PUBLISHING WITH CONTENT ANALYSIS: OPPORTUNITIES AND PITFALLS

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Can the media play a “governance” role?

- Finance and accounting folks seemed to be saying yes

- Management scholars focused on legitimating role of positive media coverage but not really governance role

- My dissertation tried to come in with a yes, but…
WATCHDOG OR LAPDOG? A BEHAVIORAL VIEW OF THE MEDIA AS A CORPORATE GOVERNANCE MECHANISM

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This study begins to provide a behavioral view of the media and corporate governance by showing how firms enact largely symbolic governance changes with respect to board independence that essentially protect managerial interests, yet still elicit positive responses from the media. I show why this media response is important for firm leaders by examining how more favorable media coverage may affect CEO job security, executive compensation, and board composition. To the extent that largely symbolic actions affect media coverage, this study raises questions about the effectiveness of the media as a governance control mechanism.

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Burr Under the Saddle: How Media Coverage Influences Strategic Change

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In this paper we introduce a new antecedent to the strategic change literature by examining the effect of media coverage on the extent of strategic change. Specifically, we examine how negative media coverage may prompt firms to make changes to their resource allocations and then explore how the makeup of the board and firm performance can moderate this relationship. We develop a theoretical framework to explain why media coverage may affect strategic change and then test our theory with a longitudinal analysis of 250 firms over a four-year period. The empirical results lend support to our theory of media influence on strategic change and suggest that the evaluations of firms by outside constituencies may influence the decision making of executives.

Key words: strategic change; media; corporate governance; top management teams

History: Published online in Articles in Advance.
How to measure media content on a large scale?

Linguistic Inquiry and Word Count (LIWC) is a text analysis software program designed by James W. Pennebaker, Roger J. Booth, and Martha E. Francis. LIWC calculates the degree to which people use different categories of words across a wide array of texts, including emails, speeches, poems, or transcribed daily speech. With a click of a button, you can determine the degree any text uses positive or negative emotions, self-references, causal words, and 70 other language dimensions.

The LIWC program analyzes hundreds of standard ASCII text files or Microsoft Word documents in seconds. The LIWC2007 program also allows you to build your own dictionaries to analyze dimensions of language specifically relevant to your interests. The Macintosh version of LIWC2007 has a feature that will highlight in color all the words found in a particular file when it is analyzed. With the Macintosh version, users can also create dictionaries that include literal phrases (e.g., ‘you know’) as well as individual words and word stems.

The student version of LIWC, LIWClite7, only analyzes plain text files using the LIWC2007 and earlier LIWC2001 dictionaries. LIWClite7 is the student version that is ideal for people with limited text analysis needs.

LIWC license
A single-user license for LIWC2007 or LIWClite7 entitles you to install the software on no more than two computers, however discounts available for multi-user versions (see End User License Agreement here).

Macintosh versus Windows LIWC2007
Note that the Macintosh version of LIWC2007 has some features (e.g., the ability to detect phrases) that are not currently available on Windows LIWC2007. In case you may need some of these features, click here to check these before you purchase.

Learn more
To learn more about the development and uses of LIWC, click the ‘How it Works’ link in the menu above. You can also read more about the categories and dictionary features of the LIWC2007 dictionary by clicking this link.
Media Coverage – What I Did

• News articles from four leading business publications and major newspapers (WSJ, Business Week, Forbes, Fortune, NYTimes, Washington Post)

• Tracked coverage of half of S&P 500 firms from 2001-2005 for a total of 42,330 articles

• Also had sub-categories of coverage in first paper
  • Excluded if firm was not mentioned in title or opening paragraph, article had less than 50 words, or mentioned more than 4 other firms.

• Measured the favorability of each article using the LIWC (Language Inquiry Word Count) software program (Pennebaker et al. 2001)
  • Uses predefined dictionaries to assess various constructs
  • Dictionaries have been validated by human coders and by use in multiple studies
  • Used the positive and negative emotion dictionary (Pfarrer et al. 2010)
  • Conducted validity and robustness checks manually
Reviewer Concerns

I have several pressing concerns about the construct validity of your variable capturing negative media attention. I think that you should take a small subsample of your text and manually check the accuracy of the LIWC negative emotions database. Specifically, for a sample of your corpus you ought to manually tease through each instance of the negative emotional triggers identified by the software and confirm whether the word is actually being said with the company as its object. It strikes me that more socially active companies (that express their own outrage or negative emotions about issues when interviewed in the press) are likely to be conflated in your method with those companies to which the media is directing its own outrage.
We followed your suggestion and conducted a sub-sample analysis of articles in our sample. Specifically, we drew a random sample of 100 articles from our corpus of articles that registered at least some degree of negative sentiment from the LIWC program. We then had one of the authors read each article with words from the negative emotion dictionary highlighted in the text. For each occurrence of a negative word, we coded whether the word was written in the context of a journalist referencing some aspect of the company or whether the words came from corporate spokespersons. In the sample of 100 articles, there were a total of 831 negative words of which 75% referred to the focal company. 10% of the words came from corporate spokespersons, often the CEO, who were occasionally interviewed as part of the article. In 4% of the cases, the words referred to another firm and in 11% of the cases, the words were unrelated to the focal firm.

This sub-sample analysis confirms that the vast majority of negative words highlighted by LIWC did in fact reflect negative sentiment about the focal company. The analysis also confirms that there is some noise in the measure, which is not surprising but the presence of this noise should make our tests more conservative in nature.
Initial Validation Analysis

<table>
<thead>
<tr>
<th>Sub-sample analysis of 100 sample articles</th>
<th>Negative Words</th>
<th>About Focal Firm</th>
<th>Company Spokesperson</th>
<th>Other Firm</th>
<th>Unrelated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words</td>
<td>831</td>
<td>627</td>
<td>79</td>
<td>31</td>
<td>94</td>
</tr>
<tr>
<td>Percentage</td>
<td>100</td>
<td>75.4</td>
<td>9.6</td>
<td>3.7</td>
<td>11.3</td>
</tr>
</tbody>
</table>

N= 100 articles
• ...my primary reservation with this paper continues to be the construction of the negative media attention variable. I very much appreciate that you conducted the manual content analysis of the LIWC-coded data. However, in my opinion the results of this analysis confirm the inconsistency of this variable.

• ...As I suggested in my earlier review, it seems possible that firms whose CEOs or spokespeople use negative words in the articles – who are openly criticizing something -- may be more socially-oriented or be more likely to have defiant governance cultures, either of which could make them more likely to adopt more drastic strategic changes. I know that this is quite a large corpus of articles you are working with, but it doesn’t seem to me to be too many to preclude a manual coding, especially if you pared down your sample to a smaller number of firms or years.

• ...I just do not think that this automatic analysis has resulted in a measure that is accurate enough to be a reliable empirical test of your theory.
LIWC examples of negative quotes

#1: Chief executive officer Jacques Nasser has publicly declared his irritation at those and other quality snafus that he said cost the company $1 billion last year.

#2: Palmolive says profit fell 8.3% on restructuring. New York Palmolive co.'s quarter profit fell 8.3% hurt by restructuring costs

#3: Chief executive David J. O’reilly said in an interview yesterday that he regretted some of his company's moves with Dynegy. “When you make an investment you assess the downside risk,” he said. “I think we fell short of assessing the downside risk.”

#4: HP chief executive Carly Fiorina said in an early morning conference call that while results in the firm's personal computer business were strong they were more than overwhelmed by weakness in computer server and storage sales to businesses. The weakness caused the company's quarter earnings to come in well under Wall Street expectations and sparked a dramatic selloff in HP shares. Fiorina meanwhile said on the conference call that she shared the frustration of analysts over HP’s performance and she declared that heads would roll at her firm. Fiorina said in addition to economic weakness, the server and storage units were hurt by a problematic transition to a new chain processing system that caused the company to miss some orders and take expensive measures
Takeaways

• It is possible to publish in high quality outlets using computer aided content analysis

• Quite a bit of variance in reviewers’ response to content analysis data

• Be ready to validate what the machine says