
34. Interco order agreement ranged from .10 to .84 using Scott’s P. The largest margin of error around point estimates of frames in the yearlong sample is plus/minus 5 at the .05 confidence level. The Columbine week data are from a 100 percent sample, and thus free of sampling error.

35. Scott’s P ranged from 1.0 to .84. The largest margin of error around point estimates of frames in the yearlong sample is plus/minus 5 at the .05 confidence level.

36. Scott’s P ranged from 1.0 to .75 on all but the gang-related item, which was .68. Several other context items were dropped because of unacceptable reliability scores. These included how the weapon was obtained, the perpetrator’s previous offenses and whether hate or racism was implicated. The largest margin of error among context items was plus/minus 12 points at the .05 confidence level. The n comprised only episodic stories from the yearlong sample.

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**U.S. Newspaper Ad Revenue Shows Consistent Growth**

by Robert G. Picard

U.S. newspaper advertising grew in real terms across the 50 years, and newspapers received two and a half times more advertising revenue in 2000 than they did in 1950.

This study explores the revenue developments of American newspapers during the second half of the twentieth century. It explores how revenues changed during the period, how they changed in relation to the general economy and how the revenue model changed during the five decades.

This business history approach is useful to understanding changes in the newspaper business over time and has been used in previous studies. Udell, for example, found that newspaper ad spending and employment expanded more rapidly between 1946-1970 than did the general economy and that changes in the industry were affected by both economic and consumption trends. Those studies, however, examined shorter periods and did not cover the last quarter of the century when substantial changes in patterns and behavior occurred.

As a business development study, this article focuses on identifying and exploring trends, developments, their implications, rather than hypothesis testing. Its purpose is to develop knowledge that describes how, when and why the newspaper industry’s finances changed and to develop understanding of how the existing conditions came about.

A body of literature researching the relative constancy hypothesis approach has also focused on media finances overall. Those studies have touched upon issues of advertising and consumer spending to explore the extent to which expenditures have remained a constant percentage of gross national product (later gross domestic product). These studies have produced conflicting results.

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This study is not intended to reexamine the relative constancy argument. Instead it draws on some data methods and analyses to determine what was happening to the national newspaper industry.

This covers developments in the newspaper industry over the second half of the twentieth century and attempts to answer several research questions:

**RQ1:**
What was the growth or decline of newspaper advertising in real terms?

**RQ2:**
How did income from various types of advertising change?

**RQ3:**
What was the growth or decline of newspaper circulation income during the period?

**RQ4:**
How did income from daily and Sunday circulation change?

**RQ5:**
How has the revenue model of newspapers been affected by the trends?

**Method**

Data on advertising were obtained from the Newspaper Association of America. Data for advertising expenditures were available across the entire period. This article uses the term “expenditures” when referring to advertising because national data from both the Newspaper Association of America and the U.S. Department of Commerce are based on advertiser expenditure data rather than newspaper income data. Thus, it is more accurate to refer to the advertising financial stream as expenditures rather than revenue or income. The data include expenditures for advertisements included on the pages of newspapers and as preprints or inserts.

Data on circulation and circulation revenue were obtained from the Newspaper Association of America and both were available beginning in 1956. Because the purpose of this study is to study change over time and the data involve expenditures, it was necessary to adjust the data to reflect changes in the economy and thus make them comparable. The author used an adjustment based on the consumer price index (CPI) for this study.

The CPI deflator is regularly used to measure changes in the value of money over time and is preferable to the gross domestic product (GDP) deflator because newspaper advertising expenditures are directly related to household consumption of retail goods and services, which is more specifically reflected in CPI changes than GDP changes. The difference between the two is that CPI excludes non-household consumption (such as government spending and exports) and “covers changes in the prices of expenditures by households which represent around 60 percent of total economic activity as defined by GDP.”

The GDP deflator is also problematic because it is not as stable as the CPI deflator and its measurement is revised more often, thus making it less viable for research over time periods such as that found in this study.

The consumer price index used for this study is the widely used CPI-U-X1 index. This index was used because the method of calculating CPI was changed in 1983 and the CPI-U-X1 index was constructed by government statisticians to account for those changes. It allows consistent measurement across the 50-year period of this study. The CPI-U-X1 index was developed by the U.S. Bureau of Labor Statistics and has been the primary method in the last two decades used by economic analysis for historical research because it provides for a consistent treatment of costs.

In order to determine the performance of newspapers in attracting advertising and circulation revenue, the data were also analyzed using expected value produced through the moving average test. This widely used and standard statistical analysis tool and its formula project values in the forecast period based on the average value of the variable over a specified number of preceding periods. This permits one to create a forecast of the value and then compare actual performance to that forecast. The method requires at least three data points to be included to create the expected value for the subsequent period. In this case the author selected the more conservative figure of five data points and used actual performance in the previous 5 years to create a forecast.

In comparing newspaper industry performance to the general economy, the author used gross domestic product as the benchmark. Data for GDP over the period were obtained from the U.S. Department of Commerce, U.S. Bureau of Economic Analysis. Use of this data permits creation of a measure of the percentage of GDP accounted for by circulation and advertising payments...
obtained by newspapers and to determine trends over time. It thus provides an indicator of the importance of the newspaper industry to the economy as a whole. The use of this percentage measure does not require the use of a deflator as does currency-based data.

Results

Advertising

Many newspaper executives believe that general trends in newspaper advertising are problematic for newspapers and that there has been a declining trend in newspaper advertising during the second half of the twentieth century. For the most part, their negative perceptions have resulted from focusing on the downward trend in advertising share going to newspapers. Newspapers accounted for almost 30 percent of all advertising expenditures in 1970, but that figure today is about 20 percent. The rise of television advertising, direct mail, Internet and other new forms of communication have all been seen as pulling share away from newspapers and endangering their future.

This fixation on the decline in advertising share, however, has hidden the true state of newspaper advertising expenditures. A declining share is important only if total advertising expenditures remain the same. If advertising expenditures grow overall, a medium can be better off even with a smaller share. Similarly, if income (adjusted for inflation) is stable or increasing, then the decline in advertising share does not remove financial resources from the industry.

Newspaper advertising expenditures during the last half of the twentieth century actually grew at a slow pace until about 1975 and then grew explosively during the last quarter of the century. The only large anomaly in the pattern was the recession of 1990-1991.

The basic annual spending figures, however, do not take into account changes in the economy. To account for those changes, the figures must be adjusted into constant prices. This study uses CPI deflator CPI-U-X1, described above, for that purpose. In adjusting the data for each year, the data for each reported year are multiplied by the deflator provided by the U.S. Bureau of Labor Statistics. This process provides a real picture of the actual trends that occurred during the period, absent the effects of inflation on currency.

When that adjustment is made, advertising expenditures for newspapers are seen to have risen in real terms during the second half of the twentieth century, with occasional downturns caused by recessions (See Figure 1).

Advertising data available from the Newspaper Association of America and the U.S. Department of Commerce do not separate expenditures for daily and Sunday papers, so it is not possible to view each separately. Data on type of advertising (national, retail, classified) are available and will be addressed later in this article.

Retail, National and Classified Advertising Growth

Although all three main categories of newspaper advertising showed real growth, the patterns of that growth varied.

The categories, national, retail and classified advertising, provide indicators of the type of advertising income, but they are not completely representative of the source. Nevertheless, the U.S. Department of Commerce and the Newspaper Association of America use them in categorizing ad type.

The figures need to be interpreted with the understanding that the “national” category represents display advertising traditionally coming from national advertisers but today also includes ads purchased from outside the local market. The “retail” category represents display advertising purchased by local sources, and the “classified” category includes both text and display ads in the classified section that may come from local or national sources.

The amount of sales in the national and retail category was affected in the last decades of the twentieth century by changing and conflicting business practices of large, multistore retailers. In some cases these retailers moved ad-purchasing decisions from local to regional or national offices. In other cases, they moved decisions down to the local market. No accurate assessment of the effect of these phenomena is available, and it has affected papers of various sizes and locations in different ways. Nevertheless, it must be understood that there were some migrations of advertisers between the categories that are not visible from the ad expenditure data alone.

Figure 1
Newspaper Advertising Expenditures (Daily and Sunday) in Current and Constant Prices, $ billion, 1950-2000
Retail advertising grew steadily throughout the second half of the century and then dropped during the recession of 1990 and 1991. In real terms, however, spending on retail advertising never returned to the heights it achieved in 1988 and 1989 (Figure 2). Nevertheless, upward growth was continuing from 1990 until the slowdown of the economy began late in 2000.

Growth of national advertising was relatively stable from 1950 until the 1980s and then began growing, moving strongly upward after the recession of the early 1990s (Figure 2). Classified advertising expenditures rose steadily between 1950 and 1980 and then surged dramatically in the 1980s and 1990s to become nearly as important as retail advertising in terms of their contributions to newspaper finances (Figure 2).

To test the meaning of this real growth, the author conducted expected value tests using the moving average formula previously discussed. The expected values were produced through this time series analysis that is widely used in financial and economic studies. In this study, the forecast produced for each year is displayed in the graph against the actual performance in the year. This allows identification of years in which the industry over- or underperformed expectation.

Based on the formula, the results show that total real newspaper advertising expenditures met or exceeded expectations nearly every year during the second half of the twentieth century. Brief exceptions occurred in 1975—when the economy reacted to rapid GDP growth and strong inflation in the previous years—and during the recession years in the early 1990s (Figure 3).

When the sub-categories of advertising were explored using the time series method, only national advertising deviated slightly from the pattern for newspaper advertising overall. It under-performed in the early 1960s and 1970s, unlike classified and retail advertising that met or exceeded expectations during those periods.

### Circulation

Total circulation revenue rose during the second half of the period, rising from $1.3 billion in 1956 (the first year for which reliable data are available) to $10.7 billion in the year 2000. Although this growth in circulation revenue may seem positive, when it is adjusted to constant currency, growth has been flat since the 1980s and ended the century at approximately the same level that it was in 1969. Nevertheless, circulation revenue was about one-third higher in real terms in 2000 than it was in 1956.

This growth in current dollars and flatness in constant dollars is mirrored in the income for daily circulation, which accounts for the bulk of newspaper circulation revenue (Figure 4). Circulation income for Sunday newspapers rose steadily from 1950 to 1990 but then declined and remained flat for the remainder to the last decade of the century.

The difficulties created by the slow growth and then flattening of newspaper circulation revenue have not been lost on the newspaper industry. Some newspapers attempted to reduce circulation expenses by controlling locations of delivery, and companies made different tradeoffs among circulation, price, and profits. An example of this was seen in early 2002 when the *Seattle Times* and *Seattle Post-Intelligencer* cut home delivery and single copy sales in Southwestern Washington, reducing daily circulation by nearly 4,000 and Sunday circulation by 5,600 in order to achieve savings of $1 million in circulation costs.

### Changes in Circulation Patterns

A portion of the circulation income developments results from a decline in the number of papers and daily circulation that was experienced in the fourth quarter of the century. Total daily circulation rose from 53.8 million, spread among 1,772 papers in 1950, to a height of 63.3 million, spread among 1,701
papers in 1983. It ended the century at 55.8 million, spread among 1,480 papers in 2000. The total number of daily newspapers peaked at 1,786 in 1952.

The decline in daily circulation and number of papers was somewhat offset by positive developments in Sunday papers, which grew from 549 papers with 46.5 million Sunday circulation to 917 papers with 59.4 million Sunday circulation. The additional income from these papers, however, was not sufficient to raise the real growth rate of circulation income during the latter years of the century.

These general changes in circulation pattern altered the average circulation of newspapers. The average paper had a daily circulation of 30,378 in 1950 and ended the century with 37,684, having grown 24 percent during the period. The average circulation of Sunday papers, however, declined from 84,849 in 1950 to 64,799 in 2000, a drop of 24 percent. The decline in average circulation for Sunday papers occurred because the number of Sunday papers doubled during the period, with the additional Sunday papers appearing in smaller cities. Because their circulations were far lower than the previously existing Sunday papers in large- and mid-sized cities, the average circulation moved downward.

The changes in number of papers and circulations affected morning and evening papers differently. Average morning circulation declined from 66,043 in 1950 to 61,600 in 2000, an 8 percent decline. The average evening circulation declined from 22,457 to 12,380 in 2000, a 45 percent decline.

During the period the number of papers with morning publication rose from 332 to 766, a 131 percent increase. The number of papers published in the evening declined from 1,450 to 727, a 50 percent decline. This pattern of loss has been observed and has been a focus of a great deal of industry attention for some time. The year 2000 marked the first time that the number of morning papers exceeded the number of evening papers.

Income and Gross Domestic Product

Advertising Revenue

A relationship between advertising expenditures and gross domestic product (GDP) has been well established through studies that show a high correlation between the two in annual figures. Although the proportion may not remain constant. This relationship is reflected in the fact that both grew steadily throughout the second half of the twentieth century. GDP grew from $294 billion to $9.9 trillion and advertising revenue increased from $2 billion to $48.7 billion. The correlation between two over the 50-year period is .994, revealing an extremely high relationship.

Although the two are clearly related and moved together, the rate of change differed across the period. From 1950 to 2000, newspaper advertising revenue grew 2,251 percent whereas GDP grew 3,255 percent. The rate of change varied across the five decades and advertising growth exceeded GDP growth only in the 1980s.

When viewed as percent change from the previous year, newspaper advertising revenue changes are more volatile than GDP changes (Figure 5).

As a percentage of GDP, newspaper advertising declined from seven-tenths of one percent in 1950 to half a percent in 2000, after a rise in the 1980s. Because there were real increases in newspaper advertising expenditures across the period, the decline of newspaper advertising as a percent of GDP underscores the fact that GDP rose more rapidly than newspaper advertising during the period.

Circulation Revenue

Circulation revenue and GDP increased during the five decades with circulation rising from $1.3 billion in 1956 to $10.7 billion in 2000. A strong relationship exists between the two (correlation: .996), but it is slightly lower than the relationship
between advertising and GDP.
Although both grew, the rate of growth of circulation revenue was less than that of GDP, particularly at the end of the century. From 1956 to 2000, circulation revenue grew 694 percent whereas GDP grew 2,154 percent. The rate of circulation growth remained below that of GDP growth in each decade.

When viewed as percent change from the previous year, circulation revenue changes tend to be less volatile than GDP changes (Figure 6).

As a percentage of GDP, circulation revenue declined from three-tenths of one percent in 1950 to about one-tenth of one percent in 2000.

**Business Model Changes**
The changes in revenue also changed the business model upon which American newspapers are based. Business models involve the conception of how the business operates, its underlying foundations and the exchange activities and financial flows upon which it depends. Such models are the architecture within which the various business activities take place.

The most fundamental change occurring in the business model during the second half of the century was a rising dependence upon advertising revenue. As shown in Figure 7, the newspaper industry was dependent upon advertising for the bulk of its income across the five decades, but that dependence grew stronger during the final quarter of the century.

The dependence on advertising increased 16 percent between 1956 and 2000, growing from 71 percent of total revenue to 82 percent of revenue.

If one considers the development of newspaper advertising across the half century, it is clear that fundamental shifts occurred in the categories of advertising upon which newspapers were dependent. In 1950, retail advertising was responsible for 57 percent of advertising revenue, national advertising for 25 percent and classified advertising for just 18 percent. In 2000, retail and classified advertising were nearly equal, with 44 percent and 40 percent respectively, and national advertising provided only 16 percent of total advertising revenue.

The importance of national advertising began to decline in the 1960s as national advertisers placed more emphasis on television advertising and classified began taking its place in terms of importance to newspapers. Classified advertising's significance jumped dramatically in the 1980s and 1990s.

These shifts made newspapers more dependent upon classified employment, automobile and real estate advertising that tends to be more cyclical and to respond more to changes in the economy than does brand advertising that makes up the bulk of television advertising.11

**Discussion**
Real advertising expenditure figures indicate that no general decline in newspaper advertising occurred during the second half of the twentieth century and that the upward trend in newspaper advertising expenditures continued even after the introduction of advertising on the Internet.

Newspaper advertising is cyclical and affected by the business cycle and other changes in the economy, so expenditures decline at times. During the past 50 years, however, a clear, overall upward trend has remained evident. At the end of the century, newspapers received two and half times more advertising income in real terms than they did in 1950.

Based on these overall newspaper advertising spending trends, there is no national evidence that advertisers shifted large amounts of advertising dollars
away from newspapers as television, direct mail, Internet and other new carriers for advertising became available and matured.

Rather, because newspaper advertising expenditures actually increased, advertisers increased expenditures when additional media advertising opportunities appeared and much of the increased spending was allocated to the newer carrier of advertising messages.

The trends in circulation revenue are not so healthy, however. Although circulation income increased in real terms by more than a third in the half century, that growth rate stopped in the 1980s, and circulation revenue has been flat since that time.

Part of this revenue trend is the result of the declining number of newspapers and their circulation partly because of the reluctance of newspapers to raise their prices.

These trends have increased the already strong dependency of newspapers on advertisers and have contributed to the increased emphasis on business and marketing aspects of newspaper operations in recent decades.

If one looks back 50 years, it is clear that the “good old days” were not as good in revenue terms and that newspapers had far less income, adjusted for inflation, with which to carry out their activities. Newspapers did not take in as much money, but perhaps the “good old days” are more idealized because newspapers and their staffs did not face the higher levels of competition for advertising and audience attention that were found in the year 2000 or because the expenses of operating were lower 50 years ago. These issues cannot be answered by this study. However, they provide questions for further research on changes in the industry during the second half of the twentieth century.

Notes
4. Revenue model refers to that portion of the business model that describes the income streams and importance.
6. For more information, see <www.ssc.wisc.edu/sp/faqs/fag5.htm> <www.bls.gov>.