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Confusing Success with Access: "Correctly" Measuring Concentration of Ownership and Control in Mass Media and Online Services

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PREPARED FOR "MEDIA CONCENTRATION AND THE INTERNET – EMPIRICAL, BUSINESS AND POLICY RESEARCH," A SYMPOSIUM AT THE COLUMBIA INSTITUTE FOR TELE-INFORMATION (CITI), COLUMBIA BUSINESS SCHOOL, APRIL 15TH, 2004

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Abstract

In 2003 the Federal Communication Commission (FCC) proposed modest relaxation of its media ownership concentration rules; the proposal aroused heated political opposition and has been partially overturned by Congress and stayed pending appellate review. The purpose of this paper is quite narrow: to explore, from a public policy perspective, *measurement* issues associated with media ownership concentration in general, and online content control in particular. Measurement is meaningless in a vacuum. Alternative approaches to measurement derive their relative merits chiefly from their ability to assess the phenomenon under study, not from independent or abstract characteristics of the measurement device. In the policy area, the choice of a method of measurement follows from the adoption of a goal, or an understanding of the nature of a problem, rather than the other way around.

Media ownership concentration raises two broad policy concerns (1) the problem of market power, which can reduce output and raise prices, reducing both consumer and social economic welfare and (2) the problem of private restrictions of access by suppliers of content that may be unpopular or politically incorrect to audiences, and the closely related issue of government regulation of content and access. The first issue (economic competition) is indistinguishable from that addressed by antitrust policy, and the sophisticated analytical tools of modern antitrust analysis present the best available approach to measurement. The second problem (competition in the market place of ideas, which I call "Miltonian competition") can also usefully be approach from an antitrust perspective, leading to a different conclusion about sound concentration measurement techniques. In this second context it makes no sense to measure concentration using revenue or audience weights, because any channel that is available to a given consumer is equally valuable as a potential source of politically significant material. Popular channels, by definition, have

popular content, but if this popularity arises from consumer choice rather than structural barriers to entry it has no significance in measuring the ease with which politically disruptive ideas can be excluded from the audience.

Online content (such as entertainment, news and advertising that is generally not in video format) may belong in the same relevant economic markets as mass media, or not, depending on the actual substitution behavior of customers. If consumers or advertisers would substitute online channels for traditional mass media channels in response to price or quality changes, then both media belong in the same market. Ownership attribution and share measurement would follow the usual antitrust rules.

Measuring concentration of control of online content for purposes of assessing restrictions on access by audiences to politically or otherwise unpopular material, and by sources of such material to audiences, requires attention, first, to the facts concerning control. If identifiable commercial entities can restrict access based on content, they should be attributed with control over the portion of transmission capacity they control. On the other hand, if both end users and content suppliers are free to find each other on the Internet, then barriers to Miltonian competition (and consumption of expression) are nil. There remains an empirical question whether use of online communication provides an alternative that users find a good substitute for traditional media for the purpose of seeking out unpopular ideas and minority-taste content. A related empirical issue involves the role played by opinion leaders in facilitating access by mass audiences to unpopular ideas expressed via unpopular channels.

Measuring media ownership concentration is a meaningless exercise in the abstract. A necessary predicate is an explicit model or models of how concentration affects policy variables such as consumer welfare or competition in the marketplace of ideas. Only then can a measure of concentration be constructed and tested for empirical consistency with the underlying model(s), with which the concentration data may or may not be consistent. As to consumer welfare in the traditional economic sense, which is positively associated with vigorous competition, traditional antitrust models and measurement techniques are, broadly, as good as it gets; there is no need for a special antitrust approach to media industries. The more controversial and often conflicting policy goals of protecting press freedom from government abridgement and of promoting diversity (or Miltonian competition) present more difficult challenges. If, however, ensuring that citizens have as much access as possible to potentially conflicting views is the objective, then concentration is best measured by counting the noses of independent sources, without regard for their current economic success. Moreover, in general, concentration in the market place of ideas, properly measured, will be lower than economic concentration.

Confusing Success with Access:

"Correctly" Measuring Media and Online Concentration

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Introduction: Analysis Precedes Measurement

The purpose of this paper is narrow: to explore, from a public policy perspective, *measurement* issues associated with media concentration in general, and online content in particular. Measurement is meaningless in a vacuum. Alternative approaches to measurement derive their relative merits chiefly from their ability to assess the phenomenon under study, not solely from independent or abstract characteristics of the measurement device. In the policy area, the choice of a method of measurement follows from the adoption of a goal, or an understanding of the nature of a problem, rather than the other way around. For example, visible smog has various measurable components, such as particulates, that may be less hazardous to health than invisible pollutants. Measures of air pollution or progress in its reduction limited to visible components may be very misleading. A reduction in visible pollutants is consistent with a worsening of health dangers. Worse, such measures may distort policy by encouraging relatively costly and inefficient control measures, resulting in fewer lives saved than would have possible with wiser use of the same control dollars. Worst, the wrong measurement tools may have unintended conse-

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quences, such as *increased* pollution-related deaths as polluters employ technologies that reduce what is measured by increasing what is not measured.

In short, choosing a method of measurement of media concentration is not the same as a debate about using the metric system versus the avoirdupois system of weights. First, we need to decide what is bad (or good) about such concentration, either in itself, or because of its effects, and then, second, we must design measurements of concentration or of the effects of concentration that make sense in terms of policy goals or effects.

Therefore, we cannot jump directly into the measurement debate without considering what it is that we want to measure and why. On the other hand, the what and the why are highly contentious issues. There cannot be a single "correct" way to measure concentration if people differ about the nature of the problem, its effects, and its proper remedies. Given the limited scope of the assignment here, it seems most effective simply to make, for purposes of this paper, some assertions or assumptions about these matters. Then we can turn to the measurement issues without having the ground shifting underfoot. Even then there is no single correct way to measure concentration, as will be demonstrated below. Different conclusions about measurement may well result, of course, if one accepts assumptions about the nature of the problem that differ from those used here.

The Media Concentration Problem

> *Congress shall make no law* respecting an establishment of religion, or prohibiting the free exercise thereof; or *abridging the freedom of speech, or of the press*; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances. CONSTITUTION OF THE UNITED STATES OF AMERICA, AMENDMENT I, adopted 1791. (emphasis added)

Freedom of speech and of the press *from government abridgement* is a fundamental right conferred on American citizens by the Bill of Rights. Although this right has been much weakened by the Supreme Court's reluctance to accord the same freedom to electronic media as to print, it retains a central position in our constellation of political freedoms. Indeed, many Americans understand this freedom to be broader (or different) than it is. It is common to encounter those who assert or simply assume that freedom of

speech and press means freedom from *any* source of restriction or constriction, public or private. Similarly, many believe, or assume, that freedom of speech and press encompasses an affirmative duty on the part of Congress to ensure that media content meets various criteria, such as fairness or diversity, or that it contains certain features, such as educational and cultural merit, or *not* contain certain other features, such as obscenity. Unless we make an effort to think in an unusually disciplined way, most of us are capable of believing in contradictory things without discomfort, and beliefs about freedom of speech and press are examples. But a central lesson of economics is that, if resources are limited and production is efficient, it is not possible to increase the amount of diversity except by suppressing speech and also reducing consumer welfare. This means that common interpretations of First Amendment "goals" that transcend the original ban on abridgement are, generally, doomed to result both in abridgement and widely accepted economic policy criteria.

Self-indulgent, sloppy or sentimental thinking by the public, like any other accurate portrayal of human behavior, must be acknowledged and accounted for in policy analysis, but has no place in the analysis itself. Policies implementing basic political freedoms must be designed to protect citizens from the tyrannical actions of the British crown obnoxious to the Framers—and still widely practiced, today, in many parts of the world. Unfortunately, we are up to our ears in sentiment when it comes to media concentration, and sentiment deeply infects both academic and judicial analysis of the problem. The most recent example was the spectacle, in 2003, of political outrage triggered by the FCC's meager proposed reforms of its media ownership rules.

The background of the controversy is as follows. The Congress in 1996 adopted by large margins a Telecommunications Act (Pub. L. No. 104-104, 110 Stat. 56 (1996)), largely deregulatory and pro-competitive in its language and in many of its provisions. The Congress clearly anticipated that increased media competition would lessen the future need for current restrictions on media ownership, which were designed to promote diversity and prevent undue concentration. Accordingly, the new law required the FCC to undertake biennial reviews of its ownership policies and to repeal those no longer necessary as a result of competition (1996 Act §202(h)). The FCC understood this to be an in-

struction to deregulate gradually, but found itself in difficulty with appellate courts when it was unable to provide a "rational basis" for its devolving regulations. Fox Television Stations, Inc. v FCC, 280 F.3d 1027 (D.C. Cir., 2002); Sinclair Broadcasting Group, Inc. v. FCC 284 F.3d 148 (D.C. Cir. 2002).

In its 2002 biennial review, the FCC undertook a massive effort to develop an analytical record to support what turned out to be relatively minor or incremental relaxations of several media ownership rules. Report and Order in the Matter of 2002 Biennial Regulatory Review, 18 FCC Rcd 13620 (2003), *stayed* 2003 U.S. App. LEXIS 18390, appeal pending sub nom., Prometheus Radio Project, et al. v. FC*C*, Nos. 03-3388, et al. (3d Cir. 2003). The most controversial decision was a proposed increase, from 35 percent (47 C.F.R. § 73.3555(e)) to 45 percent, in the portion of the U.S. population that could be reached by the TV stations owned by any one of the major broadcast TV networks (ABC, CBS, Fox, or NBC).[1]

The FCC decision met with unexpectedly vigorous public and political opposition. A series of resolutions introduced by senators and representatives, most of whom had voted for the deregulatory 1996 Telecommunications Act, was introduced beginning July 15, 2003 (108 Bill Tracking S.J. Res. 17) to repeal the FCC's proposed relaxation of media ownership rules. Ultimately, a compromise was reached with the Bush Administration; Consolidated Appropriations Act, 2004, Pub. L. No. 108-199, § 629, 118 Stat. 3 (2004). The compromise affected only one of the FCC's proposed relaxations, reducing (from the FCC's proposed 45 percent) to 39 percent the maximum reach of network-owned TV stations.

This paper takes no position on the merits of the FCC's 2003 proposals, confining itself to analysis of measurement issues, and arguing that appropriate measurement of media concentration is a necessary but not sufficient condition for rational media concentration rules. Nevertheless, substantive policy analysis and measurement cannot be separated, because only an examination of the proper objectives of regulatory policy can tell us what to measure and how to measure it.

[1] The author submitted several analyses in this proceeding on behalf of Fox, Viacom (CBS), and GE (NBC).

Possibly the most troubling aspect of the media concentration debates is the confusion of access and success, or more accurately, the notion that it would be desirable economically or politically to have a public right of access to commercially successful media. In broad perspective, this is one manifestation of the long and often bitter struggle between those who believe that social or economic justice requires equality of access (EOA) and those who believe that it requires equality of result (EOR). The killer argument of the EOA group is that, often, equality of outcome (through its adverse effects on incentives) can and, often does, make everyone worse off, especially those unfortunates who might be thought to benefit the most from outcome equality. The response of the EOR group, quite fairly, is that equality of access in principle often ends up providing neither equality nor access in practice.

In the media concentration debate the EOR side takes the position that completely open access to the means of mass communication does not exist unless all channels are equally accessible to everyone (accessible, say, at equal and low cost). The EOA side points to the very large number of channels, existing and potential, that are accessible already at very low cost. The EOR side points out that these low-cost channels have small or no audiences. The EOA side responds that the channels with larger audiences must offer attractive, costly content, and that access to them would induce "free riding" and distort incentives. The EOR group counters that the channels with large audiences have market power, often the result of connivance in the dim political past with public officials. The EOA-ers respond that whatever the course of history may have been, in today's competitive environment successful channels are not guaranteed continued popularity, because channel scarcity is no longer a barrier to entry. EOR proponents counter that TV station licenses in large markets still cost hundreds of millions of dollars—hardly evidence of low entry barriers or the end of scarcity.

A dollop of common sense, while it might not suffice to resolve this debate, would at least make clearer what is at stake. The application of common sense begins with distinguishing between supply and demand. Media concentration might result from either, with significantly different policy consequences. First, consider a idyllic world in which there is no scarcity of channels. For example, imagine a billion video channels

available to every viewer for free, aside from payments for content, with zero cost of adding even more channels if the first billion get used up, and with no one permitted to own or control programming on more than one percent of all channels. What would such a world, one with no transmission supply constraints, look like?

In this world of potential plenty, there might well be quite a lot of "concentration," attributable to consumer demand. That is, the nature of popular culture is that it is popular, which means lots of people pay attention to its components, whatever they may happen to be. Some channels would be quite popular, and people who are good at anticipating (or creating) popular cultural icons would try to keep them so, and be well rewarded for success. Their success, of course, has a feedback effect on itself, because what is successful is often popular. In the end, a relatively few channels, and owners, would have the lion's share of the audience and the revenues.

The prediction above is difficult to prove, based as it is on an assumption about the distribution of tastes among the public as well as the existence either of property rights in popular material or a scarcity of talent relevant to production of whatever is popular. The prediction does gain some credence from observation of mass communication media with essentially unlimited physical capacity and very low entry costs, such as magazine and book publishing. If the prediction is correct, it follows that we would experience a degree of media "concentration" even in the absence of anything that might be called a market imperfection or entry barrier. Such media concentration simply would be the result of demand-side forces combined with the likely natural distribution of specialized entrepreneurial skills relevant to any distribution of tastes, rather than supply-side monopolies or government giveaways of our treasured national resource, the spectrum. Equality of *access* to transmission resources would not produce equality of *result* in audience size and revenue, just as competition among book publishers produces a few best sellers and thousands of failures.

The Economic Concentration Problem

Media concentration has two policy dimensions. The first is economic, the second political. The economic problem is not in any significant way different from the problem

of concentration in other industries. Simply put, increased concentration is a social bad if it reduces, or reflects reductions in, competition among sellers. Competition benefits consumers of media content and media advertisers. Increased concentration in general is at least loosely associated with decreased competition, higher prices and reduced quality. With some caveats, this is true in the media business just as it is true in the steel business. For both industries the *tools* of antitrust analysis are extremely useful in determining whether there is (or is likely to be) a problem associated with a particular transaction or a particular level of concentration, and also what to do about it.[2] Nothing about the media as businesses suggests that antitrust analysis is less appropriate for them than for other businesses, or that there is anything to be gained from inventing a media-specific approach.

The Diversity Problem

The second concentration problem is variously characterized as diversity, as competition in the marketplace of ideas, or as access. The First Amendment was intended, originally, to prevent the government from censoring the press and individual speech. The First Amendment does not condemn media concentration per se, but only concentration resulting from government action that restricts freedom of press or speech or concentration used as a means of such restriction. An example would be government grants of monopoly press licenses, denied to political opponents of the incumbent party.

The modern political dimension of media concentration appears to be based fundamentally on an assumption, certainly *not* found explicitly in the First Amendment, that competition among ideas and opinions is a useful basis for public policy decisions and for the effective exercise of political freedom. The earliest modern assertion of this assumption that I have found appears in *Areopagitica* (1644), John Milton's petition to the Long Parliament seeking repeal of its censorship laws:[3]

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[2] The usefulness of antitrust analytical tools is not crucially dependent on the identity of the analyst. These tools are as potentially fruitful for the FCC as they are for an antitrust court or a federal prosecutor. Suggesting the applicability of general antitrust principles to the economic aspects of media concentration is not the same as suggesting that jurisdiction over such matters should lie exclusively with antitrust agencies and courts.

[3] The *Areopagus*, an Athenian hill, was the location of the court responsible for censorship.

> [T]hough all the winds of doctrine were let loose to play upon the earth, so Truth be in the field, we do injuriously, by licensing and prohibiting, to misdoubt her strength. Let her and Falsehood grapple; who ever knew Truth put to the worse, in a free and open encounter?

As it happens, I am not aware of any systematic study of the proposition that "truth" is more likely to emerge from debate among a greater number of speakers than from fewer. But for present purposes let us accept Milton's assertion. Competition among ideas means that "speakers" make their views available to others as if in the Athenian agora (marketplace), hoping to attract audiences and perhaps adherents. In the modern world the agora must be metaphorical, but the metaphor remains useful. As in the economic sphere, media concentration may impede competition (or reflect impedance of competition due to other factors) in the marketplace of ideas.

Since the 1940s, when Justice Felix Frankfurter invented the broadcast frequency scarcity doctrine that the Supreme Court still relies upon in denying press freedom to broadcasters and cable operators, Nat'l Broadcasting Co. v. 319 U.S. 190, 219 (1943), diversity has been accepted as a major goal of U.S. communications policy. "[I]t has long been a basic tenet of national communication policy that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public." Turner Broadcasting v. FCC 512 U.S. 622 at 663-64 (1984), citing Associated Press v. United States 326 U.S. 1, 20 (1945), an antitrust case involving newspaper competition. The Court recognizes promotion of diversity (or, implicitly and more broadly, the Miltonian model discussed below) as a policy goal distinct from the First Amendment's concern with government suppression of speech and press, Turner at 662-63, and is prepared to accept some abridgement of speech and press freedom to achieve higher levels of diversity than an unregulated market would provide.

The FCC's own view of its non-economic policy objectives also emphasizes promotion of diversity. Nevertheless, the FCC's June 2003 Report and Order defines diversity as involving, essentially, economic competition. According to the Order, there are five kinds of diversity, four of which are legitimate goals:

A variety of *viewpoints*, roughly synonymous empirically, says the FCC, with the number of independent outlets ¶¶ 18-35;

A variety of *program formats and content*, best achieved, according to the FCC, through competitive markets ¶¶ 36-37;

A variety of *outlets*, defined simply as the number of independent outlets, and adopted not as an end in itself but as a means to promote diversity of viewpoints, public safety and (in radio) innovation and new entry ¶¶ 38-41;

A variety of *owners* categorized by race and gender (i.e, minority and female ownership) ¶¶ 46-52;

However, the Commission rejects as a proper policy goal pursuit of a variety of program *sources*, a goal associated with its discredited anticompetitive efforts to promote Hollywood economic interests ¶¶ 42-45. (Capitol Cities/ABC v. FCC, 29 F. 3d 309, 316 (2nd Cir., 1994, overturning financial interest and syndication rules and casting doubt on their merit at the time of their adoption.)

The FCC's position on diversity has moved considerably in the direction of the equation of diversity with economic competition. It accepted that "in many markets," competition alone would "more than adequately protect viewpoint diversity" ¶ 59. Nevertheless, the Commission rejected the notion that promotion of competition through antitrust would "in all cases" ensure adequate viewpoint diversity, pointing to its media cross-ownership policy, which bans certain TV/newspaper/radio combinations even though the Commission regards each of these media as operating in separate economic markets.[4]

To its credit, the Commission has tried very hard, and made much progress, in rationalizing the Supreme Court's vague diversity goal. Even the academy, in the past often associated with undisciplined advocacy of diversity, has made progress. Professor John

[4] This last appears to be a simple conceptual error. In principle, TV stations may comprise a relevant market for purposes of antitrust analysis of a TV/TV merger or a regulatory cap, but this does not preclude the possibility that TV stations and newspapers, together perhaps with other media, comprise a relevant market for purposes of a TV/newspaper acquisition or a cross-ownership cap. In short, there can be markets within markets.

Dimmick, for example, introducing a recent special issue of the Journal of Media Economics, devoted to "Diversity and Diversification," points out that:

> Diversity, especially in broadcast programming, has played a major role in policy discussions on both sides of the Atlantic. The reason for the importance of the construct, however, is not often made explicit. Diversity in media content is important because the greater the variety or breadth of media content the greater the probability that media consumers can obtain utility or gratification from that content. Conversely, low diversity in media content means that consumers encounter fewer opportunities to obtain utility or gratification. Hence, consumer welfare is served by greater rather than lesser diversity. (JME 17:2, November 2004, at 85).

Although Professor Dimmick's claim is dubious as a matter of economics, it is revolutionary to see the diversity goal defended (solely) from a consumer welfare perspective.

In sum, the "media concentration problem" reflects a concern that media concentration might restrict economic competition among the media, raising prices and perhaps lowering quality, and a distinct concern that media concentration reflects or even causes a diminished competition among ideas and therefore impedes the search for truth. My central claim is that *measures* of media concentration, used to make or implement policy, should be correlated with one or both of these undesirable outcomes.

I will ignore in this paper other problems, real or imaginary, not related to or caused by the two issues I have just described. For example, there is a potential economic efficiency problem with media content arising from its non-rivalrous character, and other related problems arising from advertiser-revenue support and product differentiation, which may lead even a highly competitive media industry to produce too few products or the wrong products. Such problems are unrelated to increased media concentration. Indeed, in some circumstances increased concentration may alleviate them. Similarly, I will not address any failure of private media operating in competitive markets to offer program content thought by anyone (or even everyone) to be meritorious, assuming the failure is not *caused* by concentration. And finally, I do not address the presence in the me-

dia of material offensive to some (or even all) people, such as pornography, obscenity, sedition, blasphemy, or terrorist instructional matter, unrelated to media concentration.

The Merger Guidelines Approach to Measurement

The FTC-DOJ Merger Guidelines (Guidelines) are designed to screen proposed mergers and acquisitions to identify those potentially harmful to consumers. The Guidelines are based on the simple principle that a significant reduction in the extent of consumer choice may lead to higher prices and reduced product quality and variety. If many consumers have good alternatives to those offered by the merging parties, or if entry by new suppliers is easy, increased concentration cannot be harmful. Media concentration issues arise chiefly in connection with proposed mergers and acquisitions, especially those involving broadcast license transfers. In addition, the Guidelines' approach can be used to analyze competition and concentration issues other than proposed mergers. For example, they are used in deciding whether a given firm has an economic monopoly in potential violation of Section 2 of the Sherman Act, the anti-monopoly statute. They are useful too in analyzing a proposed concentration cap. Thus, the Guidelines are concerned with the same issues characterized above as the "economic" aspect of the media concentration problem.

The mechanics of measurement under the *Guidelines* can become highly technical, but the basic concepts are simple. The first step, always, is to define the relevant market, which consists of those products or services that consumers regard as good substitutes for those produced by the merging parties at prevailing prices (or the alleged monopolist at competitive prices). Products in the relevant market have various characteristics, among which geographic location may be important. Also included in the market are products not currently produced that would be produced in short order by existing suppliers in response to profitable opportunities. Together, the products included in the relevant market must be the smallest set of products that it would be profitable to monopolize.

Having defined the relevant market, measurement of concentration simply requires a summary of the market share information. The most complete summary is a table showing the market share of each competitor. A more concise summary is provided by a

"concentration ratio" such as the combined shares of the largest 4 or 8 firms. An even more concise summary is provided by the "Hirschman-Herfindahl Index" (HHI), which is equal to the sum of the squares of each firm's share. All concise summaries or indexes omit information, but facilitate comparisons, either with other markets or with standards. The trick is to omit the less useful information.

Measures of concentration are supposed to reflect degrees of pathology. Increased concentration should be at least correlated with reduced competition, higher prices or restricted freedom. This consideration should guide the choice of dimensions in which to measure market share. Among the dimensions commonly used are revenues, physical output units, and capacity.

The nature of the competitive process in the particular market will dictate which of these or other share measurements is most relevant to competition. For example, capacity may be a better measure than revenues of the competitive significance of a steel mill. In some cases there may be an empirical basis for such a choice, but empirical evidence is rare because relevant markets seldom coincide with standard classifications of industries. The "correlation" between concentration and adverse outcomes therefore derives chiefly from theoretical models. In the economic sphere, the theoretical model is based on the notion that cooperation (e.g., collusion among competitors) is likely to be easier if there are fewer competitors than if there are many competitors. Although the number of competitors is not the same, in general, as concentration (a market may be concentrated in revenues, output, or capacity, and yet have many competitors, most of them small), this theoretical model is the basis for much of antitrust policy.

In sum, the Guidelines rely on the market definition process and models of competition in the relevant market to derive concentration measurements. The Guidelines elect the HHI as the preferred summary measure of concentration and also as the metric in which standards (such as the thresholds at which mergers will be regarded as presumptively harmful) are expressed.

Finally, the Guidelines contain a device that will become relevant below, but which it is convenient to describe here: the concept of a "bidding market" [Guidelines at

note 34.] A bidding market is one in which the competitive significance of each firm, with respect to making future sales or purchases, is not correlated with its past success and not limited by its current capacity. In such markets each firm is equally well positioned to compete. Any given firm could even serve the entire current demand for the product. Measurement of concentration in bidding markets accords an equal share to each firm; for example, if there are five firms, each would be regarded as having a 20 percent share of the market. One justification for this treatment is that each firm in such a market has a $1/n^{th}$ chance of winning the next customer, where n is the number of competing firms.

Measuring Concentration in Media Economic Markets

The media serve two kinds of customers, consumers and advertisers. They purchase inputs in many markets, programming or content chief among them. Each of these sets of customers or suppliers is associated with various relevant economic markets. Antitrust analysis of such markets is common, most often arising in the context of mergers and acquisitions, but also stemming from other antitrust litigation and regulatory rulemaking proceedings. The parties to these proceedings hotly debate market definition, arguing, for example, whether or not local TV advertising sales are in the same relevant market as local radio advertising sales.

When advertising, consumer and content markets are broadly defined in the United States there is little concentration in advertising, program supply, program purchasing, or household media purchases in any except the smallest geographic media markets. Of course, it is always possible to propose narrow market definitions (advertising aimed at audiences of elderly men with impaired hearing living in Peoria) in which concentration is significant, although narrower markets tend to have more potential entrants. Market definition is an empirical question, ideally resolved with evidence pertaining to demand. The question, essentially, is how many customers (advertisers or consumers) would switch among media in response to price differences. If many would, all the media among which they would switch must be regarded as in the same market—that is, regarded as good substitutes. If few would switch, narrower market definitions are called for. In considering market definition it is important to remember that those (so-called

marginal) customers that would switch to a different source or supplier in response to a price change protect those customers who would not switch.

Once a market definition is accepted, measurement of concentration typically relies on revenue HHIs. Output measures are much more difficult because different media use different metrics (radio listener-minutes, TV viewer-minutes, or newspaper reader-inches, for example) and even within media categories such as "radio" there are distinctions that matter to advertisers, such as the demographic characteristics of the audience, that output measures may not capture. Weighting output by value (price)—i.e., using revenue—seems a reasonable approach to constructing an output index because in most models it more closely related than physical output to the incentive to cooperate, or not, among rivals. None of this is very controversial, although experts do disagree about some details, and often disagree about the proper application of these principles to particular cases. When it comes to broadcast media, there is an additional problem arising from the fact that viewers need not pay directly for broadcasts received over the air. Thus, in competing for viewers, revenue measures understate the significance of broadcast versus non-broadcast programming, such as HBO or CNN. However, in practice, roughly 85 percent of all TV households actually purchase broadcast programming from a cable or satellite company. Hence, revenue shares for broadcasters can be imputed for purposes of measuring concentration.

Ownership attribution, like market definition and the choice of share metric requires attention to the underlying problem, rather than reliance solely on abstract principles. For example, even a large non-controlling equity interest in a competing media firm may have no significance in the marketplace of ideas (because a non-controlling stockholder generally cannot influence editorial policy). On the other hand, such an interest may be very significant in the economic marketplace, where the incentive to change a price can readily be influenced by the extent to which the external costs or benefits of the price change can be recaptured through partial ownership interests in competitors.

An example of a recent study based on ownership attribution analysis is Djankov, et al. 2003, which sought to determine empirically whether government or private family own-

ership of the most popular media channels was associated, in a sample of 97 countries, with indicators of press, political, and economic freedom, and health conditions. The investigators were concerned solely with the largest TV and radio stations and newspapers in each country, and attributed ownership to the ultimate owner with the largest equity interest, working back through holding companies, nominees and the like. The largest equity holder was assumed, despite holding what might be a minority interest, to be in a position to control content. The study did not seek to measure overall concentration and it did not explicitly define markets. The underlying hypotheses involved neither the results of economic competition nor the idea of Miltonian competition. The underlying theoretical model that best fits the investigator's approach appears to be the original non-abridgement goal of the First Amendment, associating press freedom with political freedom. The direction of causation is not specified (the data are cross-sectional.) Overall, the study demonstrates the weak and ambiguous results that arise when measurement precedes theory.

Finally, it should by now be clear that it is not possible, or at any rate not sensible, to construct a measure of media concentration outside the context of a particular policy or analytical issue, even within the purely economic sphere. The right or best measurement varies according to the issue as well as according to the facts. The relevant markets for purposes of evaluating a proposed acquisition of Dow Jones by Viacom are not the same as those relevant to the analysis of a proposed merger between The Washington Post Company and Gannett. That is why efforts to produce generalized a priori measures of concentration based on standard industry definitions and classifications, such as those from census data, trade press surveys, and syndicated marketing research, are seldom very useful.

Measuring Concentration in the Marketplace of Ideas

As before, theory, or at least thought, must come before measurement. If we start with the relatively narrow goal originally associated with the First Amendment, freedom from government regulation, measurement of media ownership concentration appears simply irrelevant to any assessment of whether the goal is being realized. Either a government policy suppress speech or it does not. If we expand the public policy goal to en-

compass the Miltonian concept of competition in the marketplace of ideas, there are at least two interpretations of the goal: opportunity and result. Milton claimed that truth would emerge from competition. If this is so, then success is truth, and we might claim that commercial or popular success and truth must be synonymous. But the putative success of truth in competitive battle seems to suggest that equality of result (EOR) (low concentration) is a bad outcome. Clearly there is no objective measurement of truth that does not reside in some particular ideology, and equality of result cannot be a sensible policy choice.

We are left with opportunity, or what I earlier characterized as equality of access (EOA). Specifically, having more sources of ideas is better than having fewer sources, both from the perspective of individual consumer/citizens and from the point of view of communities. Having more sources, other things equal, corresponds to lower entry costs, which also benefits non-incumbent suppliers. If we want to measure freedom of opportunity or access, by speakers to an individual or a defined audience, it seems we should either compute entry costs or simply count the number of (unweighted) sources. Entry costs are awkward to measure and difficult to compare across media, so counting the noses of actual and potential independent suppliers of ideas falls out of the analysis as the best practical approach. Conceptually, this corresponds to the Merger Guidelines "bidding model" analysis.

It is useful to illustrate the distinction between sensible ways to measure economic ownership concentration and Miltonian concentration. Assume a local community, Miltonville, Minnesota, with one daily newspaper, 10 local radio stations, and 4 local TV stations. Although other (national) media reach the community, these are the only media with local ads and local content. In Miltonville, the daily newspaper owns one of the TV stations and two of the radio stations; the other media are each owned independently.

Media Concentration in Miltonville, Minnesota

Medium	Annual Ad Revenue	Independent Voices (cumulative)	Advertising Market Share (%)	Marketplace of Ideas Share (%)
Daily newspaper	$10,000,000	1	51.2	8.3
TV station A (owned by newspaper)	$5,000,000	Incl. above	Incl. above	Incl. above
TV station B	$5,000,000	2	13.8	8.3
TV station C	$5,000,000	3	13.8	8.3
TV station D	$3,000,000	4	8.3	8.3
Radio station A (owned by newspaper)	$2,000,000	Incl. above	Incl. above	Incl. above
Radio station B (owned by newspaper)	$1,500,000	Incl. above	Incl. above	Incl. above
Radio station C	$1,000,000	5	2.8	8.3
Radio station D	$750,000	6	2.1	8.3
Radio station E	$750,000	7	2.1	8.3
Radio station F	$750,000	8	2.1	8.3
Radio station G	$500,000	9	1.4	8.3
Radio station H	$500,000	10	1.4	8.3
Radio Station I	$250,000	11	0.7	8.3
Radio Station J	$150,000	12	0.4	8.3
Total	**$36,150,000**	**12**	**100.0**	**100.0**

The table reflects several simplifying assumptions. For example, everyone in Miltonville either does or readily could receive all these media, and advertisers regard all these media as good substitutes. On this basis, the local advertising market in Miltonville is highly concentrated (by *Merger Guidelines* standards), with an HHI over 3,000. However, the marketplace of ideas is unconcentrated, with 12 independent voices and an HHI of 826. (Of course, there is no reason to suppose that the standards in the Merger Guidelines are applicable to Miltonian competition; the standards are arbitrary even with respect to economic competition.) The local newspaper-TV-radio combination owner has more than 50 percent of the advertising market, but only 8.3 percent of the voices or access market. New ideas (by definition as yet unpopular) and old unpopular ideas can reach everyone in Miltonville via any of the 12 independent channels. That one of these

channels is commercially much more successful than the others has great significance if one is of the EOR persuasion, but no significance if one is concerned only with EOA.

Online Concentration

The Internet was not structured as a mass medium. It was designed to transmit point-to-point messages, rather than point-to-points messages. But, like the postal service, it can be used for both purposes. It should be counted as a mass medium, for purposes of media concentration analysis, from an economic perspective, if consumers use it, or readily could use it, as a substitute for whatever mass media are felt to be unduly concentrated. From a political perspective, the Internet should be counted as a mass medium if it serves or could serve as an effective (from the point of view of citizens) alternative source for new, unpopular, or illegal ideas in cases where the conventional mass media suppress such ideas, whether as a result of concentrated commercial interest or government regulation.

Online (Internet) sources of information and entertainment raise two questions: should they be regarded as in the same relevant markets as traditional media for purposes of assessing concentration in transactional analysis? If the Internet should be counted among the mass media for economic and political purposes, how should it be counted?

The economic answer is easy—Internet content and advertising should get weighted by advertiser or consumer revenue, just like other media. Each actual and potential independently-owned "site" or service, whose content is not selected or controlled except by consumers (as with DSL and cable modem services operating as, or as if they were, common carriers), should be counted as a separate competitor. Where some intermediary (such as Yahoo or AOL) selects content suppliers, all the revenues should be attributed to the entity that serves as the most binding constraint. This is the same approach used with conventional media. In measuring local video media concentration, for example, a local cable operator typically selects nearly all of its programming (local broadcast channels and certain access channels are the exceptions). Therefore, revenues for all the cable channels are attributable to the cable operator, rather than to its upstream suppliers. If the cable operator were to restrict or control content selections made by sub-

scribers on its channels devoted to high-speed Internet access service, then the Internet revenues from cable modem subscribers would be attributable to the cable operator, rather than upstream service providers, such as eBay.

For political purposes, in contrast, it makes no sense to use revenue weights. All independent sources should be counted equally from the perspective of any given set of consumers or group of consumers. Indeed, it is Orwellian to consider that giving unpopular ideas a chance by making it possible for people to consume them requires that they be integrated with or substituted for popular ideas. Because the Internet (absent content control by a local transmission company) has no limit on the number of sources of ideas it makes available to a given user, evidence that people do in fact use the Internet to acquire ideas and information effectively ends the discussion of the media concentration problem from a political perspective. Even if any given citizen does not use the Internet, there is a powerful empirical argument for counting the Internet as opening access to that citizen. According to mass communication scholars, most citizens rely for their opinions not on media directly but on opinion leaders (friends, colleagues, family members) who themselves rely more directly on media. This so-called "two-step" process was first documented in studies by Paul F. Lazarsfeld and his colleagues of the 1936 presidential election.

The FCC Diversity Index

The FCC's June 2003 order slightly relaxing five of its media ownership rules does, as recommended above, rely on the Merger Guidelines analytical framework, at least in principle, to deal with the analysis of concentration and market definition. In addition, the order contains a proposed new approach to measuring media ownership concentration for purposes of assessing the non-economic aspects of proposed transactions. The Commission created a "Diversity Index" intended to measure the extent of diversity of sources of media content available to local communities. In the Commission's words:

> In order to provide our media ownership framework with an empirical footing, we have developed a method for analyzing and measuring the availability of outlets that contribute to viewpoint diversity in local media markets. The measure we are using, the Diversity Index or DI, accounts for certain, but not all media outlets (newspapers, broadcast, television, radio, and the Internet) in local markets available to consumers, the relative impor-

> tance of these media as a source of local news, and ownership concentration across these media. The DI builds on our previous approach to the diversity goal: We retain the principle that structural regulation is an appropriate and effective alternative to direct content regulation; we retain the principle that viewpoint diversity is fostered when there are multiple independently-owned media outlets in a market; we retain our emphasis on the citizen/viewer/listener and on ensuring that viewpoint proponents have opportunities to reach the citizen/viewer/listener. What we add is a method, based on citizen/viewer/listener behavior, of characterizing the structure of the "market" for viewpoint diversity. We use the DI as a tool to inform our judgments about the need for ownership limits. [FCC Report and Order at ¶ 391.]

The FCC Diversity Index uses essentially the same approach advocated above for attributing weights to each independently-owned media outlet. That is, it does not weight individual media channels by revenue or audience size. It does, however, introduce a medium-specific weighting scheme based on measurements of the relative importance of each medium to consumers as a source of news. For example, if most people report that they obtain their news chiefly from television, while only a few report that they obtain news chiefly from the Internet, then television channels as a group are given heavier weight than Internet sources as a group.

The Diversity Index is an important step in the direction of measuring concentration in a more sensible way for purposes of assessing the range of independent sources of ideas and information available to consumers. Nevertheless, the Commission's approach has flaws.

First, it ignores sources of ideas and information other than "news." Entertainment arguably is as important, and in some respects more important, than news as a source of new and controversial ideas, as the Commission itself acknowledges:

> [W]e agree with Fox and CFA that content other than traditional newscasts also contributes to a diversity of viewpoints. Television shows such as *60 Minutes*, *Dateline NBC*, and other newsmagazine programs routinely address matters of public concern. In addition, as Fox points out, entertainment programming such as *Will & Grace*, *Ellen*, *The Cosby Show*, and *All in the Family* all involved characters and storylines that addressed racial and sexual stereotypes. In so doing, they contributed to a national dialogue on important social issues. [Report and Order at ¶33, footnote omitted]

Second, the FCC makes no attempt to assess the importance of each medium as a vehicle for politically or socially important dissenting or minority views. Ironically, the Commission only a few months after releasing this Report and Order was busily fining radio and TV stations for broadcasting "obscene" content that would be immune from such attack on the Internet.

Third, the FCC Diversity Index ignores non-media sources of information that are important, according to social scientists, in opinion formation. For example, the FCC ignores the Lazarsfeld two-step process and thus perhaps distorts the actual relative significance of the various media, which would give heavier weight to the sources accessible to or relied upon by opinion leaders.

Fourth, by giving each media owner a weight equal to the proportion of available channels that it controls, the Diversity Index departs from the principle of counting voices and produces an unnecessary inconsistency in its treatment of different media. Thus, in computing "shares of medium" for TV stations in a market with 10 stations, of which two are owned by a single owner and eight are singly-owned, the Commission attributes a 20 percent share to the owner with two stations, rather than simply counting the number of voices (nine) and attributing equal shares to each. This leads to immediate difficulties when the TV medium is combined with other media to form an aggregate index, because newspapers (each of which is composed, arguably, of many channels) and the Internet (ditto) are treated as single channels or voices.

Fifth, the empirical research relied upon by the Commission to weight the various media probably is not sufficiently robust to bear such weight. The Commission's studies (based on questionnaire data) are rather narrowly conceived and have not yet been subject to scrutiny and debate in the academic community.

Sixth, the Commission's treatment of the Internet is problematic. The Commission attributes all of the Internet medium to just two sources, cable modem providers (i.e., local cable television operators) and local telephone companies, with weights equal to the relative shares of these two sources of Internet access. It is true that both cable operators and DSL providers are in a position to control their subscribers' access to Internet ad-

dresses, and can perhaps, as a technical matter, block access to particular URLs, just as they attempt, in some cases, to block spam email. In practice, however, it has proved commercially unprofitable to engage in such blocking. The most persuasive example is America Online (AOL), once a walled garden from which its subscribers could not readily escape to the wider Internet, but now forced by commercial pressure to offer its subscribers not just Internet access, but browser tools to facilitate such access. Consumers demand unrestricted access to the entire Internet and competition among Internet access providers, including not just local telephone and cable operators but at least three current satellite companies and, potentially, numerous wireless providers, ensures that service provider access barriers cannot succeed.

The market general issue here is whether it is ownership alone that matters in assessing the potential for content restrictions, or whether market discipline can also protect consumers' interests. If owners enjoy economic rents, they can choose to spent them on content that does not maximize profits, as pointed out by Owen (1978), Demsetz (1989), and Demsetz and Lehn (1985) among others, a phenomenon Demsetz calls the "amenity value" of media ownership. Ultimately, only competition or its very imperfect substitute, common carriage, can guarantee the absence of such private restrictions.

Finally, the Commission failed to establish standards for evaluating the policy significance of Diversity Index computations. The Merger Guidelines offer standards such as the "safe harbor" for relevant markets with post-merger HHIs under 1,000. The FCC offers no corresponding guidance for parties to potential transactions. This is not surprising because the strong assumptions underlying the Diversity Index make it unsuitable for calculations pertaining to particular markets or particular transactions, as the Commission recognizes, Report and Order at ¶ 392. Indeed, the Diversity Index exercise seems to be of little real value to the Commission, except perhaps as a vehicle for expressing certain analytical conclusions in a relatively neutral context.

Conclusion

Measuring media ownership concentration is a meaningless exercise in the abstract. A necessary predicate is an explicit model or models of how concentration affects

policy variables such as consumer welfare or competition in the marketplace of ideas. Only then can a measure of concentration be constructed and tested for empirical consistency with the underlying model(s), with which the concentration data may or may not be consistent. As to consumer welfare in the traditional economic sense, which is positively associated with vigorous competition, traditional antitrust models and measurement techniques are, broadly, as good as it gets; there is no need for a special antitrust approach to media industries. The more controversial and often conflicting policy goals of protecting press freedom from government abridgement and of promoting diversity (or Miltonian competition) present more difficult challenges. If, however, ensuring that citizens have as much access as possible to potentially conflicting views is the objective, then concentration is best measured by counting the noses of independent sources, without regard for their current economic success. Moreover, in general, concentration in the market place of ideas, properly measured, will be lower than economic concentration.

References

Associated Press v. United States 326 U.S. 1 (1945)

Capitol Cities/ABC v. FCC, 29 F. 3d 309, 316 (2nd Cir., 1994)

Consolidated Appropriations Act, 2004, Pub. L. No. 108-199, § 629, 118 Stat. 3 (2004).

Demsetz, Harold, 1989, "The Amenity Potential of Newspapers and the Reporting of Presidential Campaigns," in Demsetz, H., *Efficiency, Competition and Policy,* Basil Blackwell, London.

Demsetz, Harold, and Kenneth Lehn, 1985, "The Structure of Corporate Ownership: Causes and Consequences," *Journal of Political Economy,* 93:6: 1155-1177.

Dimmick, John, 2004, "Diversity and Diversification," Journal of Media Economics 17:2, November 2004

Djankov, S., C. McLiesh, T. Nenova, and A. Shleifer, 2003, Who owns the media?. Journal of Law and Economics 46:2, 341-382.

FCC, 2003, Report and Order in the Matter of 2002 Biennial Regulatory Review, 18 FCC Rcd 13620 (2003), *stayed* 2003 U.S. App. LEXIS 18390, appeal pending sub nom., Prometheus Radio Project, et al. v. FC*C*, Nos. 03-3388, et al. (3d Cir. 2003).

Fox Television Stations, Inc. v FCC, 280 F.3d 1027 (D.C. Cir., 2002)

United States Department of Justice-Federal Trade Commission, 1992, Horizontal Merger Guidelines, (1997 rev.)

Lazarsfeld, Paul F., et al., 1948, The People's Choice; How the Voter Makes Up His Mind in a Presidential Campaign (2nd ed.). New York: Columbia Univ. Press.

Milton, John, 1644, *Areopagitica 51-52* (John W. Hales, ed., New York: Oxford Univ. Press 1961).

37. JOHN MILTON, AREOPAGITICA 51-52 (John W. Hales ed., Oxford Univ. Press 1961) (1644) (irregular spelling in original text). Whether Milton was right or not is a ~~different~~ question.

National Broadcasting Co. v. 319 U.S. 190 (1943)

Owen, Bruce M. 1975. Economics and Freedom of Expression: Media Structure and the First Amendment. Cambridge, MA: Ballinger.

Sinclair Broadcasting Group, Inc. v. FCC 284 F.3d 148 (D.C. Cir. 2002).

Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996)

Turner Broadcasting v. FCC 512 U.S. 622 (1984)