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Effects of Recessions on Advertising Expenditures: An Exploratory Study of Economic Downturns in Nine Developed Nations

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This article explores the effects of recessions in developed nations since 1989 to determine how advertising expenditures are related to recessions and whether expenditures for different media are affected differently. The study finds that advertising expenditures (in constant currency) declined an average of 5% when a 1% decline occurred. The relations between the gross domestic product and advertising expenditures were not universal across the nations, however. It appears that nature of the economies, the degree of economic fluctuation, segments of industry affected, national economic policies, and other factors may play roles in the advertising expenditure choices. The study also finds that print media are more affected by recessions than broadcast media. The effect of the economic downturns on newspaper and magazine advertising expenditures were 4 times that of the effect on television advertising expenditures.

How media are affected by advertiser choices during economic downturns is not well explored in economic, advertising, or media literature. It is accepted that slowdowns, depressions, and recessions reduce advertising expenditures but deeper investigations are generally lacking.

Simon's seminal book on advertising economics explored available studies and established the link between the business cycle and advertising expenditures (Simon, 1970). That view has been sometimes promulgated in texts since that time, but many advertising strategy and management texts and general media management texts avoid the issue altogether.

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Even books focusing on advertising economics have tended to focus on the economic effects of advertising, not the effects of the economy on advertising. For example, the book by Chiplin and Sturgess (1981) on the economics of advertising, which does a good job of covering the economic impact of advertising, avoids discussions of the general economy, recessions, depression, and the business cycle. The tendency to ignore or only brush on the issue is repeated in the other major advertising economics books, such as Schmalensee (1972) and Reekle (1981).

If one reviews advertising strategy and management texts over the past three decades, one barely finds mention of the economics of advertising and only occasional references to the effects of economic fluctuations on expenditures. Texts such as Anderson and Barry (1979), Belch and Belch (1994), Schultz and Barnes (1995), and others occasionally make brief mentions of economic effects of advertising, if at all, but tend to ignore effects of the economy on advertising.

The literature in scholarly economic and business journals is hardly more helpful. Studies that explain under what macroeconomic conditions sales of advertising are affected, which media are most affected, and to what extent different media are affected are noticeably absent. Discussions of how geographic and national differences affect advertising expenditures are not available.

In addition, little information about recessions and their causes or effects on advertising exists in the advertising literature. A widely used text on advertising management briefly addresses issues of business cycles and notes that advertising expenditures could be used to stabilize the effects of fluctuations in the economy by increasing spending to spur consumer spending during downturns. "The problem is that many advertisers, especially those who tend to set their advertising budgets at a fixed percentage of sales, actually increase advertising when times are good and decrease it when sales are weak" (Aaker, Batra, & Meyers, 1992, p. 563).

In addition to business cycles, recessions can be caused by shocks to the economy created by war, sudden loss of necessary resources in major industries, or political instability.

Even within broader media texts there is little mention of the effect of the economy on advertising. One text links advertising expenditures to gross national product (GNP) but provides little more information or evidence (Fink, 1988). Another widely used text notes that "in times of economic slowdowns, retail sales are slow and advertising budgets are often trimmed back as businesses feel the need to tighten their own belts" (Willis & Willis, 1993, p. 260).

A study of the newspaper industry's economic situation argued that its economic situation is explained largely by GNP and retail advertising expenditures (Roark & Stone, 1994). A study of the 1990–1991 recession in the U.S. newspaper industry found that larger firms were more affected than smaller firms, that non-newspaper diversification reduced the effects of the recession (Picard & Rimmer, 1999).

A body of literature testing the principle of relative constancy has produced mixed results regarding relative constancy but it has revealed long-term relations between national economic performance and advertising and between national economic performance and consumer expenditures (see Demers, 1994; McCombs, 1972; McCombs & Eyal, 1980; McCombs & Nolan, 1992; Son & McCombs, 1993; Wood, 1986). Although these studies have shown general covariance between advertising and GNP, they focused on long-term trends rather than short-term performance related to specific recessions or depressions.

Although such discussions and studies provide some information and evidence of the diminution of advertising expenditures during economic downturns, they do not answer the questions about effects that are posed by this inquiry.

This study considers two questions: (a) how are advertising expenditures related to recessions? and (b) which media suffer most from lower advertising expenditures during a recession? The study focuses on recessions because they are deep and prolonged downturns in the economy in which the effects of choices made by those controlling advertising expenditures can be seen.

METHOD

To explore the questions about the effects of recessions that are posed by this study, recessions that took place in developed nations during the 10-year period between 1989 and 1998 were selected. The 10-year period was selected because it represented the latest period in which data were available when the study began. It was also chosen because the researcher wished to limit the study to a 10-year period due to the exploratory nature of the study and because the period was one in which a number of nations had experienced economic downturns.

Operationalizing the concept of recession was complicated by the fact that no absolute definition of the terms *recession* or *depression* exist. Most economists, however, define a recession as a decline in gross domestic product (GDP)[1] for two consecutive quarters and a depression as a prolonged recession resulting in falling prices, reduced purchasing power, excess in supply, unemployment, and a general reduction in business activity (Downes & Goodman, 1995).

Because of the lack of universal acceptance of the definition of recession, nine developed nations were initially identified as having recessions based on press reports of recessions indexed in the *New York Times Index* and *Business Periodicals Index* between 1989 and 1998. These recessions all took place between the years of 1989 and 1994.

[1]Gross domestic product is now the internationally recognized standard for measuring national economic activity. It has replaced gross national product, which had previously been used in the United States and elsewhere.

Economic data were then obtained from the *United Nations Statistical Yearbook* (1998). The economic data were used to identify nations in which economic downturns were evidenced during the period. This was done using data for GDP.

Because downturns can be limited to 1 year or occur in multiple years, both current currency and constant currency GDP data were collected. The current currency figure is used for identifying recessions that occurred in only 1 year. The constant currency figure is appropriate for identifying and exploring recessions that occur in more than 1 year because it adjusts for the effects of inflation. Constant currency GDP is also used to identify single-year recessions whose presence is hidden in current currency data because of the effects of inflation.

In all cases, the downturns identified in the press reports were correspondingly identified as recessions in the economic data. Downturns occurred for two quarters or more in each of the selected nations and recessions were not identified in any additional developed nations.

Economic downturns as evidenced by GDP were experienced in these nations at different times between 1989 and 1994. For the purposes of this study it was determined that at least 1 year's data before and after each recession under study should be considered. As a result, GDP data were collected from 1988 through 1995.

The recessions in these nine nations represent a census of recessions in developed nations that took place during the years studied, so all developed nations in which recessions occurred are included in the research. Six of the nine nations included in this study are large developed nations who are members of the G8 group of nations[2]: Germany,[3] France, Italy, Japan, the United Kingdom, and the United States. The three other nations are Finland, Sweden, and Spain.

To conduct the study, advertising expenditure data for these developed nations were obtained from *World Advertising Trends 1998* (1998). The annual expenditure data were collected to correspond to the period of the data collected for GDP in the selected nations, 1988 to 1995.

For the comparative purposes of this study, these annual data for advertising expenditures are considered in comparison to annual GDP data. It must be recognized, however, that advertisers' choices regarding expenditures are sometimes not directly related to declines in GDP but to their perceptions of changes in consumption that are evident before the official GDP data reflecting that consumption are available.

[2]The G8 group of nations (formerly G7 before the inclusion of Russia) is made up of the major industrial democracies whose heads of state have met annually since 1975 to discuss and suggest actions on economic and common political issues.

[3]Data used for Germany begin in 1991 rather than 1988. This difference occurs because figures prior to reunification for the German Democratic Republic were calculated differently from those in the Federal Republic of Germany and the two figures cannot be combined to indicate the situation from 1988 to 1990. Because the German recession occurred in 1993 and because of the use being made of the data in this study, however, the shorter period of German data does not require alternative interpretation.

The study focuses on developed nations because of the breadth of media and advertising placement choices present in developed nations and because of the relatively greater stability in expenditures that is typically evident year to year in media buying patterns in developed nations.

In the GDP data, the downturns are clearly evident in the current currency figures, and the effects of the changes are seen in negative GDP growth rates ranging from –.06% in Japan in 1989 to –24.9% in Sweden in 1993 (Table 1). Although not

TABLE 1
Percent Changes in Current and Constant Dollars

Country and Year	*Change in GDP*	*Change in Advertising*	*Change in GDP (Constant)*	*Change in Advertising (Constant)*
Finland				
1990	18.8	.04	0.0	–5.4
1991	–10.0	–12.9	–7.1	–16.3
1992	–23.3	–10.3	–3.6	–12.5
1993	–20.7	–3.0	–1.2	–5.1
1994	15.6	9.3	4.4	8.1
France				
1991	23.8	–3.1	.08	–6.1
1992	.5	–.8	1.3	–3.1
1993	10.3	–5.0	–1.5	–7.0
1994	–5.6	5.1	2.7	3.3
Germany				
1992	14.5	8.9	2.2	4.7
1993	–3.0	0.9	–1.2	–3.0
1994	7.1	7.0	2.2	3.8
Italy				
1992	5.9	8.7	.07	3.5
1993	–19.3	–11.8	–1.2	–15.6
1994	3.3	2.9	2.2	–1.0
1995	7.5	4.8	3.0	–0.4
Japan				
1989	–.06	12.5	4.8	10.0
1990	2.4	9.0	5.1	5.8
1991	14.7	2.5	4.0	–0.8
1992	9.3	–4.5	1.1	–6.1
1993	14.8	–7.1	0.1	–8.2
1994	9.6	1.2	0.5	0.6
Spain				
1992	9.1	24.0	0.7	17.0
1993	–17.0	–15.6	–1.2	–19.2
1994	0.8	1.6	2.1	–3.1

(Continued)

TABLE 1
(Continued)

Country and Year	Change in GDP	Change in Advertising	Change in GDP (Constant)	Change in Advertising (Constant)
Sweden				
1990	20.2	4.2	1.4	-5.2
1991	4.2	-6.6	-1.1	-14.4
1992	3.4	0.7	-1.4	-2.0
1993	-24.9	2.6	-2.2	-1.8
1994	6.8	16.4	3.3	13.5
United Kingdom				
1990	15.9	-0.6	2.2	-9.3
1991	3.7	-5.0	0.4	-10.3
1992	3.3	3.3	-2.0	-0.4
1993	-9.8	3.8	-0.5	2.3
1994	8.2	10.6	2.2	7.9
United States				
1989	7.2	5.1	2.7	0.2
1990	7.2	2.6	1.2	-2.7
1991	5.5	-4.1	-0.5	-8.0
1992	3.0	18.4	2.5	14.9
1993	5.0	-7.6	3.4	-10.3
1994	5.4	9.2	4.1	6.5
1995	6.2	6.6	2.0	3.7

Note. Calculated by the author based on data from *United Nations Statistical Yearbook* (1998) and *World Advertising Trends 1998*; GDP = gross domestic product.

achieving negative figures in current currency, the U.S. growth rate declined to a low of 3% in 1991.

When constant currencies are employed, the recessions can be seen in every nation in the study. Negative GDP growth rates ranged from –.05% in the United States in 1991 to –34.2% in Spain in 1990 (Table 1).

When data from the current and constant GDP figures were combined, it can be seen that Finland experienced a prolonged recession from 1991 to 1993, France in 1993 and 1994, Germany and Italy in 1993, Japan in 1989, Spain in 1990 and 1993, Sweden from 1991 to1993, the United Kingdom from 1991 to 1993, and the United States in 1991 (Table 1). The Finnish downturn was so deep and prolonged that it could be classified as a depression.

To more fully understand the relations between advertising expenditures and GDP, the data for each nation were then subjected to correlation analysis to determine the extent to which overall advertising expenditures and expenditures by media were related to the recessions.

The correlation method was selected because this study was designed as an exploratory search for relations and because the limited time period of the data (8 years) made more rigorous analysis methods impractical.

RESULTS

This study has set out to answer the questions of how advertising expenditures are related to recessions and whether advertising in different media are affected differently by the downturns. The data reviewed in this exploratory study provide intriguing answers to these questions.

How Advertising Expenditures are Related to GDP

When one compares the points at which advertising expenditures declined with points at which GDP declined, it is clear that advertising expenditures are typically a leading indicator, moving downward before the economy as a whole is affected (Table 1).[4] In Germany, Italy, and Spain the changes in advertising and GDP tended to occur concurrently. The one nation in which no pattern is discernible is Japan, where advertising and GDP are not well linked and are discussed later.

Both current and constant currency figures were employed to analyze the effects of the recessions on advertising expenditures. As noted earlier, this is necessary because not all recessions were confined to a single year. The data for overall expenditures were plotted and the correlations were conducted for each nation.

The correlation data can be interpreted using the five-level interpretative guide suggested by Guilford (1956, p. 145):

1. <.20 = slight correlation, almost negligible relation.
2. .20 to .40 = low correlation, definite but small relation.
3. .40 to .70 = moderate correlation, substantial relation.
4. .70 to .90 = high correlation, marked relation.
5. >.90 = very high correlation, very dependable relation.

[4]In economic terms, a variable being a leading indicator is not taken as an indication of causality, only as occurring before the variable studied. Advertising expenditures, for example, may be declining due to reduced retail orders or sales, which ultimately affect gross domestic product (GDP), which were experienced before they affected GDP data

The correlations between current currency GDP and advertising expenditures in the nine nations during the period studied ranged from $r = .127621$ in Japan to $r = .957663$ in Germany. Five nations had very high or high correlations: Germany (.957663), Spain (.921845), Italy (.910818), United States (.906489), and Finland (.799144). Moderate correlations were found in France (.048552) and the United Kingdom (.906489). A low correlation (.219134) was found in Sweden and only a slight correlation in Japan (.127621).

The range for constant currency ranged from $r = .005976$ in Japan to $r = .980284$ in Germany. Two nations had very high correlations: Germany (.980284) and Finland (.902176). Sweden had a moderate correlation (.468162). Slight or low correlations in constant currency were found in Italy (.334075), Japan (.005876), the United Kingdom (.649875), France (.62350), Spain (.173861), and the United States (.157216).

It is noteworthy that not even a low relation was found between advertising expenditures and GDP in either current or constant currencies in Japan. The reasons for these results cannot be explained by the data and methods employed in this research but they raise fascinating questions for future research.

Was the reason for the poor relation due to the fact that the Japanese economy is highly dependent on production for export, whereas advertising expenditures reported are domestic and may be affected differently by changes in an export-driven economy? Traditional Japanese employment protections may also play a role in protecting the internal economy and domestic advertising expenditures. These possibilities raise clear issues for additional study.

Five of the nine nations showed large differences between their correlations for current and constant figure correlations: France, Italy, Spain, the United Kingdom, and the United States.

The reasons for these differences are that three of the nations (France, Italy, and Spain) had less stable economies with high fluctuations in GDP growth in current figures and significant inflation during the period studied. When the adjustment for inflation is made to constant currency, these fluctuations remain although they are not so extreme.

The United Kingdom was similarly affected by variations in current GDP prices and inflation but not to the extent of France, Italy, and Spain. The lowest annual variations in current GDP data among the five nations occurred in the United States but current and constant figures showed large differences because of higher inflation between 1988 and 1990 than in the following years.

How Advertising Expenditures for Different Media are Affected

The data clearly show that the declines in advertising expenditures are related to the recessions. As Table 2 shows, the recessions studied produced an average decline

TABLE 2
Percent Change in GDP and Advertising Expenditures

Country and Year	*Change in GDP*	*Change in Advertising*	*Change in GDP (Constant)*	*Change in Advertising (Constant)*
Finland				
1991	−10.00	−12.90	−7.10	−16.30
1992	−23.30	−10.30	−3.60	−12.50
1993	−20.70	−3.00	−1.20	−5.10
France				
1993	10.30	−5.00	−1.50	−7.00
1994	−5.60	5.10	2.70	3.30
Germany				
1993	−3.00	0.90	−1.20	−3.00
Italy				
1993	−19.30	−11.80	−1.20	−15.60
Japan				
1989	−0.06	12.50	4.80	10.00
Spain				
1993	−17.00	−15.60	−1.20	−19.20
Sweden				
1991	4.20	−6.60	−1.10	−14.40
1992	3.40	0.70	−1.40	−2.00
1993	−24.90	2.60	−2.20	−1.80
United Kingdom				
1992	3.30	3.30	−2.00	−0.40
1993	−9.80	3.80	−0.50	2.30
United States				
1991	5.50	−4.10	−0.50	−8.00
Average	−7.13	−2.69	−1.15	−5.98
Average (excluding Japan)	−7.64	−3.78	−1.57	−7.12

Note. Calculated by the author based on data from *United Nations Statistical Yearbook* (1998) and *World Advertising Trends 1998*; GDP = gross domestic product.

of 7.12% in GDP and a 2.69% decline in advertising expenditures when viewed in current dollars. When constant dollars are considered, a decline of 1.15% in GDP produced a 5.98% decline in advertising expenditures, a 500% magnifying effect (Table 2).

If Japan is excluded from the calculation on the basis that its domestic advertising expenditures did not decline, the average decline in current dollar GDP was 7.64%, which was accompanied by a 3.78% decline in advertising expenditures. In constant dollar terms an average 1.47% decline in GDP produced a 7.12% decline in advertising expenditures, a 454% magnifying effect.

If one plots and uses trendlines to clarify the response of advertising expenditures to GDP changes, the effect of the economic decline becomes clear (Figure 1). The results are not really "trends" but the trendlines help elucidate the larger decline in advertising expenditures that accompany declines in GDP.

The rate of decline, however, is not constant. Based on the trendline produced by the limited number of downturns studied, it appears that the rate of decline in advertising expenditures is highest with a small amount of decline in GDP but that the rate slows as the depth of decline in GDP increases.

This is shown in the fact that a 1% decline in GDP is accompanied by approximately a 5% decline in advertising expenditures, whereas a 3% decline in GDP is accompanied by a 10% decline and a 6% decline in GDP is accompanied by approximately a 15% decline in advertising expenditures. This study does not reveal the cause of correlation but clearly shows a relation in which a higher decline in advertising spending accompanies a decline in GDP.

These changes in spending have a significant impact on media, particularly commercially supported media because their budgets are based on projections of advertising revenues. Declining advertising expenditures of the magnitude shown in these recessions precipitously reduce income and, subsequently, profitability if managers are not able to rapidly reduce their own spending.

This research also raises the question of whether media are affected equally by the decline in advertising expenditures.

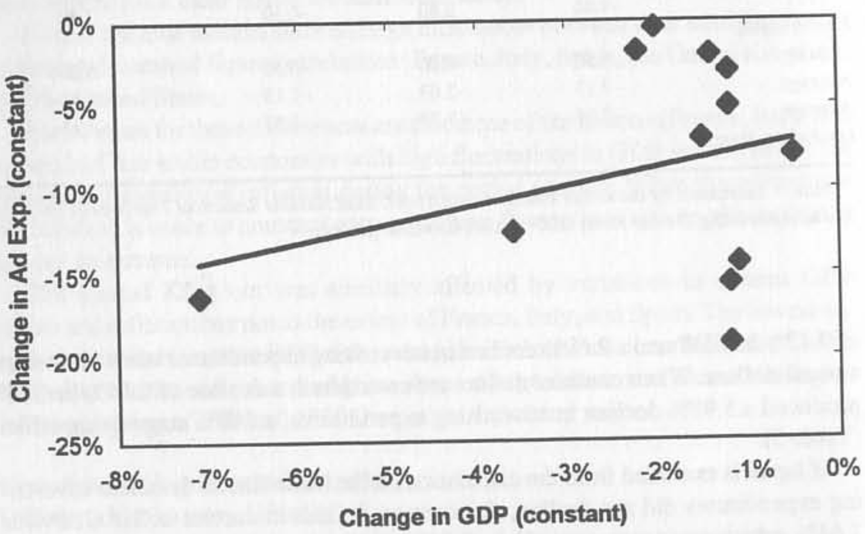

FIGURE 1 Effect of decline of GDP (constant) on advertising expenditures.

TABLE 3
Decline in Advertising Expenditures During Recession Years

	Newspaper	*Magazine*	*TV*	*Radio*	*Cinema*	*Outdoor*
Finland 1991	–18.84	–22.91	–6.26	–20.70	–29.09	–14.53
Finland 1992	–22.46	–18.20	–6.46	–12.70	20.37	–15.31
Finland 1993	–26.38	–10.99	–20.71	–31.39	–41.19	–26.02
France 1993	–11.1	–20.2	–5.6	–0.72	–20.54	–11.1
France 1994	7.05	5.46	9.45	6.07	5.0	5.59
Germany 1993	–4.64	–12.76	5.34	–3.2	2.21	–6.35
Italy 1993	–36.03	–45.98	–21.18	–30.75	—	–35.23
Japan 1989	4.84	5.3	3.27	3.21	—	6.71
Spain 1993	–39.42	–32.68	–28.08	–20.21	–18.33	–26.08
Sweden 1993	–29.21	–29.36	34.85	—	–30.37	–23.67
United Kingdom 1993	–10.66	–18.43	–10.49	5.30	–8.03	–10.05
United States 1991	–5.8	–2.73	–3.04	–2.87	—	–0.58
Average	–16.05	–16.96	–4.08	–9.00	–13.05	–16.89
Average (excluding France and Japan)	–20.45	–21.43	–6.16	–11.72	–13.89	–16.89

Note. Calculated by the author based on data from *World Advertising Trends 1998*.

When media are considered separately, it becomes clear that print media (newspaper and television) advertising expenditures are most affected by recessions and that electronic media (television and radio) are least affected (Table 3). Both newspapers and magazines lost an average of more than 16% of expenditures in the recession years whereas television lost an average of only 4.1% and radio 9%.

If Japan and France are excluded from the calculation on the bases that their domestic advertising expenditures did not decline, newspapers lost an average of 20% and magazines 21%, whereas television lost 6% and radio about 12%.

CONCLUSIONS

This exploratory study asked the questions of whether recessions and advertising expenditures are related and whether advertising expenditures for different media are affected differently by economic downturns. The answers to both questions are affirmative.

Significant declines in advertising spending were found during the recessions studied and print media were more affected than electronic media in those recessions.

The research shows that advertiser expenditures are typically reduced during recessions but that the responses are not universal among the developed nations considered in this study. The nature of the economies, the degree of economic fluctuation, segments of industry affected, national economic policies, and other factors may play some roles in the choices and these factors should be explored in further research.

The degree to which expenditures are affected may also be related to when advertisers change their purchasing behavior. In most cases it appears to be concurrent to changes in GDP but in some cases it appears to be a leading or lagging indicator. The differences may result from the availability of and responses to reliable market forecasts, the degrees to which the largest advertisers alter expenditures based on their tracking of changes in sales and the economy, or other factors. Further study in individual nations using monthly or quarterly data might help clarify patterns for each nation and the underlying reasons for those differences.

In terms of effect on different media, the results of this study clearly indicate that print media advertising expenditures are more strongly affected during recessions than are expenditures for electronic media, especially television.

Although this study does not directly address the issue, it may be that differences in the types of advertisers (e.g., manufacturers, retailers, or service firms) upon which different media depend and the uses of media by those advertisers play significant roles in the ways different media are affected.

Newspapers, for example, are the primary advertising medium for retail establishments, especially local retailers. Magazines are widely used by manufacturers and large service providers to advertise a wide range of consumer goods and support brand images. Specialty magazines also receive a good deal of advertising from retailers serving the field. Manufacturers and large service firms and a few larger multilocation retailers primarily use television. Manufacturers, large service firms, and local retailers use radio.

Because recessions affect retail sales, local and large multilocation retailers tend to cut their expenditures, as do real estate firms and automobile dealers. Because such firms are prime advertisers for newspapers and radio, reductions in such advertising are arguable reasons why expenditures in these two media fall so dramatically. The drop in magazine advertising may occur because retailers, manufacturers, and large service retailers reduce expenditures. Television expenditures are apparently less affected because the manufacturers, large service providers, and larger multilocation retailers are less willing to cut their expenditures in television than in other media.

Deeper research involving expenditures of categories of advertising expenditure during recessions will help elucidate these possibilities and whether similar patterns of reduction among advertisers occur across developed nations.

Based on this study of nine recent recessions, a relation has been shown between recessions and advertising expenditures as has differences in the ways media are affected by reductions in advertising spending during the downturns. The extent to which these relations can be established over a longer term and the complexities of the relations are worthy of broader investigation involving more recessions over a longer period and methods that control for more variations in data and effects of statistical methods.

A number of other interesting questions are raised by this study that can be explored in the broader study:

- To what extent is the structure of industrial, agricultural, and service sectors in the economy related to recessions and are these structural differences related to changes in advertising expenditures during recessions?
- To what extent and how is foreign trade related to recessions and advertising expenditures?
- Are wider fluctuations in GDP related to advertising expenditures differently than narrow fluctuations?
- Do advertising expenditures actually vary as leading, concurrent, or lagging indicators as this study shows and for what reasons?
- How do different types or categories of advertisers alter spending during economic downturns and why?
- How are spending decisions by advertisers made during recessions? Does it differ from other periods? In what ways and why?
- Are media affected more during recessions in terms of profitability than firms in other industries?

Answers to such questions will help improve understanding of how economic changes and the behavior of advertisers affect financial performance of media firms and make it possible for media managers to make better choices during economic downturns.

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