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A NEW PHASE OF THE ANTITRUST LAW

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THE divergence between the economic and legal concepts of monopoly and the consequences thereof have been emphasized by various writers in recent years.[1] Monopoly in economics means control of the market; that is, the ability of a seller by increasing or decreasing his output to affect the price of the product sold. Moreover, monopoly is recognized as being a matter of degree, depending upon the number of buyers and sellers of a commodity and the availability of adequate substitutes, ranging from pure monopoly through duopoly, oligopoly and monopolistic competition. By contrast, as Professor Mason has pointed out, "The term monopoly as used in the law is not a tool of analysis but a standard of evaluation," by means of which public policy with respect to certain business practices might be developed.[2] In law monopoly has largely meant the suppression of the freedom of an individual or firm to compete, by legal restraint, by agreement among competitors or by predatory tactics of rivals.

Probably the most important, though by no means the only, reason for the adoption of this definition of monopoly has been that courts must have available tests capable of distinguishing between situations which are and are not in the public interest, and the tests of conformity to public interest under the foregoing definition of monopoly are relatively simple. By contrast, if the economic definition of monopoly as control of the market were adopted and used as a standard of evaluation, there would be involved a complicated analysis of such factors as the behavior of prices and outputs, the relation of prices and costs, the share of the market controlled, the existence of such practices as price discrimination, and many others—a task which the courts would obviously be ill-equipped to undertake.

One outstanding consequence of the legal concept of monopoly has been that huge enterprises exercising important monopolistic influence

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[1] For example, Mason, "Monopoly in Law and Economics," 47 YALE L. J. 34 (1937); Harbeson, "The Present Status of the Sherman Act," 39 MICH. L. REV. 189 (1940); PURDY, LINDAHL and CARTER, CORPORATE CONCENTRATION AND PUBLIC POLICY (1942).

[2] Mason, id. at 34.

have been permitted to stand,[3] the only exceptions being in certain cases dealing with railroads, or with railroads and their anthracite coal affiliates.[4] Apart from the latter group of cases the rule of reason has been largely limited to distinguishing between mergers which are and those which are not guilty of predatory tactics.[5]

The legal view of monopoly is epitomized in certain well-known data in the *United States Steel Corporation* case in 1920, in which it was held that the corporation was not a monopoly within the meaning of the Sherman Act, primarily on the ground that it was not at the time

[3] United States v. Winslow, 227 U.S. 202, 33 S. Ct. 253 (1913); United States v. United Shoe Mchy. Co., 247 U.S. 32, 38 S. Ct. 473 (1918); United States v. United States Steel Corp., 251 U.S. 417, 40 S. Ct. 293 (1920); United States v. International Harvester Co., 274 U.S. 693, 47 S. Ct. 748 (1927).

[4] Northern Securities Co. v. United States, 193 U.S. 197, 24 S. Ct. 436 (1904); United States v. Terminal R.R. Assn. of St. Louis, 224 U.S. 383, 32 S. Ct. 507 (1912); United States v. Union Pacific R.R. Co., 226 U.S. 61, 33 S. Ct. 53 (1912); United States v. Reading Co., 226 U.S. 324, 33 S. Ct. 90 (1912); United States v. Reading Co., 253 U.S. 26, 40 S. Ct. 425 (1920); United States v. Lehigh Valley R. R. Co., 254 U.S. 255, 40 S. Ct. 104 (1920); United States v. Southern Pacific Co., 259 U.S. 214, 42 S. Ct. 496 (1922).

[5] In the common law the term restraint of trade originally referred to restrictive covenants which were ancillary to some larger transaction, such as, for example, the agreement of the seller of a business as part of his contract of sale not to compete with his purchaser. These contracts were at first held void and unenforceable, but at an early date a rule of reason was developed whereby such contracts might be held valid under certain conditions. See Mitchel v. Reynolds, 1 P. Wms. 181, 24 Eng. Rep. 347 (1711). In early cases under the Sherman Act the Supreme Court held that apart from such ancillary restraints every combination or agreement in restraint of trade, however reasonable or beneficial, was unlawful, and that any exceptions to the sweeping prohibitions of the Sherman Act would have to be made by Congress. United States v. Trans-Missouri Freight Assn., 166 U.S. 290, 17 S. Ct. 540 (1897); United States v. Joint Traffic Assn., 171 U.S. 505, 19 S. Ct. 25 (1898); Addyston Pipe and Steel Co. v. United States, 175 U.S. 211, 20 S. Ct. 96 (1899). However, by 1911 the view of the majority had changed. Chief Justice White, handing down the majority opinion in the Standard Oil and American Tobacco cases, held that only unreasonable restraints of trade were prohibited. According to his view, a reasonable restriction of competition was not a restraint of trade at all and the test of reasonableness should be applied to non-ancillary combinations of, and agreements between, competitors just as it had been applied earlier to ancillary restraints. See Standard Oil Co. of New Jersey v. United States, 221 U.S. 1, 31 S. Ct. 502 (1911); United States v. American Tobacco Co., 221 U.S. 106, 31 S. Ct. 632 (1911). Although only a dictum, since the Court could scarcely avoid finding these companies to be unlawful combinations in restraint of trade under any interpretation of the law, this so-called rule of reason became a basic feature of subsequent antitrust law interpretation. As pointed out above, the test of reasonableness, with some exceptions, has been primarily whether or not there is suppression of freedom to compete, as evidenced by agreements between, or by predatory tactics toward, competitors. This doctrine has been of considerable importance in protecting mergers and large-scale enterprises from dissolution under the Sherman Act but has had relatively little effect of this sort in the case of loose federations of competitors.

of the suit guilty of predatory tactics toward competitors, and that "the law does not make mere size an offence or the existence of unexerted power an offence."[6] With regard to the evidence of price leadership presented in the case, the Court answered that "The suggestion that lurks in the Government's contention that the acceptance of the Corporation's prices is the submission of impotence to irresistible power is, in view of the testimony of competitors, untenable. They, as we have seen, deny restraint in any measure or illegal influence of any kind."[7] The significance of price rigidity was dismissed with the comment that "there is danger of deception in generalities."[8] Similar dicta appear in the *International Harvester* case.[9]

On the other hand, the same definition of monopoly which has led to the foregoing treatment of mergers and large scale enterprise has resulted in the invalidation of many trade association and other collective activities, some of which imposed much weaker restraints on competition, since under the legal definition of monopoly all contracts or agreements among competitors to limit competition would *prima facie* constitute restraint of trade.[10] The rule of reason has had a very restricted application in the case of agreements made by loose confederations of competitors.[11]

In the light of the judicial interpretation of the Sherman Act sum-

[6] United States v. United States Steel Corp., 251 U.S. 417 at 451, 40 S. Ct. 293 (1920).

[7] Id. at 449-450.

[8] Id. at 448.

[9] United States v. International Harvester Co., 274 U.S. 693, 47 S. Ct. 748 (1927). For an opposite viewpoint see Interstate Circuit, Inc., v. United States, 306 U.S. 208, 59 S. Ct. 467 (1939).

[10] United States v. Trans-Missouri Freight Assn., 166 U.S. 290, 17 S. Ct. 540 (1897); United States v. Joint Traffic Assn., 171 U.S. 505, 19 S. Ct. 25 (1898); Addyston Pipe and Steel Co. v. United States, 175 U.S. 211, 20 S. Ct. 96 (1899); Standard Sanitary Mfg. Co. v. United States, 226 U.S. 20, 33 S. Ct. 9 (1912); American Column and Lumber Co. v. United States, 257 U.S. 377, 42 S. Ct. 114 (1921); United States v. American Linseed Oil Co., 262 U.S. 371, 43 S. Ct. 607 (1923); United States v. Trenton Potteries Co., 273 U.S. 392, 47 S. Ct. 377 (1927); Sugar Institute v. United States, 297 U.S. 553, 56 S. Ct. 629 (1936); United States v. Socony Vacuum Oil Co., 310 U.S. 150, 60 S. Ct. 811 (1940); United States v. Univis Lens Co., 316 U.S. 241, 62 S. Ct. 1088 (1942); United States v. Masonite Corp., 316 U.S. 265, 62 S. Ct. 1070 (1942).

[11] Bd. of Trade of City of Chicago v. United States, 246 U.S. 231, 38 S. Ct. 242 (1918); National Assn. of Window Glass Mfrs. v. United States, 263 U.S. 403, 44 S. Ct. 148 (1923); Maple Flooring Mfrs.' Assn. v. United States, 268 U.S. 563, 45 S. Ct. 578, 592 (1925); Cement Mfrs.' Protective Assn. v. United States, 268 U.S. 588, 45 S. Ct. 586, 592 (1925); Standard Oil Co. (Ind.) v. United States, 283 U.S. 163, 51 S. Ct. 421 (1931); Appalachian Coals, Inc. v. United States, 288 U.S. 344, 53 S. Ct. 471 (1933). See also note 5, supra.

marized above considerable significance attaches to the decision of the Second Circuit Court of Appeals in New York in *United States v. Aluminum Company of America*,[12] handed down on March 12, 1945, and the decision of the United States Supreme Court in *American Tobacco Co. v. United States*,[13] handed down on June 10, 1946. In the *Aluminum* case the three senior judges of the Second Circuit Court of Appeals handed down the final decision as provided by statute[14] after the Supreme Court was unable to muster the necessary quorum of six justices qualified to hear the case upon direct appeal from the district court. It was held that the Aluminum Company of America (Alcoa) had a monopoly of the domestic ingot market within the meaning of the Sherman Act, even though the company was not at the time of the suit guilty of predatory tactics as that term is ordinarily understood, and that Aluminium Limited of Canada, controlled by the same interests, violated the prohibition against restraint of trade by entering into a cartel agreement with foreign producers in 1936. In the *Tobacco* case the three leading companies, American Tobacco, Liggett and Myers, and R. J. Reynolds, were held guilty of conspiracy to monopolize because of a finding of power and intent to exclude competition to a substantial extent in the tobacco industry, even though there was no actual exclusion of competitors. The Court quoted the decision in the *Aluminum* case at length and with complete approval.

The importance of these two decisions lies not so much in their sharp modification of the rule of reason as in the fact that they represent a significant step by the federal courts toward making market control the test of monopoly and thus toward assimilating the legal concept of monopoly to the economic. Although the decisions are not clear-cut on all points and leave some unanswered questions, taken together they represent a very considerable departure from the position announced in the *Steel* and *Harvester* cases. As the magazine *Fortune* puts it, referring to the *Aluminum* case, "The Attorney General had finally succeeded in establishing, beyond appeal, that a monopoly is a monopoly—even under the Sherman Act."[15]

In order to evaluate the Court's decision in the *Alcoa* case a brief description of the economic organization of the aluminum industry is desirable. The predominant position of Alcoa just prior to World War II is revealed in Table 1. The extent of the company's control

[12] 148 F. (2d) 416 (1945).
[13] 328 U.S. 781, 66 S. Ct. 1125 (1946).
[14] 15 U.S.C. (Supp. V, 1941-1946) §29.
[15] "Aluminum Reborn," 33 FORTUNE 103 (May, 1946).

over domestic bauxite resources is disputed, the government claiming that the company controls 90 per cent of the known reserves while the company contends that the percentage is nearer half that figure. The reason for this variation in estimates is that bauxite ores are widely scattered and are of such widely varying quality that it is difficult to determine the extent of the commercially available supply. There can

TABLE I

Approximate Prewar Competition in the Aluminum Industry in the United States[a]

Product	Number of producers, including Alcoa	Alcoa's percentage of production	
		Per cent	Years included
Primary aluminum.......	1	100	Up to 1940
Alumina (for aluminum)[b].	1	100	Up to 1940
Sheet..................	7	Over 82	1939
Foil..................	5 to 10	66–44	1933–39
Structural shapes (large)..	1	100	1930–37
Extrusions.............	4	84	1934–38
Cable..................	1	100	1934–38
Cooking utensils.........	Approximately 30	50	1934–37
Castings................	•	15–25	1934–38

[a] Source: ALUMINUM PLANTS AND FACILITIES. Report of the Surplus Property Board to the Congress, Sept. 21, 1945, p. 20.

[b] A number of chemical companies produced alumina for chemical uses or for conversion into other chemical products. Their total production, however, was probably less than 5 per cent of Alcoa's.

[c] A number of medium and large producers and many small foundries engaged in nonferrous metal casting.

be little doubt, however, that the company has a strangle hold on the domestic bauxite resources. In addition Alcoa acquired important bauxite reserves in foreign countries, most of which were transferred in 1928 to Aluminium Limited of Canada, which is controlled by the same interests as control Alcoa.

During the five years ending in 1944 Alcoa added $252,000,000 to its net investment,[16] while during the same period the government invested a total of $738,732,000 in aluminum plants and facilities.[17] At the peak of the war effort Alcoa operated government facilities representing an investment of $500,000,000, including all but one of the

[16] ALUMINUM PLANTS AND FACILITIES, Report of the Surplus Property Board to the Congress, Sept. 21, 1945, p. 21.

[17] Id., p. 10.

aluminum ingot plants and a large share of the fabrication plants. For the first time in fifty years Alcoa was obliged to share the ingot market with domestic rivals. The Reynolds Metals Company began producing aluminum in May, 1941 and the Olin Corporation in September, 1942, although the latter closed down after V-J day. That Alcoa retained overwhelming dominance, however, is indicated by the data in Table 2, but it should be added that since October 31, 1945, when its leases were terminated, Alcoa has discontinued as rapidly as possible operation of the government-owned facilities built during the war. Alcoa's dominant position internationally is indicated by the fact that in 1944 it owned or operated 38 per cent of the world aluminum ingot capacity and the affiliated Aluminium Limited an additional 26 per cent.[18] The latter company is the world's largest producer of ingot. Its plant at Arvida, Quebec, secures electric power from the famous Shipshaw hydroelectric development and is reputed to be the world's lowest cost ingot plant.

On April 23, 1937, the Department of Justice brought suit against Alcoa in the federal District Court for the Southern District of New York, seeking not merely good behavior on the part of Alcoa but a reorganization of the company which would end its monopoly position. After some preliminary litigation to settle the question of jurisdiction,[19] the trial was begun on June 1, 1938. The record included 40,000 pages of testimony and 10,000 pages of exhibits and required 362 trial days to present. Judge Francis G. Caffey, in a long opinion delivered over the period September 30 through October 10, 1941, overruled the government on all points, basing his decision on the precedent of the *Steel Corporation* and *International Harvester* cases.[20] The divergence between the legal and economic concepts of monopoly is well illustrated by the following excerpt from Judge Caffey's opinion:

> "On principle it seems to me that it would be little short of absurd to construe Section 2 [of the Sherman Act] without qualification to mean that production of the entire output in the United States of a particular article, or of any article, or that the possession or sale of it by the producer, without other complaint or criticism of his conduct, would constitute monopolization of the article."[21]

[18] Id., p. 90.

[19] United States v. Aluminum Co. of America, (D.C. Pa. 1937) 19 F. Supp. 374, 20 F. Supp. 608; Aluminum Co. of America v. United States, 302 U.S. 230, 58 S. Ct. 178 (1937).

[20] United States v. Aluminum Co. of America, (D.C. N.Y. 1941) 44 F. Supp. 97.

[21] Id. at 154.

Branch of the industry	Total capacity[b] (millions of pounds)	Percent of total capacity of industry: Privately owned: Alcoa	Privately owned: Reynolds	Privately owned: Others	Owned by Defense Plant Corporation: Operated by Alcoa	Owned by Defense Plant Corporation: Operated by others	Number of private producers[c]
Alumina	4,895	44	4	—	52	—	2
Ingot	1,882[b]	47	9	—	42	2	3
Sheet	1,604	50	6	3	36	5	7
Rolled rod and bar	812	53	3	—	37	7	2
Forgings:							
Heavy hammer	248	33	—	8	27	32	4
Light hammer and pressings	405	24	—	38	18	20	32
Extrusions:							
Shapes	218[b]	53	—	3	15	29	4
Tube blooms	144[b]	58	—	11	19	12	7
Rod and bar	89	16	32	13	—	39	7
Tubing	82[b]	63	—	15	19	3	8
Wire	47	95	1	4	—	—	4
Cable	25	80	—	20	—	—	2
Castings:							
Sand (including cylinder heads)	514[b]	16	—	39	—	35	132
Permanent mold	168	21	—	74	—	5	63
Die:							
Cold-chamber	105	4	—	96	—	—	74
Gooseneck	39	28	—	72	—	—	59
Foil	56	32	50	18	—	—	6
Rolled structural shapes	27	100	—	—	—	—	1
Powder	167	7	12	21	14	46	9
Paste and flake	12	50	50	—	—	—	2
Rivets	31	27	[d]	48[e]	—	25	21

[a] Source: Fifth Report of the Attorney General, A Survey Entitled "The Aluminum Industry," S. Doc. No. 94, 79th Cong., 1st sess. (October 11, 1945), Appendices C, D, and E.

[b] Excludes Defense Plant Corp. capacity no longer used in the aluminum industry nor maintained in stand-by condition.

[c] The same private company is counted in every branch in which it operates its own or Defense Plant Corp. facilities. The actual number of private companies is, therefore, substantially less than the total of this column.

[d] Not reported.

[e] Includes capacity of Reynolds Metals Co.

As explained at the outset, the United States Supreme Court was unable to muster the necessary quorum of six justices who could qualify to hear the case upon appeal by the government, and the three senior judges of the Second Circuit Court of Appeals acted as a court of last resort.[22] We turn next to an analysis of the circuit court's decision as contained in the opinion of Judge Learned Hand.

In taking up the question of whether Alcoa violated the Sherman Act Judge Hand examined the extent of its control over the domestic market for aluminum ingot. Three alternative measures of the extent of this control were considered. The first measure was the ratio of Alcoa's production of virgin aluminum ingot to the total quantity of virgin ingot produced and imported. During the period 1929-38 Alcoa's control on this basis was 90 per cent. The second method was to subtract from the total amount of virgin ingot produced and imported that part produced by Alcoa which was used in its own fabrication plants and which therefore did not enter the market. On this basis Alcoa's control over the ingot market was reduced to 64 per cent. The third method was to exclude the ingot used by Alcoa in its own plants and to include as part of the ingot market secondary aluminum ingot reclaimed from scrap. On this basis Alcoa's control was only 33 per cent.

District Judge Caffey held that the third method best measured the extent of Alcoa's control of the market; Judge Hand, however, held that the first measure of control was the correct one and his conclusion would seem to rest on a better foundation of economic analysis than that of Judge Caffey. In support of his conclusion Judge Hand argued that the ingot produced by Alcoa which was used in its own fabrication plants should be included in computing its percentage control of the ingot market because all ingot, with trifling exceptions, is used to fabricate intermediate or end products and to the extent that ingot was used by Alcoa in its own fabrication plants the demand for ingot by others was reduced with consequent effects on its price. Likewise Judge Hand argued that secondary ingot should be excluded in computing Alcoa's control of the ingot market because Alcoa's control over the supply of virgin ingot enabled it to control the supply of secondary ingot also, and because it had an inducement to regulate, and could regulate, the current supply and price of virgin ingot not merely by reference to the current market but in anticipation of the future market and the supply of secondary ingot which would then be available.

[22] See supra, p. 980 and note 14.

Another consideration in support of Judge Hand's conclusion is that secondary ingot apparently is not a perfect substitute for virgin ingot. For some important purposes, such as in cable and airplane manufacture, it will not be accepted at all, and in other uses it generally, though not always, brings one or two cents per pound less than virgin ingot. Judge Hand called attention to these factors but did not consider that they constituted an argument in support of his conclusion.

Paradoxically, it is in connection with the treatment of market control that the decision achieves its greatest advance over prevailing legal doctrine and at the same time reveals its greatest limitations. On the one hand, the Court recognized that, with an exception noted below, "mere size" may be the foundation of monopoly power no less than predatory tactics. In so doing it took a significant step toward assimilating the legal concept of monopoly to the economic, and thus materially alleviated a basic difficulty confronting the effective application of the Sherman Act. On the other hand, the decision suffers from two serious limitations. First, the degree of control of the ingot market exercised by Alcoa approximated that of a "pure" monopoly and the economic issue presented to the Court was therefore relatively simple and clear-cut. The court did not find it necessary to consider the problem of lesser degrees of monopoly power, but Judge Hand, in referring to Alcoa's 90 per cent control of the domestic virgin ingot market, made the very significant comment that "That percentage [90] is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four per cent would be enough; and certainly thirty-three per cent is not."[28] Thus it would seem that the circuit court was not prepared to go far in making the present decision a precedent for condemning oligopoly and price leadership. It is not unlikely that the basis of this attitude is the old idea that monopoly and competition are mutually exclusive and that markets must therefore be either purely monopolistic or purely competitive, whereas it is now recognized that monopoly is a matter of degree and that actually the vast majority of all markets involve both monopolistic and competitive elements mixed in varying degrees. However, as will be explained below, the decision of the Supreme Court in the *Tobacco* case goes far toward bringing oligopoly and price leadership within the scope of the Sherman Act.

The other major limitation of the decision is the holding that under certain circumstances firms may not be in violation of the Sherman Act, even though they are of great size and exercise a high degree

[28] United States v. Aluminum Co. of America, (C.C.A. 2d, 1945) 148 F. (2d) 416 at 424.

of market control. This is the case of firms which do nothing to achieve monopoly but have monopoly thrust upon them; as Judge Hand put it, "persons may unwittingly find themselves in possession of a monopoly, automatically so to say: that is, without having intended either to put an end to existing competition, or to prevent competition from arising when none had existed; they may become monopolists by force of accident."[24] As illustrations of this situation he mentions the case of a market so limited that it is impossible to produce at all and meet the cost of production except by a plant large enough to supply the whole demand, the case where changes in taste or in cost drive out all but one purveyor, and the case where there may be a single survivor out of a group of active competitors merely by virtue of superior skill, foresight and industry. He pointed out that it would be unfair and contrary to the intent of Congress to hold that firms thus situated violated the Sherman Act, that it was to cover cases of this sort that the courts developed the doctrine that "the law does not make mere size an offense," and that the "most extreme expression of this view" was in the *Steel Corporation* and *International Harvester* cases.[25]

There is no economic justification for this exception and it can be, and has been, so liberally interpreted as to nullify the effectiveness of the Sherman Act in dealing with close-knit combinations. There is some reason to believe that Judge Hand recognized these objections but felt constrained to uphold the exception because of the terms of the Sherman Act and its legislative history. Thus he said that "although, the result may expose the public to the evils of monopoly, the Act does not mean to condemn the resultant of those very forces which it is its prime object to foster. . . ."[26] Furthermore the famous statement in the *Steel Corporation* case that "the law does not make mere size an offense," he dismissed as mere dictum without "the authority of an actual decision,"[27] as having been subsequently modified in *United States v. Swift and Co.*,[28] and as inapplicable in any event to Alcoa. He held that a firm violated the Sherman Act if it took active measures to anticipate and thereby to exclude competition, even though it resorted to no predatory tactics as that term is commonly understood. The effect of this holding is materially to restrict the application of the doctrine

[24] Id. at 429-30.
[25] Id. at 430.
[26] Id. at 430.
[27] Id. at 430.
[28] 286 U.S. 106, 52 S. Ct. 460 (1932).

of the *Steel Corporation* and *International Harvester* cases. The following passages from the decision are significant in this connection:

> "We need charge it [Alcoa] with no moral derelictions after 1912; we may assume that all it claims for itself is true. The only question is whether it falls within the exception established in favor of those who do not seek, but cannot avoid, the control of a market. It seems to us that that question scarcely survives its statement. It was not inevitable that it should always anticipate increases in the demand for ingot and be prepared to supply them. Nothing compelled it to keep doubling and redoubling its capacity before others entered the field. It insists that it never excluded competitors; but we can think of no more effective exclusion than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections and the elite of personnel. *Only in case we interpret 'exclusion' as limited to manoeuvres not honestly industrial, but actuated solely by a desire to prevent competition, can such a course, indefatigably pursued, be deemed not 'exclusionary.' So to limit it would in our judgment emasculate the Act; would permit just such consolidations as it was designed to prevent.*
>
> "We disregard any question of intent. . . . The plaintiff was seeking to show that many transactions, neutral on their face, were not in fact necessary to the development of 'Alcoa's' business, and had no motive except to exclude others and perpetuate its hold upon the ingot market. Upon that effort success depended in case the plaintiff failed to satisfy the court that it was unnecessary under §2 to convict 'Alcoa' of practices unlawful of themselves. The plaintiff has so satisfied us, and the issue of intent ceases to have any importance; . . . In order to fall within §2, the monopolist must have both the power to monopolize, and the intent to monopolize. To read the passage as demanding any 'specific' intent, makes nonsense of it, for no monopolist monopolizes unconscious of what he is doing. *So here, 'Alcoa' meant to keep, and did keep that complete and exclusive hold upon the ingot market with which it started. That was to 'monopolize' that market, however innocently it otherwise proceeded. So far as the judgment held that it was not within §2, it must be reversed.*"[29]

The second step in Judge Hand's argument that Alcoa violated the Sherman Act was that since it was well settled that all contracts

[29] United States v. Aluminum Co. of America, (C.C.A. 2d, 1945) 148 F. (2d) 416 at 431-432. (Italics supplied.)

fixing prices were prohibited under section 1 of the act it would be illogical to exempt under section 2 firms having an equal or greater degree of control over price. He pointed out that any distinction based on the argument that the mere existence of the power to control prices on the part of a monopoly was lawful so long as it was not exercised was purely formal and disappeared as soon as the monopoly began to operate, since the monopoly would then sell at a price fixed by itself. Likewise, with reference to Alcoa's defense that it was not an unlawful monopoly because its profits were moderate he pointed out that this defense had been held irrelevant in the case of price fixing agreements and that it was equally irrelevant in the case of a monopolistic firm.[80] The foregoing conclusions follow logically from the adoption of the economic test of monopoly and constitute a tacit recognition of the fact that the earlier distinction between close-knit combinations and loose agreements among competitors as regards the application of the Sherman Act was economically and socially indefensible.

A third argument advanced by Judge Hand in support of the view that Alcoa violated the Sherman Act was that the debates on the latter measure indicated that Congress wished to outlaw monopoly not merely because of its adverse economic consequences but also because it preferred the indirect social and moral effects of "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."[81]

In addition to claiming that Alcoa violated the antitrust law because of its control of the ingot market the government also contended that the company violated the law because of resort to unfair competitive practices, the traditional ground upon which monopolies had been held in violation of the Sherman Act in the past. The government charged Alcoa with preempting bauxite and water power resources in excess of its needs, suppressing competitors seeking to invade the ingot market, manipulating various markets for fabricated goods, conducting a "price squeeze" in the sheet and cable markets, and entering into certain unlawful patent agreements.

The district court held that these charges had not been proved and was sustained by Judge Hand except with respect to the alleged price squeeze in the aluminum sheet market in 1932. An injunction was

[80] United States v. Trenton Potteries Co., 273 U.S. 392, 47 S. Ct. 377 (1927); United States v. Socony Vacuum Oil Co., 310 U.S. 150, 60 S. Ct. 811 (1940).

[81] United States v. Aluminum Co. of America, (C.C.A. 2d, 1945) 148 F. (2d) 416 at 427.

issued against the resumption of this practice, the terms to be fixed by the district court. The government's complaint against the Aluminum Goods Manufacturing Company that it joined with Alcoa to dominate the utensil market was dismissed. Judge Hand explained that although Alcoa was an unlawful monopoly regardless of the existence of any unfair practices it was necessary to determine whether the latter existed, and, if so, to enjoin their resumption, because after the war Alcoa might not be a monopoly but one of a number of competitors.

The court held unlawful the cartel agreement entered into by Aluminium Limited in 1936, superseding an earlier agreement in 1931, on the ground that the purpose and effect of the agreement was to restrict imports of aluminum and therefore to restrain the foreign commerce of the United States. The company was enjoined from entering into future agreements of this type. However, Alcoa was held not to have conspired with Aluminium Limited with respect to these agreements, although the same eleven individuals—A. V. Davis, members of the Mellon family, and officers and directors of Alcoa—owned 48.9 per cent of the Alcoa stock and 48.5 per cent of Aluminum Limited.[32]

A final and extremely important consideration is the choice of policies to be adopted with respect to Alcoa and the aluminum industry generally to conform to the decision of the circuit court. Judge Hand explained that the matter was left undecided for two reasons. First, whether, or in what manner, Alcoa is to be dissolved should be controlled by the degree of success achieved in establishing a competitive organization of the industry through the disposal of war-built plants to others than Alcoa. Judge Hand pointed out that the question of remedies rests in the first instance with the district court, and that "there is a peculiar propriety in our saying nothing to control its decision, because the appeal from any judgment which it may enter will perhaps be justiciable only by the Supreme Court, if there are then six justices qualified to sit."[33]

Second, the Surplus Property Act of 1944 provides that the agencies designated to dispose of surplus property shall be governed by the objectives of establishing free, independent private enterprise, discouraging monopoly, fostering new enterprises and strengthening the position of small business concerns, and that before negotiating for the sale of any plant costing over one million dollars the Attorney General must advise the disposal agency whether the proposed disposition will violate the antitrust laws. While the district court would not, of course,

[32] Id. at 440.
[33] Id. at 446.

be bound by any plan which the disposal agency might evolve for carrying out these objectives, including the status of Alcoa, the agency will have the same objectives as the court, "and the court may well feel that it should accord to the 'agency's' plan that presumptive validity which courts are properly coming more and more to recognize in the decisions of specialized tribunals."[84]

The Attorney General has recommended that Alcoa be dissolved, but to date no action has been taken in this direction.[85] Whether or not it will be dissolved is as yet uncertain, depending as it does so largely upon the extent to which a competitive organization of the industry can be developed. As previously indicated, the government cancelled Alcoa's leases of the facilities owned by the Defense Plants Corporation effective October 31, 1945. Subsequently, on January 9, 1946, Alcoa turned over to the government, royalty-free, its patents for making alumina from low-grade bauxite. This made feasible the leasing of the government's alumina plant at Hurricane Creek, Arkansas, the ingot plants at Jones Mills, Arkansas, and Troutdale, Oregon, and other facilities, to the Reynolds Metals Company, which thereby became a fully integrated producing and fabricating organization of considerable size. Kaiser-Cargo, Inc. has leased the government alumina plant at Baton Rouge and the ingot plant at Spokane. However, the possibilities of developing competition through the sale of government-owned facilities are limited by the uneconomical location, excessive size and high power costs of some of the plants, and by the difficulty which new firms would have in securing independent supplies of bauxite.

In any case nothing approaching a regime of pure competition is feasible in the aluminum industry. Even if it were feasible administratively and otherwise to atomize the industry to a sufficient degree to attain this objective, very important economies of integration and large-scale production would be sacrificed. Competent students are of the opinion that a large number of firms would be economically justified in the mining and finishing stages of the aluminum industry, but only a few in the power, refining and reduction stages, and that there should be not more than five to ten firms if the full economies of integration and large-scale production are to be realized.[86]

We turn next to a consideration of the *Tobacco* case. The so-called

[84] Id. at 447.

[85] Fifth Report of the Attorney General, A Survey Entitled "The Aluminum Industry," S. Doc. No. 94, 79th Cong., 1st sess., October 11, 1945.

[86] PURDY, LINDAHL and CARTER, CORPORATE CONCENTRATION AND PUBLIC POLICY 218 (1942).

"Big Three," American Tobacco Company, Liggett and Myers Tobacco Company, and R. J. Reynolds Tobacco Company, along with American Suppliers, Inc., a subsidiary of American Tobacco, and certain officials of the foregoing companies, were convicted by a jury in the District Court for the Eastern District of Kentucky of violating sections 1 and 2 of the Sherman Act. Each defendant was convicted upon four counts: conspiracy in restraint of trade, monopolization, attempt to monopolize and conspiracy to monopolize. No sentence was imposed under the third count, the court holding that that count was merged in the second. Fines totalling $255,000 were levied. The conviction was sustained upon appeal by the Circuit Court of Appeals for the Sixth Circuit and by the United States Supreme Court.[37] The sole issue which the Supreme Court agreed to decide was whether actual exclusion of competitors was necessary to the crime of monopolization under section 2 of the Sherman Act.[38] The Court answered this question in the negative and it is important to review the facts which led the Court to this conclusion.[39]

The Court pointed out, first, that the present case was completely independent of the earlier action which led to the dissolution of the old American Tobacco Trust in 1911 and did not depend upon proof relating to the old trust but upon dominance and control by the defendants over the purchase of leaf tobacco and sale of cigarettes in recent years. It added, however, that the fact that the business had remained largely in the hands of the same group of companies for over a generation "inevitably has contributed to the ease with which control over competition within the industry and the mobilization of power to resist new competition can be exercised."[40] The Court spoke of the existence of a "friendly relationship" and a "community of interest," which provided "a natural foundation for working policies and under-

[37] American Tobacco Co. v. United States, 147 F. (2d) 93 (1944); certiorari granted, 324 U.S. 836, 65 S. Ct. 864 (1945); petition for rehearing denied, 324 U.S. 65 S. Ct. 864 (1945).

[38] A subsidiary contention, which the Supreme Court rejected, was that the conspiracy count in restraint of trade and the conspiracy count to monopolize trade amounted to double jeopardy, or a multiplicity of punishment in a single proceeding, in violation of the Fifth Amendment to the Federal Constitution.

[39] Justice Burton handed down the opinion of the Court. Justices Reed and Jackson took no part. Justice Frankfurter concurred in the result, but felt that the scope of the orders allowing the petition of certiorari should have been enlarged to permit consideration of alleged errors in regard to the selection of the jury. Justice Rutledge likewise agreed with the result but expressly refrained from passing upon the question of whether multiple punishment for the same offense was involved.

[40] American Tobacco Co. v. United States, 328 U.S. 781 at 793, 66 S. Ct. 1125 (1946).

standings favorable to the insiders and unfavorable to outsiders."[41] It concluded that "practices of an informal and flexible nature were adopted and that the results were so uniformly beneficial to the petitioners in protecting their common interests as against those of competitors" that the jury had found a power and intent to exclude competitors in violation of the Sherman Act.[42]

The Court next considered the size and market position of the Big Three. Although the percentage of cigarette production controlled by the three companies declined over the period 1931-39, as shown in Table 3, it never fell below 68 per cent. The balance of the production came from six companies, no one of which produced more than the 10.6 per cent once reached by Brown and Williamson in 1939. If only burley blend cigarettes, which constitute the special product of the Big Three, are considered, and the so-called 10-cent cigarettes excluded, the percentage of control enjoyed by the three leaders is increased to 80 in 1939. In the latter year the same companies produced over 63 per cent of the smoking tobacco and 44 per cent of the chewing tobacco. On the basis of the foregoing data the Court commented as follows:

> ". . . Without adverse criticism of it, comparative size on this great scale inevitably increased the power of these three to dominate all phases of their industry. 'Size carries with it an opportunity for abuse that is not to be ignored when the opportunity is proved to have been utilized in the past.'[43] . . . An intent to use this power to maintain a monopoly was found by the jury in these cases."[44]

The foregoing statement represents a considerable modification of the dictum in the *Steel* and *Harvester* cases that mere size is no offense. It will be noted also that the Court here relied on the *Swift* case, as did the circuit court in the *Aluminum* decision. In the same connection the Court pointed out the bearing of advertising expenditures on the maintenance of monopoly. It called attention to the fact that in each of the years 1937, 1938, and 1939 the Big Three expended a total of over $40,000,000 a year for advertising, and that such tremendous advertising expenditure is

> ". . . a widely published warning that these companies possess and know how to use a powerful offensive and defensive weapon

[41] Id. at 793.

[42] Id. at 793.

[43] United States v. Swift, 286 U.S. 106 at 116, 52 S. Ct. 460 (1932).

[44] Id. at 796.

TABLE III
Percentage of Total United States Production of Small Cigarettes
Produced by Leading Companies, 1931-39 [a]

	1931	1932	1933	1934	1935	1936	1937	1938	1939
American Tobacco	39.5	36.6	33.0	26.1	24.0	22.5	21.5	22.7	22.9
Liggett and Myers	22.7	23.0	28.1	27.4	26.0	24.6	23.6	22.9	21.6
R. J. Reynolds	28.4	21.8	22.8	26.0	28.1	29.5	28.1	25.3	23.6
Lorillard	6.5	5.2	4.7	4.1	3.8	4.3	4.7	5.1	5.8
Brown and Williamson	0.2	6.9	5.5	8.3	9.6	9.6	9.9	9.9	10.6
Philip Morris	0.9	1.4	0.8	2.0	3.1	4.1	5.4	5.7	7.1
Stephano	0.1	0.1	0.2	0.5	1.4	1.9	2.5	3.1	3.3
Axton-Fisher	0.7	3.1	4.4	4.4	3.0	2.2	2.4	2.7	2.4
Larus	0.2	1.0	0.6	0.6	0.7	0.8	1.0	1.3	1.3
Combined percentages of American, Liggett, and Reynolds	90.7	81.4	83.9	79.5	78.0	76.7	73.3	71.0	68.0

[a] Source: American Tobacco Co. v. United States, 328 U.S. 781, 66 S. Ct. 1125 at 1132 (1945).

against new competition. New competition dare not enter such a field, unless it be well supported by comparable national advertising. Large inventories of leaf tobacco, and large sums required for payment of federal taxes in advance of actual sales, further emphasize the effectiveness of a well financed monopoly in this field against potential competitors if there merely exists an intent to exclude such competitors. Prevention of all potential competition is the natural program for maintaining a monopoly here, rather than any program of actual exclusion. 'Prevention' is cheaper and more effective than any amount of 'cure.'"[45]

Considerable attention was given in the opinion to the practices followed by the Big Three in the purchase of leaf tobacco. These companies purchased between 50 and 80 per cent of the domestic flue-cured tobacco, between 60 and 80 per cent of the burley crop and "the greater part" of the Maryland tobacco.[46] Tobacco crops are perishable, as they require a redrying process. The farmers have no facilities for redrying tobacco and therefore must sell their crops in the season in which they are raised or they will lose them. On the other hand, each of the Big Three held stocks of tobacco with a value of over $100,000,000, enough to last about three years, and thus were independent of the tobacco market in any one year.

The government presented evidence to show that "although there was no written or express agreement discovered among American, Liggett, and Reynolds their practices included a clear course of dealing" designed to control prices and prevent the intrusion of competitors.[47] Thus the Big Three were able to control the number and location of tobacco markets by reason of the fact that collectively they purchased the bulk of the tobacco and the further fact that no one of the Big Three would participate in a market unless the others were represented. Attempts by others to open new markets were failures due to absence of buyers. Foreign purchasers would not participate without the presence of the Big Three. Nor did tobacco farmers want to sell their tobacco on a market in which the only purchasers were speculators or dealers desiring to buy tobacco at low prices for resale to manufacturers.

Again, the Big Three instructed their respective buyers concerning the top price or price range to be bid for leaf tobacco in each market in advance of the opening of these markets, and these prices appear to have been uniform for all the buyers. "The petitioners were not so

[45] Id. at 797.
[46] Id. at 799.
[47] Id. at 800.

much concerned with the prices they paid for leaf tobacco," said the Court, "as that each should pay the same price for the same grade and that none would secure any advantage in purchasing tobacco. They were all to be on the same basis as far as the expenses of their purchases went."[48] Competition among the buyers was also eliminated by the device of each company formulating grades of tobacco in which it alone was interested and for which the other companies would not compete. The differences in the grades thus formulated, while distinguishable by expert buyers, were said to be inconsequential. Each of the Big Three determined in advance what portion of the entire crop it would purchase before the market for that season opened and purchases were spread evenly over the different markets throughout the season. "No matter what the size of the crop might be," said the Court, "the petitioners [Big Three] were able to purchase their predetermined percentages thereof within the price limits determined upon by them, thus indicating a stabilized market."[49]

Finally, when lower priced (i.e., 10-cent) cigarettes began to be sold in substantial quantities, the Big Three commenced to make large purchases of the cheaper leaf tobacco used for the manufacture of such lower priced cigarettes. Meanwhile, the composition of the Big Three's brands calling for the use of more expensive tobacco remained unchanged and no explanation was offered as to how or where the Big Three used the lower priced tobacco. The government claimed that these purchases of cheaper tobacco evidenced an intent by the Big Three to deprive manufacturers of lower-priced cigarettes of the tobacco necessary for their manufacture, and to raise the price of such tobacco to a point where cigarettes made therefrom could not be sold at a sufficiently low price to compete with the Big Three's advertised brands.

The trial court also found that the Big Three conspired to fix prices and to exclude undesired competition in the distribution and sale of their principal products. The list prices charged and discounts allowed dealers by these companies remained almost identical between 1923 and the time of the trial and absolutely identical between 1928 and the latter date. After 1928 only seven changes were made by the three companies and these were identical in amount. On June 28, 1931, the list price of Camel cigarettes, the leading brand of Reynolds, was increased from $6.40 to $6.85 per thousand, followed the same day by identical increases in the price of Lucky Strike and Chesterfield ciga-

48 Id. at 802.
49 Id. at 803.

rettes, the leading brands of American Tobacco and Liggett and Myers, respectively. This increase occurred during a severe depression when tobacco farmers were receiving the lowest prices for leaf tobacco since 1905 and when manufacturing costs were declining. Reynolds justified the action merely as "an expression of confidence in the industry"; American and Liggett and Myers claimed that the increase would give Reynolds larger funds for advertising and that it was necessary for them to make similar increases in order likewise to increase their advertising and protect their competitive position.

Prior to 1931 the so-called 10-cent brands of cigarettes enjoyed relatively small sales, but after the Big Three made the foregoing increase the sales of the cheaper brands increased rapidly and made serious inroads on the business of the Big Three. The cheaper brands sold at a list price of $4.75 per thousand, and sales of these cigarettes rose from 0.28 per cent of the total cigarette sales of the country in June, 1931 to 22.78 per cent in November, 1932. In response to this threat the Big Three in January, 1933 cut the list prices of their leading brands from $6.85 per thousand to $6, and the next month to $5.50. At the latter price American and Reynolds lost money on their leading brands and Liggett was able to meet expenses only by curtailing normal business activities and by drastically cutting advertising expense. The Big Three also compelled their dealers to maintain a differential of not more than three cents per package between the price of Camel, Chesterfield, and Lucky Strike cigarettes and the 10-cent brands. This was accomplished in part by the use of inducements, such as discounts, advertising displays, cash subsidies and free goods, and in part by invoking penalties in the form of withdrawing various privileges extended to dealers and by employing price cutters. The price war resulted in a victory for the Big Three. Sales of the 10-cent brands fell from 22.78 per cent of the total cigarette sales in November, 1932 to 6.43 per cent in May, 1933. In January, 1934 the Big Three again increased the list prices of their leading brands from $5.50 to $6.10 per thousand, to $6.25 in 1937, and to $6.53 in July, 1940.

On the basis of the foregoing evidence the Court summed up its position as follows:

> "The question squarely presented here by the order of this Court in allowing the writs of certiorari is whether actual exclusion of competitors is necessary to the crime of monopolization in these cases under §2 of the Sherman Act. *We agree with the lower courts that such actual exclusion of competitors is not necessary to that crime in these cases* and that the instructions given to the jury,

> and hereinbefore quoted, correctly defined the crime. A correct interpretation of the statute and of the authorities makes it the crime of monopolizing, under §2 of the Sherman Act, for parties, as in these cases, to combine or conspire to acquire or maintain the power to exclude competitors from any part of the trade or commerce among the several states or with foreign nations, provided they also have such a power that they are able, as a group, to exclude actual or potential competition from the field and provided that they have the intent and purpose to exercise that power. See *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223, n. 59 and authorities cited. . . . No formal agreement is necessary to constitute an unlawful conspiracy. . . . The *essential combination or conspiracy in violation of the Sherman Act may be found in a course of dealing or other circumstances as well as in any exchange of words. United States v. Schrader's Son*, 251 U.S. 85. Where the circumstances are such as to warrant a jury in finding that the conspirators had *a unity of purpose or a common design and understanding, or a meeting of minds in an unlawful arrangement*, the conclusion that a conspiracy is established is justified. Neither proof of exertion of the power to exclude nor proof of actual exclusion of existing or potential competitors is essential to sustain a charge of monopolization under the Sherman Act. . . . *The authorities support the view that the material consideration in determining whether a monopoly exists is not that prices are raised and that competition actually is excluded but that power exists to raise prices or to exclude competition when it is desired to do so.*"[50]

The decision in the *Tobacco* case, as suggested earlier, is even more significant than that in the *Aluminum* case, in that the Court not only adopted the economic test of monopoly but also made it possible effectively to apply the Sherman Act in the case of large-scale enterprises exercising varying degrees of market control short of complete monopoly. Before considering further the implications of the *Tobacco* and *Aluminum* cases, however, it will be desirable to review briefly the meaning given by economists to the term "monopoly" and "competition." Until recent years monopoly was regarded as the antithesis of competition. The two were regarded as qualitatively separate and distinct and the price system was regarded as conforming generally to this dichotomy. This is the concept of monopoly implicit in the Sherman Act. The framers of this legislation regarded public utilities as "natural monopolies" while the remainder of industry, with rare ex-

[50] Id. at 808-811. (Italics supplied.)

ceptions, was regarded as essentially "competitive." Monopoly was regarded as exceptional and abnormal in the sphere of "competitive" industry and the antitrust laws were therefore regarded as a more appropriate type of control in this sphere than direct regulation.

By contrast, modern economic theory regards monopoly as being a matter of degree, depending upon the number of buyers and sellers of a commodity and the availability of adequate substitutes. At one extreme is pure monopoly, which may be defined, for practical purposes, as the exclusive control by a single seller over the supply of a commodity for which there are no close substitutes.[51] Examples of pure monopoly outside the public utility field are rare, Alcoa's 90 per cent control of the domestic ingot market prior to 1941 being a close approximation to this situation. At the opposite extreme, for pure competition to prevail there must be free entry into the trade, a standardized product and a number of buyers and sellers so large that no one acting independently can affect the price of the commodity sold. The closest approximation to this situation is found in the markets for a few agricultural staples, and even here the necessary conditions are generally fulfilled only on the seller's side of the market.

Clearly, pure monopoly and pure competition are exceptions; the overwhelming majority of all prices are determined under conditions intermediate between these extremes, reflecting the joint operation of monopolistic and competitive influences, both of which are present in varying degrees in each case. There is a continuous gradation in degrees of market control intermediate between the extremes of pure monopoly and pure competition. This situation is described in modern economic theory by the terms "oligopoly" and "monopolistic competition."[52] Oligopoly refers to a situation in which the sellers of a given commodity are sufficiently few in number that "it is necessary for each one to take into account the effect that his own actions may have on the behavior of his rivals and to act accordingly."[53] The *Tobacco* case provides a good illustration of oligopoly in the sale of cigarettes and oligopsony in the purchase of leaf tobacco. Without questioning the government's finding that there was a conspiracy, it should be pointed out that many of the practices complained of, as outlined in the preceding pages, are precisely those which the individual firm would adopt

[51] The corresponding situation where there is a single buyer is referred to as monopsony.

[52] The corresponding situations, where there are only a few buyers or where each buyer wants a slightly differentiated product, are referred to as oligopsony and monopsonistic competition, respectively.

[53] McIsaac and Smith, Introduction to Economic Analysis 48 (1937).

under conditions of oligopoly or oligopsony if it acted in its own interest independently and without collusion of any sort. A condition of monopolistic competition exists "when there are many producers of a certain type of product, and when, at the same time, the substitution of the product of one firm for that of another is limited by product differentiation."[54] Frequently, as in the *Tobacco* case, product differentiation is combined with oligopoly or oligopsony. Where one or both of these situations prevail, price competition is disadvantageous from the standpoint of the individual firm and there is both opportunity and incentive to turn competition into non-price channels.

The presence of varying degrees of monopoly introduces both favorable and unfavorable elements into the price system. On the one hand, where the economies of large-scale production are substantial the attainment of producing units of the most advantageous size would not be possible if the number of firms were large enough to permit pure competition to prevail. Furthermore, it may be that, within limits, advertising and product differentiation increase the satisfaction of wants above what it would be under the standardization required for pure competition.[55] On the other hand, monopolistic elements give rise to earnings above a competitive level, over-investment, underutilization of investment, undesirable price rigidity and price discrimination, and product differentiation in excess of what would prevail if consumers acted rationally and with full knowledge.

The implications of the *Aluminum* and *Tobacco* decisions may now be summarized in the light of the foregoing brief analysis of monopoly and competition. First of all, it should be evident that the problem of industrial control is very different and vastly more complicated than it was conceived to be by the framers of the Sherman Act. If monopoly is defined in the economic sense, an attempt to outlaw all monopoly, as called for by the Sherman Act, would reach into practically every market and would be an undertaking of such magnitude as to be administratively impracticable. Moreover, such action would be economically undesirable. As indicated above, in certain aspects and subject to appropriate controls some elements of monopoly may be advantageous. At the same time the ubiquity of monopolistic elements emphasizes that the public interest requires some type of supervision or control over virtually the entire price system.

[54] Id. 47.

[55] For a defense of monopoly on still other grounds see Boulding, "In Defense of Monopoly," 59 Q.J. of ECON. 524 (1945). It would take us too far afield to consider the thesis of this paper here.

A second implication, which follows from the foregoing, is that there is need for a revision of the Sherman Act which would redefine the monopoly and trade practice problem and establish standards or tests by means of which administrative bodies and courts could distinguish between those market situations and business practices which are in the public interest and those which are not. If this objective is to be attained, economists cannot be content with finding evidence of the existence of market controls and analyzing and classifying the various types of control situations but must evaluate these situations in terms of public interest and evolve tests to guide public policy with respect to them. Stated otherwise, there is need for a new rule of reason based on more adequate criteria of the public interest than formerly. These criteria should include not only the protection of the freedom to compete by suppression of predatory tactics toward competitors and the protection of consumers from exploitation by cutting off monopoly profits but also the promotion of stabilized, high-level output and employment by appropriate price and other policies.

Finally, it would seem that some substantial revision of governmental organization and procedure may be necessary if government is to undertake, and to cope effectively with, the task of economic control on the scale implied by the ubiquity of monopolistic elements in the industrial organization. The problem will be to prevent the existence of such far-reaching controls from undermining either efficient administration or the essentials of political democracy, a problem much more difficult than that of devising economic tests of the conformity of market organization and practices to the public interest. In view of the *Aluminum* and *Tobacco* cases the attack on these problems, which the decisions in the *Steel* and *Harvester* cases enabled us to sidestep for a quarter of a century, can no longer be postponed.