economists ‘do’” (Becker 1976: 4). What is essential, in Becker’s view, is to construe individual preferences in broader terms encompassing “fundamental aspects of life, such as health, prestige, sensual pleasure, benevolence, or envy, that do not always bear a stable relation to market goods and services” (Becker 1976: 5). His analysis “assumes that individuals maximize welfare *as they conceive it*, whether they be selfish, altruistic, loyal, spiteful, or masochistic” (Becker 1995: 634, emphasis in original). The unifying theme of his work, Becker says, is “to incorporate into the theory a much richer class of attitudes, preferences, and calculations,” thereby shedding powerful new light on a wide range of issues and subjects such as racial discrimination, crime, and family organization and behavior (Becker 1995: 649).

The key point is clear: “Consumer welfare” is determined by individuals’ preferences about what *they* consider to contribute to their own sense of utility and wellbeing, *not* by what an outside analyst might wish for them to prefer or consider “rational”, “reasonable” or “sensible”. As Becker (and Bentham before him) pointed out, economic welfare is not limited to material goods and services alone. If individuals value something, then it is economically valid—indeed, essential—that it be explicitly incorporated into an analysis of economic welfare. If something matters to individuals and their sense of their own wellbeing, then it is an economically relevant factor to explicitly factor into consideration. Conversely, a theoretical approach that dictates, a priori, which consumer preferences and values are, and are not, to be taken into account is profoundly inimical to the thrust of the modern method of economic analysis.

4 A theoretical model

Given the traditional concerns surveyed above, and in the light of Becker's work, it is legitimate to consider economic concentration to be of important direct value to consumers, and to explicitly incorporate it into a theoretical analysis of welfare maximization from which the implications for an optimal antitrust policy can be derived. This can be done using a conventional general equilibrium model and the standard Pareto optimum criterion as the condition for welfare maximization (for several examples of such models applied to a variety of economic issues, see Kogiku 1971).

Begin by assuming a two-person, one-commodity, one-factor economy in which each person's utility is increased with *less* industry concentration. In what follows, "r" is defined as a measure of decentralization in the economy which is inversely related to the level of market concentration and dominance: less concentration (higher "r") is considered a "good", while more concentration (lower "r") is considered a "bad".

Let $U^i=U^i(x^i, y^i, r)$, for $i=1, 2$ where U^i is person i's utility, x^i is person i's consumption of good x, y^i is person i's negative net consumption (supply) of factor y, and r is a measure inversely related to industry concentration and dominance.

For each person make the conventional assumptions that the partial derivative of individual utility with respect to that person's consumption of good x is positive, and the partial derivative with respect to that person's negative net consumption of factor y is positive. In addition, assume the partial derivative of a person's utility with respect to reduced concentration/dominance (i.e., greater r) is non-negative:

$$U_x^i > 0, \; U_y^i > 0, \; U_r^i >= 0 \text{ for } i = 1, 2$$

If $U_r^i > 0$, then decentralization increases consumer satisfaction, concentration/dominance is a "bad", and traditional concerns about market concentration matter. If, instead $U_r^i = 0$, then changes in the level of concentration have no direct effect on individuals' utility, and traditional concerns about concentration do not matter.

Assume the economy's transformation function can be written in standard form as:

$$F(x, y, r) = 0 \text{ where } x = x^1 + x^2, y = y^1 + y^2, F_x > 0,$$
$$F_y > 0, \text{ and } F_r \text{ is restricted as indicated below.}$$

To render the model operable for the questions at hand, assume that at least for high values of r, $F_r>0$, meaning that at low levels of concentration and high levels of competition, there are some economies and efficiencies of scale, so that increasing firm size and raising market concentration (lowering r from a high value) leads to greater output with no additional factor supply (or the same output with less factor supply). Assume also that for low values of r, $F_r < 0$, meaning that at some higher concentration levels there are diseconomies, so that increasing market concentration still further leads to efficiency losses in the form of less output with the same factor supply.

As a necessary condition for welfare maximization, Pareto optimality requires that antitrust policy be enforced so that, at the optimal outcome, one person's utility cannot be increased without necessitating a reduction in another person's utility. Thus, for a given level of person two's utility, U^2, person one's utility must be at its maximum. The necessary requirements for welfare maximization can be obtained as follows:

$$\begin{aligned} &\text{Max } U^1\left(x^1,\ y^1,\ r\right) \\ \text{s.t.} \quad &U^2\left(x^2,\ y^2,\ r\right) = U^2 \\ &F(x,\ y,\ r) = 0 \end{aligned}$$

The first order conditions for the maximum are obtained by defining a Lagrangean function equal to

$$L = U^1\left(x^1,\ y^1,\ r\right) + \lambda_1\left(U^2\left(x^2,\ y^2,\ r\right)\right) - U^2\right) + \lambda_2\, F(x,\ y,\ r). \tag{1}$$

The first order conditions (in addition to the constraints) are as follows.

$$\partial L/\partial x^1 = U_x^1 + \lambda_2\, F_x = 0 \tag{2}$$

$$\partial L/\partial y^1 = U_y^1 + \lambda_2\, F_y = 0 \tag{3}$$

$$\partial L/\partial r = U_r^1 + \lambda_1 U_r^2 + \lambda_2\, F_r = 0 \tag{4}$$

$$\partial L/\partial x^2 = \lambda_1 U_x^2 + \lambda_2\, F_x = 0 \tag{5}$$

$$\partial L/\partial y^2 = \lambda_1 U_y^2 + \lambda_2\, F_y = 0 \tag{6}$$

Use Eq. 2 to obtain:

$$\lambda_2 = -U_x^1/F_x \tag{7}$$

Use Eqs. 5 and 7 to obtain:

$$\lambda_1 = U_x^1/U_x^2 \tag{8}$$

Use 4, 7, and 8 to obtain:

$$\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right) = F_r/F_x \tag{9}$$

Condition 9 contains the critical result, indicating (with the addition of negative signs to both sides) that to maximize economic welfare it is necessary that antitrust policy be enforced so that the marginal rate of transformation between reduced concentration and output of good x must be equal to the sum of the marginal rates of substitution between reduced concentration and the output of good x for each person. Put differently, for a welfare optimum it is necessary that antitrust policy be enforced so that the rate at which the economy is able to increase output by raising concentration is equal to the rate at which people must obtain increased output in order to offset their loss of utility due to higher concentration while remaining equally satisfied (that is, remaining at the same level of wellbeing).

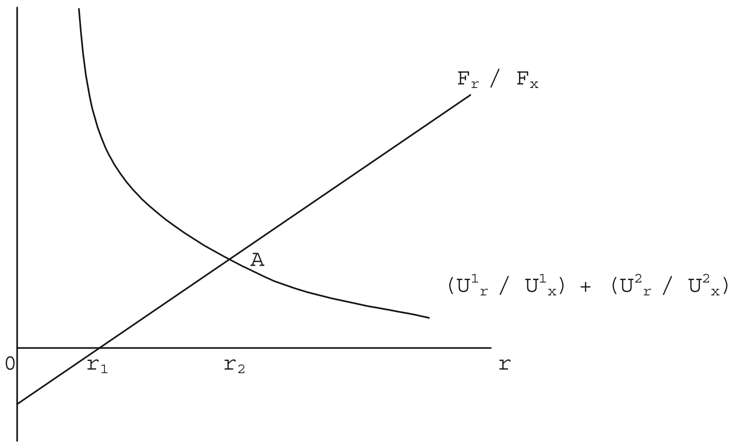
To better understand this condition for a welfare maximum, consider how welfare could be increased if this equality did not hold: If the economy could, with higher concentration, increase output by more than the amount needed to compensate people for the disutility suffered directly from the increased concentration, then welfare would be increased by raising concentration. Conversely, if raising concentration would increase output by less than the additional output needed to compensate people for the disutility suffered directly from the increased concentration, then welfare could be increased by reducing concentration. Only when the equality of Eq. 9 holds is it not possible to increase consumer welfare by altering concentration.

To further explore the significance of the direct effect of concentration or dominant position on welfare maximization and its implications for antitrust policy, consider the following two cases:

Case 1: Exclude Traditional Concerns about Concentration For Case 1, a special case, it is assumed (as the new view asserts) that concentration is not considered to be of direct consumer value, and that changes in concentration do not directly affect individuals' utility ($U_r^i = 0$ for i=1, 2). In this case, an antitrust policy that maximizes consumer welfare will permit concentration to be increased until $(F_r/F_x) = 0$, as specified in Eq. 9. Here, an optimal antitrust policy will allow industry concentration to be increased along with the increase in output until additional levels of concentration are no longer able to generate any additional increase in output and consumer welfare. In other words, to achieve a consumer welfare maximum, the antitrust agencies would permit increases in market concentration or dominant positions until the point at which even further concentration would produce net *in*efficiency, either in terms of allocative inefficiency or productive inefficiency or both.

Case 2: Include Traditional Concerns about Concentration For the more general case, however, suppose instead that traditional concerns about concentration *do* directly matter and are explicitly incorporated into the analysis, and that reducing concentration directly increases consumer utility ($U_r^i > 0$ for i=1,2). In this second case, an antitrust policy that maximizes consumer welfare calls for less concentration levels (higher r) than in the first case, in order to satisfy the welfare-maximizing conditions of Eq. 9. In this case, consumer-welfare optimizing antitrust policy will prevent increases in concentration/dominance *even though* for purposes of argument output might have been increased with no additional input (even though there could be net allocative and productive inefficiency), when the resulting increases in output are not large enough to compensate consumers for the direct loss in welfare stemming from that greater concentration.

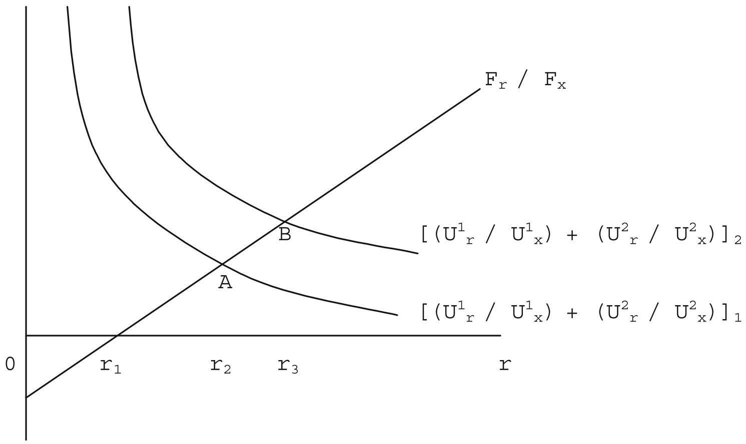
These contrasting outcomes are depicted in Diagram 1. For



Case 1, where concentration is excluded from direct utility, the Pareto optimal level of concentration occurs at r_1, a relatively high level of concentration. (As concentration is increased, it is assumed that the additional output obtained from increasing concentration still further is falling. Thus, it is assumed that F_r/F_x is positively sloped.) Consumer welfare maximizing antitrust policy will permit concentration or a dominant position to be increased until no further increases in output are possible from increasing concentration, which is at r_1.

By contrast, in Case 2, in which decentralization is valued by consumers, and where concentration is explicitly incorporated into individual utility functions, a Pareto optimum for welfare maximization requires less concentration (higher r) at r_2 corresponding to point A in Diagram 1. (A diminishing marginal rate of substitution is assumed between reduced concentration and output as concentration is reduced for each individual. In other words, as concentration is increased, the amount of output needed to compensate for even higher concentration is greater. Thus $\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right)$ is downward sloping). The Pareto optimum occurs at point A as determined by Eq. 9.

A further interesting result of this analysis is that consumer welfare maximizing antitrust policy will not permit concentration levels to increase as much (not even to the level indicated at r_2 in diagram 1) when "severity of distaste" for higher concentration is greater; that is, the optimal r level will be to the right of r_2. To obtain this result, assume U_r^i/U_x^i is larger for i= 1,2 when the "severity of distaste" for added concentration is greater. Utility falls by a greater amount when concentration is increased. As a consequence, the amount of additional output individual i needs in order to compensate for increased concentration, $\left(U_r^i/U_x^i\right)$, is larger. Here, welfare will be enhanced by reducing concentration or dominance further because the reduction in concentration will increase individual utilities by more than the reduction in output decreases individual utilities. Graphically as shown in Diagram 2, the $\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right)$ line will shift up and out to the right, from $\left[\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right)\right]_1$ to $\left[\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right)\right]_2$. The $\left[\left(U_r^1/U_x^1\right) + \left(U_r^2/U_x^2\right)\right]_2$ function then will intersect the F_r/F_x line to the right of r_2 at r_3 (corresponding to point B), at a reduced level of concentration.



In sum, these results indicate that if concentration directly matters for consumer utility so that less concentration or dominance is preferred by consumers for the reasons traditionally considered, then an antitrust policy that maximizes consumer welfare must aim to achieve less concentration (less dominance) in the economy than a policy which ignores concentration's direct effect on utility. Alternatively, if traditional concerns about concentration matter, then excluding them from consideration by requiring only allocative and productive efficiencies will *fail* to maximize consumer welfare.

5 Conclusion

The EC Competition Commission's decision to block the proposed merger between General Electric and Honeywell in 2001, and its treatment of Microsoft more recently, have been criticized by some in the U.S. as representing an economically flawed antitrust policy that fails to maximize consumer welfare (see Patterson and Shapiro 2001). In the U.S., Judge Learned Hand's landmark 1945 decision in *Alcoa* has in the same way long been a lightning rod for contempt by proponents of the new view of antitrust policy. In one hotly-debated passage of that decision, Hand wrote that in legislating the Sherman Act, the American Congress "was not necessarily actuated by economic motives alone. It is possible, because of its indirect social or moral effect, to prefer a system of small producers, each dependent for his success upon his own skill and character, to one in which the great mass of those engaged must accept the direction of a few" (148 F 2d 416, 427). For a new-view proponent like Robert Bork, this passage epitomizes what he considers to have become the crisis in U.S. antitrust policy—"a thoroughly perverse judicial tour de force, contrary to the legislative intent of the Sherman Act ... and the entire spirit of antitrust" (Bork 1978: 170).

Viewed through the lens of the more general theory of concentration and economic welfare developed in this article, however, it is possible that the European Competition Commission and Judge Hand both engaged in economically legitimate welfare-maximization. For if concentration and dominant position *do* matter directly to consumer welfare, then it *is* economically valid to explicitly take them into account in enforcing antitrust policy so as to maximize this broader conception of consumer welfare.[1] Conversely, to exclude concerns about concentration and dominant position from consideration results in an antitrust policy that fails the new view's test of consumer welfare maximization.

This analysis further shows that achieving economic efficiency in the form of a Pareto optimum may require antitrust officials to prevent increases in concentration (or increases in the strength of dominant positions) even though such increases may enhance allocative and/or productive efficiencies: It is not sufficient for welfare maximization that the net allocative, productive and/or dynamic efficiencies projected to be realized from a proposed concentration increase (or from a strengthening of a dominant position) be positive. In addition, these gains must be great enough to compensate for the loss of welfare suffered by consumers when concentration and economic power and dominance increase—a difficult hurdle to overcome in the light of the evidence suggesting that, in actuality, excessive concentration *harms* economic efficiency, whether statically or dynamically construed (Adams and Brock 2004).

[1] Donald Dewey has made an important related point: "I have never been much disturbed about the [anti-concentration] goals imputed to antitrust by the opinions of the late Justice Douglas ... A more decentralized, less bureaucratized economy is not an ignoble ideal." Rather than dismissing this ideal as a product of economic ignorance and incompetence, Dewey suggested instead that "critics of antitrust should make a good faith effort to understand its appeal." (Dewey 1990: 127).

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