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Media Concentration in the U. S. and European Union: A Comparative Analysis

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This paper analyzes how concentration of media markets is measured in the United States and the major European nations. Theoretical and methodological aspects of measuring concentration are introduced, along with data that illustrates the United States media markets are becoming increasingly consolidated across industries. Efforts to measure concentration in the European Union are also discussed. Problems in measuring concentration are detailed, with the authors calling for common approaches and better sources of data to facilitate scholarly research on concentration, especially needed for cross-cultural studies.

Media Concentration in the U. S. and European Union: A Comparative Analysis

Media mergers and acquisitions have become commonplace over the last two decades, not only involving companies in the United States but also companies around the globe. During the 1980s, a series of major media mergers took place, involving Time Inc. and Warner Communications; General Electric and RCA, Viacom and Paramount; and Capital Cities Communications and ABC (Auletta, 1992). Merger activity escalated further during the 1990s with a number of major transactions that structurally altered the media marketplace. Among the more significant mergers involved the Walt Disney Company's acquisition of Capital Cities/ABC, AT&T's acquisition of Tele-Communications Inc., Viacom's acquisition of CBS, Clear Channel Communication's acquisition of AMFM Inc., and the merger of AOL and Time Warner.

Merger activity impacted industries outside of broadcasting and cable. In the newspaper industry, Tribune acquired the assets of Times Mirror. Vivendi acquired Seagram Universal to create a second European media conglomerate with assets that rival Bertelsmann. In the book industry, the four largest publishers (Pearson, News Corporation, Viacom and Bertelsmann) all acquired publishing companies during the 1990s, further increasing their respective market shares (Schiffrin, 2000).

Many factors have contributed to the increase in corporate mergers and acquisitions. Ozanich and Wirth (1998) claim media mergers and acquisitions have been driven by technological change, liberalization of regulatory policy, and the availability of capital. The latter two factors deserve additional comment.

There is no doubt the 1996 U. S. Telecommunications Act fueled increasing consolidation across the communication industries. Designed to eliminate barriers to competition, the 1996 Act greatly liberalized ownership limitations for broadcasting and cable companies, allowing companies to acquire more competitors. For example, in the radio industry alone, some 75 different companies operating independently in 1995 were consolidated into just three companies by 2000.

The economic expansion of the 1990s (roughly 1992-1999) was driven by low interest rates and inflation, low unemployment, and a strong global economy in the developed regions of the world. Business, industry, and individuals were making money, and with interest rates among the lowest in post-war history, there was plenty of capital available to finance mergers and acquisitions for media properties.

Together, these conditions further enhanced a marketplace already conducive to consolidation and expansion. With so much emphasis and attention on "new media" and "new economy" ventures available through markets associated with the Internet (e.g., portals, e-commerce, Internet Service Providers [ISPs]) traditional media companies expanded their empires and operations, all in pursuit of achieving higher profits and increasing economies of scale and scope.

This study looks at the role of media concentration both within the United States and the European community. Concentration is a critical issue for societies and regulators, in that the media industries are so pervasive by nature. Critics contend undue concentration can negatively impact content diversity and also lead to potential anti-competitive practices among major firms. This research is designed to address the following questions: How is media concentration measured in the U. S. and Europe? Are the methods used consistent across continents?

Media Concentration

The study of media concentration in the communications industries remains an important concern for media economics researchers. In following the industrial organizational model (see Scherer & Ross, 1990), an understanding of the level of concentration within a given market dictates the structure of a market, which in turn has implications for the types of products offered, the degree of differentiation, the costs to consumers, and the barriers to entry for new competitors.

The number of producers or sellers in a given market explains a great deal about concentration in a given market. A market is concentrated if it is dominated by a limited number of firms. The lower the number of producers, the larger the degree of power each individual firm will wield. Highly concentrated markets usually lead to strong barriers to entry for new competitors. Historically, regulators have frowned on heavily concentrated markets, especially when the threat of anticompetitive behavior is a concern.

To determine buyer concentration from the perspective of the audience, one can review the latest audience ratings or circulation data. In evaluating a market media, economists are usually interested in two other forms of concentration: concentration of ownership and concentration of market share (Albarran, 2002).

Concentration of ownership refers to the degree to which an industry is controlled by individual firms. Bagdikian (2000) documents a continuing decline in the number of firms involved in the media industries based on a variety of different factors. Concentration of ownership is considered problematic for democratic societies as it could lead to a decline in diversity of expression.

Critics contend that as the media become more concentrated and less competitive, they not only yield greater economic power, but political power as well, through the control and dissemination of information. As such, U. S. and European regulators for many years attempted to limit concentration of control in order to maintain a diverse presentation of different views.

Theoretical Dimensions of Concentration

Albarran and Dimmick (1996) identified two categories of concentration in their analysis of the communication industries. Within-industry concentration is familiar to economists and regulators as it uses abstract labels (e.g. monopoly, oligopoly, etc.) to identify market structure.

A second category of concentration one must consider is across-industry concentration, increasingly recognized by media scholars (e.g., Bagdikian, 2000; Compaine & Gomery, 2000). Clearly, mergers and acquisitions impact both forms of concentration. In within-industry concentration, market leaders try to dominate the same industry, while in across-industry concentration a firm's behavior is directed toward control of businesses in aggregate industries. We see across-industry concentration as much more problematic when looking at large media conglomerates like Time Warner, Viacom, Disney, News Corporation or Bertelsmann, who operate in different horizontal markets and control considerable market share within these individual markets.

Albarran and Dimmick (1996) identified economies of multiformity as a strategic response behind increasing consolidation. The authors cited diversification efforts, repurposing of content, and the contracting of successful talent as a means to promote economies of multiformity.

Measuring Concentration. Different tools are used to measure concentration of market share within a particular industry. One simple approach, concentration ratios, compares the ratio of total revenues of the major players with the revenues of the entire industry, using the top four firms (CR4) or the top eight firms (CR8). If the four-firm ratio is equal to or greater than 50 percent, or if the eight-firm ratio is equal to or greater than 75 percent, then the market is said to be highly concentrated. Concentration ratios are helpful in conducting trend analysis, to determine changes over time. However, the ratios themselves are not sensitive to the individual power held by individual firms. For example, two different industries may have equal ratios, but the shares of the firms within each of the industries may differ greatly.

The CR4 and CR8 ratios have been frequently used to measure concentration within media industries. Owen, Beebe and Manning (1974) found the market for television programming concentrated. Picard (1988) examined the newspaper industry using daily papers in local markets and found evidence of high concentration. Chan-Olmsted and Litman (1988) found cable systems were moving towards increasing concentration. Other researchers have used concentration ratios to assess levels of concentration in media markets in other countries (Chen, 2002).

As Albarran and Dimmick (1996) articulate, concentration ratios can be applied to measure across-industry concentration. Researchers must identify the appropriate market share (e.g. revenue/turnover or circulation) of the top-four and eight firms across the various types of communication

industries compared to the total communication industry revenues. Using similar criteria, across-industry concentration would theoretically exist if the CR4 was equal to or exceeded 50 percent of total communication revenues or the CR8 was equal to or exceeded 75 percent of total communication industry revenues. Albarran and Dimmick (1996) point out that across-industry concentration measured in this way "would include revenue derived simply from being in different industries as well as revenues specifically derived from economies of multiformity" (p. 44-45).

The Herfindahl-Hirschman (HHI) Index, used by the Antitrust Division of the Department of Justice in the United States, is another tool to measure concentration in a market. The HHI is a more sophisticated than simple CR4 and CR8 ratios. The HHI is calculated by summing the squared market shares of all firms in a given market. The index is more accurate than concentration ratios, but to calculate the HHI one must have data on each firm contributing to total revenues in an industry. This can be problematic when trying to measure concentration in markets with multiple participants. For example, in the United States, there are hundreds of cable system operators, as well as newspaper publishers, making measurement of such industries very tedious.

One other tool to measure concentration is the Lorenz Curve (see Albarran, 2002). The Lorenz Curve assumes that in a market individual firm shares should be divided equally. Using data from a market, the researcher can plot the individual shares on a graph, illustrating the level of inequality (or curve) that exists in the market being examined. The utility of this approach lies in its graphical presentation, but the curve can be hard to interpret (Litman, 1985). Like the HHI, the larger the number of firms the more challenging to use this method as a means to measure concentration.

U. S. Media Industry Concentration Data

Media industry consolidation in the United States is the subject of continuing research by Albarran and Dimmick (1996) and Albarran (2003). In this paper, concentration ratios were used to measure across-industry concentration using the most currently available data (from 2001). Again, our purpose here is to observe trends regarding across-industry concentration as it exists in the United States.

In order to chart across industry concentration, we need data from the top 8 firms, as well as total communication industry revenues for the media segments under examination. This data is listed in Table 1.

Table 1: Top Eight Communication Industry Firms Based on 2001 Revenues*

Company	**2001 Revenues** (in millions)
Time Warner	$40,258
Viacom	18,814
Walt Disney	15,675
Sony	9,298
Bertelsmann	7,765
Thomson	7,027
Gannett	6,344
Hughes Electronics	6,304
Total Communication Revenues	**$168,404**

*Note: The table only considers data for the primary media industry segments. These include broadcast radio and television, television networks, cable and satellite systems, motion pictures, recorded music, and book, magazine and newspaper publishing.

Source: Veronis, Suhler & Associates, *Communications Industry Reports* (1995-2001).

The data from previous studies (Albarran & Dimmick, 1996; Albarran, 2003) measuring across-industry consolidation reported in 1995 and 1999 is listed in Table 2 along with the 2001 results.

Table 2. Across-Industry Concentration Measures (1995-2001).

Year	CR4 Ratio	CR8 Ratio
1995	.25	.40
1999	.42	.59
2001	.49	.66

Table 2 reports a growing trend in concentration of United States media sectors. In just five years, the share of the top 4 companies nearly doubled, while the share of the top 8 firms grew by 26 basis points. In other words, the top four companies control almost one-half of total communication industry revenues, while the top eight companies control 66 percent of total communication revenues.

In terms of total industry revenues, the communication industries as a whole continue a path towards increasingly higher concentration. Given the mergers of Vivendi's entertainment assets with General Electric's NBC unit, and News Corporations's acquisition of Direct TV, concentration will continue to go higher, and could be expanded further should Comcast acquire the Walt Disney Company. In summary, the data is very clear in describing the United States as an increasingly consolidated media market.

Media Concentration in Europe

To study media concentration across Europe, one needs to gather adequate statistical data. Each member state of the European Union has a particular political and legal system that influences the communication market. This means that gathering and analyzing data, as a single European unit is not an easy task. There are very few recent studies that examine and discuss media concentration (see Iosifides, 1997), but no single source provides a complete picture.

Sanchez-Tabernero (1993) and Sanchez-Tabernero and Carvajal (2002) provide an analysis of media industry concentration across the industry sectors and individual EU states. The authors employ industry data from various sources (primarily original research), since one single source of comparative industry data on the European level is not in existence. A report by the European Federation of Journalists (2003) identifies the threats of concentration especially to the Public Broadcasting Service and emerging markets of Eastern Europe, but provides no clear measures or data to support the claims. The European Audiovisual Observatory (2002) compiles the only publicly available comparative statistical data. According to the most recent edition of media statistics, the top 50 European companies in the global audiovisual sector had a share of 32.5% of the market while U. S. companies controlled 42.8% in 2000. The market share of US companies grew 6 percentage points (up from 36%) since 1996.

The reality is most European firms function in one national market. The largest European multinational company is Bertelsmann, with 24 TV stations and 14 radio stations in ten countries, which makes it the largest TV and radio group. The German-based company also holds stakes in content production, new media, magazine and book publishing, music and media services. Vivendi Universal tried to emerge as a second global media powerhouse, but finds itself in a diminishing role by merging its entertainment assets with General Electric's NBC unit.

Other big European media groups are unable to globalize their activities on a larger scale. Due to very segmented media markets with language differences, small size of the national markets, various socio-political traditions and the strong presence of local players, European media are not concentrated on an international level. We are witnessing increasing activities of top communication industry firms on the European markets[1]. Already existing studies of media concentration in individual EU[2] nation states have identified relatively strong monomedia concentration in most European countries where the position of market leaders is very dominant on one media market (Meier & Trappel, 1998). Such a situation exits in the newspaper market, (see Table 3), but also in the production of TV programming and top TV channels.

Table 3: Circulation Share of the Top 3 Newspaper Companies (2001)

Country	Circulation share of top 3 newspaper companies for selected countries (2001)
Finland	46
The Netherlands	88
Sweden	85
Switzerland	71
United Kingdom	60
France	41
Ireland	66
Germany	35
Italy	43
Spain	53

Source: Deutsche Bank Media Research, March 2002.

Most European media industry sub-sectors are strongly concentrated at the national level. Among the most concentrated industries are daily newspapers, cable and satellite TV (European Federation of Journalists, 2002; Sanchez-Tabernero and Carvajal, 2002). As in the U. S., growing media concentration within national borders in Europe is seen as a threat to media pluralism, diversity and quality of journalistic work.

Regulating Media Concentration in Europe

The media industry sector in the European Union is seen as fundamental importance for democracy, freedom of expression and cultural pluralism as well as contributing to technological

[1] Some examples include Time Warner openeing new theme park near Madrid, MTV Networks Europe expanded its offer of local versions in every European country, etc.

[2] For an overview of media concentration literature in European states see Sanchez-Tabernero and Carvajal, 2002.

innovation, economic growth, employment, and functioning as a single market (Commission of the European Community, 1994). The audiovisual sector[3] is set to play a considerable role in realizing the objective set out at the Lisbon summit of making Europe the most dynamic, knowledge–based economy in the world (European Parliament, 2003).

The directive Television without Frontiers (TwF) laid the main foundation of EU audiovisual policy in 1989, before new media technologies emerged. Its revision in 1997 brought clarification and new rules, but the scope and extent were not fundamentally altered. In 2002 new initiatives were proposed and currently many European bodies are at work preparing new proposals that will be discussed during the revision process. Public consultation with the aim of establishing the specific needs in order to update the directive was held in Brussels in 2003. Concluding these meetings the European Commission proposed a detailed comparative study on regulatory measures in the media sector. This study and discussion about necessary changes in the directive are scheduled for 2005, together with the 3rd European Audiovisual Conference. We can expect that the topic of regulating and measuring media concentration in Europe will be a prominent issue over the next couple of years.

The main objective of TwF is to promote the free movement of European television programs within the internal market as well as promote the development of the European audiovisual industry. But the problem of concentration of media ownership is also regulated by competition regulation (Council regulation no. 4064/89) on the control of concentration. By the same token, cooperation between European broadcasters and producers is encouraged within the measurers of MEDIA Plus program – set of activities prepared by the European Commission to help overcome European fragmentation of markets, insufficient size of companies, low rate of cross border program distribution and the like.[4] Media concentration, in this case, is considered as an appropriate means for overcoming the continuously growing media trade deficit with the U. S. and lost audiences for European films.[5] The EU policy towards media concentration lacks internal coherence and consensus how the concentration within media industries should be measured.

Although the single regulatory pattern does not emerge across Europe, generally speaking it could be sustained that controlling more than of one-third of the television market is deemed as a limit in many member states. This means that a minimum level of diversity implies having at least three nation-wide broadcasters. In several smaller states the foreign channels received are a means of contributing to pluralism.

The current situation in Europe favors transnational media conglomerates, while small and medium enterprises are bound by (in some cases) very strict national legislation. Increasing competition and non-transparent transnational ownership structures contributed to the use of antitrust legislation among legislators in the European states. In many states, an audience share approach is being employed. This reflects the real influence of a company in a relevant market, and at the same time it is neutral to the number of licenses which one broadcaster can hold and allows its international development. Some countries have recently been considering the introduction of media ownership regulatory model based on a general clause of investigation in media sector. A Media Concentration Committee in Sweden made a proposal to the Government, suggesting that mergers and acquisitions of media companies should be

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[3] In the EU terms media industry is described by term „audiovisual sector" which comprises of film, TV, radio, home video and other forms of audiovisual production, broadcasting as well as manufacture of audiovisual supports like video casettes, DVDs etc.(European Audiovisual Observatory 2002)

[4] The Europe wide support programme for the media industry aims to spend 400 million Euro between 2001-2005 to encourage the development, distribution and promotion of European audiovisual works

[5] In 2002 the EU/US the deficit in trade of audiovisual programmes reached record 8 billion EUR (European Audiovisual Observatory 2002)

subject to both competition legislation and to specific Media Concentrations Act. Such solution would provide a mean of possible prohibition of mergers that impede free exchange of opinions and comprehensive information. Table 4 summarizes the policy efforts on television, foreign capital, and media ownership across selected countries in Europe.

Table 4: Overview of Media Ownership Rules in European States

Country	TV regulation	Foreign capital regulation	Media ownership
Austria	Limit on number of licenses (up to q analogue and 2 digital in a given area) No cross ownership of press/radio/cable infrastructure and TV license	Limit on number licenses Foreign ownership limit for out of EEA area (max 49%)	
Belgium	Flemish part: - regional broadcaster – only non-profit organizations - limit on number of licenses (max 1) - political ties limited In Francophone part: - limit on number of licenses (max. 1) - political ties limited - no cross ownership cable and TV	None	Normal merger control rules Francophone part: - limit on single ownership of TV (24%)
Denmark	Requirement of local residents in the TV boards	No restrictions	Normal competition law applies
Finland	No restrictions	No restrictions	No restrictions
France	Limits on terrestrial TV and Satellite TV licenses, audience share limit Cross ownership limits	Foreign ownership limit for non EEA –max 20 % share	Many specific limit on ownership
Germany	Regulated at regional level Audience share limit, cross ownership restricted	No restrictions	
Greece	Cross media-ownership restricted	Foreign ownership limit for non EU –max 25 % share	Limit on ownership of TV station – max 25 % stake.
Holland	Cross media ownership restricted, audience share limits	No restrictions	
Ireland		No restrictions	Limit on ownership of TV station – max 27 % stake.
Italy	Maximum advertising revenue – 30% of the market Cross media ownership limits	Restrictions in favor of Italian nationals	Ownership limit – 20%
Norway		No restrictions	Special council decides if the dominant positions “jeopardize the general concept of pluralism”

Spain	Restrictions on horizontal cross ownership.	No restrictions since 1999	Normal competition law applies
Sweden	No restrictions	No restrictions	Normal competition law applies Media concentration committee proposes the bill on specific anti concentration measures.
United Kingdom	Audience share limit (15 %), Cross media ownership limits		

Source: Credit Suisse/First Boston research, Council of Europe

Given the variety of ownership rules throughout Europe, it is unrealistic to consider the current regulatory framework as a common policy towards media concentration. It would be good to see a development towards clear definitions and measurements of media ownership and concentration. The up-to-date collection and public access to economic information on media firms operating in Europe is absolutely necessary. Only by securing appropriate data on media concentration can the goals of pluralism be possible. Such data should be collected and used in monitoring and as the basis for regulation and control of media concentration.

Discussion and Conclusions

This paper illustrates the problems in trying to measure concentration in both the United States and the European Community. In the United States, data is easier to acquire due to the public reporting required of American-based companies. However, the data is not always accurate, as many corporations make adjustments months and even years after financial performance results are reported. Add to that the problems encountered with corporate accounting standards in the U. S. that were first detailed in the summer of 2002, all leaving researchers questioning the validity of the data at hand.

The situation is also confusing in Europe. Each nation treats concentration differently, and follows different guidelines. Even though regulators hope to position Europe as a common market, the reality is there is no effective way to measure concentration across the European Union. Data is hard to find, and in some cases, does not even exist. Nor is there agreement over the types of measures to use in assessing concentration among European nations. Concentration ratios, the HHI, and the Lorenz Curve are not recognized as usable instruments across the European nations.

Measuring concentration, and having agreed upon measures and methodologies to gauge concentration, is an important need of media economics researchers. Clearly, greater collaboration is needed among governments representing the U. S. and the EEU to identify common data sources and methods because the same large companies (e.g., Time Warner, Viacom, NBC Vivendi, News Corporation, Sony, etc.) are operating in both continents and across markets. Likewise, media economics researchers can help in this process by helping clarify and identify the challenges of measuring concentration, both within and outside domestic borders.

Without such agreement and collaboration, as this paper illustrates, researchers can only provide an anecdotal picture of concentration in comparing the United States and the European nations. In the

21st century, we should expect more out of our research and strive for more sophisticated and quantifiable means of dealing with this important subject so central to understanding media firm conduct, behavior, and performance, and how these media firms impact society at local, domestic, and global levels.

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