

News and Advertisements: How Negative News May Reverse Advertising Effects

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This study focuses on the effects of news and advertising expenditures on corporate reputation. Both advertisement expenditures and the tone (or tenor) of business news exert a positive influence on corporate reputation. In addition, advertising expenditures were found to magnify the effects of the tone of the news. In particular, moderately educated customers are susceptible to the tone of the news. These research results follow from a repeated yearly survey regarding the corporate reputation of 10 focal companies, and from advertising expenditures and a daily content analysis of the tone of the news in the media used by the respondents. Because advertisements magnify the effects of negative news, negative news renders advertisements unfit, especially for moderately informed consumers. The research results suggest that advertisers should wait for a storm of negative news to subside before advertising. They may monitor word of mouth to anticipate such a storm.

INTRODUCTION

Corporations typically spend the largest part of their total communications budget on advertising. However, a single negative press report may be enough to damage a reputation and to cause share prices to plummet. For example, a phony press release about Emulex—which announced reduced earnings estimates, a government investigation because of accounting problems, and the discharge of the chief executive—caused Emulex to nose-dive (Berenson, 2000; Irwin, 2000).

Nevertheless, the influence of news relative to the influence of advertisement campaigns seems to be one of the uncharted territories in marketing communications research. Recently, Loda and Carrick Coleman (2005) showed that free publicity had a greater influence on perceived credibility and purchase intent than advertising. Moreover, the results of their study suggest that the effect of publicity can be significantly enhanced when it is followed by advertising. Loda and Carrick Coleman point to the fact that publicity—while potentially more persuasive—is less under the

control of the marketers because, contrary to advertising, publicity can also be negative. Therefore, this article investigates both the effects of the tone of news and advertising intensity. An examination will be carried out concerning how these two components of integrated marketing communication influence *corporate reputation*. As Page and Fearn (2005) demonstrate, consumers do care about corporate reputation when it comes to purchasing decisions. One of the subjects that will be addressed in this article is whether advertisements and the news exert an *independent* or an *intertwined* influence on corporate reputation. If the effects of the news and the advertisements were independent of each other, then a marketing department could raise advertisement expenditures to compensate for the effects of negative news, or lower advertisement expenditures in the case of positive news. One may argue that effects of advertisements and the news are *intertwined*, however. Negative news may actually lower the effectiveness of advertisements, whereas positive news may bolster advertising

Negative news may actually lower the effectiveness of advertisements, whereas positive news may bolster advertising effects.

effects. If the former is the case, advertisers would be wise to wait for a storm of negative news to subside to prevent the power of their advertisements being greatly reduced.

NEWS EFFECTS AS CONTEXT EFFECTS FOR ADVERTISEMENTS

From the point of view of a marketing department, or at least from the point of view of traditional media planners who focus primarily on audience size and audience composition, the effects of free publicity are best understood as *context effects*. Context effects have been demonstrated, for example, for the programs that serve as the vehicles for advertisements. Intensely watched programs that are valued positively carry over these characteristics to the attention for, and the attitude toward, the advertisement (Moorman, Neijens, and Smit, 2005).

From a broader perspective, Weilbacher (2003) argues that, notwithstanding the dominant experimental paradigm in most consumer research, advertisements are always snapshots taken from a wider context rather than pure stimuli. The context effect that has attracted the most attention in social psychology, from the seminal work of Carl Hovland and colleagues (Hovland and Weiss, 1951) onward, is the *credibility* or *trustworthiness* of the information source. The importance of source credibility of the advertising company has been demonstrated also in the area of consumer marketing (Kruglanski et al., 2005). Several studies reported that the reputation of a company influences con-

sumers' attitude-toward-the-brand and purchase intentions (Lafferty and Goldsmith, 1999; Page and Fearn, 2005).

Whereas their research asked whether corporate reputation influences the attitude toward the advertisement, this article asks how corporate reputation may be affected by advertising on the one hand and free publicity on the other.

EFFECTS OF NEWS AND ADVERTISEMENTS

In the marketing field, the effects of advertising repetition are widely studied. Although many experimental studies found an inverted U-shaped relationship between advertising exposure and advertising effectiveness (Anand and Sternthal, 1990; Nordhielm, 2002; Schumann, Petty, and Scott Clemons, 1990), monotonic relationships between advertising exposure and advertising effectiveness have been reported as well (Bornstein, 1989; Bornstein and D'Agostino, 1992). Nordhielm (2002) suggests that the point at which affective response begins to decline has not yet been reached in the monotonically increasing pattern. The question can be raised as to whether the inverted U-shaped relationship between advertising exposure and advertising effectiveness will occur in a *real-life situation*, where applied marketing research is used to determine when a "worn out" advertisement should stop. In addition, it should be noted that people have more opportunities of escaping from the advertisement in a real-life situation (i.e., by getting something to drink during a commercial break) than in a laboratory situation.

Effects of advertising on corporate reputation and purchase intentions have often been established for corporate brands that are identical to product brands (e.g., for hotels such as Holiday Inn or Howard Johnson, cf. Cobb-Walgren, Ruble, and Donthu, 1995). Only a few empirical studies focused specifically on the effects of advertising on corporate reputation. Winters (1986, 1988) found that both product advertising and corporate advertising exert a positive influence on the reputation of oil company Chevron. Fombrun and Shanley (1990) conducted an empirical study of 292 large U.S. firms. They found that the higher a firm's advertising intensity, the better its reputation. Their hypothesis will also be focused upon in this study:

- H1: The higher the advertisement expenditures of an organization are, the better corporate reputation will be.

Related research shows that corporate advertising contributes also to other corporate assets, such as quantity and quality of organizations' applicant pools (Collins and Han, 2004).

Although Fombrun and Shanley (1990) did not find support for their hypothesis that a company's reputation will be improved the more nonnegative media coverage it receives, this hypothesis was confirmed in the study of Wartick (1992) and will also be focused upon in this study.

- H2: The more positive the direction (or tone, tenor) of the news regarding support and criticism for an organization, the better corporate reputation will be.

Independent or intertwined effects?

For marketers it is important to know how the news modifies the effects of

advertising. If the effects of the news and the advertisements are independent, then a marketing department could raise advertisement expenditures to compensate for the effects of negative news, or lower advertisement expenditures in the case of positive news. In an interesting study by Verbeke and Ward (2001) on beef consumption in Belgium, the authors suggest the following: "While the positive impact of beef/veal advertising could counter some of the negative press, it is clear . . . that beef/veal promotions can hardly be expected to fully offset the effect of a negative press" (Verbeke and Ward, 2001, p. 367).

On the basis of research findings about *priming* (Iyengar and Kinder, 1987), one may expect that the effects of news and advertisements are intertwined. It is a matter of priming if the public judges companies by using criteria based on matters in the news. According to the priming hypothesis, if television news becomes preoccupied with the environment, then citizens would *evaluate* Shell primarily by its environmental policy. Iyengar and Kinder (1987) drew upon Simon's (1979) observation that people do not pay attention to everything, due to their limited cognitive information processing capacity. Consumers ordinarily prefer heuristics—intuitive shortcuts and simple rules of thumb. One such rule of thumb is reliance upon information that is most accessible. In the case of positive news, subsequent advertisement may serve as a reminder. Negative news will presumably be forgotten quite quickly, but subsequent advertisements may magnify its effects by restoring their "top of mind" availability. Priming also helps to explain the results of Loda and Carrick Coleman (2005) that the publicity-then-advertising sequence was most effective. This leads to the following hypothesis:

H3: Advertisement expenditures magnify the effects on corporate

reputation of the direction (or tone, tenor) of the news regarding support and criticism for an organization.

Inverted U-shaped effects of news

Whereas an inverted U-shaped relation between advertisements and their acceptance is unlikely in real life because marketing departments will invent new advertisements before the old ones become worn out, in news effects research an inverted U-shaped relation between exposure to information and its acceptance is prevalent. The Receive-Accept-Sample-Model of John R. Zaller, which is based on modeling the available empirical evidence from a great variety of previous content analysis studies and public opinion surveys (Zaller, 1992), entails that the effect of exposure to a specific policy recommendation on message recall increases with one's preexisting awareness of the problem area, whereas the likelihood that the recommendation will be accepted, given one's recall, decreases with one's preexisting awareness. Therefore, the relationship between preexisting awareness and acceptance will often show an inverted U-shape. Often, recommendations will be accepted especially by those who know too much to forget about a proposal for solving a problem, and too little to think of an alternative solution, because it is often the case that proposals will not be recalled by those with a low awareness, and not be accepted by those with a superior awareness, also of alternative proposals. In addition, the nature of the news often changes when the amount of news increases, or when an issue stays on the media agenda for a prolonged period. Journalists will be given more space and time to cover the issue, which increases the likelihood that they will focus on, or even deliberately search for, alternative aspects of the issue. More

news often means that criticasters of an organization or its products are given more space. Especially consumers with a moderate awareness will be susceptible to these criticisms, because those with a low awareness will not remember the criticisms, while those with a superior awareness will be able to refute them. In this study educational level will be used as a proxy to measure awareness, because we do not have access to product-specific or organization-specific measures of awareness for all focal companies, nor for all products of all focal companies.

H4: Education modifies the effect of the tone of the news on corporate reputation, with the highest effect for moderately educated consumers (inverted U-shaped effect).

We expect that a moderate level of awareness—as measured by educational level—will increase the impact of the tone of the news.

METHOD

In the present study, three types of data concerning firms from The Netherlands were used: public opinion data, advertising data, and content analysis data about the news.

Selection of focal media

The Netherlands is a suitable country for testing the effects on public opinion of advertising and media coverage in a real-life situation because a small number of news and advertisements outlets will reach a large audience. Ninety-four percent of the Dutch population watches one of the two major television news programs broadcast on Dutch television (one for the public broadcaster *NOS* and the other for the commercial broadcaster *RTL4*) at least once a week. Both television programs are

Corporate reputation is not only dependent on advertising expenditures, but also on the positive or negative direction of business news.

sandwiched between commercial blocks (data from TNS NIPO telepanel 1998, see below). Fifty-six percent of the Dutch population reads one of the five national newspapers, while subscriptions to daily newspapers are responsible for 85 percent of the total circulation (Bakker and Scholten, 2003). Therefore, the present study focuses on the effects on public opinion of advertisements and news from two television stations—*NOS* and *RTL4*—and five national newspapers—*Algemeen Dagblad*, *NRC Handelsblad*, *De Telegraaf*, *Trouw*, and *de Volkskrant*—of The Netherlands.

Selection of the focal companies

With a view to being able to generalize the results, we examined a wide variety of large companies from different industries and two sectors: Shell and BP (oil industry), ABN AMRO and Rabobank (banks), Albert Heijn and Super de Boer (supermarkets), Dutch Railways (NS) and Dutch airport Schiphol, the Dutch police, and the Dutch agricultural sector. With the exception of BP (a British company) and Shell (a Dutch/British company), all companies are Dutch.

Advertising data

To enable a comparison of television advertising intensity and print advertising intensity, we opted for advertising expenditures as a measure of advertising intensity. The advertising data for this study were obtained by aggregating the data per focal company for each of the investigated media for each year preceding the

measurement of public opinion (from July 24, 1997 to July 25, 1998; from July 26, 1998 to August 14, 1999; and from August 15, 1999 until July 22, 2000).

Analysis of media content

Media coverage on the focal companies was analyzed on a daily basis for the complete research period from July 24, 1997 to July 22, 2000. This period was selected to coincide with the public opinion polling data: all the media coverage from the year preceding the poll was analyzed.

To create an elaborated media profile of the companies, a network approach to content analysis was used. The present study used the Network analysis of the Evaluative Texts (NET) method (de Ridder and Kleinnijenhuis, 2001; Kleinnijenhuis, de Ridder, and Rietberg, 1997) to extract elementary assertions from texts. In this study, assertions were focused upon in which a relationship between two actors (such as two companies) was expressed, which we label as *support and criticism news*. In the case of support and criticism news, an organization is supported or criticized by other actors or by the media themselves. A sentence like “Montignac summons Albert Heijn to court,” belongs to support and criticism news. This study focused on the support and criticism *received* by the focal organization. Coders were instructed to code the tone of the news assertion—the degree of support or criticism—with one of the following values: -1 , -0.5 , 0 , 0.5 , and 1 , where -1 is very negative and $+1$ is very positive.

The news was coded by seven student coders who were selected on the basis of their skills. The coders coded an additional 10 percent to determine *intercoder reliability*. The overall correlation with regard to the tone of news is satisfactory, $r = 0.81$, $n = 648$ assertions. Weighting factors were used to take into account the prominence of the news (such as the page numbers in the case of newspapers and the viewer ratings in the case of television news).

In total, the media coverage on the focal organizations and sectors consisted of 5,531 newspaper articles and 1,275 news items, which together resulted in 9,344 assertions—of which 3,045 assertions dealt specifically with support and criticisms for the focal companies.

Public opinion data

Public opinion data regarding the focal companies for three consecutive years were kindly made available to us by TNS NIPO, a large market research agency in The Netherlands. Because the media use of each of the respondents was known, it was possible to take the *individual media use* of the respondents into account, which makes it possible to test the effects of individual differences in exposure to advertisements and news due to preferences for specific media. The panel data that were used in this study were collected in the summers of 1998, 1999, and 2000. Because respondents agreed beforehand to participate in a survey, nonresponse is low. Because the respondents formed a national representative panel, a weighting factor was not applied.

A total of 1,289 respondents took part in the survey either once, twice, or three times. To prevent depletion of respondents with too high a number of questions, each respondent answered questions with respect to half of the focal companies only. Only those respondents were

Websites with elaborate information to counterbalance negative reports in the press may miss the target, because only highly aware consumers will have the patience to read and the skills to comprehend this information.

included in the final study that used at least one of the media that were focused upon in this study.

For each of the respondents, media use and social-demographic background characteristics were assessed. Education, which is expected to have a modifying impact on the influence of the news on corporate reputation, was measured by means of a 7-point ordinal scale. This scale was linearly transformed to a -1 to $+1$ scale. Next, moderately educated viewers were assigned the value of 1, and both high- and low-educated respondents a value of 0, by means of a $y = 1 - x^2$ transformation.

Corporate reputation, which is the dependent variable in the hypotheses to be tested, was measured in the spirit of the Expectancy Value Model (Fishbein and Ajzen, 1975), eliciting the salient issues on which individual respondents evaluate the performance of companies. For each focal company in each year, corporate reputation was measured as the overall agreement with the policy of an organization on the two issues that a respondent deemed most salient for that organization. As a first step, the *salience* of corporate associations was measured by asking the respondents to choose their two most salient associations from a checklist consisting of 12 substantive potential associations and the categories “don’t know” and “other.” As a second step, the *agreement* with the policy of the organization

with respect to each of the two most salient associations was measured by means of a 5-point scale based on the response to the question “Do you agree with the policy of [name of the focal company] regarding [association mentioned by the respondent]?” (strongly disagree = -1 , disagree = -0.5 , neutral, as well as do not know = 0, agree = $+0.5$, strongly agree = $+1.0$). As the third step, *overall agreement* was computed as the average of the two 5-point scales.

Data analysis

To estimate the influence of the news and of advertisements in specific media on consumers, two variables were created for each consumer: a news variable and an advertising variable. Weight factors were used to take into account the *visibility* of the news. In the case of print news, visibility was measured based on the page number in the newspaper and the number of words. In the case of television news, visibility was measured based on the viewer ratings. In addition, the individual media use of the respondents was taken into account

Multiple regression analysis (OLS) will be used to test the four hypotheses, starting from a *pooled cross-sectional* data set of organizations, years, and respondents. Because OLS on pooled cross-sectional data may violate the assumption of independence of the measurements, a hierar-

chical linear model (HLM, also known as a “random slope model” or as a “mixed model”) will be reported additionally (see Snijders and Bosker, 1999). Estimates from an HLM are also valuable in their own right, because they give a clue to the question of whether effects of advertisements and the news are invariable or (slightly or highly) variant between customers.

RESULTS

Advertising

Table 1 gives an overview of the advertising data. Total advertising expenditures for the focal companies are listed in the bottom row of the table. Note that the column percentages hide the fact that, during the three years, total advertising expenditures of the focal companies increased due to an increase in television advertising expenditures, whereas newspaper advertising expenditures dropped.

The advertising data from Table 1 clearly reveal that advertising expenditures vary from company to company, but also that different companies opt for their own media mix. These media mixes vary sharply on a yearly basis, presumably because of new products, new marketing strategies, and new advertisement opportunities—e.g., in the case of public broadcaster NOS, a smaller audience, but more and larger advertising blocks.

Clearly superstore chain Albert Heijn and ABN AMRO bank spent the most money on advertising, whereas the police, the agricultural sector, Schiphol Airport, and the oil companies Shell and BP spent less on advertising. Albert Heijn traditionally used newspapers to promote its products, but during the research period television advertising became more prominent. The competing superstore chain of Super de Boer also stepped up its television advertising expenditures.

TABLE 1

Advertising Expenditures in Three Years per Medium Type (Column Percentages)

	7/24/97 to 7/25/98			7/26/98 to 8/14/99			8/15/99 to 7/22/00		
	Print	Public TV	Commercial TV	Print	Public TV	Commercial TV	Print	Public TV	Commercial TV
<i>Retail</i>									
Albert Heijn	37%	3%	8%	34%	7%	23%	42%	6%	19%
Super de Boer	5%	3%	14%	16%	1%	5%	18%	4%	15%
<i>Transport</i>									
Schiphol Airport	2%	0%	0%	5%	0%	0%	2%	0%	0%
NS railways	7%	28%	45%	5%	13%	33%	5%	19%	32%
<i>Sectors</i>									
Police	1%	0%	0%	2%	0%	0%	1%	1%	2%
Agriculture	1%	1%	2%	2%	1%	2%	0%	2%	10%
<i>Banks</i>									
ABN AMRO	23%	38%	7%	12%	23%	4%	16%	46%	13%
Rabobank	20%	21%	17%	21%	55%	32%	13%	16%	8%
<i>Oil companies</i>									
Shell	1%	1%	4%	1%	0%	2%	2%	7%	2%
BP	3%	4%	4%	1%	0%	0%	0%	0%	0%
Advertising expenditures, sum, amounts × €1000	21,887	6,146	3,649	21,070	11,030	4,414	20,453	9,025	4,532

Tone of the news

Table 2 gives an overview of the support and criticism for the focal companies. The scale of the *mean direction* of support and criticism news ranges from -1, which means that the organization received criticism only, to +1, which means that the focal organization received only support and no criticism.

Criticisms in the media for the retail companies Albert Heijn (-0.15, -0.24, -0.46) and Super de Boer (1.00, 0.00, -0.63) intensified during the research period. No single denominator for the grievances ex-

isted. Topics of critical reports varied from unsure business ventures to dubious ways of using weight loss diet programs to raise the prices.

During the research period, especially the noise pollution criticisms on the growth of Schiphol Airport toned down (-0.19, -0.21, +0.08), whereas criticisms on the delays with NS railways maintained their levels (-0.20, -0.05, -0.29).

The tone of the criticisms on the police and the agricultural sector became subdued after the election year 1997-1998, in which the issues of crime and infection

with animal diseases due to large-scale agricultural factory farming had been campaign themes.

As compared to Rabobank, ABN AMRO was surrounded with more negative publicity because, among other reasons, ABN AMRO lost the battle to take over the Belgian Generale Bank from competitor Fortis in 1998.

The British oil company BP was less in the spotlight of the Dutch media and attracted less negative news than its Dutch-British competitor Shell. The topics of negative news reports were diverse,

TABLE 2

Tone of the News in Three Years (Criticism . . . Support Scale -1...+1)

	<u>7/24/97 to 7/25/98</u>		<u>7/26/98 to 8/14/99</u>		<u>8/15/99 to 7/22/00</u>	
	Tone	%	Tone	%	Tone	%
<i>Retail</i>						
Albert Heijn	-0.15	2%	-0.24	1%	-0.46	3%
Super de Boer	1.00	1%	0.00	0%	-0.63	0%
<i>Transport</i>						
Schiphol Airport	-0.19	20%	-0.21	24%	0.08	11%
NS railways	-0.20	10%	-0.05	6%	-0.29	21%
<i>Sectors</i>						
Police	-0.25	34%	-0.20	30%	-0.17	26%
Agriculture	-0.23	9%	-0.02	17%	-0.13	14%
<i>Banks</i>						
ABN AMRO	-0.13	9%	-0.30	6%	0.01	11%
Rabobank	0.54	4%	0.05	5%	0.27	3%
<i>Oil companies</i>						
Shell	0.08	9%	-0.23	11%	-0.17	11%
BP	-0.13	1%	0.81	2%	0.17	1%
<i>n</i> statements (weighted)		1,303		896		846

ranging from "Shell wants to go to Iran despite threat from US" (*De Telegraaf*, April 28, 1998) to malicious pleasure in the media after continued quibbles with Greenpeace, even after Greenpeace had bought Shell shares. The Brent Spar affair dating from 1995, during which Shell and Greenpeace disagreed on how to get rid of a disused North Sea oil storage platform called the Brent Spar, was often mentioned as a key event in connection with Shell.

Corporate reputation

Table 3 gives an overview of the development of corporate reputation for the focal companies during the three years of the research period. The reputation scale ranges from -1, which means that all the

respondents strongly disagreed with the policy of the focal organization, to +1, which means that all the respondents strongly agreed with the policy of the focal organization for each of the two issues that were most salient for individual respondents.

Corporate reputation dropped slightly for retailer Albert Heijn (from +0.31 down to +0.25), whereas the reputation of Super de Boer increased slightly (from +0.22 to +0.25). The reputation of Schiphol Airport remained positive (+0.19, +0.16, +0.18), whereas the reputation of the NS Railways remained negative (-0.05, -0.08, -0.04). After the election year of 1998, during which many politicians stated that the police had lost the fight against crime,

the reputation of the police increased slightly (-0.07, -0.06, 0.00). The reputation of the agricultural sector and the two banks, ABN AMRO and Rabobank, decreased slightly, but remained positive. While the reputation of oil company BP remained almost at the same level, the reputation of Shell appears to diminish slightly (+0.11, +0.06, +0.07).

Test of the hypotheses

On the basis of the data from Tables 1, 2, and 3, it is hard to see how corporate reputation depends precisely on the news and on advertisements. Hypothesis tests require comparisons at the level of individual responses. Table 4 gives an overview of the test results at the level of

TABLE 3
Corporate Reputation in Three Years (Bad Reputation . . .
Good Reputation -1 . . . +1)

	1998			1999			2000		
	Mean	SD	n	Mean	SD	n	Mean	SD	n
<i>Retail</i>									
Albert Heijn	0.31	0.40	416	0.30	0.40	255	0.25	0.42	627
Super de Boer	0.22	0.38	276	0.26	0.35	176	0.25	0.36	438
<i>Transport</i>									
Schiphol Airport	0.19	0.39	453	0.16	0.35	273	0.18	0.36	678
NS railways	-0.05	0.45	440	-0.08	0.41	283	-0.04	0.39	655
<i>Sectors</i>									
Police	-0.07	0.49	450	-0.06	0.47	262	0.00	0.44	674
Agriculture	0.16	0.37	431	0.12	0.37	266	0.12	0.37	627
<i>Banks</i>									
ABN AMRO	0.20	0.30	398	0.19	0.30	247	0.15	0.33	617
Rabobank	0.21	0.37	403	0.20	0.35	238	0.18	0.34	601
<i>Oil companies</i>									
Shell	0.11	0.35	474	0.06	0.31	291	0.07	0.36	664
BP	0.10	0.24	419	0.09	0.23	263	0.10	0.26	624

responses for a specific company from a specific respondent in a specific year. According to the hypotheses, corporate reputation varies with last year's advertisements offered by one's personal media, the tone of the news in one's personal media, and one's educational level.

The pooled cross-sectional estimates give an overview of the test results for the available set of responses ($n = 12,919$), including those that were obtained from respondents who participated only once in the yearly repeated panel survey.

The data support the four hypotheses, as can be seen from the significance of the four (positive) standardized regression coefficients (columns "beta"), both with OLS and HLM estimation. Thus, both advertisements (Hypothesis H1) and—positive—news (Hypothesis H2) have a positive effect on corporate reputation, with advertisements magnifying the effects of the tone of the news (Hypothesis H3). Effects of the news are especially strong for moderately educated customers (Hypothesis H4). The standardized regression

TABLE 4
Hypothesis Tests of Determinants of Corporate Reputation (Standardized Regression Estimates)

	OLS: Ordinary Least Squares		HLM: Hierarchical Linear Model			95% Interval Beta's per Respondent	
	Beta	Sig	Beta	Sig	Var(beta)	Lower Bound	Upper Bound
H1 advertising expenditures	0.13	**	0.13	**	**	-0.15	0.42
H2 news direction support and criticism	0.11	**	0.11	**	**	-0.19	0.42
H3 interaction advertisements expenditures × news direction	0.03	**	0.03	**	ns	—	—
H4 interaction news direction × moderate education	0.04	**	0.03	*	ns	—	—
R^2_{Adj}	0.03		0.23				
n	12,919		1,286 respondents with 10.05 responses on average responses				

* $p < 0.05$; ** $p < 0.01$; ns = not significant; — = not applicable due to the insignificance or nonestimability of the basic estimate.

coefficients (beta's) from Table 4 show that the average consumers do respond to the news as well as to advertisements in the expected direction. Corporate reputation improves with an increase of advertising expenditures as was predicted by Hypothesis H1 (standardized regression coefficient $\beta = +0.13$), but also with a decrease of negative news, thus with support rather than criticisms from stakeholders ($\beta = +0.11$), as was predicted by Hypothesis H2. Moreover, positive news will boost the effects of advertising expenditures ($\beta = +0.03$), as was predicted by the interaction Hypothesis H3. Because most news is negative, the reverse side of this coin is more important: *negative news will decrease the return on advertisement expenditures*. The interaction effect of the direction of the news with a moderate education indicates ($\beta = +0.04$) indicates that especially moderately educated consumers are susceptible to the direction of the news.

The low explained variance for the OLS model ($R_{adj}^2 = 0.03$) means that it is hard to predict how specific consumers will respond to specific news stories or specific advertisements for specific companies in specific years. The higher explained variance for the HLM model (0.23 as compared to 0.03) means that predictive power is gained by assuming that the strength of the reactions to the news and to advertisements varies between consumers. Estimated strengths of reactions of *individual* consumers ranged from beta's between -0.15 and $+0.42$ for advertising expenditures, and between -0.19 and $+0.42$ for the news (95 percent interval; cf. Snijders and Bosker, 1999). The variance in individual responses to the interaction effects is nonsignificant, which indicates that the interaction effects that were predicted by Hypotheses H3 and H4 hold for every consumer in much the same way.

Advertisers should wait until a storm of negative news dies down to increase their advertising budgets.

The models presented in Table 4 still do not take full advantage of the research design in which the same respondents were interviewed each year. Retesting the OLS model and the HLM model from Table 4 with one's impressions of corporate reputation in the previous year as an additional explanatory variable confirmed the results from Table 4. Each regression coefficients kept the same direction as in Table 4, albeit with a smaller effect size, due to the fact that in an autoregressive model influences from advertisements and the news that were already present last year will be attributed to one's previous impressions of corporate reputation. The explained variance increases (to 0.20 for the OLS model, and to 0.34 for the HLM model) due to the inclusion of last year's corporate reputation.

DISCUSSION

In this article the effects of advertising expenditures and the tone of news on corporate reputation are studied. This article aims to establish that corporate reputation is not only dependent on advertising expenditures—a claim that is still corroborated by a fairly limited number of studies only—but also on the positive or negative direction of business news. This article focuses especially on the question whether effects of news and advertisements are independent or intertwined. This may help marketers who care about corporate reputation to decide whether advertising expenditures should be raised or lowered when their company is criticized in the news.

The data for the study were derived from a repeated yearly survey about cor-

porate reputation with primarily Dutch companies from 1998 until 2000, from advertising expenditures of these firms in specific media (two national television stations and five national newspapers), and from a daily content analysis of these media in the years preceding the survey. We established a link between the precise media consumption profiles of respondents, the news and advertisements in their personal media, and personal changes in assessments of corporate reputation.

The results indicate that both advertisement expenditures and the tone of business news exert a positive influence on corporate reputation (Hypotheses H1 and H2). Advertising expenditures magnify the effects of the tone of the news (Hypothesis H3). Hence, increasing or even keeping upright advertising expenditures when criticisms of the firm appear on a daily basis in the press will harm the firm. Especially moderately aware customers are susceptible to the tone of the news (Hypothesis H4).

The results should be interpreted with caution due to a number of *limitations* in the research design. Owing to the focus on the interaction effects of the news and advertisements, one global measure of the tone of the news was used, whereas news effects research shows that the precise effects of the news depend also on the issue at hand, the nature of the medium, the trustworthiness of the source of the support or criticisms, and on attributions of successes and failure (e.g., Jo, 2004; Meijer, 2004; Meijer and Kleinnijenhuis, 2006). Furthermore, only advertisement expenditures for each of the firms in the media of a consumer's choice were taken as a measure of the

advertising pressure on the respondent, whereas future research could also take into account the nature of advertisements (corporate or brand, explicit or implicit) and the precise sensory appeal of advertisements. Due to the full year period between the surveys, the precise short-term effects of both the advertisements and the news will probably be underestimated. Despite such obvious limitations, which may serve as starting points for future research, the results from this study may be useful for practitioners.

The finding that both advertisements and the news have an effect on corporate reputation is commonly accepted, as is indicated by the existence of both a marketing and a public relations division in large companies. Nevertheless the joint existence of these effects was seldom established before due to the drudgery of gathering data for a sufficient number of companies, not only about changes in corporate reputation, but also about advertising expenditures, and about the direction (or tone, tenor) of business news.

The study showed that moderately educated customers are most susceptible to the news. This means that in the wake of negative news, advertising may still be worthwhile when the target groups are largely located either among the higher educated, who are apt at discounting the negative news, or among the lower educated, who are not very aware of it. Nevertheless, websites with elaborate information to counterbalance negative reports in the press may miss the target, because only highly aware consumers will have the patience to read and the skills to comprehend this information. Mass media campaigns with one simple countervailing message may also miss their target, because many unaware consumers will be reached who were not even aware of the negative reports in the press in the first place, whereas in the meanwhile

highly aware citizens will reject oversimplistic messages.

The finding that advertising expenditures and the tone of news are intertwined is especially interesting, because it is not commonly accepted at all. Some companies try to compensate negative publicity by raising their advertising budget, whereas other companies keep silent. Royal Dutch Shell, which was heavily criticized in the news of 1995 for its intention to sink the Brent Spar to the sea bottom, tried to restore its environmental image by explaining its decision in advertisements. When in 1999 the Dutch national airways company KLM was overwhelmed by media criticism after 440 squirrels were put down after having been illegally transported in a KLM cargo, KLM immediately stopped its television advertisement campaign in which two white swans stately splash down into the blue seas iconifying KLM. The research results presented here suggest that the Shell policy was a waste of money, whereas the KLM decision was cleverer. Advertisers should wait until a storm of negative news dies down. Companies dispose of many means, however, to prevent such a storm. They may monitor their own telephone communications and complaints services, as well as public websites, discussion groups, weblogs, and podcasts to learn the concerns of interest groups and the word of mouth of their consumers to enable anticipation, either by feeding the ongoing discussions with new words, new propositions, and new topics, or by staging a "stealing thunder" operation to admit shortcomings and failures frankly, for example, by announcing the withdrawal of a product from the market, while at the same time announcing an improved product, or even a new policy, or a new takeover. **JAR**

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REFERENCES

- ANAND, P., and B. STERNTHAL. "Ease of Message Processing as a Moderator of Repetition Effects in Advertising." *Journal of Marketing Research* 27, 3 (1990): 345-53.
- BAKKER, P., and O. SCHOLTEN. *Communicatiekaart van Nederland: Overzicht van media en communicatie*. Alphen aan den Rijn/Diegem, The Netherlands: Kluwer, 2003.
- BERENSON, A. "On Hair-Trigger Wall Street, A Stock Plunges on Fake News." *New York Times*, August 26, 2000.
- BORNSTEIN, R. F. "Exposure and Affect: Overview and Meta-Analysis of Research 1968-1987." *Psychological Bulletin* 106, 2 (1989): 265-89.
- , and P. R. D'AGOSTINO. "Stimulus Recognition and the Mere Exposure Effect." *Journal of Personality and Social Psychology* 63, 4 (1992): 545-52.

- COBB-WALGREN, C. J., C. A. RUBLE, and N. DONTU. "Brand Equity, Brand Preference, and Purchase Intent." *Journal of Advertising* 24, 3 (1995): 25–40.
- COLLINS, C. J., and J. HAN. "Exploring Applicant Pool Quantity and Quality: The Effects of Early Recruitment Practice Strategies, Corporate Advertising, and Firm Reputation." *Personnel Psychology* 57, 3 (2004): 685–717.
- DE RIDDER, J. A., and J. KLEINNIJENHUIS. "Media Monitoring Using CETA: The Stock Exchange Launches of KPN and WOL." In *Applications of Computer Content Analysis*, M. West, ed. Westport, CT: Ablex, 2001.
- FISHBEIN, M., and I. AJZEN. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley, 1975.
- FOMBRUN, C. J., and M. SHANLEY. "What's in a Name? Reputation Building and Corporate Strategy." *Academy of Management Journal* 33, 2 (1990): 233–58.
- HOVLAND, C. I., and W. WEISS. "The Influence of Source Credibility on Communication Effectiveness." *Public Opinion Quarterly* 15, 4 (1951): 635–50.
- IRWIN, N. "Emulex Shares Plummet After Hoax." *The Washington Post*, August 26, 2000.
- IYENGAR, S., and D. R. KINDER. *News that Matters*. Chicago, IL: University of Chicago Press, 1987.
- JO, S. "Effect of Content Type on Impact: Editorial Versus Advertising." *Public Relations Review* 30, 4 (2004): 503–12.
- KLEINNIJENHUIS, J., J. A. DE RIDDER, and E. M. RIETBERG. "Reasoning in Economic Discourse: An Application of the Network Approach to the Dutch Press." In *Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts*, C. W. Roberts, ed. New York: Erlbaum, 1997.
- KRUGLANSKI, A., A. RAVIV, D. BAR-TAL, A. RAVIV, K. SHARVIT, S. ELLIS, R. BAR, A. PIERRO, and L. MANNETTI. "Says Who? Epistemic Authority Effects in Social Judgment." In *Advances in Experimental Social Psychology, Volume 37*, M. P. Zanna, ed. Amsterdam: Elsevier, 2005.
- LAFFERTY, B. A., and R. E. GOLDSMITH. "Corporate Credibility's Role in Consumers' Attitudes and Purchase Intentions When a High versus a Low Credibility Endorser Is Used in the Ad—Recipient's Access to Attitude-Relevant Information in Memory." *Journal of Business Research* 44, 2 (1999): 109–16.
- LODA, M. D., and B. CARRICK COLEMAN. "Sequene Matters: A More Effective Way to Use Advertising and Publicity." *Journal of Advertising Research* 45, 4 (2005): 362–72.
- MEIJER, M. M. *Does Success Breed Success? Effects of News and Advertising on Corporate Reputation*. Amsterdam: Aksant, 2004.
- , and J. KLEINNIJENHUIS. "The Effects of Issue News on Corporate Reputation: Applying the Theories of Agenda Setting and Issue Ownership in the Field of Business Communication." *Journal of Communication* 56, 2 (2006): 543–59.
- MOORMAN, M., P. C. NEIJENS, and E. G. SMIT. "The Effects of Program Responses on the Processing of Commercials Placed at Various Positions in the Program and the Block." *Journal of Advertising Research* 45, 1 (2005): 49–59.
- NORDHIELM, C. L. "The Influence of Level of Processing on Advertising Repetition Effects." *Journal of Consumer Research* 29, 3 (2002): 371–82.
- PAGE, G., and H. FEARN. "Corporate Reputation: What Do Consumers Really Care About?" *Journal of Advertising Research* 45, 3 (2005): 305–13.
- SCHUMANN, D. W., R. E. PETTY, and D. SCOTT CLEMONS. "Predicting the Effectiveness of Different Strategies of Advertising Variation: A Test of the Repetition-Variation Hypotheses." *Journal of Consumer Research* 17, 2 (1990): 192–202.
- SIMON, H. A. *Models of Thought*, Vol. 1. New Haven, CT: Yale University Press, 1979.
- SNIJDERS, T. A. B., and R. J. BOSKER. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage Publishers, 1999.
- VERBEKE, W., and R. W. WARD. "A Fresh Meat Almost Ideal Demand System Incorporating Negative TV Press and Advertising Impact." *Agricultural Economics* 25, 2/3 (2001): 359–74.
- WARTICK, S. L. "The Relationship between Intense Media Exposure and Change in Corporate Reputation." *Business & Society* 31, 1 (1992): 33–49.
- WEILBACHER, W. M. "How Advertising Affects Consumers." *Journal of Advertising Research* 43, 2 (2003): 230–34.
- WINTERS, L. C. "The Effect of Brand Advertising on Company Image: Implications for Corporate Advertising." *Journal of Advertising Research* 26, 2 (1986): 54–59.
- . "Does It Pay to Advertise to Hostile Audiences with Corporate Advertising?" *Journal of Advertising Research* 28, 3 (1988): 11–18.
- ZALLER, J. R. *The Nature and Origins of Public Opinion*. Cambridge: Cambridge University Press, 1992.