The Future of Journalism and Public Media:
Toward a Comprehensive Theory of Market Failure and Public Policy Responses

Mark Cooper
Fordham University

Follow this and additional works at: https://fordham.bepress.com/mcgannon_working_papers
Part of the Journalism Studies Commons, and the Mass Communication Commons

Recommended Citation
https://fordham.bepress.com/mcgannon_working_papers/28

This Article is brought to you for free and open access by the Donald McGannon Communication Research Center at DigitalResearch@Fordham. It has been accepted for inclusion in McGannon Center Working Paper Series by an authorized administrator of DigitalResearch@Fordham. For more information, please contact considine@fordham.edu.
THE FUTURE OF JOURNALISM AND PUBLIC MEDIA:
TOWARD A COMPREHENSIVE THEORY OF MARKET FAILURE AND PUBLIC POLICY RESPONSES*

Mark Cooper
Affiliated Scholar
Donald McGannon Communication Research Center

October, 2010

The Donald McGannon Communication Research Center
Faculty Memorial Hall, 4th fl.
Fordham University
Bronx, NY 10458
718.817.4195
www.fordham.edu/mcgannon
mcgctr@fordham.edu

*Forthcoming in Robert McChesney & Victor Pickard, eds. Will the Last Reporter Please Turn out the Lights: The Collapse of Journalism and What Can Be Done To Fix It. (New York: The New Press); Research Assistance provided by R. Jamil Jonna
INTRODUCTION

Summary of the McChesney-Nichols Argument

The question of “How to save Journalism?” is a front burner issue, as major metropolitan dailies, like the Rocky Mountain News and the Philadelphia Inquirer implode. Calls for bailouts have gone up even from critics of the industry, to save the jobs of journalists, while the industry is calling for a further relaxation of limits on media ownership so they can merge newspapers and television stations exemptions from the antitrust laws so they can coordinate the availability of content online.

Before policy makers spend a lot of public money or weaken important public policies, we should ask some tough questions. Why should we “save” “journalism?” What is the problem with the newspaper business? Will saving newspapers save journalism? Will allowing mergers solve the economic problem or improve the quality of content?

In The Death and Life of American Journalism\textsuperscript{1}, McChesney and Nichols use a framework they have applied for decades to develop an account of the current crisis in journalism and the policy responses that flow from it that is dramatically different from the dominant framing we hear in the media and public policy debates.\textsuperscript{2} Their account commands attention because it is grounded in a long-term, structural explanation of the secular decline of journalism in America.\textsuperscript{3}

\textit{Death and Life} argues that the seeds of disaster were sewn during more robust economic times because of a misguided business model. Quality journalism was undermined by the commercial, corporate business model that sought to squeeze high rates of profit out of highly concentrated markets by pressuring variable costs – reporters – to produce more with less. As the quality of the product declined, so too did the value of the business. Thus the root cause of this decline is the concentrated, commercial mass media business model, not the rise of the Internet or the advent of television.

As long as the business model was still robust, it was difficult to have a debate about how this under-investment resulted in inadequate journalism, particularly in an age when a belief in “market fundamentalism”\textsuperscript{4} stressed economic success above all else. The media sector was a particular target of market fundamentalism, symbolized early on by Mark Fowler’s 1982 statement -- as Ronald Reagan’s first Federal Communications Commission Chairman -- that “A TV is just a toaster with pictures” in an article entitled “A Marketplace Approach to Broadcast Regulation.”\textsuperscript{5} Behaving like a toaster with pictures, even during periods of economic expansion, the commercial mass media failed to invest adequately in quality journalism. McChesney and Nichols argue that with the faith in market fundamentalism recently shaken by the financial meltdown, the bursting of economic bubbles, the collapse of the commercial mass media business model and other scandals\textsuperscript{6}, the broader issues of quality journalism can no longer be ignored. The account offered by McChesney and Nichols must be confronted and a far reaching debate over quality journalism can begin.
Purpose of the Paper

This paper seeks to elaborate on the McChesney-Nichols argument by offering a broader analysis of market failure in the media sector. It adds several layers of conceptual refinement and empirical evidence. We have elsewhere reviewed the large literature and empirical evidence supporting this view. McChesney and Nichols present a great deal of new, qualitative evidence in their most recent book. The purpose of this paper is to sharpen the conceptual framework, to provide key pieces of empirical analysis that demonstrate the critical conceptual points and to provide a traditional framework that may be more familiar to policymakers, which may enable them to recognize and become comfortable with the new direction of policy that is necessary to ensure a robust journalistic sector henceforth.

In the next section, we refine the distinction between the role of the media in the polity and the economy, elaborate on the causes and measurement of the failure of the 20th century commercial, corporate mass media model, and distinguish between the role of the media as a 4th estate and a 5th estate. We then provide new data to reinforce the conceptual conclusions above, as well as the earlier analysis of McChesney and Nichols. We include more precise measures of the failure of the commercial mass media to invest in the journalism that society needs and wants and an examination of the impact of the growth of digital media on the commercial mass media. The conclusion integrates the conceptual and empirical discussions as a framework for understanding the policy recommendations made by McChesney and Nichols.

CONCEPTUAL FRAMEWORK

The Role of Journalism in Society

Industrial organization analysis traditionally starts with product and geographic market definitions, but an under-appreciated aspect of this approach is to start with basic conditions. “What exactly is the nature of the product being produced?” Here, the important point is that the value of quality journalism lies in the polity, not the economy. The role of the 4th Estate is to help to produce good government (see Figure 1). Quality journalism is the tool that it uses to do so. Generally, this is accomplished by monitoring the other estates in society – political, economic and social.

The Monitorial role is probably the most widely recognized and least controversial in terms of conventional ideas about what the press should be doing, as seen by the press itself, its audiences, and various sources and clients. It refers to all aspects of the collection, processing, and dissemination of information of all kinds about current and recent events, plus warnings about future developments. Some comment and interpretation is appropriate.
Figure 1: Reinforcing and Expanding the McChesney/Nichols Case for Public Support for Quality Journalism

<table>
<thead>
<tr>
<th>The Polity</th>
<th>The Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>McChesney/Nichols</td>
<td>McChesney/Nichols</td>
</tr>
<tr>
<td><strong>Additional Support</strong></td>
<td><strong>Additional Support</strong></td>
</tr>
</tbody>
</table>

**Key Premises**

- 4th Estate plays a vital role in democracy
- Quality journalism is an externality and public good in a commercial system
- Market imperfections are pervasive, market failure inevitable

**Policy Implication**

- Quality journalism deserves public support
- Quality journalism needs public support
- Failure to support measured by audience
- Failure to support measured by Function

**Evidentiary Support**

- Founding Fathers and early Republic
- 20th Century jurisprudence
- Tying policy to market failures
- Collapse of concentrated, commercial business model
- Economics of collapse & revival
- Inability of cyberspace to produce quality journalism

Main Page References:
(a) pp. 148-155, 214
(b) pp. 27-43, 101-108.
McChesney and Nichols launch their argument by noting that the Founding Fathers were convinced of the importance of the press, so much so that they not only attested to its importance in their writing -- memorialized it in the First Amendment -- but also favored the press with massive subsidization of distribution costs in the early Republic. It was not until much later that commercialization turned the press into the media and the tension between its roles in the polity and its economic underpinning became apparent.

The core concept of the monitorial role involves the journalist as a neutral watchdog, rather than a partisan participant, holding social, economic and political actors to account by presenting facts rather than advocating positions and offering opinions. Journalists inform the citizenry about the activity in the polity, the economy and society more broadly. This framing places a spotlight on investigative journalism. Reporting is not just a recording of an eyewitness account. It involves probing beneath the surface of that account, juxtaposing inevitably conflicting accounts and editing the result into a coherent story. Although some explicit editorializing, based on quality journalism, is part of the monitorial role, it is not just an opinion either. There are always tensions, as journalists are humans and inevitably have a perspective. Journalism tends to set the agenda based on what it devotes attention to. Quality journalism does not claim that there is no perspective in the reportorial process. Rather, it seeks to control the impact of this perspective.

Over the course of two centuries, this basic recognition of the social value of the press beyond its economic value persisted. These concepts were expressed for the industrial age in a seminal, antitrust case before the Supreme Court – the U.S. v. Associated press – in which a dominant journalistic enterprise was challenged. Justice Frankfurter’s concurrence states the proposition as forcefully as any:

*Truth and understanding are not wares like peanuts and potatoes. And so, the incidence of restraints upon the promotion of truth through denial of access to the basis for understanding calls into play considerations very different from comparable restraints in a cooperative enterprise having merely a commercial aspect.*

**Distinguishing the 4th Estate from the 5th Estate**

While the monitorial role of the press has been the focal point of thinking, a secondary role has been recognized – the participatory role.

*The facilitative role... is not prominent in the literature... The theory of the public sphere has also identified the media as an essential element. That theory refers primarily to journalism that is deliberately practiced as a means of improving the quality of public life and contributing to deliberative forms of democracy... It is designed to widen access and promote active citizenship by way of debate and participation.*

We refer to this role as the 5th estate for ease of reference and because the concept is being applied to the impact of the Internet on the contemporary media landscape. It is generally hoped that monitoring society and informing the public will get them to act, but mobilizing is a different kettle of fish. This type of activity predominates in cyberspace because the medium is naturally suited to do this.
More generally, the networks comprising the 5th Estate have two key distinctive and important characteristics: 1. the ability to support institutions and individuals to enhance their ‘communicative power’... by affording individuals opportunities to network within and beyond various institutional arenas. 2. The provision of capabilities that enable the creation of networks of individuals which have a public, social benefit (e.g. through social networking websites).

Our use of the term “5th estate” has similarities and differences with the use Dutton makes of the term above. We agree that the emergence of the 5th estate stems for the dramatic expansion of access to information and the ability to communicate across institutional and geographic boundaries. We disagree with the suggestion that the 5th estate can supplant the 4th estate. Interestingly, the only other reference to the explicit use of the term 5th estate that Dutton makes is to a web site that adopted the name. The web site described itself as serious and satirical commentary and appears to be defunct (with no entry after July 2009). This example underscores the two characteristics of the 5th estate that distinguish it from the 4th estate. It is largely commentary and its durability over time at the level of individual organizations is suspect. Others have argued that the 5th estate is necessary to monitor the 4th estate. Ironically, if the 4th estate were doing a better job, the need for and role of the 5th estate in this regard would be reduced, but its broader role in democratic discourse would continue.

This is the view that McChesney and Nichols take. They point out that the ratio of opinion to fact in the media of the 5th estate is much higher than the 4th estate. Few resources are devoted to collecting and reporting news and much of the news that is disseminated has its origin in the work of the 4th estate. After discussing the crisis of the 4th estate in the implosion of the consolidated, industrial business model of the media, McChesney and Nichols devote a great deal of attention to explaining why the emerging 5th estate is not likely to fulfill the functions of the dwindling 4th estate. Indeed, without a vigorous 4th estate, the 5th estate can become an echo chamber in which opinions are never challenged or tested by factual accounts.

Figure 2 depicts the public sphere along three dimensions. The first is whether the discourse is private or public. The second is whether the discourse is autonomous (direct) or mediated. The figure seeks to highlight two changes in the public sphere that are taking place as a result of spread of digital technologies. First the public sphere has expanded. The ability of people to engage in autonomous and mediated conversations has increased and the nature of the mediation has changed, with control located much closer to the speaker. Second, the primary expansion has come in the area of 5th estate activities. Third, the role of the mass media has declined much more on a relative basis, but not on an absolute basis.

As described in Figure 2, cyberspace activity is much better suited to fulfilling the 5th estate functions of participation, which helps to explain why cyberspace is not likely to fulfill the monitory function of the 4th estate. Once we recognize the distinction between the 5th estate and the 4th estate, we resolve apparent conflicts between policies that are intended to strengthen the 4th estate and policies that strengthen the 5th estate. Policies that enhance the
Figure 2: The Expanding Digital Public Sphere and the Need for Policy

**20th Century Public Sphere**

- **Private**
  - Dinner Table
  - Backyard Fence
  - Water Cooler
  - Street Corner

- **Social- NGO**
  - Church
  - PTA
  - Union Hall
  - Civic Assoc.

- **Public Media**

- **Mass Push Media**

**21st Century Public Sphere**

- **Private**
  - Dinner Table
  - Backyard Fence
  - Water Cooler
  - Street Corner

- **Social- NGOs**
  - Church
  - PTA
  - Union Hall
  - Civic Assoc.

- **Structured Viral Communications**
  - Coordinated/
  - Networked
  - Cooperation

- **Alternative Media**
  - Posts
  - Wikis, etc.

**Public Media**

**Structured Viral Communications**

**Alternative Media**
5th estate function do not solve the 4th estate problems. The need to reform the commercial media, to prevent dominance over the 4th estate functions, and to support public media in creating an institution that is genuinely devoted to quality journalism remain concerns because the commercial media are still extremely important in the mediated segment of the emerging public sphere.

**Causes of Market Failure**

McChesney and Nichols frame the failure of the market to produce adequate quality journalism as a market failure that is well recognized in neoclassical economics, an externalities and public goods problem. Positive externalities are values created by a product that are difficult for the private producers of those products to capture in a transaction. Since journalism, accountability, and the general consciousness of accurate information are all benefits to society that cannot be captured or monetized, the private sector does not invest sufficiently to produce them and society is denied their value. Good government is such a value. Public goods have unique characteristics that make them unlikely to be produced by the private sector in sufficient amounts. They are non-rival; the fact that one person enjoys the good does not mean that a second person is denied the benefits of the good means that they are produced (i.e. they are not “scarce” in the classic economic sense). They are also non-excludable; it is difficult to deliver the benefit to one person and exclude others from enjoying the benefits as well (i.e. they suffer from a free rider problem).

The analysis of market failure need not rest on externalities/public goods alone, however. McChesney and Nichols add a structural element to their framework. The industry became highly concentrated and vertically integrated, which led to a dramatic reduction in competition. Excused from competition, the industry is less responsive to consumer demand and used its market power to influence demand, failed to innovate and dissipated economic rents in inefficient and socially unproductive ways. The monopoly and oligopoly situation created perverse incentives to squeeze profits by cutting quality rather than investing in productivity.14

Figure 3 summarizes a comprehensive framework of market failure based on a broader critique of market fundamentalism. The critique of neoclassical economic theory on which it rests identifies five broad categories of market failure.15 We can find examples of market failure that afflict the 20th century model of concentrated commercial, corporate mass media in each of these categories:

<table>
<thead>
<tr>
<th>Societal Failures</th>
<th>Externalities/Public Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Flaws</td>
<td>Concentration/High short term profit demands</td>
</tr>
<tr>
<td>Endemic Problems</td>
<td>Conflicts of interest, Perverse incentives</td>
</tr>
<tr>
<td>Transaction costs</td>
<td>High costs of physical distribution</td>
</tr>
<tr>
<td>Behavioral problems</td>
<td>Misperception of value of civic discourse</td>
</tr>
</tbody>
</table>

The power that media concentration confers on owners and the perverse incentive that advertising introduces into the selection of content have long been identified as problems in
Figure 3: A Comprehensive Framework for Identifying Causes of Market Failure

<table>
<thead>
<tr>
<th>Neo-classical and Traditional Industrial Organization</th>
<th>Keynesian, New Institutional &amp; Behavioral Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIETAL FLAWS</strong></td>
<td><strong>ENDEMIC IMPERFECTIONS</strong></td>
</tr>
<tr>
<td>Externalities:</td>
<td>Capital</td>
</tr>
<tr>
<td>ICE problems</td>
<td>Maldistribution</td>
</tr>
<tr>
<td>Price discrimination</td>
<td>Insufficiency</td>
</tr>
<tr>
<td>Entry barrier</td>
<td>Asymmetric Information</td>
</tr>
<tr>
<td>Bargaining</td>
<td>Perverse Incentives</td>
</tr>
<tr>
<td>General Purpose Technology</td>
<td>Conflict of Interest</td>
</tr>
<tr>
<td>Producer surplus</td>
<td>Ownership</td>
</tr>
<tr>
<td>Consumer surplus</td>
<td>Agency</td>
</tr>
<tr>
<td>Prosumers</td>
<td>Transfer</td>
</tr>
<tr>
<td>Network Effects</td>
<td>Limited payback</td>
</tr>
<tr>
<td>Direct</td>
<td>Lack of premium</td>
</tr>
<tr>
<td>User</td>
<td>Moral Hazard</td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
</tr>
<tr>
<td>Cross platform</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
</tr>
<tr>
<td>Applications</td>
<td></td>
</tr>
<tr>
<td>Public Goods</td>
<td></td>
</tr>
<tr>
<td>Basic research</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Learning-by-doing</td>
<td></td>
</tr>
<tr>
<td>Learning-by-using</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td><strong>INDUSTRY STRUCTURE</strong></td>
<td><strong>TRANSACTION COST</strong></td>
</tr>
<tr>
<td>PROBLEMS</td>
<td>Friction</td>
</tr>
<tr>
<td>Imperfect Competition</td>
<td>Switching costs</td>
</tr>
<tr>
<td>Concentration</td>
<td>Sunk costs</td>
</tr>
<tr>
<td>Barriers to Entry</td>
<td>Lifetime</td>
</tr>
<tr>
<td>Scale</td>
<td>Risk &amp; Uncertainty</td>
</tr>
<tr>
<td>Vertical Leverage</td>
<td>Technology</td>
</tr>
<tr>
<td>Collusion</td>
<td>Marketplace</td>
</tr>
<tr>
<td>Marketing</td>
<td>Policy</td>
</tr>
<tr>
<td>Bundling: Multi-attribute</td>
<td>Financial</td>
</tr>
<tr>
<td>Gold Plating</td>
<td>Liability</td>
</tr>
<tr>
<td>Inseparability</td>
<td>Imperfect Info.</td>
</tr>
<tr>
<td>Purchase Method</td>
<td>Availability</td>
</tr>
<tr>
<td>Advertising</td>
<td>Accuracy</td>
</tr>
<tr>
<td>Regulation &amp; Policy</td>
<td>Search Cost</td>
</tr>
<tr>
<td>Price Distortion Avg-cost</td>
<td></td>
</tr>
<tr>
<td>Permitting</td>
<td></td>
</tr>
<tr>
<td>Other Distortions</td>
<td></td>
</tr>
<tr>
<td>Cost Level</td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td></td>
</tr>
<tr>
<td>Product cycle</td>
<td></td>
</tr>
<tr>
<td>Disaggregated/fragmented Mkt.</td>
<td></td>
</tr>
<tr>
<td>Elasticity</td>
<td></td>
</tr>
<tr>
<td>Own-price</td>
<td></td>
</tr>
<tr>
<td>Cross-price</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td></td>
</tr>
<tr>
<td>Emergency replacement</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
</tr>
<tr>
<td>Improper installation</td>
<td></td>
</tr>
<tr>
<td>Lack of enforcement</td>
<td></td>
</tr>
<tr>
<td><strong>BEHAVIORAL FACTORS</strong></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
</tr>
<tr>
<td>Preference</td>
<td></td>
</tr>
<tr>
<td>Custom</td>
<td></td>
</tr>
<tr>
<td>Values &amp; Commitment</td>
<td></td>
</tr>
<tr>
<td>Social group &amp; status</td>
<td></td>
</tr>
<tr>
<td>Perception</td>
<td></td>
</tr>
<tr>
<td>Prospect</td>
<td></td>
</tr>
<tr>
<td>Framing</td>
<td></td>
</tr>
<tr>
<td>Loss Avoidance</td>
<td></td>
</tr>
<tr>
<td>Status Quo</td>
<td></td>
</tr>
<tr>
<td>Salience</td>
<td></td>
</tr>
<tr>
<td>Social Influence</td>
<td></td>
</tr>
<tr>
<td>Awareness</td>
<td></td>
</tr>
<tr>
<td>Attention</td>
<td></td>
</tr>
<tr>
<td>Low priority</td>
<td></td>
</tr>
<tr>
<td>Calculation</td>
<td></td>
</tr>
<tr>
<td>Bounded rationality</td>
<td></td>
</tr>
<tr>
<td>Ability to process info</td>
<td></td>
</tr>
<tr>
<td>Limited understanding</td>
<td></td>
</tr>
<tr>
<td>Heuristic Decision Making</td>
<td></td>
</tr>
<tr>
<td>Rules of thumb</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Discounting</td>
<td></td>
</tr>
<tr>
<td>Low Probability Events</td>
<td></td>
</tr>
<tr>
<td>Long-Term</td>
<td></td>
</tr>
<tr>
<td>Small Outcomes</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
</tr>
<tr>
<td>Improper use &amp; maintenance</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
</tbody>
</table>
the media sector. There is strong support in the mainstream literature on media market performance for the proposition that specific groups (minorities, small groups, small places) will be systematically underserved, even by “efficient” markets, where there are high fixed costs. This is exactly the problem of centralized commercial mass media which exhibits high transaction and production costs. Contemporary analysis has gone even further in the analysis of bias. It turns out that competition is no guarantee of good performance, since commercial interests have a perverse incentive (from the point of view of quality journalism) to pander, rather than inform. Finally, consumers may not value civic content.

EMPIRICAL ADDITIONS

Failure to Meet Society’s Needs for a Vibrant 4th Estate

How many journalists do we need? How much journalism does society want? Why is the amount we have of each not enough? The answers to these questions are highly subjective. For the purposes of this analysis, we examine the trends of resources devoted to journalism across time, compared to the task that journalism faces as the 4th estate. Starting from the monitory view of quality journalism, we suggest that the magnitude of the task facing journalism reflects more than just the size of the population that has to be reached, which was the primary measure used by McChesney and Nichols, but also its diversity. More importantly, the 4th estate must cover corporations, the economy and government, all of which have grown more rapidly than the population. Therefore, we propose a number of measures of the activity in those arenas that suggest that the task has grown much more rapidly and expansively than a simple calculation of journalists per capita. We have calculated the ratio of the number of journalists to the activity they must cover and the audience they must reach.

Population Diversity

Using 1970 as the base year, we find a massive under-investment in journalism (see Figure 4). The number of journalists did not grow anywhere nearly as quickly as the size and complexity of the audience they had to reach or the issues they had to cover. McChesney and Nichols measured the number of journalists per capita starting in 1980 and found a sharp decline. By moving the starting point back a decade, we find that there had been growth between 1970 and 1980, so the number of journalists compared to the size of the population was about the same at the beginning of the period (1970) as at the end (2010). However, when we factor in the growing diversity of the population, we find a much bigger challenge, relative to the U.S. population, than McChesney and Nichols did. The U.S. population was much more homogeneous in 1970 than 2010, both in terms of its ethnic makeup and the household arrangements in which people lived.

Activity to be Monitored

When we approach the issue from the perspective of the activities that journalists must cover, the deficit become even greater. The amount of activity has changed even more
Figure 4: Ratio of Journalists to Population

![Graph showing the ratio of journalists to population from 1970 to 2010.](image)

Source: Statistical Abstract, various issues: 2009, examples, Table 8 and 58.

The number of corporations doubled compared to the number of journalists and their size increased fivefold. Foreign ownership increased 25 fold.

Figure 5: Ratio of Journalists to Corporate Activity (Real Values)

![Graph showing the ratio of journalists to corporate activity from 1970 to 2010.](image)

Source: Statistical Abstract, various issues; 2009, examples, Tables 731 and 1249.
We observe similar levels of expansion in the economy and the economic assets of households (see Figure 6). Ironically, the growth of government measured by the work force, about which there is so much complaining, was somewhat slower than the growth of economic activity (see Figure 7). Nevertheless, measured by the size of federal, state and local budgets, the number of journalists declined. It should be noted here that our index is based on the total number of journalists, not those assigned to cover governmental activities. The share of statehouse reporters declined over the period, so the deficit in coverage was even greater than these figures indicate.²¹

Figure 6: Ratio of Journalists to Economic Activity (Real Values)

![Figure 6](image_url)

Source: Statistical Abstract, various issues; 2009, examples, Tables 645, 1129, 1150, 1152, 1246.

Figure 7: Journalists to Government Activity

![Figure 7](image_url)

Misuse of Revenue

Shifting the base to 1970 helps to make another point (see Figure 8). The failure to add journalists to keep pace with the expanding challenge of coverage was not for lack of resources. The commercial model took profits out rather than reinvest in journalism. As shown in Figure 8, advertising revenue net of circulation costs, a good measure of resources that could have been devoted to beefing up newsrooms, increased dramatically from 1970 through 2000, faster than Gross Domestic Product. If the newspapers had increased the number of journalists at the same rate as their advertising revenue was increasing there would have been twice as many journalists (120,000 compared to 60,000). If they had increased only as fast as GDP, there would have been 50 percent more journalists (90,000 compared to 60,000). The deficit in reportorial resources would have been much smaller. Thus, shifting the time frame underscores the fact that during times of economic boom the corporate model in journalism failed to devote the resources necessary to maintain the base of journalism. The key implication is that even restoring the resource base will not solve the problem. Moreover, as we explain below, the commercial model is not likely to restore the resource base. Therefore, providing a vigorous 4th estate requires a fundamental shift in approach.

Figure 8: Trends in Print Ad Revenue, GDP and Print Journalists

Source: Newspaper Association of America, Trends and Numbers.

Failure to Fulfill Society’s Wants

The declining ability of the concentrated commercial business model to fulfill the 4th estate function was driven in part by the pursuit of audiences, which lies at the core of the
commercial model. The profit taken out of the enterprise retarded the investment in quality journalism. The problem is magnified from the point of view of democratic discourse because the resources left in journalism were misdirected. The media does not serve the needs of all members of society equally; it serves the members of the audience most valued by the advertisers best and delivers the content that the advertisers think will generate sales. Certain types of coverage (hard news) do not attract the audiences that the advertisers want.

Figure 9 demonstrates this proposition for the issue that is most central to this analysis

**Figure 9: The Gap Between Social Value and Commercial Value of Civic Discourse**

![Graph 1: Civic Engagement (Voter Turnout) v. Advertiser Interest](image)

*Index 35-44 = 1*

\[ y = 0.2831x + 0.1383 \]

\[ R^2 = 0.9939 \]

\[ y = -0.1457x^2 + 0.8783x - 0.32 \]

\[ R^2 = 0.9742 \]

![Graph 2: Avid News Use v. Advertiser Interest](image)

*Index 50-64 = 1*

\[ y = 0.0659x + 0.5231 \]

\[ R^2 = 0.9414 \]

\[ y = -0.0451x^2 + 0.5021x - 0.3361 \]

\[ R^2 = 0.7879 \]

Sources: Statistical Abstract (Table 406), for voter turn-out, Entertainment Industry Economics for advertiser spending; Pew Internet and American Life (Understanding the Participatory News Consumer, March 1, 2010) for Avid News Interest
– civic participation. The half of the population that is most engaged civically, as measured by its voter turnout, is severely undervalued by the advertisers. The population groups that are most avid followers of news are not those most highly prized by advertisers.

**Figure 10:**

![Graph showing Inadequate Coverage of Issues](image)

*Source: Pew Internet and American Life (Understanding the Participatory News Consumer, March 1, 2010)*

To make matter worse, the media not only targets a specific subgroup of the population that advertisers value, but it does so with particular types of programming -- mainly sports -- that target the males in the most valued age groups (see Figure 10). A third or more of the respondents to a large poll on news said there was not enough coverage of a number of topics, including international news, domestic policy, state government and the local community. If advertisers undervalue both the people and types of content that are most vital to civic discourse, then commercial media will never fill the need of society for quality journalism.

Launching the analysis from the functioning of the polity points to another source of concern brought out by this data. Between one-third and four-fifths of the people do not turn out to vote and between one-quarter and two-thirds are not avid news followers. While it can be argued that society does not need more of its citizens to be engaged, it is at least as plausible that the lack of engagement is a behavioral source of market failure. Assuming that the group that values civic discourse most is the best we can hope for, we can identify two sources of deficit in the valuation of civic discourse (as shown in Figure 11). The gap between 100 percent and the percent in the highest group can be considered the externality or public good gap. The gap between the “best” group in society and the rest of society can be
considered the perception problem. Both of the gaps are substantial. Each requires a different policy to remedy the problem.

**Figure 11: Two Deficits in the Valuation of Civic Discourse**

![Figure 11: Two Deficits in the Valuation of Civic Discourse](image)

Source: See Figure 9.

**DIGITAL DISINTERMEDIATION AND THE FUTURE OF JOURNALISM**

The previous discussion explored aspects of the failure of the commercial mass media business model to produce quality journalism, which includes one key cause of the economic decline – deterioration of quality due to downsizing of the journalistic core. The recent precipitous decline in newspaper revenues stems from a different source. In order to understand the current crisis and potential solutions it is critical to have a clear picture of exactly what is occurring.

Digital disintermediation – the process of removing or weakening the intermediaries that stand between the creation of content and the delivery of content to the public – is frequently “blamed” for the decline of the media. While there are some respects in which this is true, the popular framing of the proposition misses the most important point: that inefficiency, not piracy, has undermined the concentrated, commercial model. Digital disintermediation has different effects on different aspects of the journalism and media space. It dramatically weakens the commercial mass media business model, the focal point of the 4th estate in the 20th century, while strengthening and facilitating citizen participation in the 5th estate, the focal point of the 21st century. The question is how to solve the problems of the 4th estate while encouraging the positive outcomes of the newly empowered 5th estate.
The digital revolution is having two profound effects on the commercial mass media. First, the intermediary role that the commercial enterprises play -- creating an audience to sell to advertisers -- is being undercut because the production and distribution of physical goods to disseminate content (newspapers, books, music CDs, broadcast stations, cable systems) are expensive ways to create audiences. The Internet makes it possible to aggregate audiences in much less costly ways that do not require a newspaper, book publisher, music label or broadcaster. Second, the cost of producing content has also reduced.

Figure 12 shows that in the three sectors where digital disintermediation has had the greatest impact – music, newspapers and book publishing – the commercial mass media model was dominated by activities other than the creation of content. Content creators account for only 15 cents of every dollar that a consumer pays to receive content from a commercial media company. The physical medium and physical distribution represent about half of the total cost of the product. These costs can be largely eliminated. Running a huge commercial enterprise to produce and distribute the physical products is costly as well. These costs can be reduced with the use of digital technologies, as can advertising and marketing costs.

**Figure 12: Shares in Purchase Price of Information Goods**

![Shares in the Purchase Prices of Information Goods](image)


The audience-creating aspect of digital disintermediation is most evident in the newspaper sector. As shown in Figure 13, the primary source of lost revenue in the past decade is in classified advertising, which accounts for about 60 percent of the loss. Classified
advertising is an appendage to the newspaper – usually contained in a separate section – and advertisers pay to be there because they think there will be an audience and they hope people who are looking for something will go there, even though they have to acquire so much “extraneous” material. One can argue that the bundling is efficient in physical space, since it spreads the fixed cost of distribution across a number of products (news, sports, funnies, classified, movie listings, etc.) Once the Internet became ubiquitous, specialized classified service providers (e.g. Craig’s List), employment lists (Monster.com), and electronic two-sided markets providers (e.g. E-bay) became more attractive. Bundling not only loses its value, it becomes a hindrance (too much noise and low probability of effectiveness).

**Figure 13: Newspaper Sources of Ad Revenue**

![Figure 13](image)

Source: Newspaper Association of America, *Trends and Numbers.*

The ability to target advertising is also important. The success of local cable and weekly advertising has probably accounted for part of the revenue loss in the retail category. Newspapers are forced to shrink their service areas as they can no longer compete with the more efficient alternatives.

Digital distribution is not succeeding because it is stealing the content of the commercial mass media; it is succeeding because it is a much more efficient mechanism for aggregating audiences and distributing information. Because it is so efficient, the future media will not support the massive commercial enterprises that came to dominate the mass media in the 20th century. Since these losses are based on efficiency and competition, there is no reason to believe that they will be restored, nor is there any reason to believe that policy should be implemented to “save” the commercial mass media enterprises, as an economic
proposition. This does not mean, though, that there cannot be a large and effective 4th estate. It does mean that the 4th estate will have to be focused more on content producers than intermediary corporations, and likely require more public support. Because the cost of producing and distributing content is so much lower, the possibility of designing sustainable public support mechanisms is greater.

Figure 14 integrates the conceptual and empirical analyses using the misfit between avid readers and advertiser valued audiences as the base. Each of the market imperfections drives the market farther from the optimum level of output of quality journalism, resulting in a massive and pervasive market failure. As depicted in Figure 14, the commercial mass media business model is responsible for the bulk of the market failure (externalities, perverse incentives and high cost). The dramatic reduction in costs associated with digital disintermediation potentially addresses one of the market imperfections, the cost issue, but not the perverse incentives or externalities problems. These are inherent in the commercial base of the model.

**Policy Challenges**

Confronted with a major crisis and change in an industry, there are two avenues of policy analysis one must consider. First, policies that do not make sense should be resisted. Second, policies to drive change in the direction that promotes the public interest should be identified.

**Bailing out a Failing Industry will not Solve the Problem**

When an industry is dying under the weight of technological change and new competitive business models, the worst thing public policy can do is allow it to leverage the vestiges of its franchise or invoke some claim to special status to retard the progress of technology or impede the growth of competition.

Public policy has struggled to preserve a modicum of competition in the newspaper industry by suspending the strictures of antitrust law for almost 35 years to no avail. The purpose of antitrust is to preserve competition, not obsolete business models. For much of that time, there was not a genuine prospect of an alternative. Today there is. The Internet and the digital revolution have opened the door to a vast array of competitors to the dominant newspaper model.

For newspapers the costs of content production are a small percentage of the total costs of the physical production and distribution of news – recent analyses indicate as little as 15% of total costs. As these physical costs are shed, there is no reason to assume that a viable stream of income composed of a mix of subscription and advertising revenue large enough to support the newsroom cannot be created. There is also no reason to assume the underlying market failures that lead the underproduction of quality journalism will be corrected in the commercial space.
Figure 14: Sources of the Deficit of Quality Journalism

Output/Value

Quantity of Quality Journalism Society Needs

Externalities and Public Goods Problem

Public Perception Problem

High Transaction & Production Cost v. Excess/Short Term Profit Demands

Perverse Incentive

Efficient Production of Quality Journalism

Actual Output of Quality Journalism

Demand Side Characteristics
Much of the journalism we lament losing is not local, but statewide, regional, national and international. If an issue is not inherently local, such as a school board election, it will have difficulty commanding resources in the local media because “outsiders” can now use digital distribution to aggregate a larger audience. Local papers will simply not be able to compete in reporting on global, national or statewide issues and they have begun to outsource that function. Small-town newspapers should be able to survive even in the digital age because they serve inherently local markets that attract fewer competing media services. However, local papers will simply not be able to compete in reporting on global, national or statewide issues and they will have to adapt their business model to the new environment. A few national/global newsgathering wire services, newspapers and major broadcasters should weather the economic downturn -- albeit with fewer quality journalists -- since nobody else will meet consumer demand for such information.

Newspapers in medium to large cities that historically covered local, statewide, regional, national and some global news are in the worst shape because the new environment impacts their business model most. In the digital age, they probably cannot maintain adequate advertising revenue -- losing ground to cable and web-based alternatives to classified ads -- to sustain adequate investment in such broad-based reporting. They lose competitively in the national and global markets to the big national newspapers and wire services and lose local advertising revenue to competing media.

While antitrust cannot solve the problem of the newspaper industry, there are three critical errors that antitrust policy must avoid.

First, newspapers and TV stations, which do not compete in physical space, do compete in cyberspace, using their physical space brands to generate huge flows of traffic to their web sites. This nascent competition should be preserved. Newspaper TV cross ownership should not be allowed.

Second, efforts to form cartels to control the pricing of the distribution of digital content, advocated under a theory of destructive competition (i.e. as long as anyone gives content away for free no one can charge for it) should be rejected. If, indeed, there is a market failure in the distribution of digital content, a private cartel is not the solution. A compulsory licensing scheme that provides a stream of income but prevents anticompetitive and antidemocratic restraints of the flow of information is preferable.

Third, to the extent that competition persists in physical space, it is between dailies and weeklies and other forms of physical, specialized press (e.g. ethnic media). Given the collapse of the daily newspaper business model in large metropolitan areas, it will be difficult to oppose consolidation in that product space, but that does not mean antitrust authorities should turn a blind eye toward the capture of competing physical space products or business practices that are intended to weaken competition from these physical space alternatives. Acquisition of weeklies and practices that attempt to squeeze competition by bundling advertising in dailies and weeklies should be frowned upon. (Small town newspapers are not suffering nearly as much as large metro newspapers, but they are already invariably monopolies and entry into this space is highly unlikely)
The correct antitrust attitude is to protect competition where it is viable in the long term. The claim that we should deviate from that path to preserve the social value of newspapers is dubious at best. The claim that we must preserve the dying business model because it performs an important social function is neither an antitrust issue, nor is it very compelling. When was the golden age of newspapers as the fourth estate in the era of the industrial, commercial mass media? The examples of real investigative print journalism making a difference are few and far between. A camera capturing the word “macaca” or a well-crafted satire replayed millions of time on the Internet can have as much impact as an army of investigative journalists. The alternative media are certainly immature as a fourth estate, but the bar has been set so low by the sorry record of the commercial mass media in the past several decades and the new public sphere is brimming with such activity and experimentation, that there is little reason to believe that it will not fulfill the fourth estate function in a superior manner.

Alternative Media can provide Building Blocks, but Public Resources Are Necessary

The commercial newspaper market in the 21st century media environment leaves substantial gaps in coverage that would never have been filled by the commercial model. The same technology that is undermining that model create opportunities for new models of journalism, which may evolve to support journalists, but it remains to be seen whether it can evolve into the institution of journalism that society needs.

The digital age has witnessed an explosion of alternative media and citizen expression that did not exist in the 20th century age of mass media. Whether this expression is or can become the sort of journalism that provides the public good remains to be seen and how the new media can be made to support good journalism requires new business models. The question is “can new media become a trusted intermediary that engages in good journalism with the resources necessary to fulfill journalism’s function?” One critical challenge is to figure out how to tap into the immense energy of the public sphere in cyberspace while preserving key journalistic attributes someplace within a much-expanded public sphere.

Some important examples to consider include –

**Informational Text:** Is Wikipedia an encyclopedia? If not, what would it take to make it one? How much editorial control could be applied without destroying the wiki essence? What models of editorial oversight best balance the goal of quality content and democratic input (lieutenants, councils, member rankings, member voting)?

**Online Posts:** Online posts began as pure opinion pages (e.g. Huffington) but they have started to take root, add reporters and start doing investigative journalism. They are supported by online advertising. Some bring substantial expertise and develop aspects of reporting that exist in the traditional media but can be highly developed in digital applications (e.g. 538). They tend to have political leanings, which cause the professional school of journalism heartburn, but the commercial mass media have suffered from a pervasive bias
problem itself. While many of the posts have strong identifications across the political some are largely informational and quite expert.

**Books:** Publishing in the digital environment is changing rapidly. Rejected authors build audiences online and get contract from the publishers who rejected them. Publishers now make all or part of their works available at no charge online and have agreed to allow them to be scanned and searched. Whole new forms of copyright are being developed.

**Music:** There are seven million bands on Myspace and virtually none have a contract with a record label, but they sell billions of songs online. They are certainly musicians, but are they professional musicians? Does it matter? Can they support themselves as musicians, probably not, but what would it take to deepen the model so that they can and could it spread to other forms of information and cultural content production?

**Open Source:** Open source software has produced large quantities of high quality product; some believe higher quality than commercial software. Labor is contributed and supported by commercial entities that have a need for the product (not unlike aggregators who need good journalistic content). Decision making management structures have been created to promote progress toward completion of tasks. Group processes determine critical tasks and screen acceptable solutions, not unlike the functions of editorial boards and editors.

**Crowd Sourcing:** One of the lessons being taken (and debated) from the past election is the ability of semi-organized crowds (truth squads) to respond to negative advertising and smear campaigns. The impact of poor quality content was reduced (it can never be eliminated) dramatically because of the speed and scope of the ability to respond.

**Nonprofit information models:** Consumer Reports, fearing a declining revenue stream from print publishing, has transformed itself into a hugely successful mass online subscription business. It has a trusted brand to build on, but there is no reason that other nonprofit brands cannot be built in cyberspace to support subscription models. Commercial news outlets have begun to rely on noncommercial services that produce and distribute news relying on low cost digital communications.

These are just a glimpse of the alternative approaches to content creation and distribution that are bubbling in the digital public sphere. They are chosen to show the great diversity of approaches that has flowered in cyberspace. The various characteristics will likely be mixed and matched in the search for long term viability. Professional and citizen journalists already mix; what the proportion that creates a durable new journalism will be remains to be seen.

The cacophony of the blogosphere is dizzying and overwhelmingly opinion, which must be counted as an improvement over a public sphere dominated by corporate media. To build trust the new journalism will have to produce a steady stream of output that readers find authoritative, correct and useful. To ensure the quality of output, they will need to routinize the roles of reporter and editor and find ways to ensure the reporters and editors have resources to do their jobs. Traditional media have begun to utilize this communications
mechanism, with reporters blogging and bloggers reporting on traditional media web sites. However, it is the independent media that provides the seeds of an alternative journalism. These tend to be structured viral communications, in which a light touch of hierarchy can go a long way.

The essential challenge is to map the basic characteristics of journalism – reporting, editing, and response – into the new media space. Given the poor record of the commercial mass media, alternative media are almost certain to represent a much greater degree of gender, race and ethnic diversity. The challenge is to understand the institutional structures that will allow the emerging alternative media and online models of structured viral communications to become trusted intermediaries.

The above models may provide institutions to house journalists and environments in which good journalism can be produced, but the challenge will remain of directing sufficient resources to ensure the quantity of good journalism is sufficient to fulfill its public purpose. There is a structural gap that will not be filled by these models. The proliferation of competition for advertising does not translate into competition for the production of quality journalistic content. We will have to look elsewhere for a solution to the underproduction of quality journalism.

Promoting Quality Journalism

Figure 15 associates the various policies discussed by McChesney and Nichols with specific market failures. Exhibit 16 identifies the areas of the public sphere that are the targets of the various policies.

The role of a vigorous public media to provide 4th estate functions is well supported by this analysis. An expanded public media addresses several of the market failures, more than any other single alternative.

- Public goods (i.e. public media) need to be supported by public funds or they will be underprovided.

- Perverse incentives and conflicts of interest are addressed by public media both directly and indirectly. Directly the public media produces quality journalism. Indirectly public media serves as a benchmark by which the performance of the commercial media can be judged.

- Concentration is addressed in part by creating a strong public media alternative.

Public media does not address all of the market failures.

- The various policies that ensure a communications network that is ubiquitous and open for democratic discourse are justified to support the 5th estate functions.
### Figure 15:
Differentiating Policy Recommendations by Product and Geographic Markets

<table>
<thead>
<tr>
<th>Market Failure Category</th>
<th>Specific Problem</th>
<th>4th Estate Policies</th>
<th>5th Estate Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal</td>
<td>Public Goods</td>
<td>Public funds create public media</td>
<td>Promote ubiquity and digital inclusion</td>
</tr>
<tr>
<td>Endemic</td>
<td>Perverse Incentives</td>
<td>Expand public media to provide content</td>
<td>Network Neutrality</td>
</tr>
<tr>
<td></td>
<td>Conflicts of Interest</td>
<td>Expand public media to expose bias</td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td>Concentration</td>
<td>Expand public media as an alternative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prevent anti-competitive behavior by commercial mass media</td>
<td></td>
</tr>
<tr>
<td>Transaction Cost</td>
<td>High physical</td>
<td>Channel resources to content producers</td>
<td>Promote digital inclusion</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Under-appreciation of value</td>
<td>Education</td>
<td>Education, Promote appreciation</td>
</tr>
<tr>
<td></td>
<td>of civic discourse</td>
<td></td>
<td>of journalistic values</td>
</tr>
<tr>
<td></td>
<td>Lack of willingness to pay</td>
<td>Vouchers</td>
<td>Vouchers</td>
</tr>
</tbody>
</table>
Figure 16: Policies to Strengthen the Public Sphere in the Digital Age

21st Century Public Sphere

- **Private**
  - Dinner Table
  - Backyard Fence
  - Water Cooler
  - Street Corner

- **Social- NGOs**
  - Church
  - PTA
  - Union Hall
  - Civic Assoc.

- **Many to Many**
  - Blogosphere
  - List Serves
  - Meet-ups

- **Structured Viral Communications**
  - Coordinated/
  - Networked
  - Cooperation

- **Public Media**
  - Expand Public Media
  - Promote post-commercial media
  - Reform commercial media

- **Alternative Media**
  - Posts
  - Wikis, etc.

- **Mass Push Media**

5TH ESTATE 4TH ESTATE

Digital Inclusion
Education
• Uneven distribution of interest in civic discourse and a lack of willingness to invest in this discourse can be addressed with education.

• To the extent that there is an affordability problem for either the 4th or 5th estate functions, vouchers are an approach that preserves consumer sovereignty (as opposed to direct subsidies to corporations, which filter the support through a corporate lens).

Conclusion

The McChesney-Nichols critique of the 20th century model of commercial media has gained purchase with the economic collapse of the last decade, but the resistance to meaningful reform is strong, as we have seen in the effort to address pervasive market failures in health care and financial services. By presenting a broad analysis of the causes of market failure in this sector, based on the traditional structure, conduct performance paradigm of industrial organization and the growing critique of neoclassical economics, we hope those who are open to basing policy on data-driven empirical analysis will be accepting of a more penetrating account of the death of journalism and open to the substantial shift in policies that are needed to bring quality journalism back to life in America.
END NOTES


2 See e.g. Federal Trade Commission, *Potential Policy Recommendations to Support the Reinvention of Journalism*,

3 The hyperbolic attacks from the Progress and Freedom Foundation are a good indicator of the success that the McChesney and Nichols piece is having, as is the inclusion of this view in “official” fora.


6 A flood of books carries the critique, but the key is to recognize that the cornerstone of market fundamentalism – the efficient market hypothesis – is flawed (see for example, Cooper, George, *The Origin of Financial Crises: Central Banks, Credit Bubbles and the Efficient Market Fallacy* (New York: Vintage, 2008); Cassidy, John, *How Market Fail: The Logic Of Economic Calamities* (New York,: Farrar, Strauss, Giroux, 2009); Pollin, Robert, *Contours of Descent* (New York: Verso, 2005), Fox, Justin, *The Myth of the Rational Market* (New York: Harper, 2009) and that the pursuit of private interest does not automatically lead to efficient outcomes, as even conservatives have admitted including none other than Allan Greenspan, who admitted under cross examination (U.S. House of Representatives, Committee on Oversight and Government Reform, October 23, 2008) that “Those of us who looked to the self-interest of lending institutions to protect shareholders’ equity, myself included, are in a state of shocked disbelief. Such counterparty surveillance is a central pillar of our financial markets state of balance…If it fails, as occurred this year, market stability is undermined…I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms (see also Posner, Richard, *A Failure of Capitalism* Cambridge: Harvard, 2000).

7 Cooper, Media Ownership and Democracy (Palo Alto: Center for Internet and Society, 2003); The Case against Media Consolidation (New York: Donald McGannon Center for Communications Research, 2006).


11 Christians, p. 126.

12 Dutton, p. 2.


14 This is a long standing critique in the mainstream literature (see, Cooper, The Case Against, Chapter 9).


16 Baker (2002) identifies these, particularly the use of the media and its resources to pursue owner interest.

17 Waldfogel, “A consumer with atypical tastes will face less product variety than one with common taste... The market delivers fewer products – and less associated satisfaction – to these groups simply because they are small.


The number of journalists is estimated based on Census and ASNE data as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Print</th>
<th>TV/Radio</th>
<th>Online</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>34.8</td>
<td>14</td>
<td>0</td>
<td>48.8</td>
</tr>
<tr>
<td>1980</td>
<td>46.4</td>
<td>34.8</td>
<td>0</td>
<td>81.2</td>
</tr>
<tr>
<td>1990</td>
<td>58.7</td>
<td>35.5</td>
<td>0</td>
<td>94.2</td>
</tr>
<tr>
<td>2000</td>
<td>60.7</td>
<td>33.7</td>
<td>10</td>
<td>104.4</td>
</tr>
<tr>
<td>2010</td>
<td>44.2</td>
<td>28.2</td>
<td>8.1</td>
<td>80.5</td>
</tr>
</tbody>
</table>

We use a common concentration ratio to measure the diversity of the population (the HHI index). This index gives greatest weight to the largest category, which is appropriate in this analysis since it is the large audience that attracts the attention of the commercial media. As a point of reference, in 1970 married white couples constituted about three-quarters of the households in the U.S. By 2010, they were about two-fifths.

While it can be argued that individual reporters became more productive – as communications improved, data gathering was aided by computers, etc. – but it is unlikely that this could have offset the dramatic decline in the number of journalists covering this expanding field of activity. Starting from the assumption that there were enough journalists and good journalism in 1970, we would conclude that there was a severe deficit of by 2000.