

**AN EMPIRICAL EVALUATION OF THE CONTENT  
AND CYCLE OF FINANCIAL REPORTING: THE  
CASE OF CONSUMER CREDIT**

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## ABSTRACT

Hypotheses concerning patterns of journalistic reporting of consumer debt are tested by conducting a detailed content analysis of all relevant articles in the New York Times 1950-95. Examination of this body of articles indicates that reporting is skewed toward the negative, it is cyclical in character, it follows the macroeconomic business cycle, and the pattern of reporting content is similar from one cycle to the next. In simple economic forecasting models, reporting of consumer credit is better explained statistically by economic variables other than credit growth rates themselves, particularly inflation rates. Although the methodology of the newspaper articles relies on presenting credit growth figures, timing and content of the articles are influenced by obtrusive economic events.

## **An Empirical Evaluation of the Substance and Cyclicity of Financial Reporting: The Case of Consumer Credit**

Borrowing by households has expanded sharply in the current economic upswing. Although by no means unprecedented, the borrowing upsurge has prompted expressions of concern in the popular press. In a front-page article on November 24, 1996, for example, the Washington Post reported that "Credit, once a commodity hoarded by bankers and handed out only after an exhaustive analysis of a borrower's ability to repay, today is being thrown at consumers like rice at a wedding." An important question for the journalists who write such material is whether clever hyperboles about consumer debt lead readers to useful understanding of current economic conditions.

Availability of consumer credit has obvious benefits early in an economic recovery. As the economy begins to perk up after a recession, consumer credit expansion bolsters retail sales, industrial production, and the pickup in economic growth. These things happen in every upswing, but even casual perusal of old newspaper files on consumer credit suggests that credit growth also typically generates a variety of concerns.

Apparently, increasing credit use in economic advances, and the inevitable buildup of consumer debt levels that results, has a tendency to lead observers, including reporters, to have misgivings about longer-term economic prospects. Examining aggregate statistics, such as the nominal level of consumer

credit outstanding, its growth rate, and the ratio of total consumer debt to income, they fear that increasing consumer-credit promises future economic problems. Press attention then demonstrates concerns for both the economic health of the individual (microeconomics) and for the well being of the whole economy (macroeconomics). For example, articles often contend that the debt burden creates possibilities of both overextensions and bankruptcies among consumers, often illustrated with sorrowful individual examples. On the macroeconomic side there may be discussions of overall slowdowns in consumer spending arising from the overhang of debt. The worry with the latter is that the sheer size of the consumer sector of the economy almost dictates that any spending hiatus will cause an overall economic recession.

Such concerns are not a new phenomenon. In fact, a generation ago economics professor Warren Smith wrote that these worries were "not entirely new." According to Smith (1967),

Although the sources of anxiety about the growth of private debt have not always been made entirely clear by commentators who have addressed themselves to the subject, it is possible to distinguish several different strands in discussion:

1. There is a view that the pace of debt growth in recent years has been so rapid that it cannot possibly continue indefinitely. ...

2. There is a fear that the burden of debt repayments would considerably accentuate the effect of a decline in income if such a decline should occur for any reason. ...

3. A third concern has to do with the so-called quality of credit reflected in an increased frequency of defaults, foreclosures, repossessions of collateral, and so on.

...

4. There is a further question.... Do our financial institutions and financial markets possess sufficient flexibility to enable them to adjust readily to major shifts in the

composition of credit demand if such shifts should occur? (P. 73)

When reporters articulate such gloomy views, the question naturally arises whether or not this is good reporting of the consumer-credit aspect of the business cycle. At least two important issues are involved here. First, do reporters, as we have implied, in fact tend to concentrate on the negative aspects of consumer credit? It may be that bad news is just more noticeable or more easily remembered, but the actual reporting of consumer-credit trends is more balanced or even mostly favorable.

Second, if news attention toward credit matters does focus especially on negative aspects of experience, are such views well founded? If, for example, experience demonstrates that reporters gloomily forecast outcomes that actually happen, then it seems that the reporting is appropriate. If, in contrast, the reporting pattern frequently presents worrisome outlooks but actual economic experience is much better on average, then its value is more questionable.

The purpose of this article is to quantify the content of reporters' commentary on the economics of consumer-credit and debt burden over a long period of time and to compare the commentary to actual economic developments. To focus the process, the article formulates and tests specific hypotheses about news reporting in the area of consumer credit. It develops quantitative measures for amount and content of press attention to consumer credit and uses these measures to facilitate both 1)

tests of the hypotheses about reporting over the credit cycle and 2) comparisons of reporting content to the credit growth pattern and the pattern of business cycles.

To begin this study of reporting content, section II of this article examines consumer credit growth in the past half century and develops some hypotheses about journalistic reporting of trends in this area. The hypotheses are testable questions about both quantity and content of reporting on consumer credit trends and their relationship to actual business cycle developments. Section III reviews methodology for testing these hypotheses and Section IV employs a file of all the articles on consumer credit in the New York Times 1950-95 to measure reporting of the debt growth and burden issues. It then uses these measures to provide statistical tests of the hypotheses about reporting content, as well as comparisons with actual events. By extending the study to almost a half century, this section provides an extended quantitative perspective on the frequent concern that the press misunderstands, and even unintentionally misleads, in this important area. Finally, Section V summarizes the findings and offers a brief conclusion.

#### Credit Growth Patterns

In nominal dollars, consumers' use of credit certainly has increased dramatically in the post World War II era. From a total of \$23.2 billion at the end of 1950 (and only \$6.5 billion at the end of 1945), non-mortgage consumer credit expanded to

\$1.1 trillion at the end of 1995, more than 5000 percent (Table I).<sup>1</sup> Over the period, consumer credit demonstrated an annual compound growth rate of about 9 percent.

Credit growth has not been steady over this time, however. Instead, it has been intensely cyclical, expanding rapidly during the early stages of a business upturn and then slowing (Figure I). Experience shows that the pace of credit growth has usually even become negative briefly at the bottom of the business contractions that eventually followed each upswing.<sup>2</sup>

Even over periods as short as one cyclical upturn growth has sometimes been spectacular. For example, in the upturn that began in early 1961 consumer credit grew 111 percent before the cyclical peak in 1969. Consumer credit grew another 75 per cent in the shorter 1975-80 upswing and soared 108 percent in the cyclical advance 1982-90. Revolving consumer installment credit mounted even more rapidly than the total during those years, up more than 225 percent 1982-90.

In the current expansion that began in April 1991, consumer installment credit expanded rapidly again, reaching an annual growth rate of 14 percent in 1994 and 1995, before falling off to an 8 percent rise in 1996. For the recent advance to the end of

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<sup>1</sup>The volumes and growth rates discussed in this section are for total consumer credit encompassing consumer installment and non-installment credit, including credit cards but not home-equity credit. The Federal Reserve Board, which collects and publishes the statistical information in the credit area, classifies the latter as mortgage credit.

<sup>2</sup>Business cycle turning point dates are determined by the National Bureau of Economic Research (NBER), a private organization based many years in New York and now in Cambridge Massachusetts that is generally regarded as the official arbiter in this area.

1996, consumer credit grew 51 percent and revolving credit just under 100 percent. Increases such as these undoubtedly help explain much of the perception that consumer credit has expanded too rapidly for too long.

The conventional measure of the "burden" of consumer debt is the ratio of total consumer credit outstanding to disposable personal income. This measure probably is reported most often because the more theoretically appealing ratio of scheduled payments to income is not readily available from government figures and it is difficult to estimate (see Paquette, 1986; Canner, Kennickell, and Lockett, 1995). This conventional debt/income measure of the burden of consumer credit also exhibits a cyclical pattern (Table I). It rises early in the upswing phase of the business cycle, as debt expands faster than income, and it then falls later in the cycle and especially in the contraction phase as debt grows more slowly than income. Income itself also exhibits a cyclical growth pattern (not shown in the table). Its cyclical fluctuations are far less pronounced than those of consumer credit, however. Consequently, most of the fluctuations in the conventional measure of debt burden arises from the numerator of the ratio, the credit component.

#### Hypotheses about the Reporting Cycle

First, it is worthwhile to explore the often-heard contention that the media prefer to report bad news rather than good news, even on economic issues like consumer credit.

Actually, there may be a variety of reasons why reporters seem to focus on negative events or interpretations. For instance, negative economic events may be more newsworthy if the norm is a steadily progressing economy. Or, if publishers believe that the public likes to read about problems, there is an economic incentive to write about the negative. This attitude might come about if consumers have a disproportionate concern about the economic downside in order to prepare and protect themselves. These possibilities or others can lend a negative slant to the reports that find their way into print. It is also possible that reporting is actually more balanced than it seems but readers of news simply remember negative reports more clearly than positive ones and they think that news reporting is biased toward the negative when actually it is not. Balance in the news is an issue that can be examined by looking at past experience. Formalizing this question for quantitative study produces an initial hypothesis that is independent of the stage of the business cycle:

H1: News reports of consumer credit emphasize negative views and analysis.

Second, for news reporters, steady growth or decline of anything may not normally constitute news. Consequently, it seems likely that the cyclicity of credit growth is what draws the attention of reporters. If so, then reporting of credit growth probably shows cyclical signs as well: readers might reasonably expect differences in quantity or content of articles

on consumer credit over the course of the credit cycle. This suggests a second hypothesis:

H2: Reporting of consumer credit shows cyclicity correlating with the business cycle.

Third, the cyclical pattern may be very "lumpy." At first glance it might seem that high quality reporting of a cyclical phenomenon should be cyclical too and require at least two comparable reporting phases, one for the upswing and another for the down side. As suggested above, however, consumer credit may well have different cyclical impacts depending on the phase of the business cycle and, consequently, different degrees of news interest. When consumer credit grows early in the upswing, it may be seen as economically advantageous or at worst benign, but it might become more of a concern to reporters as an economic advance ages. If it is correct that reporting of consumer credit focuses especially on the negative (H1) and that there are phases to this reporting (H2), then it seems that the reporting phases might well take a distinct pattern. Specifically, combining the essences of H1 and H2, it seems that negative reporting about consumer credit likely will occur most extensively when economic news is generally most negative, that is when the expansion phase of the cycle is giving way to the downturn. This produces a hypothesis about the timing of consumer-credit reporting:

H3: Negative reporting about consumer credit will concentrate around the time of the business cycle downswing.

Fourth, besides revealing the cyclical nature of consumer

credit growth per se, Figure 1 also demonstrates that historically the credit growth cycles have been quite similar. They exhibit fairly consistent amplitudes, peaking at a growth rate of approximately 15-20 percent, and they tend to fall off reasonably rapidly before declining briefly to a growth rate around zero or below at the time of the next recession. This similarity suggests another hypothesis about reporting over the credit cycle. Since credit growth cycles seem quite similar, then it seems reasonable to hypothesize that reporting of the growth cycles is very similar from one cycle to the next as well. Both H2 and H3 suggest such a pattern, and the fourth hypothesis follows from them:

H4: Reporting of consumer credit exhibits a similar content pattern from one cycle to another.

In effect, this hypothesis argues that reporting of consumer credit follows a similar story line and intensity at similar cyclic stages. If this is correct, then reporters should learn from prior experience. Rather than portraying an economy that is heading into uncharted and dangerous waters as consumer debt grows in a cyclical upturn, the message more properly should be that "here we go again." If so, then prior outcomes can be a good reference for writing about developments in the new business cycle.

## **Method**

### Content Analysis

Empirical examination of the content of mass media

deliveries is a well established specialty in communications research.<sup>3</sup> As discussed by Kassarian (1977), content analysis is the "study of the message, not the communicator or the audience" (P. 8). Accordingly, it is intended to be a "scientific, systematic, quantitative, and generalizable description of communications content" (Kassarian, 1977, p. 10).

Its methods are used to explore questions ranging from the impact of political news coverage on opinion formation to authorship authenticity of disputed historical manuscripts.<sup>4</sup>

As many writers on content analysis have discussed, it is precisely because content analysis attempts to be objective, scientific (replicable), systematic, and quantitative that it differs from literary criticism and other areas of communications evaluation (see the references in footnote 3). Analysts must develop precise rules in order effectively to translate words (or pictures) into quantitative data they can analyze statistically.

In effect, content analysis is analogous to performing a questionnaire study on inanimate subjects (words or pictures). There must be carefully designed procedures and rules to follow in such a study if the resulting data are to be meaningful for analysis.

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<sup>3</sup>See, for example, Berelson (1952), Budd, Thorpe, and Donohew (1967), Holsti (1969), Kassarian (1977), Krippendorff (1980), Kolbe and Burnett (1991), Lee and Ungar (1989), and Wimmer (1994). Content analyses of news reporting, including this article, fundamentally assume that content is a measurable attribute of news reports apart from observers' understanding. For discussion of this issue see Berelson (1952) and Kepplinger (1989).

<sup>4</sup>Kassarian also lists definitions of content analysis employed by others and briefly reviews some of its uses.

To analyze news reporting of consumer credit, the authors first determined the types of variables to be collected to measure scale and content of reporting in this area. Scale measurement in this context refers to frequency and amount of coverage, while content refers to subject matter of the reports and their analytical makeup. After specifying the variables, the authors designed the relevant questionnaire, chose and trained coders, and gathered the data in a way intended to be objective, scientific, quantitative, and generalizable as discussed by Kassarian and others. The next section reviews in more detail the procedures followed.

#### Data

To derive the data necessary for hypothesis testing we assembled and examined all the articles included under the index classification "Consumer Credit" found in the indexes of the New York Times 1950-95. Although there are many other newspapers, this one seems best to represent a national perspective on economic news. Except the more specialized Wall Street Journal, no other general newspaper covers economics, business, and related matters as extensively.

#### Procedure

To translate written commentary on the economics of consumer-credit growth and debt burden into data for analysis, articles judged to be both "topical" and "significant" were selected from the entire set indicated by the newspaper's index.

Topical articles are those with a focus on the economic aspects of consumer credit and significant articles are those that do more than merely report statistics. These latter articles permit classification and weighting in a variety of ways including by subject matter, size, placement, prominence, "voices" of speakers, speaker methodology, and overall tone of the article.

In compiling the list of newspaper articles for analysis, the authors essentially applied a subtractive process. They read all of the articles listed under "consumer credit" in the newspaper's yearly index, which comprises every mention of consumer credit regardless of the specifics or importance of the article. The list of topical articles retained for analysis includes only those which focus on the importance of consumer credit for economic relationships. For the purposes here, this amounts to excluding the following categories of articles (Table II):

- 1) Economic notes. These are very small articles, consisting of a mention of only a sentence or two and offered as part of a summary report of economic developments of the previous day with little or no analysis presented.

- 2) Articles on industry operating methods. These involve reviews of creditors' procedures, terms, and technology, or articles on technological change in the credit industry generally.

- 3) Articles about the business or prospects of individual

creditors or about personnel and activities in the credit industry. These cover profit reports, sales experience of individual creditors, and credit terms offered. They also include notices of corporate appointments and promotions awarded to senior credit executives, notes on management conferences, and so forth.

4) Articles about consumer protection and consumerism. Such reports include discussions about the need for disclosure laws or other consumer protections, discussions of credit discrimination, "human interest" stories concerning particular consumers' credit-related problems, budgeting and spending advice for consumers, and articles about credit counseling. Articles of this nature that addressed consumer-credit or debt-burden trends for the economy were retained, however.

5) Political issues and discussions. These articles include occasional comments on consumer credit made by political figures as part of political campaigns, but also quite a few articles in the 1950's and around 1980 concerning credit controls. In the past, especially during the wartime emergencies of World War II and the Korean War, the country experimented with controls on consumer credit as a possible way of holding down inflationary demands for scarce consumer goods. Consumer credit controls also resurfaced for a few months in 1980 as part of President Carter's economic stabilization policies. Under the circumstances, in each instance the controls themselves became an important press

topic. Some of these articles addressed the issue of the relation between controls and economic conditions and so are rightfully included in the listing of topical articles on the debt issue, but more often they centered on other questions.<sup>5</sup> The following suggest the types of articles on credit controls that are not included in the listing of topical articles:

- A) Whether controls give too much power to government.
- B) The usefulness of selective versus general controls.
- C) Previous experience with controls.
- D) The need for or design of evaluative studies of controls and the personnel to do the studies.

"Significant" topical articles exclude from the total of topical articles all statistical reports that do not contain analysis, leaving only the analytical topical articles. Examples of exclusions include statistical reports on credit growth, revolving credit, credit cards, home equity credit, or credit delinquencies that do not provide any analysis or discussion of meaning and importance. Brief mentions of the monthly statistical reports from the Federal Reserve fall into this category. In effect, the significant articles remaining are those which are topical and expressive on the issue of consumer credit and credit growth as it relates to economic relationships.

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<sup>5</sup>Even so, it would be possible to evaluate these articles for content, including tone and voice. Although the authors did not do this formally for the articles on credit controls not counted as "topical," it did seem that the articles often exhibited a negative tone. Frequently, they seem to advance the viewpoint that there is something inherently problematic about consumer credit, justifying controls in this area rather than in some other area.

From the articles it is possible to collect a group of variables that are useful for analytical purposes and to derive others.

Measurements on the collected variables followed procedures specifically designed for the task. First, the authors agreed in advance on variables to be collected, designed the questionnaire (coding sheet) and coder instructions, and trained the coders. Next, two or three coders read every article previously judged by the authors to be "significant" and recorded observations on the list of variables according to a set of written instructions and descriptions (the coding sheet and instructions are available from the authors). Third, the coders compared their findings and discussed the cases where results differed. For the latter, each newspaper selection was reviewed and discussed individually until there was agreement. Fourth, when there was agreement on each article, its measurements were recorded. Finally, the authors transformed the data describing the content of each included article into machine-readable form for analysis.

In all, the collection procedure tabulated 31 variables for each "significant" article in 6 groupings (Table III). The first group was the relevant subject matter of the article. Each article selected was examined for the presence of eighteen categories of discussion about the economic importance of consumer credit. Each article could qualify in more than one category, up to the possibility of all eighteen. Subject categories were subdivided into positive and negative and further

subdivided into microeconomic importance, macroeconomic importance, and other. Codes recorded whether the relevant discussion of each subject was a major part of the article in question or only a minor part.

The second grouping considered the size of the article in the newspaper and the size of the relevant portion. We defined size as the total number of paragraphs, and size of relevant portion as the number of paragraphs devoted to discussion of the economic aspects of consumer credit (i.e. the topical portion). In some ways determining the length of the relevant portion of the article was the most difficult part of coding and recording the 31 variables, due to necessity of deciding whether closely related discussions were topical or not. To assist the coders with consistency in decision making, one of the authors joined the coding working group for determining this measurement and to help minimize possible subjectivity in the decisions made and disagreements between coders.

The third grouping recorded the location and prominence of the relevant article in the paper. The first variable recorded the location of the article in the paper as front page, editorial page, front page of an inside section, or other, and the second was a dichotomous variable to note special prominence because of graphics or a large headline.

The fourth grouping noted the voices of the speakers in the relevant part of each article. The codes related each of the

relevant subjects (Group I) directly to one or more of the four speaker classes (industry, government officials, academics, or only the voice of the reporter -- the default) discussed this matter. Here "discussed" means direct reference or quotation establishing a position on one of the 18 relevant subjects. Each subject could be related to as many as all four speaking voices, thus permitting a very large number of possible combinations of speakers and subjects in a single article. The codes also recorded the importance of each of the speakers within the context of the article -- whether each voice recorded was primary or not and which voice, if any, set the tone for the article as a whole.

The fifth grouping recorded the methodology employed by each speaker about a subject -- analytical, assertion, moralizing claim, or defense against an unspoken opposite claim. A statement was counted as analytical if there was some sort of appeal to statistics, history, experience, logic, or any other reasonable way of arguing a point; otherwise it was an assertion.

The coding instructions required that statements be counted as assertions unless there was clear indication of some thought process making it more than an assertion. The moralizing claim code refers to statements that are more than assertions in that they take on moralistic overtones, such as suggesting that credit is an evil in itself. Defense against an unspoken opposite claim refers to straw-man attacks on an unspoken conventional wisdom,

with no support of the conventional wisdom itself.

As with speakers, the coding scheme for methodology also permitted multiple responses for each subject matter touched upon in the article. Again, this maximized the number of possible cross products between methodology and the other variables. The codes for methodology of discussion further recorded whether the analysis, assertion, or moralizing claim came with a prediction or not.

Finally, the coders recorded an overall rating for each article on a scale of -3 to 3. A score of -3 denoted articles that were highly one sided in discussing the problematic nature of consumer credit upward through +3 for articles that were one sided but highly favorable concerning the consumer credit situation. Although such scaling is by its nature somewhat subjective, the authors believe that the scale with only three points in each direction is sufficiently wide that replication by other coders could produce the same or similar results. Coders evaluated each article independently and then discussed the few articles that did not produce immediate agreement. After discussion, agreement was 100 percent.

## **Results**

### Tests of Hypotheses

Using these definitions, there were 844 topical articles on the economics of consumer credit in the New York Times 1950-95. Of these, 504 were statistical reports and the like, leaving 340

significant topical articles during these years. These provide the core of the data available for analysis.

Test of H1: News reports of consumer credit emphasize negative reports and analysis.

A group of variables was available for testing H1, and measurements on each appears to be consistent with the hypothesis. Taken together, they provide empirical support for the belief that news reporting of consumer credit, while two sided, tends to lean strongly toward the negative.

As noted earlier, each article received an overall positive-negative rating on a scale 3 to -3. Focusing first on the number of articles, this variable indicates that by number 55 percent of the articles received a negative overall rating (Column 1 of Table IV). While by itself this piece of evidence seems to lend only weak support for the hypothesis, it actually appears to understate a negative tendency in some interesting ways.

For one thing, many of the positive articles came at the very beginning of the time period under discussion (also a period of credit controls that appeared to inflate the number of articles). Reporting since the early 1950's has been considerably more negative. The year 1950 was arbitrarily chosen for the starting year of this study because it was a round-number year a reasonable time after the traumatic years of World War II and the immediate postwar period. During 1929-49 economic conditions certainly differed from the period following because of the depression, the war, and the transition to a peacetime

economy. The transformation was especially important for consumer goods and consumer credit that were restricted during the war. But 1950 may not be the best illustrative choice as starting point for analyzing newspaper content. With the passage of time after that year reporting of consumer credit trends became increasingly negative. For example, we might have selected 1955 as the starting point for analysis, under the assumption that postwar normalcy took somewhat longer to return. There was, indeed, even another war during the 1950-55 period. During 1955-95 60 percent of the articles were negative. The negative proportion was 63 percent 1960 through 1995, and 69 percent 1965-95 (column 1 of Table IV).

Furthermore, this finding of negativity that increases over time is independent of the measurement of negativity employed. It is, of course, possible that the number of negative articles is greater than positive, but that the positive articles are more strongly positive or are placed more prominently in the newspaper. Neither of these appears to be the case, however. Weighting the articles by the degree of positiveness or negativeness on the collected scale of +3 through -3 also produced 55 percent of the total weight negative 1950-95, with 62 percent negative 1955-95, 66 percent 1960-95, and 71 percent 1965-95 (column 2 of Table IV). Additionally, weighting the articles by placement in the newspaper (additional weight for front page, front page of an inside section, editorial page,

prominent headline or graphics) produces analogous results (column 3 of Table IV).

Third, many of the articles that are in the positive category turn out to be positive only because they knock down a straw man, a notorious line of fallacious reasoning (see Copi and Burgess-Jackson, 1996; Copi and Cohen, 1997). During the data-recording process the coders recorded a code for articles that argued against an unspoken opposite position. In effect, these articles posited an unspoken conventional wisdom (the straw man) and then proceeded to knock it down. Some of these articles were positive in their commentary on consumer credit and some were negative, but the preponderance were positive. Thus, a group of the positive articles on consumer credit were only positive in the sense that they reported, in effect, that "it is not really as bad as you think."

While it is possible to argue whether such straw-man attacks really are positive or negative, excluding them from the analysis under the contention that they are not really either positive or negative again raises the proportion of negative articles. Both the count of positive or negative articles (not shown in the table) and the proportion of the sum of the positive and negative weights (column 4 of Table IV) again demonstrate the preponderance of negativity that has existed over the years in reporting on the economics of consumer credit. Even more striking, negativity has increased significantly over the 45-year

period.

Fourth, another way to look at the question of negative of reporting is to examine only the articles in which the voice of the press is the preponderant source of information in the articles. In effect, looking at the newspaper articles this way excludes from the analysis primarily the speeches of business executives, government officials, and academics, and leaves behind mainly the articles where reporters have taken it upon their own initiative to examine the consumer credit situation. Again, this raises the proportion of negative weight (column 5 of Table IV). It seems that a measurable proportion of the positive articles over the years has been associated with the speeches and musings of sources other than the press itself. When the reporter is the predominant voice in the article, the tone tends to become much more negative, reaching the weighted proportion 88 percent classified as negative 1965-95.

In sum, although over the full forty-five years encompassed by the data set only about 55 per cent of the articles received a negative ranking at first cut, the reporting record on consumer credit is actually much more negative when examined in greater depth.

Tests of H2: Reporting of consumer credit shows cyclicity correlating with the business cycle;

H3: Negative reporting about consumer credit will concentrate around the time of the business cycle downswing; and

H4: Reporting of consumer credit exhibits a similar content pattern from one cycle to another.

Evidence from the data set also is consistent with the second, third, and fourth hypotheses (Table V). Reporting about the economics of consumer credit appears to be intensely cyclical, correlating well with the pattern of the business cycle itself (H2). In addition, positive reporting of consumer credit appears to take place most often around the middle of the cyclical upswing with negative reporting concentrating early and late in the upswing and in the downturn (H3). Furthermore, this pattern seems quite similar from one cycle to another (H4).

Table V arrays the overall positive/negative ranking of articles analyzing consumer credit summed by years, within each of the post-1950 business-cycle upswings. In each cycle the first month of the first year is the onset month of the new upswing, and the last month is the last month of the following recession.<sup>6</sup> The specific positive/negative measure displayed in this table weights the coders' overall ranking for the article by location in the paper, prominence of the article, and proportion of the article that deals with consumer credit. This comprehensive measure of the positive/negative content of the articles is then summed over all the significant consumer-credit articles for that year.

The table clearly shows the cyclicity of consumer-credit reporting. In all but one cycle the index is the largest (most positive) near the midpoint of the cycle and then it trails

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<sup>6</sup>This means that the last "year" of each cycle as viewed is variable in length, since cycles do not exactly end on calendric cue. Also, the first year recorded, 1950, is two months short, since the upswing actually began in November, 1949.

downward, becoming smallest (most negative) around the business cycle trough year(s), overlapping into the early portion of the following upswing. The notable exception is the very short upswing August 1980 through July 1981. This upswing was so short that the positive phase of credit reporting never had time to emerge. The period was further complicated by severe inflation.

This experience of a short upswing surrounded by two close recessions (February 1980-July 1980 and August 1981-November 1982) may also have contributed to explaining the variability of news coverage in the following period, cycle 8. The uncharacteristic degree of negative coverage in year 3 of that cycle, December 1984-November 1985, may have reflected ongoing concern related to the timing of the previous short-lived cycle.

Also, year 7, December 1988-November 1989, registered as more positive than typical at this stage of the cycle. This lengthy cycle, nonetheless, still fits within the pattern where relatively more negative coverage is concentrated around the recession periods and generally more favorable coverage occurs toward the middle of the upswing.

Interestingly, taken as a whole, review of the significant topical articles on consumer credit indicates a pattern that, while consistent with H3, contradicts the content of the articles themselves. Where negative articles often argue a malevolent scenario based on high (and too high) levels or growth rates of consumer credit, H3 and the reporting cycle depicted in Table V

indicates that coverage, in fact, is most positive during the periods of business cycle expansion when credit growth rates reach their maximums. Furthermore, reporting is most negative near or at business cycle recessions when credit growth is minimal, not when growth rates are at their highest.

This pattern would seem to indicate that consumer credit growth is not an agenda-setting item for reporters (Zucker, 1978); it appears that reporters do not set their own agenda concerning reporting of credit growth. Rather, they follow developments, but the developments they follow when reporting about credit conditions are more closely associated with other economic indicators than with credit changes, despite the content of the articles. The pattern (timing) of articles may be determined by a different set of considerations than what is reported. Since we are primarily interested in the pattern of reporting on consumer credit, we attempt to explore this issue more formally with statistical methodology in the next section. Simple forecasting models of coverage and content of reporting on consumer credit are estimated, using economic variables as arguments.

#### Relationship of Reporting Content to Economic Trends

Preliminary indications that reporting of consumer credit may depend on more than credit growth trends argue for the use of a multivariate estimating technique to test the significance of alternative relations. Based on the content of the articles,

rather than on the preliminary findings suggested by Table V, the estimating equation hypothesizes that the magnitude of the positive/negative index of reporting coverage of consumer credit is an inverse function of the rate of real consumer credit growth the previous year.<sup>7</sup> As this variable rises, according to the hypothesis, reporting becomes more negative and conversely. The multivariate equation also tests whether the index is a function of current economic conditions as well, either a direct function of economic growth (represented by the growth of real gross domestic product, GDP, this year) or an inverse function of inflation (measured by this year's growth in the consumer price index). The equation also includes a dummy variable which equals one in 1950-7 to take into account the years when policy legality and efficacy of consumer credit controls were strongly debated in the press and equals zero in other years.

Ordinary least squares estimation indicates that inflation is a better predictor than credit growth of the positive/negative index of reporting on consumer credit.<sup>8</sup> The index is significantly related to the current inflation rate with the correct (negative) sign, showing that inflation rates are inversely related to reporting on consumer credit (Equation 1, Table VI). In contrast, the lagged real consumer credit growth

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<sup>7</sup>Real (inflation-adjusted) consumer-credit growth is used in the estimating equation because it represents the true expansion of credit apart from inflation. Using this form of the variable also reduces collinearity between the independent variables.

<sup>8</sup>The growth rate of the consumer price index (inflation) is also a better predictor than the alternative indicator of current economic conditions, the growth rate of real GDP (equation not shown in the table).

rate is not significantly related to the measure of reporting content. The F statistic for the overall model is significant at the one percent level, indicating that the model explains a significant portion of the variation in the data.

The results appear to support the notion that reporters do not focus primarily on consumer credit trends when deciding to write about consumer credit. The inflation rate is a better predictor of reporting of consumer credit trends than consumer credit growth itself, even though the articles focused on consumer credit. Consequently, it does not appear that the overall growth in consumer credit is the obtrusive issue followed by journalists when writing about credit.

A variety of alternative specifications of the model using other measures of credit growth were utilized to test the strength of the results. Other credit growth variables tested included the five-year moving average growth rate, and measures of growth acceleration. Variables accounting for interactions between inflation and credit growth rates were also tested without better results. Simply stated, none of the models tested found that a measure of real consumer credit change was a significant predictor of the news analysis of the issue. Replacing last year's credit growth in the equation with this year's growth actually produced a significant positive correlation with the article index, in other words, reporting about credit growth was most negative when credit growth was low.

This further highlights the implausibility of credit-growth figures being the tabulations that produce negative coverage.

A second statistical model is also consistent with the importance of the inflation rate, which represents economic conditions more generally, in generating a negative coverage year for reporting on consumer credit (Equation 2, Table VI). In this instance a logit model was estimated to study the weaker-form relation -- the probability of obtaining aggregate negative orientation of reporting coverage on consumer credit for the year (rather than the linear relationship to magnitude). The inflation rate is still the most important predictor, but this time the lagged real consumer credit growth rate showed an inverse correlation and achieved significance at the 10 percent level. This indicates a limited degree of confidence in the correlation. The model is a good predictor, achieving reasonable  $R^2$  and an F statistic significant at the 1 percent level.

Together, models 1 and 2 corroborate the significance of the inflation rate in predicting newspaper coverage of credit, while maintaining the lesser or even opposite roles of consumer credit growth as predictor of its newspaper coverage. Varying model 2 to substitute the real growth rate of GDP for the lagged change in consumer credit growth explicitly correlates this basic measure of the business cycle (together with the inflation rate) to the negative sign of the index of content. This adjustment produced the best fitting logit equation with all parameters

statistically significant. The model indicates that higher real growth rates in GDP are inversely correlated with likelihood of obtaining a negative year in the content index. In other words, lower GDP growth rate is consistent with a negative coverage year. Thus, current GDP may be important in signaling concern and negative content concerning credit growth, although not necessarily the relative magnitude of the concern.

### **Discussion**

In sum, examination of reporting on consumer credit in the domestic newspaper closest to a national source indicates that reporting is skewed toward the negative. Furthermore, reporting is cyclical in that it follows the macroeconomic business cycle, and the pattern of reporting content is similar from one cycle to the next. Possibly most interesting, reporting of consumer credit is better explained statistically by other economic variables than credit growth rates themselves.

The finding that prior credit growth rates are not a good predictor of the timing and intensity of coverage of credit growth seems surprising, especially since more than 70 percent of both positive and negative articles on consumer credit growth focus explicitly on the growth figures as the positive or negative aspect of the news article. Statistical results indicate, however, that although calculating such figures may be important to constructing a majority of the newspaper articles, the figures are not predictive of the timing and intensity of

negative or positive coverage overall.

Since inflation and GDP growth tend to be obtrusive issues themselves, this finding may be explainable, even if potentially misleading to readers. As the inflation rate rises, concerns arise over the current and future state of the economy. Journalists then begin to question economic conditions and analytically negative articles surface to a greater extent, including negative articles about consumer credit conditions. Conversely, as inflation drops or GDP growth rates surge, sanguine attitudes arise and analysis becomes more felicitous. Thus, it seems that credit appears to be an element of economic reporting that is not strictly defined to itself, but is analyzed through the lens of the most obtrusive economic issues. In this sense, concerns over the economy or economic prospects influence the type of coverage or analysis devoted to consumer debt issues.

There is doubtless a variety of factors associated with news coverage of any issue, and certainly of consumer-debt issues. Issues as variegated as structural changes in the economy and trends in society that affect newspaper sales can play roles in determining the analysis and types of articles published over time. In this context one question that arises is whether journalists learn from past experiences. Results reported here might lead one to conclude that they do not; after all, the cyclical pattern of the reporting was generally maintained throughout the 45-year period. Close inspection of inflection

points within cycles indicates the possibility that memory (albeit short term, perhaps only over the past cycle) may have some role in the timing of reporting. Isolating the three cycles that extended for a longer duration than the preceding cycle, cycles 4, 6, and 8, suggests that the duration of the previous cycle may exercise some influence on the reporting agenda in the current cycle. For example, in cycle 4, there is a dip in the index at the third period which corresponds to the timing of the previous cycle's downturn. Thus, there may be some recall of the pattern of the previous cycle and reaction in the present cycle.

There is also the downturn in the positive/negative reporting index previously noted in cycle 8 that corresponds to the length of cycle 7. If the last cycle was only two years long (as was cycle 7) then one might expect journalists to become anxious around the second or third year into the next cycle (as occurs in cycle 8). Unfortunately, there are too few cycles to test such an explanation reliably, however plausible it may appear.

Finally, it is worth noting that the findings here arise from only one newspaper. Although this newspaper clearly is a significant news source in the United States, it would be useful to extend the analysis here to other news sources including newspapers, magazines, and the electronic media. Similar or different outcomes, corroborating or not, would be interesting findings.

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**TABLE I**

Measures of Consumer Credit and Credit Growth

Year	Consumer Credit Outstanding Year End	Consumer Credit Growth Dec to Dec	Consumer Credit Debt Burden CCO/DPI
1950	23246.7	23.73%	6.22
1951	24612.5	5.88%	5.98
1952	29656.6	20.49%	7.09
1953	33684.0	13.58%	8.20
1954	34981.1	3.85%	8.16
1955	41869.3	19.69%	9.13
1956	45436.2	8.52%	9.39
1957	48070.7	5.80%	9.72
1958	48330.1	0.54%	9.17
1959	55941.0	15.75%	13.82
1960	59975.8	7.21%	14.51
1961	62202.6	3.71%	14.01
1962	68123.1	9.52%	14.59
1963	76579.4	12.41%	15.49
1964	85981.0	12.28%	16.14
1965	95993.5	11.65%	16.53
1966	101855.8	6.11%	16.25
1967	106858.1	4.91%	15.86
1968	117406.6	9.87%	15.79
1969	127124.0	8.28%	15.73
1970	131480.3	3.43%	15.03
1971	146881.1	11.71%	15.02
1972	166135.5	13.11%	14.90
1973	189954.2	14.34%	15.08
1974	198755.3	4.63%	14.69
1975	203617.9	2.45%	13.96
1976	224840.2	10.42%	14.16
1977	257470.9	14.51%	14.74
1978	302087.1	17.33%	15.27
1979	343542.6	13.72%	15.32
1980	350129.5	1.92%	13.63
1981	367587.5	4.99%	13.16
1982	384628.8	4.64%	13.01
1983	433682.2	12.75%	13.55
1984	512770.3	18.24%	14.69
1985	592716.1	15.59%	16.46
1986	646301.9	9.04%	17.14
1987	676303.4	4.64%	16.61
1988	719025.1	6.32%	16.91
1989	779004.9	8.34%	16.99
1990	789326.5	1.33%	16.30
1991	777233.1	-1.53%	15.31
1992	779947.0	0.35%	14.60
1993	838622.9	7.52%	15.11
1994	959747.5	14.44%	16.30
1995	1094197.0	14.01%	17.61

## Table II

### Exclusions from the Index Listing of Articles on consumer Credit

#### Exclusions as not "Topical"

- 1) Economic sidelights: e.g. very small articles consisting of a few sentences sometimes included in sections on "economic notes" or the like.
- 2) Creditors operations: e.g. procedures, technology, technological change.
- 3) Creditors' business experience and prospects: e.g. profits, sales, credit terms, industry personnel actions and activities.
- 4) Consumer protection, consumerism: e.g. need for disclosure laws, "human interest" stories concerning consumers' problems, budgeting and spending advice for consumers.
- 5) Political issues: e.g. speeches by politicians during campaigns and discussions of the politics and government policies of credit controls:
  - A) Whether controls give too much power to government.
  - B) The usefulness of selective versus general controls.
  - C) Previous experience with controls.
  - D) Need for or design of a study of controls.

#### Exclusions as not "Significant"

Statistical reports without analysis. e.g. reports of growth percentages, percentages of retail sales, delinquencies, etc. without analysis.

**Table III**

Variables for Content Analysis

- I. Relevant subjects present in article or not (18 variables)
  - A. Subject variables
    - a. Positive microeconomic
      - 1. Higher living standard
      - 2. Other positive microeconomic subject
    - b. Negative microeconomic
      - 3. Personal economic difficulties
      - 4. Other negative microeconomic subject
    - c. Positive macroeconomic
      - 5. Economic expansion
      - 6. Employment
      - 7. Price stability
      - 8. Economic fundamentals OK
      - 9. Credit Growth/Status OK
      - 10. Other positive macroeconomic subject
    - d. Negative macroeconomic
      - 11. Recession/depression
      - 12. Unemployment
      - 13. Price instability/inflation
      - 14. Economic instability/Status not OK
      - 15. Credit growth/status not OK
      - 16. Other negative macroeconomic subject
    - e. Other
      - 17. Positive other
      - 18. Negative other
  - B. Codes (Coded by presence or not):
    - 0. Discussion not present
    - 1. Discussion present but a minor aspect of the article
    - 2. Discussion present and a major aspect of the article
- II. Size/length of article (2 variables)
  - A. Size/length variables
    - a. Total length variable
    - b. Relevant paragraphs
  - B. Codes: Number of paragraphs
- III. Location/prominence of article in paper (2 variables)
  - A. Location variable
  - B. Codes
    - 3. Front page of paper
    - 2. Editorial page or front page of inside section
    - 1. Other
  - C. Prominence variable
  - D. Codes
    - 1. Especially prominent because of headline or graphics
    - 0. Other

Table III Continued

- IV. Voices present in article or not (4 variables)
- A. Voice variables for each subject
    - 1. Industry voice
    - 2. Government voice
    - 3. Academic voice
    - 4. Reporter's voice
  - B. Codes
    - 0. Voice not present
    - 1. Voice present, but not primary
    - 2. Voice present and primary voice about point
    - 3. Voice present, primary voice about point, and most important voice in setting tone of article
- V. Methodology of voices on subjects (4 variables)
- A. Methodology variables for each subject-voice combination
    - 1. Analytical with/without prediction
    - 2. Assertion with/without prediction
    - 3. Moralizing claim
    - 4. Defends against opposite position
  - B. Codes
    - 0. Methodology not present
    - 1. Methodology present without prediction
    - 2. Methodology present with prediction
- VI. Overall classification of article (1 variable)
- A. Classification variable
  - B. Codes:
    - 3. Consumer credit will cause much damage or consumers are in poor shape economically because of credit. Article largely one sided.
    - 2. Consumer credit is a problem or consumer economic condition is not especially good or is deteriorating because of credit. Article contains some element of balance.
    - 1. Consumer credit possibly may be a problem. Article reasonably well balanced (but with a slight tone that credit is a problem).
      - 1. Consumer credit possibly not much of a problem. Article reasonably well balanced (but with a slight tone that credit is not a problem).
      - 2. Consumer credit is not a problem or consumer economic condition is not especially bad or deteriorating because of credit. Article contains some element of balance.
      - 3. Consumer credit situation largely under control or benign. Will not cause much damage or consumers are not in poor shape economically because of credit. Article largely one sided.

**Table IV**

Proportions of Negative Articles  
(Per cent)

<u>Period</u>	<u>1</u> Proportion of Number of Articles	<u>2</u> Proportion of Sum of Weights	<u>3<sup>a</sup></u> Proportion of weights, adjusted for <u>Prominence</u>	<u>4</u> Proportion of weights, excluding <u>"straw man"</u>	<u>5</u> Proportion of weights, including only <u>Press voice</u>
1. 1950-95	55	55	55	62	81
2. 1955-95	60	62	60	68	81
3. 1960-95	64	66	64	70	85
4. 1965-95	69	71	69	74	88
5. 1970-95	68	68	67	72	86
6. 1975-95	66	68	66	70	85
7. 1980-95	64	66	64	68	81
8. 1985-95	64	64	64	70	81

Notes: Columns 2, 4, and 5 multiply the positive/negative scale variable for each article (+3 through -3) by the frequency of the articles in that scale group and compare the sum of the positive and negative products to the sum of the absolute values. See text for further description of columns 4 and 5.

<sup>a</sup>Column 3 employs an additional multiplier constructed from the location and article prominence variable (see Table III) and applies it to the products used in constructing the weighted variable used in column 2. This multiplier equals 3 for an article on the front page or on the editorial page or initial page of an inside section with special prominence. The multiplier equals 2 for an article on the editorial page or an initial page of an inside section but without special prominence or on any other page with special prominence. Otherwise this multiplier equals 1.

TABLE V

Weighted Index and Annualized Growth Rates by Cycle Period  
Annualized Growth Rates

Period	Dates	Cycle 1			
		Weighted Index Sum	Nominal Credit Growth	CPI Growth	Real Credit Growth
1	Jan50-Oct50	90.18	55.47%	2.45%	51.96%
2	Nov50-Oct51	-32.92	4.19%	6.34%	-2.02%
3	Nov51-Oct52	308.33	15.69%	1.41%	14.09%
4	Nov52-Jul53	66.42	16.65%	0.50%	16.09%
5	Aug53-May54	53.14	2.62%	0.36%	2.26%
Cycle 2					
1	Jun54-May55	66.08	11.79%	-0.63%	12.50%
2	Jun55-May56	95.39	13.86%	1.20%	12.51%
3	Jun56-Aug57	25.60	6.88%	3.57%	3.18%
4	Sep57-Apr58	-60.00	-0.43%	3.28%	-3.63%
Cycle 3					
1	May58-Apr59	-25.59	5.67%	0.14%	5.52%
2	May59-Apr60	37.16	12.83%	1.72%	10.93%
3	May60-Feb61	-11.25	4.80%	1.10%	3.68%
Cycle 4					
1	Mar61-Feb62	0.85	3.67%	0.90%	2.74%
2	Mar62-Feb63	40.00	9.97%	1.03%	8.85%
3	Mar63-Feb64	24.70	11.17%	1.31%	9.73%
4	Mar64-Feb65	43.91	11.35%	1.10%	10.14%
5	Mar65-Feb66	42.86	10.11%	2.46%	7.47%
6	Mar66-Feb67	-15.25	4.16%	2.55%	1.57%
7	Mar67-Feb68	-53.51	4.57%	3.64%	0.90%
8	Mar68-Feb69	-34.44	10.23%	4.37%	5.61%
9	Mar69-Dec69	-39.05	6.68%	5.32%	1.30%
10	Jan70-Nov70	-21.44	2.44%	4.89%	-2.35%
Cycle 5					
1	Dec70-Nov71	-15.70	10.75%	3.02%	7.51%
2	Dec71-Nov72	-1.30	11.65%	3.16%	8.23%
3	Dec72-Nov73	-0.46	13.89%	8.00%	5.45%
4	Dec73-Mar75	-83.30	3.84%	10.53%	-5.86%
Cycle 6					
1	Apr75-Mar76	-10.00	4.73%	5.66%	-0.88%
2	Apr76-Mar77	10.00	10.13%	6.24%	3.66%
3	Apr77-Mar78	-36.36	14.26%	5.67%	8.13%
4	Apr78-Mar79	-50.73	15.33%	9.39%	5.43%
5	Apr79-Jan80	-119.18	12.20%	12.58%	-0.35%
6	Feb80-Jul80	-75.08	-3.70%	9.11%	-12.25%
Cycle 7					
1	Aug80-Jul81	-30.91	4.38%	9.98%	-5.09%
2	Aug81-Nov82	-54.12	4.12%	4.72%	-0.57%
Cycle 8					
1	Dec82-Nov83	21.00	10.70%	3.48%	6.98%
2	Dec83-Nov84	63.29	16.54%	3.85%	12.23%
3	Dec84-Nov85	-164.86	14.45%	3.32%	10.77%
4	Dec85-Nov86	60.00	8.80%	0.82%	7.91%
5	Dec86-Nov87	-50.00	4.33%	4.24%	0.09%
6	Dec87-Nov88	-40.89	5.93%	4.06%	1.79%
7	Dec88-Nov89	20.76	7.68%	4.22%	3.32%
8	Dec89-Jul90	-17.78	1.96%	4.98%	-2.93%
9	Aug90-Mar91	0.00	-0.57%	3.64%	-4.11%
Cycle 9					
1	Apr91-Mar92	-69.27	-1.27%	2.88%	-4.04%
2	Apr92-Mar93	-80.03	1.72%	2.87%	-1.11%
3	Apr93-Mar94	73.10	8.60%	2.22%	6.23%
4	Apr94-Mar95	13.08	13.98%	2.72%	10.97%
5	Apr95-Dec95	-120.13	11.83%	2.02%	9.66%

**Table VI**

Regression Models

Dependent Variables

negsgn = 1 if sum of weighted articles over the year is < 0; zero otherwise  
 sw4 = Yearly sum of article weights

Independent Variables

controls = Dummy variable = 1 if the year was characterized by significant debate over the institution or efficacy of consumer credit controls  
 cc rg = Real growth rate of U.S. consumer credit in current year  
 cpi g = Growth rate in U.S. consumer price index for current year  
 gdp rg = Real growth rate in U.S. gross domestic product for current year  
 lcc rg = Real growth rate in U.S. consumer credit from previous year (one year lag)

Forecast Model 1: Ordinary Least Squares Estimation for Sum of Weighted Articles (sw4)

Independent Variable	Parameter Estimate	Standard Error
Intercept	26.09	20.43
cpi g	-868.81 **	337.76
lcc rg	-170.70	1154.38
controls	88.24 ***	30.73

R<sup>2</sup> = 0.319 \*\*\*

Variation: Current consumer credit growth as single independent variable

Intercept	-28.61 **	13.01
cc rg	488.52 ***	148.45

R<sup>2</sup> = 0.198 \*\*\*

Forecast Model 2: Logistic Estimation of Negative Coverage Year (negsgn)

Intercept	-0.8254	0.7813
cpi g	50.7107 ***	19.3987
lcc rg	-11.1566 *	6.0464

R<sup>2</sup> = 0.317 \*\*\*  
 -2logL = 42.77

Variation: current year's real GDP growth (gdp rg) replaces last year's consumer credit growth (lcc rg)

Independent Variable	Parameter Estimate	Standard Error
Intercept	-0.29	0.97
cpi g	48.91 **	20.66
gdp rg	-32.07 *	17.18

$R^2 = 0.333$  \*\*\*  
-2logL = 43.04

Note, asterisks placed next to parameter estimates indicate significance levels and asterisks placed next to  $R^2$ 's indicate significance levels of the F statistic in the following design:

- \*\*\* indicates significance at the 1% level
- \*\* indicates significance at the 5% level
- \* indicates significance at the 10% level.