



1-1-1986

Market Concentration and Performance: A Survey of the Evidence

Almarin Phillips

Follow this and additional works at: <http://scholarship.law.nd.edu/ndlr>



Part of the [Law Commons](#)

Recommended Citation

Almarin Phillips, *Market Concentration and Performance: A Survey of the Evidence*, 61 Notre Dame L. Rev. 1099 (1986).

Available at: <http://scholarship.law.nd.edu/ndlr/vol61/iss5/8>

This Article is brought to you for free and open access by NDLScholarship. It has been accepted for inclusion in Notre Dame Law Review by an authorized administrator of NDLScholarship. For more information, please contact lawdr@nd.edu.

Market Concentration and Performance: A Survey of the Evidence

*Almarin Phillips**

The venerable *Alcoa* case¹ defines the problems I address in this paper. Judge Learned Hand, emphasizing that monopoly affords a firm “control” of the market and freedom “to raise its prices,”² concluded that a market share of ninety percent “is enough to constitute a monopoly.”³ As market share drops, however, so—according to Judge Hand—does monopoly power. Thus, Judge Hand’s opinion indicated that “it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three percent is not.”⁴ There are, of course, numerous decisions to the same effect, including many merger cases.⁵ The conventional wisdom contained therein argues that market power is greater when the market share of the leading firm is large, the combined share of the largest firms is high, and the overall number of firms in the market is small.⁶

Given some data and a computer, economists are wont to “test hypotheses.” And there are data on market concentration and various measures of market performance that have prompted economists to test hypotheses such as those suggested by the *Alcoa* case and, of course, those suggested by economic theorizing itself. These “structure-conduct-performance” empirical studies are summarized and criticized in Part I.

At the same time that he promulgated his structural test for monopoly—noting in passing that the law forbade all trusts, “good” and “bad” alike—Judge Hand appears to have acknowledged that

* Hower Professor of Public Policy and Professor of Law and Economics, University of Pennsylvania; B.A., 1948, M.A., 1949, University of Pennsylvania; Ph.D., 1953, Harvard University.

1 United States v. Aluminum Co. of Am., 148 F.2d 416 (2d Cir. 1945).

2 *Id.* at 425, 426.

3 *Id.* at 424.

4 *Id.*

5 See, e.g., United States v. Von’s Grocery Co., 384 U.S. 270 (1966).

6 See F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE (2d ed. 1980), for a complete exposition. More theoretical treatments are given in Clarke & Davies, *Market Structure and Price-Cost Margins*, 49 *ECONOMICA* 277 (1982); Cowling, *On the Theoretical Specification of Industrial Structure-Performance Relationships*, 8 *EUR. ECON. REV.* 1 (1976); Cowling & Waterson, *Price-Cost Margins and Market Structure*, 43 *ECONOMICA* 275 (1976); Geroski, *Interpreting a Correlation Between Market Structure and Performance*, 30 *J. INDUS. ECON.* 319 (1982); and Saving, *Concentration Ratios and the Degree of Monopoly*, 11 *INT’L ECON. REV.* 139 (1970).

the phenomena of apparent monopoly may have causal directions and social consequences which differ from those that ruled his *Alcoa* decision. "Monopoly," he opined, "may [be] thrust upon" a firm; firms "may unwittingly find themselves in a position of monopoly and . . . they may become monopolists by force of accident."⁷ There are, then, other aspects to the structure-conduct-performance relationship. One of these is the possibility that concentration as we find it developing and existing in the marketplace is the result of a stochastic (random) process, both inevitable and benign. This idea is treated in Part II.

Of far greater intellectual and policy consequence is the possibility that concentration is typically the result of what Judge Hand called "superior skill, foresight and industry."⁸ Some have argued that the structure-conduct-performance paradigm is diametrically wrong; the correct relationship is from conduct and performance, on the one hand, to market structure, on the other.⁹ Firms that perform well, efficiently producing products and services which consumers prefer, gain market share and earn relatively high profits. Similarly, firms that successfully innovate grow more rapidly and earn higher profits than do their less successful rivals. As the *Alcoa* decision somewhat incongruously observes, it would be counterproductive if the "successful competitor, having been urged to compete," were "turned upon when he wins."¹⁰ These are the matters treated in Part III.

Part IV attempts to bring the assorted empirical evidence into perspective. That there can be excessive monopoly power and abusive monopolization is not denied. Certainly there can be section two offenses. At the same time, it is doubtful that any search for a Rosetta Stone of industrial organization can ever be successful. There simply is no way to translate unequivocally from market concentration to unreasonable market power. The attempts to do so may in fact hide—rather than reveal—the secrets of markets.

I. Empirical Tests of the Structure-Conduct-Performance Paradigm

The structure-conduct-performance (S-C-P) paradigm is simple enough. The idea is that in unregulated markets, characteristics of market structure (*e.g.*, the number of sellers, market concentration, entry conditions) largely determine sellers' conduct (*e.g.*, the degree and type of rivalry or collusiveness among firms), and that

7 148 F.2d at 429-30.

8 *Id.* at 430.

9 See note 33 *infra*.

10 148 F.2d at 430.

together these factors (along with other exogenous variables—incomes, tastes, developments in other markets) largely determine market performance (price-cost relationships, in particular).¹¹

There have been literally hundreds of empirical explorations of various S-C-P hypotheses.¹² While there are many differences among them, the usual approach uses ordinary least squares (OLS) regressions to discover relationships between a dependent variable purporting to measure market performance and a set of independent variables designed to reflect characteristics of the market (and, sometimes, of particular firms).¹³ The dependent performance variable in these studies may be price, the relative markup of price over (marginal) cost, or some rate of return on investment for a cross section of firms in a large sample of markets or industries. Some of the studies compare industries with different structures at a given time while others include intertemporal observations as well.

The independent variables typically include concentration measures (*e.g.*, four-firm or eight-firm concentration, Herfindahl indexes), variables to represent barriers to entry (*e.g.*, advertising-sales ratios, minimum efficient scale of production), and one or more variables to capture differences or changes in demand. Other

¹¹ See sources cited in note 6 *supra*.

¹² The modern versions began with Bain, *Relation of Profit Rate to Industrial Concentration: American Manufacturing, 1936-40*, 65 Q. JOUR. ECON. 293 (1951). A review of other early studies appears in Weiss, *Quantitative Studies in Industrial Organization*, in FRONTIERS IN QUANTITATIVE ECONOMICS (M. Intriligator ed. 1971) and in Weiss, *The Concentration-Profits Relationship and Antitrust*, in INDUSTRIAL CONCENTRATION: THE NEW LEARNING (H. Goldschmid, H. Mann & J. Weston eds. 1974) [hereinafter cited as INDUSTRIAL CONCENTRATION]. Scherer reviews other principal studies through the late 1970s. See F. SCHERER, *supra* note 6. The more recent studies—each of which provides a more extensive bibliography—include: Bothwell, Cooley & Hall, *A New View of the Market Structure-Performance Debate*, 32 J. INDUS. ECON. 397 (1984); Dalton & Penn, *The Concentration Profitability Relationship: Is There a Critical Ratio?*, 25 J. INDUS. ECON. 133 (1976); Gale & Branch, *Concentration versus Market Share: Which Determines Performance and Why Does It Matter?*, 27 ANTITRUST BULL. 83 (1982); Geithman, Marvel & Weiss, *Concentration, Price and Critical Concentration Ratios*, 63 REV. ECON. & STAT. 346 (1981); Hart & Morgan, *Market Structure and Economic Performance in the United Kingdom*, 25 J. INDUS. ECON. 177 (1977); Kwoka, *The Effect of Market Share Distribution on Industry Performance*, 61 REV. ECON. & STAT. 101 (1979); Newman, *Strategic Groups and the Structure-Performance Relationship*, 60 REV. ECON. & STAT. 417 (1978); Ravenscraft, *Structure-Profit Relationships at the Line of Business and Industry Level*, 65 REV. ECON. & STAT. 22 (1983); Schmalensee, *Do Markets Differ Much?*, 75 AMER. ECON. REV. 341 (1985); White, *Searching for the Critical Industrial Concentration Ratio: An Application of the "Switching Regimes" Technique*, in STUDIES IN NON-LINEAR ESTIMATION (S. Goldfeld & R. Quandt eds. 1976). The latter is not an ordinary least squares (OLS) regression study, but it does include an analysis of variance. See note 13 *infra* and accompanying text.

¹³ For an excellent discussion of the OLS regression method, see Fisher, *Multiple Regression in Legal Proceedings*, 80 COLUM. L. REV. 702 (1950). Regression analysis indicates the proportion of the variance in a dependent variable that can be explained by (or is associated with) the variance in one or more independent (exogenous) variables. This analysis also provides estimates of the amount the dependent variable changes per unit change in each of the independent variables.

independent variables are often introduced. These variables measure things such as whether the product is a producer or a consumer good, the degree of unionization, the degree of product differentiation, the extent of the geographic market, the absolute (or relative) size of the firm, and the degree of collusiveness.

On the surface, what information do these studies yield? First, a vast majority of them show a positive association between profits, rates of return, price-cost margins, or prices—as the dependent variables—and market concentration—as the independent variable. This association is not a linear one and it may not exist in isolation from other structural factors. In Bain's original 1951 research, the results suggested that profits were significantly higher *only* when high concentration was combined with high barriers to entry; this generalization still appears to hit close to the mark.¹⁴

The search for a unique, critical concentration ratio has been unavailing. Up to some point, increases in concentration appear to have no significant relationship with prices or profit rates, but that point has not been demonstrated to be unique. It varies widely from study to study, not independently of the sample of industries and other variables used in the regressions.¹⁵ Moreover, the statistical relationships found between concentration and profitability are sensitive to the particular concentration measures used in the analysis, despite the fact that, in general, the several measures of concentration are themselves highly correlated.¹⁶

Curiously, in some recent highly disaggregated studies, the effect of concentration on profitability has disappeared when the market share of the individual firms was included as an explanatory variable.¹⁷ In fact, the concentration effect sometimes appears as *negative* in these studies. This result casts considerable doubt on the idea that high concentration leads to higher profitability because of its facilitating collusion: If higher profits run with higher shares for individual firms, not with higher combined shares, the collusion hypothesis becomes suspect.

There are many other reasons to question any of the results of these OLS regression analyses. One important reason is that recorded accounting rates of return may be grossly imperfect measures of economic profitability.¹⁸ Moreover, even if profitability

14 Neither is it at variance with the views of Judge Hand in *Alcoa*, where he emphasized entry barriers as well as a high market share.

15 See Geithman, Marvel & Weiss, *supra* note 12; White, *supra* note 12.

16 See Kwoka, *Does the Choice of Concentration Measure Really Matter?*, 29 J. INDUS. ECON. 445 (1981).

17 See Ravenscraft, *supra* note 12; Schmalensee, *supra* note 12.

18 See Fisher & McGowan, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AMER. ECON. REV. 82 (1983). The Fisher-McGowan attack elicited strong reac-

were correctly measured, it does not necessarily follow that monopoly power is exercised in ways that are fully reflected in profits. Firms may have short-run objectives other than profit maximization.

Another important criticism of the studies is that no satisfactory statistical technique exists to define product and geographic markets properly prior to computing concentration ratios for classes of industries. For the most part, the studies use four digit Standard Industrial Classification (SIC) codes for product definitions and then adopt national aggregates as the implicit geographic demarcation.¹⁹ For anyone steeped in the antitrust approach to market definition, this aspect of the studies by itself raises grave questions on the meaningfulness of their results.

There is an important problem associated with statistical observations that are in the form of weighted averages.²⁰ When, for example, the capital-output and the advertising-sales ratios for an industry are measured as total industry capital divided by industry output and total industry advertising divided by industry output, respectively, the result is identical to the average of the same ratios for individual firms, each weighted by that firm's share of industry output. The ratios for the largest firms thus dominate the observations. A (relatively) very large firm may have heavy *total* advertising and nonetheless have a (relatively) low advertising-sales ratio. In such cases, the weighted industry average would be low, even though smaller and entering firms might have to engage in heavy advertising (relative to *their* sales) in order to compete.

It turns out, then, that these variables may not measure what they are supposed to measure—in this case, the height of entry barriers.²¹ Actually, a majority of the studies to date are based on data that are almost entirely formulated on some kind of weighted average. This is true for the industry profitability dependent variable,

tions, of course. See Horowitz, Long, Ravenscraft, Martin & van Breda, *Comments*, and Fisher's reply, in 74 AMER. ECON. REV. 492-517 (1984).

19 Some of the earlier studies use two and three digit SIC groupings. The FTC "line of business" statistics have been used in a number of recent works, with individual firm and product line information incorporated. See, e.g., Ravenscraft, *supra* note 12. Occasionally, researchers have moved between three and four digit SICs and higher level product classifications for particular industries to "correct" for apparent "outliers" in the structure-performance relationship. A few studies introduce variables to reflect whether—judgmentally—the real markets are predominantly international, national, regional, or local.

20 On this, as well as on the next few points, see the methodological criticisms in Phillips, *A Critique of Empirical Studies of Relations Between Market Structure and Profitability*, 24 J. INDUS. ECON. 241 (1976) and Phillips, *Evidence on Concentration in Banking Markets and Interest Rates*, 56 FED. RESERVE BULL. 916 (1967).

21 For greater detail, see K. COWLING, J. CABLE, M. KELLY & T. MCGUINNESS, *ADVERTISING AND ECONOMIC BEHAVIOR* ch. 7 (1975) ("Advertising and Price-Cost Margins").

for the concentration ratios, and for the entry barrier and demand variables. Because of this, spurious and misleading results may emerge.²²

Finally, it must be emphasized that independent structural variables typically succeed in explaining a relatively small portion of the total variance.²³ This does not present a technical econometric problem if, as is assumed, the omitted explanatory variables have only random effects on the dependent variable. But if an omitted variable were to be non-random and/or correlated with one or more of the included dependent variables, totally incorrect results may be read from the relationship shown in the regression equations.

Again, an example may help. Suppose that the surviving firms in an industry in which risk is high tend, on average, to be more profitable than those in industries with lower risk. Suppose further that, due to the fact that high risk knocks many firms out, concentration in the more risky industries tends to be higher than in the less risky. Now run a regression of profitability analysis on concentration, omitting a measure of risk. The results will show that high concentration "causes" (sic!) high profits, when in fact, it is the risk differential that is running the show! The risk factor drives the industry structure; if risk-adjusted rates of return were considered, profits might actually be lower—not higher—in the more concentrated group.²⁴

There are innumerable analogous conjectures that might plausibly cause misreadings of results, and some of these are not purely hypothetical. When bank size and loan size were introduced into regressions to measure relations between bank market concentration and loan interest rates, very different results emerged from those when bank and loan size were ignored.²⁵ It developed that interest rates varied inversely with loan size, loan size varied directly with bank size, and—more surprisingly—metropolitan area bank concentration varied inversely with bank size. The "naked" relation between concentration and interest rates was in large mea-

22 That the results may then be more correct representations of the largest firms has been in part responsible for the criticisms covered in Part III. This also helps explain why the effects of industry concentration ratios tend to disappear when data on the market shares of individual firms are put into the regressions.

23 That is, the (corrected) coefficient of multiple regression—the so-called \bar{R}^2 factor—runs from, say, .20 to .40. Some are lower; some, higher. This leaves 60 to 80% of the variance "unexplained."

24 An early classic dealing with risk and rates of return is G. STIGLER, *CAPITAL AND RATES OF RETURN IN MANUFACTURING INDUSTRIES* (1963). See also Cootner & Holland, *Rate of Return and Business Risk*, 1 *BELL J. ECON. & MGT. SCI.* 211 (1970); Fisher & Hall, *Risk and Corporate Rates of Return*, 83 *Q. J. ECON.* 79 (1969).

25 Phillips, *Evidence on Concentration in Banking Markets and Interest Rates*, *supra* note 20.

sure masking an innocuous loan-size effect. Quite clearly, lawyers, judges, and economists need to exercise care when relying on any or all of these empirical works.

II. Market Structure and Stochastic Processes

Most students of industrial organization view market structure as somehow related to market performance and firm conduct. Further, in their quest for fuller understanding, they look for cause and effect relationships including perhaps strategic conduct by firms that affect market structure (*e.g.*, monopolization) and non-strategic performance flowing from market structure (*e.g.*, monopoly pricing). There is a view that all of this is wrong. Market structure and, particularly, the appearance of concentrated markets have occasionally been seen as nothing more than the results of random events. If larger firms in concentrated markets have higher profits, it is just a metaphoric “flip of the coin” that is involved.

Early variants of studies bearing on the possibility that stochastic factors determine structure demonstrated how concentrated populations of firms could easily emerge even when researchers make no explicit assumptions about the conduct or, indeed, about the superiority of any particular firm.²⁶ Subsequent models—mostly non-empirical—incorporated temporal interdependencies, with profits in one period affecting subsequent investment possibilities and the probability of future period profits.²⁷ Still more recent work involves detailed computer simulations that permit the analysis of various factors that increase or decrease the tendencies for markets to become concentrated.²⁸ All of these studies illustrate once again that the identification of concentration with monopoly power is indeed a fragile “mental construct.”

III. Market Concentration and “Superior Skill, Foresight and Industry”

In *Alcoa*, Judge Hand seemingly dismissed the idea that Alcoa’s market power arose from “superior skill, foresight and industry.” Today, it is less easy to dismiss criticisms of econometric tests of the S-C-P paradigm that rest on essentially the same arguments. The generally positive relationship that researchers have found be-

26 Hart & Prais, *The Analysis of Business Concentration*, 119 J. ROYAL STAT. SOC’Y 150 (1956); Ijiri & Simon, *Business Firm Growth and Size*, 54 AMER. ECON. REV. 77 (1964); Simon & Bonini, *The Size Distribution of Business Firms*, 48 AMER. ECON. REV. 607 (1958).

27 See, *e.g.*, Mancke, *Causes of Interfirm Profitability Difference: A New Interpretation of the Evidence*, 88 Q. J. ECON. 181 (1974).

28 In particular, see R. NELSON & S. WINTER, AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE (1982); Nelson & Winter, *Forces Generating and Limiting Concentration Under Schumpeterian Competition*, 9 BELL J. ECON. & MGT. SCI. 524 (1978).

tween concentration and profitability could be due to a system of causation quite different from the relationship assigned by that paradigm. The "superior skill, foresight and industry" of a few firms could be reflected in their having lower costs, better products, and, consequently, higher profits and larger market shares. What Judge Hand apparently saw as the exceptional case might indeed be the rule.

The truth is that nearly all of the empirical studies surveyed are not specified in a way that discriminates among competing hypotheses regarding the reasons why concentration and profitability may be positively interrelated. This was noted by economists of the "Chicago School" (among others) shortly after the first round of large scale, computer-based studies appeared.²⁹ Those defending the S-C-P paradigm (and the econometric studies they felt supported that approach) were quick to dismiss the merits of the attack.³⁰ This hardly quelled the dissent,³¹ and it may well be that there is currently declining sympathy for the S-C-P approach—regardless of the results of the econometrics.³²

There are two trains of thought about "superior skill, foresight and industry." With perhaps some exaggeration, the first is that of the "Chicago School." This position holds that the S-C-P approach is entirely wrong. Causation runs from superior performance to high concentration, this school argues, except where governments provide protection. Thus it dismisses any possibility that high concentration may be associated with socially harmful market power. A few have attempted to supply empirical support for this position, but their efforts have yielded very mixed results.³³ Scherer has sug-

29 See, e.g., Brozen, *The Significance of Profit Data for Antitrust Policy*, 14 ANTITRUST BULL. 119 (1969); Brozen, *Bain's Concentration and Rates of Return Revisited*, 14 J. L. & ECON. 351 (1971); Brozen, *Concentration and Profits: Does Concentration Matter?*, 19 ANTITRUST BULL. 381 (1974).

30 See the comments by Wenders, MacAvoy, McKie, and Preston, along with further comments by Brozen, in 14 J. L. & ECON. 485-512 (1971).

31 Shortly after the exchange noted in notes 29-30 *supra* came what is perhaps the most notable of these dissents. See Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J. L. & ECON. 1 (1973). See also Demsetz, *Two Systems of Belief About Monopoly*, in INDUSTRIAL CONCENTRATION, *supra* note 12; Peltzman, *The Gains and Losses from Industrial Concentration*, 20 J. L. & ECON. 229 (1977).

32 In this context, the "Chicago School" view is somewhat similar to late nineteenth century "Social Darwinism." That is, "stronger" (better) firms weed out the "weaker" (poorer) firms, and increases in concentration reflect only the "survival of the fittest" (best) firms. There is also a flavor of the early Schumpeter school of thought. In *THE THEORY OF ECONOMIC DEVELOPMENT* (1911), Schumpeter depicted the rise of monopoly markets as a consequence of successful innovation. Thus market structure was, as in the "Chicago School" view, an endogenous part of a market system, with structural change dependent on differential performance by firms in the market.

33 In addition to the articles by Brozen, *supra* note 29, and Peltzman, *supra* note 31, see Carter, *Collusion, Efficiency and Antitrust*, 21 J. INDUS. ECON. 435 (1978) and Brown, *The Relationship Between Concentration and Profitability in the Banking Industry*, Working Paper No. 94,

gested that the "fundamental disagreement" based on differences in "schools" is so pronounced that it "is doubtful that they would vanish even if statistics on performance and quality were available in unlimited quantity and impeccable quality."³⁴

The other attack on the causation theme in the orthodox S-C-P approach is more moderate. It in fact incorporates both the S-C-P and the "Chicago School" views into one, more general conception of the market process. While this synthesis acknowledges that concentration may indeed confer market power, it also recognizes that concentration may arise because of superior performance.³⁵ Again, attempts at empirical verification of the existence of such a two-way relationship are limited.³⁶

On methodological grounds alone, it is clear that essentially no confidence can be placed in any of the OLS regression studies done in this area. This is true whether the hypotheses being tested are those of the S-C-P paradigm or those of the "Chicago School." And it would remain true even if the econometric difficulties (discussed in Part I) somehow disappeared. Ironically, this truth is *not* because both the S-C-P and "Chicago" approaches are wrong; rather it is the consequence of each of them being true—or, more correctly, half true!

IV. Conclusion

While the econometric studies offer scant guidance for those prosecuting or defending a market structure case or for those attempting to define public policy, they do provide some important lessons. The first and most obvious one is that lawyers, judges, and economists should accord the studies no more importance than

Center for the Study of American Business, Washington University (St. Louis, October 1985). Both of the latter purport findings congruent with Demsetz's thesis. See note 31 *supra*. Scherer attacked Peltzman's methods and results. Scherer, *The Causes and Consequences of Rising Industrial Concentration*, 22 J. INDUS. ECON. 229 (1979). Others investigated the Demsetz thesis for British firms but found essentially no support for it. Clarke, Davies & Waterson, *The Profitability-Concentration Relation: Market Power or Efficiency*, 32 J. INDUS. ECON. 435 (1984).

34 F. SCHERER, *supra* note 6, at 290.

35 For detail and background, see Phillips, *Structure, Conduct and Performance—And Performance, Conduct and Structure?*, in INDUSTRIAL ORGANIZATION AND ECONOMIC DEVELOPMENT: ESSAYS IN HONOR OF EDWARD S. MASON (J. Markham & G. Papanek eds. 1970); Phillips, *Commentary*, in INDUSTRIAL CONCENTRATION, *supra* note 12.

36 *But see* Phillips, *An Econometric Study of Price-Fixing, Market Structure and Performance in British Industry in the Early 1950s*, in MARKET STRUCTURE AND CORPORATE BEHAVIOUR: THEORY AND EMPIRICAL ANALYSIS OF THE FIRM (K. Cowling ed. 1972); Strickland & Weiss, *Advertising, Concentration, and Price-Cost Margins*, 84 J. POL. ECON. 1109 (1976); Gabel, *A Simultaneous Equation Analysis of the Structure and Performance of the United States Petroleum Refining Industry*, 28 J. INDUS. ECON. 89 (1979); M. INTRILIGATOR, ECONOMETRIC MODELS, TECHNIQUES AND APPLICATIONS 475-80 (1978).

they deserve. On a scale of one to ten, the studies merit only "two-and-a-half cheers."

A second message that comes through "loud and clear" is that the relationship between market structure variables and monopoly power is a complicated one. This has been recognized by most practitioners, even if it has escaped economic theorists and econometricians. Nevertheless, one occasionally finds unjustified efforts to generalize and simplify in contexts in which those efforts are inappropriate.³⁷ In any event, cases have to be considered on their merits.

The third point follows immediately from the second. Where high market concentration is found and, especially, where the facts show changing shares and rising concentration, the possibility that the market is moving toward a more efficient organizational structure must be explored. That offenses of monopolization may occur can hardly be denied, but the "Chicago School" view is not completely wrong. Neither is it exclusively correct.

³⁷ Note that even Judge Hand generalized in terms of 90%, 60 or 64%, and 33%. This, however, was more excusable in *Alcoa* than the Supreme Court's use of market share in cases such as *United States v. Pabst Brewing Co.*, 384 U.S. 546 (1966), and *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966).