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Neutral Media? Evidence of Media Bias and its Economic Impact

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Abstract Three major surveys of professional journalists, in 1976, 1986, and 1996, suggest that the vast majority consider themselves to be neutral, objective, and balanced observers, whose role is merely to provide information. But how neutral is the media, in terms of its orientation and effects on the behavior of the markets? In this paper, we unite a number of literatures to suggest that by choosing what event to report, how much and how frequent to report an event, and by choosing what descriptive tone to adopt in their coverage, the media has a non-neutral impact on the economy. We report evidence to suggest that: (1) the media helps set the public agenda, by promoting certain events and causes, for better or for worse; (2) the media influence the public's perception of risk, by disproportionately sensationalizing risk and by emphasizing probable negative consequences over probably positive ones; (3) the media influences elections and their outcomes; (4) the media influences the public's perception of the manager, the reputation of the firm, and the goods that the firm produces; (5) the media shapes consumer sentiment and the consumers' willingness to spend; and (6) the media shapes business sentiment and influences both firm- and market-level behavior. In doing so, we demonstrate conclusively that the media is not neutral: the media alters the public's perception of reality. In other words, we suggest not only that the media reports the news, but also shapes the world in which we live.

Keywords: media, journalism, risk, agenda-setting, sentiment, elections, objectivity

1. INTRODUCTION

Scholars suggest that journalists should: (1) report the news; (2) provide analysis; (3) act as a watchdog; (4) enable public access and participation; (5) provide entertainment; and (6) should do so in an accurate and objective way (Cassidy 2005).

In fulfilling these roles, the majority of journalists view themselves as “neutral” (Lasswell 1949; Schramm 1949; Tuchman 1977); “neutral” journalists are politically and ideologically independent, and in providing information, “neutral” journalists should not aim to influence behavior. Indeed, in three major surveys of professional journalists—conducted in 1976, 1986, and 1996—the vast majority describe themselves, effectively, either as “passive” observers, who simply report the news, or “active” observers, who investigate events and “uncover” the news. Only 6% of the 1,220 journalists surveyed by Weaver and Wilhoit (1996) identified *themselves* as having an “interventionary,” or “agenda-setting” role, and because of their effect on the behavior of the markets, we describe these as having a “non-neutral” role.

But how neutral is the neutral 94%? In this paper, we present a review of the existing discussion on the political tendencies and the market-altering effects of the media. First, we argue that: (1) by choosing what events to report on; (2) by choosing how much and how frequent to report on a subject; and (3) by choosing what language to use when describing an event, the media can influence the public’s perceptions. By choosing how to interpret and how to present that information, however, we suggest that the media can actively shape the public’s perception of reality.

Second, we review six currently unconnected strands of research on the ways in which the media can and does influence economic activities. The media: (1) helps set the public agenda, by promoting certain events and causes, for better or for worse; (2) influence the public’s perception of risk, by disproportionately sensationalizing risk and by emphasizing probable negative consequences over probably positive ones; (3) influences elections and their outcomes, due to the journalists’ political and ideological tendencies; (4) influences the public’s perception of the manager, the reputation of the firm, and the goods that the firm produces; (5) shapes consumer sentiment and the consumers’ willingness to spend; and (6) shapes business sentiment and influences both firm decisions and market-level behavior.

In doing so, we demonstrate that the media is not neutral, in the sense that by choosing what news to cover, and in what way, the media alters the public’s perception; in other words, the media not only reports the news but makes the news.

2. A JOURNALIST’S VIEW OF JOURNALISTS

Most journalists view themselves as neutral (Lasswell 1949; Schramm 1949); “neutral” journalists are politically and ideologically independent, and in providing information, “neutral” journalists should not seek to influence the

behavior of parties in society and economy. This view was confirmed by three major surveys, conducted in 1976, 1986, and 1996.

2.1 1976: “Neutral” and “Participatory” Journalists

In their book *A Sociological Portrait of American Journalists*, Johnstone *et al.* (1976), for example, survey 1,300 professional journalists and distinguish between two types of “observer” journalists: (1) “neutral” and (2) “participatory” journalists.

“Neutral” journalists, according to Johnstone *et al.*, are journalists who adhere to the norms of objectivity and report accurate, factual, and verifiable information. Neutral journalists report news that is of “interest to a wide audience,” look to “provide entertainment and relaxation,” and stay away from stories where the details were not verifiable; “neutral” journalists present what they “know that they know.” “Participatory” journalists, on the other hand, hold that it is their responsibility to play a more active and participatory role in reporting events. Participatory journalists feel that it is their duty “to investigate, to provide . . . analysis, to discuss national policy, and to help develop the intellectual and cultural interests of the public.” Participatory journalists, in other words, look to discover the story, and act as a watchdog of public interest, and can be seen to “find” the news. “Participatory” journalists, however, only report what it is that they find and remain objective therefore in reporting reality.

Johnstone *et al.* (1976) report that most of the 1,300 journalists that they surveyed were pluralistic in their outlook: only 8% considered themselves to be “predominantly participatory,” and only 10% saw themselves as “predominantly neutral.” Thirty-five percent claimed to be “balanced,” 25% described themselves to be “more neutral than participatory,” and 21% saw themselves as being “more participatory than neutral.”

2.2 1986: “Interpreters,” “Disseminators,” and “Adversarial Journalists”

Then years later, in their book, *The American Journalist: A Portrait of U.S. News People and their Work*, Weaver and Wilhoit (1986) build on Johnstone *et al.*’s (1976) classification and describe three distinct types of journalists: (1) the “disseminator”; (2) the “interpretive” journalist; and (3) the “adversarial” journalist.

Like Johnstone *et al.*’s (1976) “neutral” journalists, “disseminators” attempt to “avoid stories with unverifiable information,” and try to “get information quickly to the public”; disseminators, effectively, present what they “know that they know.” Weaver and Wilhoit (1986) report that slightly more than half (51%) of

the 1,001 journalists that they surveyed considered this to be a “very important” part of their job. Weaver and Wilhoit (1986) then split Johnstone *et al.*’s (1976) concept of the “participant” journalist into two distinct roles. “Interpretive” journalists are journalists whose role it is to “analyze and to interpret complex problems, and to discuss public policy in a timely manner.” Interpretive journalists, effectively, are journalists who look to “frame the story” and, in doing so, provide readers with a clearer picture of the story. Weaver and Wilhoit (1986) report that nearly 63% of the 1,001 journalists whom they interviewed consider the interpretive role to be a “very important” part of their job. They conclude therefore that most journalists viewed their professional roles as a combination of “interpreter” and “disseminator.” By contrast, only 17% of journalists surveyed by Weaver and Wilhoit (1986) considered themselves to be “adversarial.” “Adversarial” journalists are skeptical of both government and business interests, and take nothing at face value. “Adversarial” journalists look to discover the truth behind the story and, in an investigative sense, act as a watchdog of public interest.

Like Johnstone *et al.* (1976), Weaver and Wilhoit (1986), effectively, describe journalists as either “passive” or “active” observers, but only as observers, who operate with the public’s best interest in mind: journalist either report upon reality or take an active stance in uncovering that reality. In all cases, however, according to Weaver and Wilhoit, journalists have a straightforward, neutral, information-providing role.

2.3 1996: The “Populist Mobilizer”

In 1996, Weaver and Wilhoit return to the topic of journalistic roles.

In their book, *The American Journalist in the 1990s: U.S. News People at the End of an Era*, they report on a survey of 1,220 US journalists, in the 1990s. Again, they report that most journalists viewed their professional roles as a combination of the interpreter and disseminator function, although the percentages of journalists who described themselves as “adversarial” increased from 17% in 1986 to 18% in 1996.

In their 1996 survey, however, Weaver and Wilhoit add a fourth type of journalist to the three discussed in 1986: the “populist mobilizers.” “Populist mobilizers” are a class of journalist, which combines the “adversarial,” “disseminator,” and “interpretive” journalist roles that Weaver and Wilhoit identified in 1986. Populist mobilizers are more “active” journalists; they see their role as “developing the cultural interests of the public ... setting the political agenda, and allowing ordinary people to express their views.” Thus, in 1996, Weaver and Wilhoit identify a journalist with a clearly non-neutral role: populist mobilizers look to actively alter public perceptions.

Weaver and Wilhoit report, however, that only 6% of respondents described themselves as populist mobilizers. In other words, 94% remained “neutral.”

Thus, the vast majority of journalists seem to view themselves as “passive” observers, and those who consider themselves to be “activist” are activists only in a “watchdog” sense. All appear to be “neutral”, in the sense that none seeks to actively influence behavior, and all appear to work in the interests of the public.

3. AN ECONOMIST’S VIEW OF JOURNALISTS

3.1 Media Coverage and Market Sentiment

Research suggests that the media shapes market “sentiment” or “belief” (Starr 2004), and intentionally, or unintentionally, influences behavior, in the following three ways

First, research tells us that people are more likely to read articles with dramatically negative headlines, because people are more likely to think that the information contained in a negative article may be more immediately relevant (Akerlof *et al.* 2000; Gabaix *et al.* 2003). Thus, from a conscious, commercial perspective, the media has an incentive to be intentionally negative. In a state of uncertainty, sentiment—or the willingness of the consumer and the business to invest—will be reduced.

Second, it is suggested that by reporting upon reality, even the genuinely neutral journalist will be forced to make choices that will bring with them their views of the world, which may unintentionally influence sentiment. There are three ways in which journalists can unintentionally influence sentiment:

- (i) By “selecting” and filtering information, the media impacts the reader’s view of the world, and encourage readers to update their expectations of probable future situations (Doms and Morin 2004). Choosing to report “bad” news over “good” news, for example, can leave the reader with a sense of fear over the state of the world in which they live, even when such a perception is not entirely correct, or necessary. Johnstone *et al.*’s (1976) neutral journalists, and Weaver and Wilhoit’s (1986, 1996) “disseminators” attempt to “avoid stories with unverifiable information,” and try to “get information quickly to the public.” In doing so, however, they must still make a selection, and the result of their selection can be a non-neutral effect on the behavior of the economy.
- (ii) The “volume” of the media’s coverage impacts the reader’s view of the world, because difficulties in absorbing information are lessened for readers when the volume of the coverage increases (Carroll *et al.* 1994; Moscarini 2004). In other words, the more frequent a news event is reported upon in the media, the greater the probable impact of that event on the sentiment of the market.

- (iii) What language to choose, or the descriptive “tone” of the coverage, impacts the reader’s behavior as well (Sims 2003). Tone is particularly visible, but not limited to, the use of “emotive terms” that characterize the selected information to give it meaning. By referring to the Great Depression of the 1920s/1930s, for example, and by comparing current economic troubles with the Great Depression, the media taps into the reader’s pre-conceived feelings of uncertainty and anxiety surrounding this event. A negative descriptive tone impacts the beliefs and expectations of the reader, and in choosing how to “frame” a story, Johnstone *et al.*’s (1976) “participatory” journalists and Weaver and Wilhoit’s (1986, 1996) “interpretative” and “adversarial” journalists can, clearly, have an impact upon the reader’s view of the world.

Finally, Weaver and Wilhoit’s (1996) “populist mobilizer” can use the platform afforded them to directly shape the reader’s view of the world in which they inhabit.

3.2 The Effect of the Intangible on the Tangible

But why should we care? Why should journalists and the tone of the media affect the economy? Well, research suggests that there is more to understanding fundamental economic movements than understanding the economic fundamentals (Starr 2004).

In recent years, models that incorporate “non-fundamental” shocks – and allow, for example, for changes in intangible and psychological factors – have been shown to have a greater predictive power than models that simply account for tangible changes (Benhabib and Farmer 1999; Benhabib and Wen 2004; Farmer and Jang-Ting 1994).

In terms of the consumers’ willingness to spend, for example, classical economics suggest that spending is a function of income, interest, and saving rates. Carroll *et al.* (1994), however, shows that changes in tangible factors, such as ‘consumer confidence’ – an indicator which measures how consumers ‘feel’ about the overall state of the economy, and their personal financial situation – can have a significant predictive role. Matsusaka and Sbordone (1995) estimate that, all else equal, a change in consumer sentiment may explain as much as 13–26% of the fluctuations in consumer spending.

Managers too, the research suggests, are affected by non-fundamental changes. Chauvet and Guo (2003) show that fluctuations in business “outlook,” or business “sentiment” can have independent, causal effects on the manager’s willingness to commit; they find that models which incorporate intangible features, such as changes in business “outlook,” more accurately predict real world investment decisions.

4. THE NON-NEUTRAL IMPACT OF THE MEDIA

Indeed, there is much evidence to suggest that the media and the journalists who populate it, has a non-neutral impact on the economy, and on the behavior of the public. We explore six strands of research on the topic: (1) the media and the public agenda; (2) the media and the public perception of risk; (3) the media and the election outcome; (4) the media and the public's perception of the firm and its services; (5) the media and the consumers' willingness to spend; and (6) the media and the firms willingness to invest. Together, these are examples provide evidence that the media changes reality, purposefully or not.

4.1 The Media and the Public Agenda

The media records public knowledge and opinions, and focuses public attention and interests on certain issues (McCombs 1981; Pollock and Rindova 2003; Rogers *et al.* 1993). The issue of the environment is an interesting and relevant example. Ader (1995) shows that increased attention to pollution in *The New York Times* was followed by increased concern about pollution in the general public, as measured by the Gallup Poll. In other words, and in this example, the media took a non-neutral, but pro-social and environmentally friendly decision to set the public agenda. Marks *et al.* (2002, 2003) show that the media is not necessarily, however, pro-social and environmentally friendly. Marks *et al.* (2003) examine how the media frames the discussion of genetically modified crops in the US and UK newspapers, and reports that the media routinely emphasized the risks (e.g., "irreversible transgenes") over the benefits (e.g., less pesticides and associated benefits to water quality, land savings, less impact on wildlife, etc.). As a result of the media's non-neutral stance on the topic of genetically modified crops, Marks *et al.* (2002, 2003) report that the public largely turned against a seemingly pro-social and environmental action, even in the absence of *any* scientific evidence to support their populist claims. In other words, Marks *et al.* (2002, 2003) suggest that the media not only created the news but also used what it created to set the public agenda and alter public behavior.

4.2 The Media and Public's Perception of Risk

The media influences the public's perception of risk (Flynn *et al.* 1998; Frewer *et al.* 2002; Hill 2001; Lofstedt 2003; McComas 2006; McInerney *et al.* 2004). In many countries, the news serves as the primary source of risk communication to the general public by the authorities (Boholm 1998), and the result is a change in social-level as well as personal-level perceptions of risk (Tyler and Cook

1984). So how does the media use this power? Looking at mortality rates, Frost *et al.* (1997) report that the media tends to underrepresent the more mundane, but relatively more probable causes of death, such as, for example, tobacco use and heart disease, and to overrepresent the more dramatic but relatively less probable causes, such as motor vehicles and toxic agents. As a result, the media is responsible for the development of stigma (Flynn *et al.* 2001). Rowe *et al.* (2000) report, in a cross-boundary comparison of newspaper articles content featuring Chernobyl, that most articles overrepresented the event, without making use of proper statistics, and Macino and Gerlach (1999), in a study of articles discussing breast cancer in women magazines, discovered that most tended to report dramatic, but incorrect and incomplete information. Mebane *et al.* (2003) also show that during the period of the anthrax scare in 2001, the media generally followed Center for Disease Control press releases, but systematically underreported the question of who was exposed, how they were exposed, and how effective antibiotics were in preventing anthrax. In all cases, the media opted to increase fear, and uncertainty, by reporting the more dramatic aspects of the news, and in doing so, clearly adopt a non-neutral stance on events.

4.3 The Media and Election Outcome

A large literature documents a significant relationship between media portrayal of US politicians and political parties, and election outcomes. The evidence suggests that in the USA, the media tends to be left-leaning; Lichter *et al.* (1986) report that 54% of journalists are left-of-center, while 17% are right-of-center, and show that in three successive presidential elections, the overwhelming majority of journalists—94%, 87%, and 81% respectively—voted for democratic candidates. The political tendencies of neutral journalists should not matter. However, the evidence is that the views of the journalist rub-off. Find that a subscription to the *Washington Post*, a left-of-center US newspaper, increased the probability of voting Democratic by eight percentage points in the 2005 Virginia election. Della Vigna and Kaplan (2007) report similar results when looking at the electoral effects of the introduction of the right-of-center *Fox News Channel* in the period 1996–2000. They show that in the US, Republicans gained 0.4–0.7 percentage points in the towns that broadcast *Fox News*, and suggest that *Fox News* convinced 3–28% of its viewers to vote Republican. The choices that the media makes, in terms of what to cover, and how, is the explanation for these results. But the conclusion is the same: an objective, neutral media should not have a measurable effect on an election.

4.4 The Media and the Perception of the Firm

The media influences the public's perception of the manager, the firm, and its offerings (Brown and Deegan 1998; Dutton and Dukerich 1991; Elsbach 1994; Elsbach and Sutton 1992; Fombrun and Shanley 1990). Boholm (2003) provides a tangible example: in 2002, it was discovered that by moving the car battery from the front to the back of the car, Volvo unintentionally increased the electromagnetic fields in a number of their models. There was no scientific evidence that electromagnetic fields are damaging to human health, and less still that the electromagnetic field generate in the Volvo was damaging. Yet the media provoked a public outcry: Volvo was labeled as "deplorable," and it was reported that "the new Volvo can give you cancer." As a result of the media's coverage, and even in the absence of scientific evidence, Volvo was forced to recall the cars and to reduce the electromagnetic fields. Clearly, an objective, neutral, and observational media would not have such an effect on the firm.

4.5 The Media and Consumer Sentiment

The media shapes consumer sentiment (Doms and Morin 2004; Salyer and Sheffrin 1998; Starr 2008). For example, looking at how the media reports upon the economy in the period 2000–2008, and considering how this impacts consumer sentiment, McCarthy and Dolfsma (2009) show that an increase in the coverage of "bad news"—and particularly an increase in the use of "emotive" terms, such as "crisis," "slowdown" and "downturn"—by the media influences consumer sentiment and predicts short-term spending fluctuations. Even in the absence of a "real" crisis, the authors suggest that the negative coverage by the media can cause consumers to act as if there was a crisis. In other words, McCarthy and Dolfsma (2009) not only provide evidence of the media's influence, or power, but also show the non-neutral tendencies of the media too.

4.6 The Media and Firm Behavior

The final strand of literature considers how the media impact the behavior of the firm. In terms of market-level trading, Tetlock (2007) finds that high media pessimism predicts downward pressure on market prices, and unusually high or low pessimism predicts high market trading volume: in other words, all else equal, the mood of the media impacts the value of the market. Next, and in terms of firm-level decisions, McCarthy *et al.* (2012) find that media coverage affects the willingness of the firm to patent; in other words, the media affects the commercialization of new knowledge. Firms patent less in recessionary

periods, and more in growth periods. Using a sample of 1,895,473 patent applications made in the period 2003–2011, and controlling for real changes in the economy, the authors document a significant role, in particular, for the media’s use of “emotive” terminology, on the willingness of the firm to patent new knowledge. They find that an increase in the use of emotive terms in particular, words, such as panic, worry, and anxiety, predicts a decrease in the number of patent applications, even when the economic fundamentals appear positive.

5. CONCLUSIONS

Journalists, and the media in general, would like to be seen as neutral. We buy their papers and read their articles because we trust them to provide us with an “unbiased” picture of the complex world in which we live. Indeed, 40 years of surveys confirm the fact that most journalists (94%) think of themselves as neutral.

In reality, we suggest that the media is anything but neutral. Journalists are not only incentivized to be negatively biased, but by selecting, framing, and analyzing events, even those who want to be neutral will impact their audience’s view of the world. By reporting the news, we suggest that journalists change the (impact of the) news.

We report evidence to suggest the media, both intentionally and unintentionally, impacts: (1) the public agenda; (2) the public perception of risk; (3) the election and the probable outcome of the election; (4) the firm’s and the manager’s reputation; (5) the consumers’ willingness to spend; and (6) the firm’s willingness to invest.

In doing so, we conclude that the media is not neutral in the sense of being the outside player whose the media is not neutral, in the sense of being an outside player, whose behavior does not affect the system it studies. Rather, we suggest that the media is a powerful explanatory variable in understanding fundamental changes in the economy, which we hope future research will more regularly incorporate.

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