

Who Captures the Power of the Pen?

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Abstract

We study how political capture affects the corporate governance role of the media. Relying on a unique media market in China that is characterized by the prevalence of both state-controlled and market-oriented media, we manually construct a comprehensive financial news sample containing 80,008 articles during the 2004–2010 period and provide evidence that negative coverage by the market-oriented media significantly increases the chance of forced top executive turnover, whereas similar coverage by the state-controlled media has no such impact. Tests based on instrumental variable and exogenous experiments provide positive evidence of the casual link.

Keywords: Media coverage, media concentration, political capture, CEO turnover
JEL Code: G32, G34, J33, M41

“Global press freedom fell to its lowest level in over a decade in 2013... In another key development, media freedom in the United States deteriorated due primarily to attempts by the government to inhibit reporting on national security issues”

– Karin Deutsch Karlekar and Jennifer Dunham, 2014,
“Press Freedom in 2013: Media Freedom Hits Decade Low”

1. Introduction

As the broadest and most freely disseminated information intermediaries, the media play an important role in corporate governance (Dyck and Zingales 2002)¹. Nevertheless, only 14% of the world’s population receives information from potentially independent media². The reason for this lack of media independence is that 30% of media firms around the world are directly controlled by governments, while the remaining market-oriented media firms are indirectly influenced by governments through content restrictions (Djankov et al. 2003). Given the substantial influence of government control on the media industry, a key question is raised regarding what form of media is optimal to protect shareholder interests. In this study, we investigate the corporate governance role of the two types of media: the state-controlled media and the market-oriented media.

Compared with the state-controlled media, the market-oriented media are more profit-driven and have less self-censorship, particularly when their coverage is disconnected from conflicts of political interest (Djankov et al. 2003; Besley and Prat 2006; Houston, Lin, and Ma 2011; Dyck, Moss, and Zingales 2013). As a result of less political capture, coverage by the market-oriented media is more comprehensive, more accurate, and timelier. Consequently, the market-oriented media can enjoy greater credibility with the public and place more pressure on management in governing a firm. We call this view *the market-disciplining hypothesis*. However, driven by profit-seeking incentives, the market-oriented media may issue biased articles to cater to the interests of readers (Core, Guay, and Larcker 2008; Gentzkow and Shapiro 2010) or write favorably about firms for advertising revenue (Gurun and Butler 2012), whereas the state-

¹ See, Bushee et al. (2010), Engelberg and Parsons (2011), and Griffin, Hirschey, and Kelly (2011) for the role of the media as information intermediaries; and see, Zingales (2000), Miller (2006), Dyck, Volchkova, and Zingales (2008), Joe, Louis, and Robinson (2009), Dyck, Morse, and Zingales (2010), Kuhnen and Niessen (2012), Braggion and Giannetti (2013), Liu and McConnell (2013), and Dai, Parwada, and Zhang (2014) for the details regarding the corporate governance role of the media.

² See, Karlekar and Dunham (2014) for a 2013 survey of press freedom around the world.

controlled media are funded by governments, and they are less likely to sensationalize news stories. Therefore, the monitoring role of the market-oriented media could be compromised relative to the role of the state-controlled media. We call this view *the market-catering hypothesis*.

To test these two competing hypotheses, we focus our study on the Chinese market because of its unique features regarding media markets and corporate governance. First, unlike developed economies such as the U.S. or western European countries, state ownership of the media in China is pervasive. For example, according to the data compiled by Djankov et al. (2003), the top five Chinese newspapers ranked by daily circulation are all controlled by the government. Moreover, in China, the impact of political capture on the media is significant (Esarey 2006; Piotroski and Wong 2012; Jin, Xu, and Zhang 2014; Piotroski, Wong, and Zhang 2014). For instance, Esarey (2006) states, “In no country is this clash between the free flow of information and state control more vividly on display than in China. At once economically dynamic and ruled by a government unaccountable to public opinion, China represents a crucial test case of political control of mass media”. Despite government control of the media, an increasing number of business newspapers have been established by profit-driven organizations. For example, the top four state-controlled business newspapers had a daily circulation of approximately 2.4 million in 2010, while the top four market-oriented business newspapers had a daily circulation of approximately 2.8 million. The combination of the prevalent state-controlled media and the progressive market-oriented media makes the Chinese market a particularly fertile setting in which to examine the impact of government on the corporate governance role of the media.

Second, the Chinese corporate governance system offers a unique contrast to corporate governance in developed markets (Sun and Tong 2003; Allen and Qian 2005; Li et al. 2011; Piotroski and Wong 2012; Karolyi 2014). In developed markets, both internal and external governance mechanisms provide incentives for corporate managers to maximize shareholder value, including equity ownership by top executives, monitoring by institutional shareholders, outside directors on the board, and the threat of external takeovers (Kang and Shivdasani 1995; Doidge, Karolyi, and Stulz 2007). In contrast, in the Chinese market, equity ownership by management is atypical, institutional shareholders are not dominant and are mostly passive, the monitoring of outside directors is generally acknowledged as weak, and takeovers are extremely rare (see, e.g., Sun and Tong 2003; Allen and Qian 2005; Firth, Lin, and Zou 2010; Li et al.

2011). Such deficiencies in both internal and external governance mechanisms provide a good setting to test the monitoring role of the media in the context of a natural isolation from alternative channels of corporate discipline (Kato and Long 2006; Li et al. 2011).

In this paper, we rely on a large hand-collected sample of 80,008 news reports from eight major business newspapers in China during the 2004–2010 period. Specifically, we categorize these eight newspaper sources into two types: state-controlled newspapers (*China Securities Journal*, *Securities Daily*, *Securities Times*, and *Shanghai Securities Journal*) and market-oriented newspapers (*China Business Journal*, *21st Century Business Herald*, *The Economic Observer*, and *First Financial Daily*). State-controlled newspapers are founded by government newspaper offices and are designated by the China Securities and Exchange Commission (CSEC) as official outlets through which listed firms can publish mandatory disclosures, whereas market-oriented newspapers are founded by for-profit organizations and are neither directly owned nor controlled by the government (You and Wu 2012).

To construct our media measures, we read each news report to determine whether the tone of the report is negative, neutral, or positive about the firm. We then count the number of positive and negative articles over each fiscal year and use the difference between the numbers of positive and negative articles as the key measure of the tone of media coverage. To gauge the corporate governance role of the media, we examine the impact of the media on the likelihood of top executive turnover. There are several reasons to focus on top executive turnover. Removing top executives is considered one of the most aggressive actions taken in the course of corporate governance, and it is one of the most observable measures of corporate governance (Weisbach 1988; Adams, Benjamin, and Weisbach 2010). Most importantly, forced CEO turnover in Asian markets is representative or comparable to that in the U.S. and other similar European markets (Kang and Shivdasani 1995).

We begin by examining whether there is any difference between the governance role of the state-controlled media and that of the market-oriented media regarding the likelihood of forced executive turnover. First, we find strong evidence that negative media coverage not only increases the chance of forced top executive turnover but also ties the sensitivity of the likelihood of top executive turnover to firm performance. The effect is not only statistically significant but also economically relevant. For example, a one standard deviation decrease in the tone of media coverage increases the likelihood of forced top executive turnover by 2.4% in

absolute magnitude and by 20.5% relative to the average likelihood of forced top executive turnover³. Second, when we decompose the news reports into those from the state-controlled media and those from the market-oriented media, we find that only negative coverage by the market-oriented media has a significant impact on the likelihood of forced executive turnover and on the sensitivity of top executive turnover to firm performance, whereas negative coverage by the state-controlled media does not have such an impact. For example, a one standard deviation decrease in the tone of the market-oriented media leads to a 2.5% (absolute magnitude) or 21.8% (relative magnitude) increase in the likelihood of forced top executive turnover. These findings provide the first evidence supporting the market-disciplining hypothesis.

To substantiate our main findings and solidify the causal relationship, we implement a multi-pronged approach to address the issue of endogeneity. First, we focus on the economic intuition and identify specific cases in which the state-controlled media and the market-oriented media may perform different roles with regard to executive turnover. We employ three anecdotal examples about Chinese companies (Jiugui Liquor, Jilin Zixin Pharmaceutical Industrial, and Sanlu Group) in our study, and all three show that the market-oriented media served as the whistle blower for corporate scandals, which eventually led to the removal of these firms' top executives, whereas the state-controlled media either kept silent or were blocked from reporting by the government.

Second, the causality between media coverage and top executive turnover can run in the opposite direction. When firms perform poorly and draw the attention of investors, the media may simply cater to the demands of the audience by targeting coverage on these poorly performing firms or even by sensationalizing issues without in-depth research or analysis (Core, Guay, and Larcker 2008; Bhattacharya et al. 2009). We address this potential reverse causality bias using an instrumental variable approach. We use the firm's geographical distance to the headquarters of media outlets and the interaction between this distance and industry-level return on assets as instruments. Both variables are associated with the tone of media coverage, but neither variable implies firm performance or forced CEO turnover (Engelberg and Parsons 2011;

³ The economic significance of the tone of media coverage is comparable to that of a firm's operating performance (ROA), and a one standard deviation decrease in ROA increases the likelihood of forced top executive turnover by 2.8%.

Gurun and Bulter 2012). Our conclusion remains the same in this instrumental variable approach.

Third, we exploit the exogenous variation in the political capture of the media by using the 2008 Beijing Olympic Games. During the prelude to the Olympics, the Chinese government tightened control over media reporting and essentially banned coverage of politically sensitive subjects because the political priority was to hold a “harmonious” Olympics. After 2008, this tight control was significantly relaxed. Based on this exogenous variation in the political capture of the media, we perform two-stage least square (2SLS) regressions in which the first-stage regressions include a dummy variable to denote the pre- and post-Olympic period of our sample. We find consistent results using this identification strategy.

Finally, it is possible that alternative disciplinary channels other than media coverage have the impact on the likelihood of top executive turnover. To make sure that the results in our baseline regressions are not driven by those alternative disciplinary channels, we reestimate our regressions by including additional control variables, including the tone of news articles by the foreign media, the tone of blog posts on social media, changes in institutional ownership, changes in analyst forecasts, changes in analyst rankings, and audit opinions. We find that our results are robust to the inclusion of these additional control variables.

After we identify the causal relationship, we perform further analyses to study the source of differences between the disciplinary effect of the market-oriented media and that of the state-controlled media. First, we investigate the characteristics of news articles and find that articles by the market-oriented media are more critical, comprehensive, and focused on covered firms. Second, we find that the stock price responds significantly positively (negatively) to positive (negative) news reports. For example, one positive report by our sample newspapers is associated with a 1.0% positive abnormal return around the reporting date. Importantly, we find that the stock price is more responsive to news reports issued by the market-oriented media. Third, we find that news reports from the market-oriented media are not only more correlated with firms’ *current* performance but also strongly predict firms’ *future* performance, whereas news reports from the state-controlled media do not have such informativeness to reflect firms’ fundamental values.

In the last part of our study, we investigate factors that drive the effect of political capture on the governance role of the media. We first classify firms into non-state-owned enterprises (non-

SOEs) and state-owned enterprises (SOEs) to proxy for potential conflicts with the political elite (Houston, Lin, and Ma 2011). We find that the governance role of the media is only pronounced for non-SOEs. Second, following Wang, Wong, and Xia (2008), we construct two cross-province variables to proxy for the degree of corruption of the political system, and we find that the monitoring role of the media is more effective for firms located in provinces with less corruption.

Our paper is among the first to compare the market-oriented media and the state-controlled media in terms of how the media should be optimally organized to discipline insiders in a country. Broadly speaking, the corporate governance role of the media is recognized in the literature across several aspects. The business media can act as the watchdog or whistle blower for accounting fraud (Miller 2006; Dyck, Morse, and Zingales 2010), expose board ineffectiveness (Joe, Louis, and Robinson 2009), monitor executive compensation (Kuhnen and Niessen 2012), limit firms' ability to use dual class shares (Braggion and Giannetti 2013), influence managers' capital allocation decisions (Liu and McConnell 2013), and reduce insiders' trading profits (Dai, Parwada, and Zhang 2014). Relying on the unique media market in China, we show the distinct monitoring role of the market-oriented media relative to that of the state-controlled media. Furthermore, consistent with cross-country evidence on state media ownership (Djankov et al. 2003; Houston, Lin, and Ma 2011)⁴, we contribute by directly identifying political capture as a critical obstacle to the corporate governance role of the media at the firm level.

The remainder of the paper proceeds as follows. We review the related literature and develop our hypothesis in Section 2. In Section 3, we explain the measures we use for governance activity and media coverage and describe the data and sample characteristics. In Section 4, we examine whether and how political capture affects the role of the media in forced top executive turnover, and we address endogeneity issues. In Section 5, we compare the informativeness of the state-controlled and market-oriented media. In Section 6, we examine other forms of political capture and the corporate governance role of the media. Finally, we provide concluding remarks in Section 7.

⁴ Djankov et al. (2003) show that state media ownership is prevalent around the world and negatively associated with the level of freedom of the press and the level of economic freedom. Furthermore, Houston, Lin, and Ma (2011) find that state ownership of media is associated with higher levels of bank corruption.

2. Literature review and hypothesis development

There is a growing strand of literature on the corporate governance role of the media. By disclosing and disseminating new information, the business media can act as a whistle-blower or watchdog in the corporate governance of firms.

This strand of the literature examines the effects of the media on corporate governance in several aspects. The seminal works by Zingales (2000) and Dyck and Zingales (2002) propose that the media can place pressure on corporate managers by collecting and disseminating information. In support of the corporate governance role of the media, Dyck, Volchkova, and Zingales (2008) use a unique sample of Russian firms in the period from 1999 to 2002 and find that media coverage in the Anglo-American press increases the probability that a corporate governance violation will be reversed. Consistently, Miller (2006) find that the media play a monitoring role with regard to accounting fraud by rebroadcasting information from other information intermediaries and by undertaking original investigation and analysis. By studying all reported fraud cases in large U.S. companies between 1996 and 2004, Dyck, Morse, and Zingales (2010) find that the business media are an important type of whistle-blower to detect corporate fraud.

Aligned with the general corporate governance impact of the media, the recent literature investigates the role of the media specifically in several governance attributes. For example, Joe, Louis, and Robinson (2009) examine how the media exposure of board ineffectiveness affects corporate governance and find that media coverage forces the targeted agents to take corrective actions and enhances shareholder wealth. Kuhnen and Niessen (2012) study the monitoring role of the media on executive compensation and find that after more negative press coverage of CEO pay, firms reduce option grants and increase less contentious types of pay, such as salaries. Using a 15-year sample of intense debate on dual class shares in the UK, Braggion and Giannetti (2013) show that negative media coverage limits firms' ability to use dual class shares. Liu and McConnell (2013) examine the role of the media on capital budgeting using value-reducing acquisition attempts and find that managers are more likely to abandon these attempts when there is more negative media coverage. To test whether news dissemination in itself exerts a corporate governance effect, Dai, Parwada, and Zhang (2014) show that the media reduce insiders' trading profits by disseminating the regulatory releases of insider trading activities.

In the above literature on media monitoring, an important assumption is the independence of media outlets. However, when this independence is affected by government censorship or profit-driven financial incentives, the monitoring role of the media is less clear. In the following paragraphs, we develop two main hypotheses for the empirical testing of the study.

On the one hand, compared with the state-controlled media, the market-oriented media are more profit-driven and have less self-censorship, particularly when coverage by the market-oriented media is disconnected from political interests that may be in conflict (Besley and Prat 2006; Djankov et al. 2003; Houston, Lin, and Ma 2011; Dyck, Moss, and Zingales 2013). In 2008, for example, it was discovered that Sanlu Group, one of the largest dairy producers in China, sold baby formula laced with an industrial additive called melamine, which caused 294,000 babies to become ill and killed six infants. Chinese journalists from state-controlled media outlets, however, were blocked from covering the Sanlu Group story by censorship edicts that prohibited the coverage of politically sensitive subjects during the prelude to the Olympics, when Beijing's political priority was to host a "harmonious" Olympic Games⁵. A news report about the scandal surfaced only after the Olympics, when *Lanzhou Morning Post*, a market-oriented newspaper based in the Gansu province, blew the whistle⁶. Therefore, the monitoring effect of the market-oriented media should be more pronounced than that of the state-controlled media. We state this *market-disciplining view* as our main hypothesis.

We examine the effect of the monitoring role of the media on the likelihood of top executive turnover as an important outcome of corporate governance and monitoring. The focus on top executive turnover has several advantages. First, removing top executives is considered one of the most aggressive actions taken in the course of corporate governance (Weisbach 1988), which provides a clear testing ground to examine the governance role of the media. Second, top executive turnover is one of the most observable measures of corporate governance (Adams, Benjamin, and Weisbach 2010), which allows us to investigate whether the state-controlled or market-oriented media have a significant impact on the governance of a firm. Third, previous studies show that forced CEO turnover in Asian markets is representative of or comparable to forced CEO turnover in the U.S. and other similar European markets (Kang and Shivdasani 1995;

⁵ "Despite warnings, Chinese regulators failed to stop tainted milk", *New York Times*, September 27, 2008.

⁶ The news article was published on September 8, 2008. For details, please see "Timeline of China's tainted milk scandal", <http://english.caijing.com.cn/2008-12-31/110044273.html>.

Aggarwal et al. 2011). By examining the relationship between the monitoring role of the business media and CEO turnover in China, we are able to shed further light on the growing evidence of managerial job security and employment prospects in emerging markets (Chang and Wong 2009).

In a well-governed firm, top executives must be responsible for the performance of the company and rewarded or replaced accordingly (Kang and Shivdasani 1995; Masulis and Mobbs 2011). If the market-oriented media perform an effective monitoring role, poor firm performance resulting from managerial incompetence will be accurately disclosed to the public in a timely manner, and top executives will thus be more likely to be replaced under shareholder pressure. Thus, our market-disciplining hypothesis has two predictions:

H1A: *The likelihood of top executive turnover is positively associated with negative coverage by the market-oriented media.*

H1B: *The sensitivity of top executive turnover to firm performance is higher when there is more negative press coverage from the market-oriented media.*

On the other hand, driven by profit-seeking incentives, the market-oriented media may issue biased articles to cater to the interests or opinions of readers. For example, Core, Guay, and Larcker (2008) argue that in contrast to the corporate governance role of the media, media outlets slant news stories to take a negative tone about firms that are out of favor with readers' opinions. Supporting this view, Gentzkow and Shapiro (2010) find that reader preferences account for approximately 20% of the variation in the measured slant in their sample. Moreover, the market-oriented media may have strong incentives to write favorably about firms to sustain their advertising revenue. Consistently, Gurun and Butler (2012) find that local news outlets issue more positive articles about local firms with higher advertising expenditures⁷.

As a recently explosive case in China, 23 journalists and two editors working for a website of *21st Century Business Herald* (a market-oriented newspaper in our sample) were arrested after an

⁷ In addition, Reuter and Zitzewitz (2006) show that mutual fund recommendations are correlated with past advertising in three personal finance journals. More generally, Bednar (2012) studies the behavioral view of the media and provides evidence against the effectiveness of the media as a governance control mechanism.

alleged scam⁸. These journalists and editors targeted firms preparing for initial public offerings and forced them to sign lucrative advertising contracts to avoid critical news coverage. For those firms that refused to cooperate, the media exaggerated news stories and published negative reports. This event triggered a fierce debate in China about whether the market-oriented media should be tightly controlled by the government or even banned.

Overall, these arguments suggest that the market-oriented media play a less effective monitoring role due to their profit-driven incentives compared with the state-controlled media. We consider this *market-catering view* to be the competing hypothesis, which leads to the opposite predictions of H1A and H1B.

3. Data, variable construction, and descriptive statistics

3.1. Data sample

Our initial sample begins with all publically listed firms from 2005 to 2010 covered by the China Stock Market and Accounting Research Database (CSMAR), which provides comprehensive information about stock prices, financial statements, corporate governance, and ownership structure. The database has been widely used by studies such as Sun and Tong (2003), Chan and Wu (2010), and Xu (2011). We first exclude firms in the financial industry from our sample. We further require that firms have non-missing information on stock prices, financial statements, corporate governance, and ownership structure. The final sample includes 8,240 firm-year observations across 12 industries and 31 provinces. We provide detailed information about the source of our data and the definitions of the variables used in the study in Appendix A. The distribution of the number of firms included in the sample by industry and year is reported in Appendix B1, and the distribution by province and year is given in Appendix B2. We find that the manufacturing industry has the largest number of firms, ranging from 711 firms in 2005 to 887 firms in 2010. With regard to provincial location, Guangdong has the largest number of firms, with 135 firms in 2005 and 192 firms in 2010. The overall sample increases from 1,246 firms in 2005 to 1,536 in 2010, which reflects the development of China's capital market during this period.

⁸ "State media say website extorted businesses", *Wall Street Journal*, 12 September 2014; "Police in China detain editor of paper", *The New York Times*, 25 September 2014.

3.2. Variable construction

3.2.1. Tone of media coverage

We construct the media variables based on the eight largest nation-wide business newspapers in China: *Securities Daily*; *Securities Times*; *China Securities Journal*; *Shanghai Securities Journal*; *The Economic Observer*; *21st Century Business Herald*; *First Financial Daily*; and *China Business Journal*. In 2010, the circulations for each publication were 200,000; 600,000; 800,000; 800,000; 600,000; 670,000; 716,000; and 850,000, respectively. The *Economic Observer* and *China Business Journal* are issued weekly, whereas the other newspapers are issued daily⁹.

We classify these eight newspapers into two categories: *state-controlled* newspapers and *market-oriented* newspapers. We classify the first four newspapers (*Securities Daily*; *Securities Times*; *China Securities Journal*; and *Shanghai Securities Journal*) as state-controlled newspapers and the last four newspapers (*The Economic observer*; *21st Century Business Herald*; *First Financial Daily*; and *China Business Journal*) as market-oriented newspapers. This classification is based on media information regarding ownership structure and control rights obtained from the newspapers' websites, company filings, and government disclosures. A detailed description of all of these newspapers is provided in Appendix C, and front-page samples of these newspapers are presented in Figure IA1 in the Internet Appendix. From now on, we will define the tables and figures contained in the Internet Appendix with the prefix "IA".

The four state-controlled newspapers are founded by newspaper offices, which are non-profit-organizations directly owned and controlled by the government. For example, China Securities Journal is a national securities newspaper founded in October 1992 and owned by Xinhua News Agency, which is subordinate to the State Council and reports to the Communist Party of China's Propaganda and Public Information Departments. These state-controlled newspapers are also designated by the China Securities and Exchange Commission (CSEC) as

⁹ One concern is that weekly issued journals may not be as timely as daily issued journals. In our sample, both weekly issued journals are market-oriented media. Any difference in journal timeliness due to issue frequency would bias against our hypothesis. To further address this issue, we use various event windows to account for different issue frequencies when examining the market response of media reports, and we find similar results across all event windows.

the outlets through which publicly listed firms should disclose news. When collecting the news reports in the state-controlled newspapers, we only focus on news reports written by journalists, and we exclude media releases from firms because they are rebroadcasts and do not contain any new information.

The four market-oriented newspapers are either owned or controlled by financial institutions, public companies, or wealthy individuals. None are directly owned or controlled by the government. Therefore, all the market-oriented newspapers have profit-driven objectives. For example, 21st Century Business Herald was founded in 2000 by Southern Media Group and is jointly owned by a public investment company, Fosun Group, which is listed on the Hong Kong Stock Exchange.

To construct our measures of media coverage, we manually read 80,008 news reports and record whether the tone of each report on a firm is negative, neutral, or positive. This data-collection task is performed by the authors and six graduate students in business administration. Before the formal data collection, we perform a pilot experiment for 500 randomly selected news articles to finalize the criteria to decide the tone of a media report. For each news article, two team members evaluate a report's tone independently, and a formal data collection process is implemented after the two independent evaluations are found to be consistent more than 90% of the time. In the formal data collection stage, for each report we use two independent evaluations from team members to ensure we have unbiased evaluations of the media tone. If there is no consensus between the two evaluations, a third evaluation is applied for a further verification¹⁰. To test the consistency of the evaluation, we perform the *Cronbach* test and find that the *Cronbach* α value is over 0.9, which suggests a high level of consistency.

We use the number of positive articles minus negative articles as our measure for media coverage and refer to this measure as “media tone” (*Tone*). Similarly, we calculate the tone of market-oriented media coverage (*MktTone*) as the number of positive articles minus negative articles reported by the market-oriented media and the tone of state-controlled media coverage (*GovTone*) as the number of positive articles minus negative articles reported by the state-

¹⁰ For the first and second team members, the correlations between their evaluation and the finalized evaluation are 0.952 and 0.971, respectively, which suggests a high level of reliability for these independent evaluations.

controlled media. If one news report covers multiple firms, we include that report when calculating the tone of media coverage on each firm.

We do not rely on the count of positive or negative words when constructing our media tone measures. Our measure has several unique features compared to methods that use counts of certain words to quantify the qualitative content of news stories (Tetlock, Saar-Tsechansky, and Macskassy 2008). First, we are able to assess the information content of each word and understand the content of the news report in context, without assuming that all negative words in the predetermined dictionary are equally informative and that neutral words are uninformative. Second, we are able to identify whether the tone of media coverage refers to a company or to other entities, such as an industry or the economy, which dramatically reduces the measurement errors of our media tone variable. Third and most critically, compared with English, the definition of positive and negative phrases in Chinese is much more complicated, and the tone of a phrase can hardly be evaluated outside of a certain context.

3.2.2. Forced top executive turnover

To identify forced top executive turnover, we first obtain information about the CEO from the CSMAR database by examining changes in the name of a firm's top executive. We then search the newswire using the name of the chief executive and the company as keywords to obtain more detailed information about the turnover event. We assume a forced turnover if the information in the news reports is sufficient for us to make such a judgment. Forced CEO turnover (*CEOTurnover*) is a dummy variable that equals one if there is forced CEO turnover in a given year.

Our detailed procedure to identify forced top executive turnover is described below. Consistent with Chang and Wong (2009), any person holding the formal title of either General Manager or Chief Executive is identified as a CEO. For our sample period, there are 1,990 cases identified as having CEO changes in 8,240 firm-year observations. If a firm undergoes two or more turnovers in the fiscal year, then only the first turnover is counted. We identify forced top executive turnover using a two-step procedure. In the first step, we extract from the CSMAR the reported reasons for top management turnover. The CSMAR provides the following 12 reasons for top management turnover: change of job, retirement, contract expiration, changes in controlling shareholders, resignation, dismissal, health reasons, personal reasons, corporate

governance reform, legal disputes, completion of acting duties, and no reason given. Appendix D reports the distribution of the different reasons for a CEO to leave the top management team in our sample. Among these, we treat *dismissal* (28 observations) as forced turnover and *retirement, change in controlling shareholders, health reasons, corporate governance reform, and legal disputes* as voluntary turnover (99 observations). After the first step, there are 1,863 observations for which we cannot decide whether the turnover of the top executive is forced. We further analyze these observations in the second step.

In the second step, we identify the destinations of the departing top executives and group them into the following 12 categories¹¹: (1) information unavailable; (2) new position ranked lower than CEO position; (3) CEO position taken up at unlisted, smaller firm; (4) dismissal; (5) important government position taken; (6) remaining as board chairman or vice chairman; (7) promoted to board chairman or vice chairman; (8) CEO position taken up at another listed firm or parent firm; (9) arrested or under investigation; (10) health problems; (11) retirement; and (12) going abroad to study. Because it is unlikely that there would be no information available if a departing CEO took up a position that is better than his or her previous role, we define reasons (1) – (4) as indicators that the new job is worse than the previous job and reasons (5) – (8) as indicators that the new job is better than the previous job. As suggested by Chang and Wong (2009), turnover is highly likely to be voluntary (forced) if the new job is better (less desirable) than the old one. Therefore, a turnover caused by reasons (1) – (4) is classified as forced turnover and as voluntary turnover otherwise. Using this procedure, we are able to identify 1,990 top executive turnovers in our sample. Among these turnovers, 948 turnovers are classified as forced turnovers.

Our procedure to identify forced top executive turnover is conservative compared with other studies. For example, Parrino (1997) classifies a turnover as forced when the “WSJ announcement of the succession does not report the reason for the departures as involving death, poor health, or the acceptance of another position (elsewhere or within the firm).” Thus, he virtually assumes that any turnover without a disclosed reason except for health issues is forced.

¹¹ Information about the departing executive is obtained from the firms’ annual reports, the China's Listed Firms Database provided at <http://stock.sina.com.cn/>, [http:// www.hexun.com](http://www.hexun.com) or [http:// www.jrj.com.cn](http://www.jrj.com.cn), and Internet search engines such as <http://www.baidu.com> and <http://www.google.com>.

Even if he further investigates these cases by trying to track where these departed CEOs go, he still codes a turnover as forced if he cannot find any useful information.

We adopt the conservative measure of forced CEO turnover because of the unique feature of the labor market for corporate executives in China. Compared with developed markets, the reasons for top executive turnover in the Chinese market are more diverse. For example, a significant number of top executives, particularly those from SOEs, have been appointed as government officials or to senior positions in government agencies when they depart from their companies. Moreover, to prevent the entrenchment of a chief executive, a common practice in Chinese SOEs is the “rotation” of senior executives, pursuant to which chief executives in the same industry swap companies every three to five years. These turnovers, apparently, are not the result of enforcing corporate governance on poor performing executives.

3.2.3. Control variables

Drawn from existing studies (e.g., Denis, Denis, and Sarin, 1997; Kaplan and Minton, 2012) on the determinants of forced top executive turnover, we construct the following set of control variables: return on asset ratio (*ROA*), annual stock return (*Return*), the log of firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), a dummy to denote whether a firm is a state-owned enterprise (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). All continuous variables are winsorized at the 1% level. A detailed definition of all these variables is provided in Appendix A.

3.3. Summary statistics

Panel A of Table 1 reports summary statistics for our sample firms. In Panel A, we report the summary statistics for forced CEO turnover, the tone of media coverage, and the control variables we use in the regression. We find that, on average, 11.5% of firm-year observations have forced turnover events. This figure is lower than those reported in studies using U.S. data, such as Kang and Kim (2008) (24.9%), and is lower than that in Japan (24.1%) (Kang and Shivdasani, 1995), which suggests that the labor market for top executives in China is not as

liquid as that in developed markets and that the governance environment in China is not as efficient as that of developed markets¹².

Several other findings are noteworthy. We find that the mean value of our key measure of media tone is 1.898, which suggests that media coverage is positive for the sample firms, on average. Moreover, the mean tone of the market-oriented media and that of the state-controlled media is 1.811 and 0.073, respectively, which suggests more positive coverage from the market-oriented media. The standard deviation of media tone is higher for the market-oriented media than for that of the state-controlled media, which suggests more dispersed coverage by the former. Regarding the frequency of media coverage, on average, a firm has seven news reports in a year, and approximately 20% of firm-years have no news coverage.

With regard to the control variables, we find that the mean *ROA* is 0.047, whereas the mean value of stock returns is -0.167. We also find that approximately 53.4% of the shares are owned by blockholders, and 64.8% of the sample firms are SOEs. Regarding the board structure variables, we find that each firm's board has an average of nine directors, three of whom are insiders, also on average. These board characteristics are consistent with findings using U.S. data (Linck, Netter, and Yang 2008)¹³.

Panel B of Table 1 illustrates that there is a negative correlation between media tone measures and forced CEO turnover, which may imply a corporate governance role for the media. For example, the Pearson (Spearman) correlation coefficient between *tone* and *CEOTurnover* is -0.082 (-0.107). Not surprisingly, the tone of media coverage is positively correlated not only with firm performance but also with firm size, block ownership, state ownership, board size, CEO age and CEO tenure. The tone of media coverage is negatively correlated with firm leverage and CEO-chairman duality. Although this table provides some preliminary evidence, the correlation may still be spurious because of the lack of control variables. Thus, the next step of our analysis is to examine the relationship in a multivariate framework.

¹² The low rate of forced CEO turnover is also consistent with our conservative procedure when identifying forced turnover. However, any forced turnover event we fail to identify using this procedure will bias against our findings.

¹³ For the additional variables we use in this study, we provide summary statistics in Table IA1. For instance, changes in institutional ownership ($\Delta Institution$) have a mean value of 4.7% in our sample, which is consistent with the fact that the market shares of financial institutions are steadily increasing in China over recent years.

4. The market-oriented media, the state-controlled media, and forced top executive turnover

4.1. Political capture and the role of the media on forced top executive turnover

In this section, we examine the monitoring role of the business media using forced top executive turnover as an important governance outcome variable. As a preliminary analysis, we form single-sorted media tone portfolios in Table IA2. First, we sort firms according to the tone of media coverage, and we perform a portfolio analysis for the likelihood of top executive turnover. We also separate our sample according to firm size, return-on-asset ratio, and stock return. Across all samples, we find that firms negatively covered by the market-oriented media have a significantly high likelihood of forced CEO turnover, whereas firms with a worse tone that is cast by the state-controlled media do not.

We then formally perform linear probability models to examine the effect of the media on forced CEO turnover¹⁴. Our dependent variable is a dummy variable equal to one if a forced top executive turnover event occurs and zero otherwise (*CEOTurnover*). The following regression provides a baseline for our multivariate analyses:

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), log of firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). To address the concern that our results could be driven by omitted, unobserved firm characteristics and the potential time trend of the turnover behavior, we include firm and year fixed effects in our regressions¹⁵. Standard errors are adjusted for heteroskedasticity and firm-level clustering. All the control variables and our media tone variables are as of the previous year.

¹⁴ To control for firm fixed effects, we use the linear probability model as the main specification. In unreported tests, we find robust results using the logit regression approach.

¹⁵ As an alternative approach to control for the unobservable firm characteristics, we adopt a specification with changes in the tone variables and control variables, and we find consistent results. The results are reported in Table IA3.

Our results are reported in Table 2. In Model (1), we include the media tone of all news reports in the regression and find that the coefficient on media tone is significantly negative at the 1% level, which suggests that firms covered negatively by the media will be more likely to have their top executives replaced. In Model (2), we include both the tone of the state-controlled media and that of the market-oriented media in the same regression and find that the coefficient of *MktTone* is significantly negative, whereas the coefficient of *GovTone* is not significant, which suggests that the tone of the market-oriented media has a greater impact on top executive turnover compared with that of the state-controlled media. For economic significance, we find that a one standard deviation decrease in the tone of media coverage increases the likelihood of forced top executive turnover by 2.4% in absolute magnitude and by 20.5% relative to the average likelihood of forced top executive turnover. More importantly, a one standard deviation decrease in the tone of the market-oriented media leads to a 2.5% (absolute magnitude) or 21.8% (relative magnitude) increase in the likelihood of forced top executive turnover.

Additionally, we test the sensitivity of forced CEO turnover to performance by estimating the following regression using the linear probability model:

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \\ + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

The key feature of the above regression model is that we include the interaction term between the accounting performance and different measures of media tone. The results are reported in Models (3) and (4) of Table 2. In Model (3), we find that the interaction term is significantly positive, which suggests that poorly performing firms are more likely to have their top executive removed if they are also covered negatively by the media. In Model (4), we interact our performance measure with both the tone of the state-controlled media and that of the market-oriented media and find that the coefficient on the interaction between *ROA* and *MktTone* is significantly positive at the 1% level, whereas the interaction between *ROA* and *GovTone* is not significant.

Given that the standard deviation for *MktTone* is much greater than the standard deviation for *GovTone*, it is possible that the greater impact of the market-oriented media when compared to that of the state-controlled media is due to the larger standard deviation of *MktTone*. To address this concern, we use the standardized media tone, standardized market-oriented media tone, and standardized state-controlled media tone in Table IA4, and we find robust evidence. As

another robustness check of our baseline regression, we extend our emphasis to media characteristics and specifically incorporate the salience of media coverage (whether the entire article is about one particular firm) and the total circulation of a newspaper into the construction of the media tone variables. We obtain consistent findings and report our results in Table IA5.

Taken together, our findings support the market-disciplining hypothesis that news coverage from the market-oriented media has a significant impact on forced CEO turnover directly and on performance-related turnover sensitivity, whereas news coverage from the state-controlled media does not have such an impact.

4.2. *Endogeneity tests*

Our main variables, *Tone*, *MktTone*, and *GovTone*, are unlikely to be of random occurrence¹⁶. If media coverage and top executive turnover are jointly determined by other unobservable firm characteristics, our regression results are subject to an omitted variable bias. Alternatively, it might be that the direction of causality runs from top executive turnover to media coverage and not the other way around.

4.2.1. *Cases*

To disentangle the causal impact of the media on corporate governance, we present three anecdotal cases for both the market-oriented media and the state-controlled media in China.

A. Plasticizer scandal of Jiugui Liquor Co Ltd

On 19 November 2012, a news report from *21st Century Business Herald*, one of the four market-oriented media outlets in this study, uncovered that Jiugui liquor, made by one of China's largest liquor makers, Jiugui Liquor Co Ltd, contained an excessive amount of plasticizer, which can cause serious damage to human immune and reproductive systems¹⁷. The news report led to a halt in the trading of Jiugui's shares, and the share price of Jiugui Liquor Co Ltd dropped by

¹⁶ See Engelberg and Parsons (2011) and Dougal et al. (2012) for a comprehensive discussion of the causal issue of media coverage.

¹⁷ Journalists of *21st Century Business Herald* sent a bottle of Jiugui liquor to the Shanghai Tianxiang Quality and Inspection Service. The investigation report showed that Jiugui liquor contained 1.08 mg/kg of plasticizer, which is much higher than the regulatory standard of 0.3 mg/kg set by the Chinese Ministry of Health in June 2011.

36% within four days of the disclosure. CEO Xinguo Wang, CFO and Vice CEO Jun Wang, and a few other top executives resigned two months after the scandal broke. All the state-controlled media had a delayed reaction regarding this scandal.

B. Accounting fraud of Jilin Zixin Pharmaceutical Industrial Co Ltd

In 2010, Jilin Zixin Pharmaceutical Industrial Co Ltd claimed that the company's financial profits had nearly doubled due to the significant growth in sales of its ginseng products. However, on 6 August 2011, *Capital Week*, one of the market-oriented newspapers, blew the whistle and revealed that Jilin Zixin had inflated their earnings through illegal related-party transactions. Following this report, the China Securities Regulatory Commission conducted an investigation on the accounting fraud. Two months later, CEO Chunsheng Guo resigned.

C. Tainted milk scandal of Sanlu Group Co Ltd

In September 2008, Sanlu Group, one of the largest dairy producers in China, was found selling baby formula laced with an industrial additive called melamine, which made 294,000 babies ill and killed six infants. Even after repeated complaints from consumers, the Chinese government restated that Sanlu's baby formula met the applicable standards¹⁸. A news report about this scandal surfaced only after *Lanzhou Morning Post*, a market-oriented newspaper based in Gansu province, blew the whistle. Within one week of the news report, Sanlu initiated a recall of all its milk products. Three months later, Sanlu declared bankruptcy and the trial of its CEO Tian Wenhua began. On 22 January 2009, Tian was sentenced to life imprisonment and fined \$2.9 million, and other executives received sentences of five to fifteen years.

All three events show that the market-oriented media play a significant role in monitoring firms' products, performance, and financial statements, whereas the state-controlled media have no such effect.

¹⁸ On 8 September 2008, New Zealand Prime Minister Helen Clark notified Beijing officials of the issue after Sanlu's New Zealand partner Fonterra reported to the New Zealand government.

4.2.2. An instrumental variable approach

If top executive turnover events are predictable, it is possible that media outlets will follow these events solely to cater to the needs of their audiences (Core, Guay, and Larcker 2008; Bhattacharya et al. 2009). If this is indeed the case, we might detect a spurious relationship between media tone and top executive turnover, not because media reports lead to disciplinary action toward executives but because disciplinary action toward executives attracts media attention.

To address this endogeneity issue, we use an instrumental variables approach. We employ two instruments. The first instrument is the log of a firm's average geographical distance to the headquarters of the media (*Distance*). To the extent that negative coverage by the local media is avoided because of the advertising expenditures of local firms or suppressed by local government officials in response to political incentives, we would expect that firms located far from the news media would be more likely to receive negative coverage (Engelberg and Parsons 2011; Gurun and Bulter 2012; Jin, Xu, and Zhang 2014; Piotroski, Wong, and Zhang 2014). Thus, our first instrumental variable is likely to be negatively correlated with the tone of media coverage and, therefore, to satisfy the relevance requirement.

Our second instrumental variable is the interaction between the distance variable and industry-level ROA ($ROA_{Industry} \times Distance$). To the extent that the tone of a news report is related to firm performance, we would expect that the media will produce more negative reports about distant firms in industries with poor performance. We also note that both of our instrumental variables are unlikely to have a predictable impact on the likelihood of top executive turnover; thus, they all satisfy the exclusion requirement. We perform 2SLS regressions in which the first stage regressions separately include each of the two instruments.

The results are reported in Table 3. Panel A shows the results of the first-stage regression, in which we use ordinary least square (OLS) regressions to estimate media tone variables. In Columns (1) to (3), we use *Distance* as the instrumental variable, whereas in Columns (4) to (6), we use $ROA_{Industry} \times Distance$ as the instrumental variable. As expected, we find that both instrumental variables are negatively correlated with media tone. For all six specifications, our unreported tests show that the first-stage *F*-statistics are above 10, which indicates that the instruments are relevant (Stock and Staiger, 1997).

In Panel B of Table 3, we report the results of the second-stage regression in which we use the dummy variable for top executive turnover as the dependent variable and the predicted variables for media tone and other control variables used in Table 2 as the independent variables. We find that the coefficient of the predicted tone of coverage by the market-oriented media ($\widehat{MktTone}$) is negative and significant at the 1% level across all specifications. We also find that the interaction term between ROA and ($\widehat{MktTone}$) is positive across all specifications, which suggests that poorly performing firms will be more likely to have their top executive removed if the market-oriented media cover them negatively. However, the coefficient of the state-controlled media is either insignificant or inconsistent with the monitoring effect of the media.

4.2.3. An experiment with the 2008 Beijing Olympic Games

To further identify the causal effect of media tone on corporate governance outcomes, an arguably exogenous source of the variation in media coverage is required. For this purpose, we exploit the variation in the state capture of media that resulted from time-series sources surrounding the 2008 Beijing Olympic Games. During the prelude to the Olympics, the Chinese government tightened its control of media reporting and essentially banned coverage of politically sensitive subjects because the political priority was holding a “harmonious” Olympics. After 2008, this tight control was significantly relaxed.

The relaxation of political capture over the media after the Olympics provides us with the time-series variation in media coverage. Such variation is attractive because it allows us to use an *exogenous* source of variation to test for the effect of media coverage on corporate governance outcome. To the extent that state media capture reduces the impact of media coverage on corporate governance outcomes, we would expect that the effect of media tone on top executive turnover would be more pronounced after 2008.

To test this hypothesis, we perform 2SLS regressions in which the first-stage regressions include a dummy variable *OlyGames* that equals one for the post-Olympic period of our sample. Our results are presented in Table 4¹⁹. Panel A of Table 4 shows the results of the first-stage regression in which we use OLS regressions to estimate the media tone variables. In Models (1)

¹⁹ As an alternative approach, we divide our sample into the pre- and post-2008 periods and reestimate our baseline regression models. The results are reported in Table IA6. We find that the coefficient on the interaction between performance and market-oriented media tone is significantly more positive for the post-2008 subsample.

to (3), we find that *OlyGames* is negatively correlated with media tone (even with an insignificant coefficient for *GovTone*), generally confirming the weakened state capture of the media after the 2008 Beijing Olympic Games²⁰. In Models (4) to (6), we interact *OlyGames* with *distance* to enhance the power of the test by adding the cross-firm variation and find that this interaction term is significantly negative, suggesting that the “distance effect” of media coverage is enhanced after 2008.

In Panel B of Table 4, we report the results of the second-stage regressions in which we use the dummy variable for top executive turnover as the dependent variable and the predicted variables for media tone and other control variables used in Table 2 as the independent variables. We find that the coefficient of the predicted tone of coverage by the market-oriented media ($\widehat{MktTone}$) is negative and significant at the 1% level across all specifications. We also find that the interaction term between *ROA* and $\widehat{MktTone}$ is positive across all specifications, confirming our previous finding that poorly performing firms will be more likely to have their top executives removed if the market-oriented media cover them negatively.

4.3. Alternative disciplinary channels

It is possible that alternative disciplinary channels other than media coverage have an impact on the likelihood of top executive turnover. To make sure that the results in our baseline regressions are not driven by those alternative disciplinary channels, we reestimate our regressions by including additional control variables.

The first variable we include is the tone of reports by foreign media, *ForeignTone*. The data for foreign media news variables are obtained from RavenPack News Analytics (Dang, Moshirian, and Zhang 2014), which collects and analyses firm-level business news from major real-time newswires, such as Dow Jones Newswires, all editions of the *Wall Street Journal*, *Baron's*, and other trustworthy sources (e.g., financial sites, local and regional newspapers). To the extent that those foreign media outlets have a more globalized group of investors, we would expect that their coverage would have a disciplinary effect on covered firms.

²⁰ In Model (3), the correlation between *OlyGames* and *GovTone* are much weaker, probably due to the fact that the Chinese government kept tight control on state media reporting, both before and after the Olympic period.

Larcker, Larcker, and Tayan (2014) document a powerful force of social media and its impact on corporate reputation. The second variable we include is the tone of blog posts on social media, *SocialTone*. To construct this measure, we collect blog posts on the most influential Internet forum in China and calculate the number of positive posts minus the number of negative posts as our measure of social media tone²¹.

Additionally, we include other control variables that proxy for alternative disciplinary channels, as documented by previous studies. Specially, we include changes in institutional ownership ($\Delta Institution$), changes in analyst forecasts ($\Delta AnaEPS$), changes in analyst rankings ($\Delta AnaRank$), and audit opinions (*AudOpinion*) (Cohen, Krishnamoorthy, and Wright 2002; Chung and Zhang 2011; Chen, Harford, and Lin 2014). We report the results in Table 5 and find that our findings are robust to the inclusion of these additional control variables.

5. Informativeness of news reports

5.1. Article characteristics

Having established the casual relationship between the governance role of the media and the likelihood of forced CEO turnover, we perform further analyses to explore the fundamental differences between the disciplinary effect of the market-oriented media and that of the state-controlled media. Besley and Prat (2006) argue that the private media are less likely to be influenced by political capture and that their reports are more comprehensive, timelier, and more credible to the market²². Therefore, we would expect that news reports from the market-oriented media should be more informative about firm fundamentals. Fundamental informativeness can be measured directly by the characteristics of news articles or indirectly by both the impact of the stock price and the prediction of current and future operating performance.

First, we perform the regression analysis using three characteristics of news articles as our dependent variables and include a dummy variable for the market-oriented media (*MktMedia*) as the focal explanatory variable. The first characteristic of articles that we examine is the tone of a

²¹ We collect our blog post information from *Guba.eastmoney.com*, which is the most influential investment forum in China and particularly popular among retail investors.

²² Similarly, Gentzkow and Shapiro (2006, 2008) argue that media independence and competition can reduce media bias.

news article (*ArticleTone*). To the extent that articles with negative tone carry more disciplinary impact, it is possible that the market-oriented media issue more negative reports.

The second characteristic of articles that we test is the number of words in a specific article (*ArticleWord*). Using this measure, we are able to examine whether news articles from different types of media outlets have different levels of comprehensiveness. For example, the market-oriented media may issue more detailed and in-depth articles about a firm as a result of the competition from other news outlets in the same market.

The third characteristic of articles measures the focus of a news article, using a dummy variable that equals one when an article title contains the name of the firm (*ArticleTitle*). If a newspaper issues an article titled with the name of a specific firm, this article would draw more attention from readers, resulting in a greater market impact (Barber and Odean 2008; Liu, Sherman, and Zhang 2014).

In addition, to account for the firm and governance characteristics that may influence media reporting, we include in our regressions a set of control variables that measures firms' accounting and governance characteristics. Specifically, we include *ROA*, *Return*, *Size*, *Leverage*, *Block*, *SOE*, *BoardSize*, *BoardIndSize*, *CEOAge*, *CEOTenure*, and *CEOChairman*.

We report our results in Table 6. In Model (1), we find that the coefficient on *MktMedia* is negative and significant, suggesting that the market-oriented media outlets issue more negative articles. In both Models (2) and (3), we find that the coefficients on *MktMedia* are positive, suggesting that market-oriented media outlets issue longer articles and are more likely to include firms' names in article titles.

In Table IA7, we examine these article characteristics during two types of specific events. Models (1)-(3) focus on a three-month event window after a large stock price decline, and Models (4)-(6) focus on a three-month event window after a CSRC's punishment release. During both types of specific events, we have consistent findings on the reporting features of the market-oriented media.

Taken together, we find that compared to articles by the state-controlled media, articles by the market-oriented media have some unique features. They are more critical, comprehensive, and focused on covered firms. These unique reporting features constitute the source of the disciplinary effect for the market-oriented media.

5.2. Market reaction to news reports

Next, we use a regression analysis to examine the market response when a news report is issued by a media outlet. Our dependent variables are cumulative abnormal returns (*CAR*) across various event windows, and the event day is the date that a news report is issued. Following the standard event-study methodology, we use the daily stock return minus the value-weighted market return as a measure of abnormal announcement day returns²³. To account for the different issue frequencies of newspapers, we calculate *CAR* using four event windows: [-1, +1], [0, +1], [-1, +5], and [0, +5]. We control for firm size, book to market ratio, leverage, standard deviation of stock returns, and the SEO dummy; all these factors could potentially affect stock returns.

We report our results in Table 7. In Models (1), (3), (5), and (7), we use *Tone* in the regression. We find that across all regressions, the coefficient of *Tone* is significant and positive, which suggests that during the window period, abnormal announcement returns are higher when the media report is more positive. Notably, we find that the market reaction for news reports is more pronounced when we include day *t*-1 in the event window, which suggests that the news reports are particularly informative about events that occurred on day *t*-1. For example, one positive report is associated with 1.0% abnormal returns around the reporting date.

In Models (2), (4), (6), and (8), we include both *MktTone* and *GovTone* in the regressions. We find that for all the event windows, the market is more responsive to news from the market-oriented media. For example, in Model (2), when we use [-1, +1] as our event window, the coefficient of *MktTone* is 1.053, whereas the coefficient of *GovTone* is 0.786. We also perform additional tests to examine the difference between the two coefficients, and we find that the difference is significant at the 1% level. In terms of economic significance, these differences suggest that the market reaction is 37% more responsive when a media report is from market-oriented media outlets²⁴.

Overall, this finding supports the hypothesis that reports from the market-oriented media are more informative and timelier than those issued by the state-controlled media.

²³ As a robustness check, we also employ a market model to measure abnormal announcement day returns. To obtain our estimates of the market model, we use 200 days of return data before the announcement date. We have similar findings using this alternative approach of calculating abnormal return.

²⁴ We report a consistent finding in Table IA8 using the standardized media tone, standardized market-oriented media tone, and standardized state-controlled media tone.

5.3. Current and future firm operating performance

Next, we examine the economic relevance of media coverage to firms' *current* and *future* operating performance. If the disciplinary effect of the market-oriented media is due to the informativeness of its news reports, we would be able to observe a strong correlation between market-oriented media tone and firms' performance. To test this hypothesis, we focus on operating performance and use the return-on-assets ratios in the year of news reports (ROA_t) and the following year (ROA_{t+1}) as our dependent variable. To be consistent with our previous analysis for the market response, we include the same set of control variables as in Table 7.

We report our results in Table 8. In Models (1) and (3), we use the tone from all media outlets in the regression and find that across all regressions, the coefficient of *Tone* is significantly positive, which suggests that in the reporting year and in the following year, firm performance is highly correlated with media tone.

In Models (2) and (4), we include media tone from both state-controlled media and market-oriented media in the regressions. We find that for both the reporting year and the following year, news from the market-oriented media is more informative about firm performance. For example, the coefficient of *MktTone* is 0.006 in Model (2), whereas the coefficient of *GovTone* is only 0.004. We perform additional tests to examine the differences in the two coefficients and find that the difference is significant at the 1% level. These differences suggest that the market-oriented media during the year of reporting are significantly more informative than the state-controlled media²⁵.

These findings echo those from the event study and again support the argument that market-oriented media reports are more informative.

²⁵ We report a consistent finding in Table IA9 using the standardized media tone, standardized market-oriented media tone, and standardized state-controlled media tone. Because ROA_t and ROA_{t+1} are the firm-level variables, we also show the robustness of our finding by replacing the article-level analysis with the firm-level analysis in Table IA10.

6. The degree of political capture and the corporate governance role of the media

6.1. The corporate governance role of the media and state-owned enterprises

To the extent that the role of the media as a governance control mechanism is hindered by political capture, we would expect that the monitoring role of the media is stronger when political capture through state control is weak. However, the degree of political capture is not only determined by the direct control of the state but also influenced by potential conflicts with the political elite and by the corruption of political systems (Houston, Lin, and Ma, 2011).

To explore the degree of political capture at the firm level, we classify firms into non-state-owned enterprises and state-owned enterprises to proxy for potential conflicts with the political elite. Studies such as Sun and Tong (2003), Kato and Long (2006), and Li et al. (2011) show that SOEs have more serious governance issues due to potential entrenchment. Thus, we expect that the impact of the media on corporate governance will be more pronounced for non-SOEs. In our sample, approximately 65% of the firms are SOEs.

To the extent that reports on SOEs are subject to more state capture, we expect to find that the disciplinary effect of the media will be weakened for SOEs. In Table IA11, we compare the characteristics of SOE firms and non-SOE firms and their turnover outcomes. Notably, we find that SOEs have less forced top executive turnover compared with non-SOEs and are covered more optimistically and intensively by the media. We also find that SOEs are larger, use less debt, and have better accounting performance. They also have older chief executives than non-SOEs. These findings suggest that the more optimistic media coverage for SOEs could be due to better accounting performance.

We then divide our sample into SOEs and non-SOEs in Table 9 and perform regression analyses for top executive turnover in each subsample. To be consistent with our previous analysis of top executive turnover, we use the same set of control variables and regression specifications as in our baseline analysis in Table 2.

We test SOEs in Models (1) to (4), while we examine non-SOEs in Models (5) to (8). We find that the monitoring effect of the media is concentrated on non-SOEs. For example, the coefficient of *Tone* is negative and significant at the 1% level in Model (5), whereas the analogous coefficient is not significant in Model (1). Moreover, in Model (6), we find that the monitoring effect for non-SOEs is mainly the result of news reports by the market-oriented

outlets. For example, a one standard deviation decrease in the tone of media coverage (coverage by the market-oriented media) increases the likelihood of forced top executive turnover by 6.6% (6.7%) in absolute magnitude and by 57.4% (58.3%) relative to the average likelihood of forced top executive turnover. Similarly, the interaction term in Model (8) between ROA and market-oriented media tone is significantly positive, whereas the interaction term between ROA and state-controlled media tone is not significant, suggesting the impact of market-oriented media on turnover-performance sensitivity in non-SOE firms.

6.2. *The corporate governance role of media and institutions*

Following Wang, Wong, and Xia (2008), we construct two cross-province proxies for political capture using the corruption level of political systems, and we report our results in Table 10.

The first measure of media state capture we use is the level of government decentralization in the province in which the firm's headquarters is located. In Panel A, we divide our sample according to this measure and find that the monitoring role of the media is concentrated on firms located in provinces with a higher level of governance decentralization. For example, the coefficient of *MktTone* is statistically significant in provinces with a more decentralized government but not in provinces with a more centralized government. In terms of economic significance, a one standard deviation decrease in the tone of the market-oriented media leads to a 3.3% (absolute magnitude) or 28.7% (relative magnitude) increase in the likelihood of forced top executive turnover in provinces with a more decentralized government.

The second measure of media state capture we use is the legal environment in the province in which the firm's headquarters is located. In Panel B, we divide the sample according to this measure and again find consistent evidence that the monitoring role of the media is concentrated on firms located in provinces with a better legal environment²⁶. Taken together, our findings

²⁶ To complement the analysis in Table 10, we construct two additional cross-province variables to proxy for political capture based on the corruption level of political systems and report our results in Table IA12. The first additional measure of media state capture we use is the credit market development index (*Credit*) constructed as the percentage of deposits taken by non-state financial institutions and the percentage of short-term loans to the non-state sector for each province. The second measure of the level of corruption we use is the economic development (*GDP*) constructed as GDP per capita in thousands of RMB for each province in which the firm's headquarters are located. The results reinforce the evidence that the monitoring role of media—and particularly market-oriented media—is stronger in areas with less corruption.

suggest that the monitoring role of media—and particularly market-oriented media—is stronger in areas with less corruption.

7. Conclusion

In this paper, we examine two competing views on the role of media monitoring with the presence of political capture: the view that the market-oriented media have a stronger disciplinary effect due to their comprehensive, accurate, and timely reporting and the view that the market-oriented media have a weaker disciplinary effect due to their slant to cater to readers and advertising revenue. To test these hypotheses, we examine the governance role of the media on the likelihood of top executive turnover as an important outcome of corporate governance.

We find strong evidence that negative media coverage significantly increases the chance of forced top executive turnover, particularly when firms have poor performance. Most importantly, when we separate the news reports according to whether they originate from the state-controlled media or the market-oriented media, we find that negative coverage by the market-oriented media has a significant impact on the chance of forced executive turnover, whereas negative coverage by the state-controlled media does not have the same impact. A multi-pronged approach that includes an instrumental variable test and an exogenous event provides positive evidence regarding the casual link.

To identify the source of the market-oriented media's disciplinary effect, we show that their articles are more critical, comprehensive, and focused on covered firms. In addition to these reporting features, the stock price is more responsive to news reports issued by the market-oriented media. We also show that news reports from the market-oriented media are more informative about firms' accounting performance around the reporting period. Further analysis finds that the disciplinary effect of the market-oriented media is stronger for firms that are less likely to be influenced by political capture, such as non-state-owned firms or firms located in provinces with less corruption.

References

- Adams, Renée B., Benjamin E. Hermalin, and Michael S. Weisbach, 2010, The role of boards of directors in corporate governance: A conceptual framework and survey, *Journal of Economic Literature*, 48, 58–107.
- Aggarwal, Reena, Isil Erel, Miguel Ferreira, and Pedro Matos, 2011, Does governance travel around the world? Evidence from institutional investors, *Journal of Financial Economics* 100, 154–181.
- Allen, Franklin, Jun Qian, and Meijun Qian, 2005, Law, finance, and economic growth in China, *Journal of Financial Economics* 77, 57–116.
- Barber, Brad M., and Terrance Odean, 2008, All that glitters: the effect of attention and news on the buying behavior of individual and institutional investors, *Review of Financial Studies* 21, 785–818.
- Bednar, Michael K., 2012, Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism, *Academy of Management Journal* 55, 131–150.
- Besley, Timothy, and Andrea Prat, 2006, Handcuffs for the grabbing hand? Media capture and government accountability, *American Economic Review* 96, 720–736.
- Bhattacharya, Utpal, Neal Galpin, Rina Ray, and Xiaoyun Yu, 2009, The role of the media in the internet IPO bubble, *Journal of Financial and Quantitative Analysis* 44, 657–682.
- Braggion, Fabio, and Mariassunta Giannetti, 2013, On the determinants of the non-voting shares' discount: Investor preferences and fundamentals, working paper.
- Bushee, Brian J., John E. Core, Wayne Guay, and Sophia J. W. Hamm, 2010, The role of the business press as an information intermediary, *Journal of Accounting Research* 48, 1–19.
- Chan, K. Hung, and Donghui Wu, 2010, Aggregate quasi rents and auditor independence: evidence from audit firm mergers in China, *Contemporary Accounting Research* 28, 175–213.
- Chang, Eric C., and Sonia M.L. Wong, 2009, Governance with multiple objectives: Evidence from top executive turnover in China, *Journal of Corporate Finance* 15, 230–244.
- Chen, Tao, Jarrad Harford, and Chen Lin, 2014, Do Analysts Matter for Governance? Evidence from Natural Experiments, *Journal of Financial Economics*, forthcoming.
- Chung, Kee H., and Hao Zhang, 2011, Corporate governance and institutional ownership, *Journal of Financial and Quantitative Analysis* 46, 247–273.
- Cohen, Jeffery R., Ganesh Krishnamoorthy, and Anold Wright, 2002, Corporate governance and the Auditor experiences, *Contemporary Accounting Research* 19, 573–594.
- Core, John E., Wayne Guay, and David F. Larcker, 2008, The power of the pen and executive compensation, *Journal of Financial Economics* 88, 1–25.
- Dai, Lili, Jerry T. Parwada, and Bohui Zhang, 2014, The governance role of the media through news dissemination: evidence from insider trading, working paper.

- Dang, Tung Lam, Fariborz Moshirian, Bohui Zhang, 2014, Commonality in news around the world, *Journal of Financial Economics*, forthcoming.
- Denis, David J., Diane K. Denis, and Atulya Sarin, 1997, Ownership structure and top executive turnover, *Journal of Financial Economics* 45, 193–221.
- Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer, 2003, Who owns the media? *Journal of Law and Economics* 46, 341–381.
- Doidge, Craig, G. Andrew Karolyi, and Rene M. Stulz, 2007, Why do countries matter so much for corporate governance? *Journal of Financial Economics* 86, 1–39.
- Dougal Casey, Joseph Engelberg, Diego Garcia, and Christopher A. Parsons, Journalists and the Stock Market, *Review of Financial Studies* 25, 639–679.
- Dyck, Alexander, Adair Morse, and Luigi Zingales, 2010, Who blows the whistle on corporate frauds? *Journal of Finance* 65, 2133–2255.
- Dyck, Alexander, David Moss, and Luigi Zingales, 2013, Media versus special interests, *Journal of Law and Economics* 56, 521–553.
- Dyck, Alexander, and Luigi Zingales, 2002, The corporate governance role of the media, NBER Working paper.
- Dyck, Alexander, Natalya Volchkova, and Luigi Zingales, 2008, The corporate governance role of the media: Evidence from Russia, *Journal of Finance* 63, 1093–1135.
- Engelberg, Joseph E., and Christopher A., Parsons, 2011, The causal impact of media in financial markets, *Journal of Finance* 66, 67–97.
- Esarey, Ashley, 2006, Speak no evil: Mass media control in contemporary China, *Freedom House Special Report* (http://www.freedomhouse.org/uploads/special_report/33.pdf).
- Firth, Michael, Chen Lin, and Hong Zou, 2010, Friend or foe? The role of state and mutual fund ownership in the split share structure reform in China, *Journal of Financial and Quantitative Analysis* 45, 685–706.
- Gentzkow, Matthew, and Jesse M. Shapiro, 2006, Media bias and reputation. *Journal of Political Economy* 114, 280–316.
- Gentzkow, Matthew, and Jesse M. Shapiro, 2008, Competition and truth in the market for news. *Journal of Economic Perspectives* 22, 133–154.
- Gentzkow, Matthew, and Jesse M. Shapiro, 2010, What drives media slant? Evidence from U.S. daily newspapers, *Econometrica* 78, 35–71.
- Griffin, John, M., Nicholas H. Hirschey, and Patrick J. Kelly, 2011, How important is the financial media in global markets? *Review of Financial Studies* 24, 3941–3992.
- Gurun, Umit, G., and Alexander W. Butler, 2012, Don't believe the hype: local media slant, local advertising, and firm value, *Journal of Finance* 67, 561–698.
- Houston, Joel F., Chen Lin, and Yue Ma, 2011, Media ownership, concentration and corruption in bank lending, *Journal of Financial Economics* 100, 326–350.
- Jin, Li, Nianhang Xu, and Weining Zhang, 2014. The effect of politician career concerns on media slant and market return: Evidence from China, working paper.

- Joe, Jennifer R., Henock Louis, and Dahlia Robinson, 2009, Managers' and investors' responses to media exposure of board ineffectiveness, *Journal of Financial and Quantitative Analysis* 44, 579–605.
- Kang, Jun-Koo, and Anil Shivdasani, 1995, Firm performance, corporate governance, and CEO turnover in Japan, *Journal of Financial Economics* 38, 29–58.
- Kang, Jun-Koo, and Jin-Mo Kim, 2008, The geography of block acquisitions, *Journal of Finance* 63, 2817–2858.
- Kaplan, Steven N., and Minton Bernadette A., 2012, How has CEO turnover changed? *International Review of Finance* 12, 57–87.
- Karlekar, Karin D., and Jennifer Dunham, 2014, Press freedom in 2013: media freedom hits decade low. *Freedom House Report* (http://freedomhouse.org/sites/default/files/FOTP_2014.pdf).
- Kato, Takao, and Cheryl Long, 2006, CEO turnover, firm performance, and enterprise reform in China: Evidence from micro data, *Journal of Comparative Economics* 34, 796–817.
- Karolyi, Andrew, 2014, *Cracking the emerging markets enigma*, Oxford University Press, forthcoming.
- Kuhnen, Camelia M., and Alexandra Niessen, 2012, Public opinion and executive compensation, *Management Science* 58, 1249–1272.
- Larcker, David F., Sarah M. Larcker, and Brian Tayan, 2014, Josh Hardy and the #SaveJosh Army: How Corporate Risk Escalates and Accelerates through Social Media, working paper.
- Li, Kai, Tan Wang, Yan-Leung Cheung, and Ping Jiang, 2011, Privatization and risk sharing: evidence from the split share structure reform in China, *Review of Financial Studies* 24, 2499–2525.
- Linck, James S., Jeffrey M. Netter, and Tina Yang, 2008, The determinants of board structure, *Journal of Financial Economics* 87, 308–328.
- Liu, Baixiao, and John J McConnell, 2013, The role of the media in corporate governance: Do the media influence managers' capital allocation decisions? *Journal of Financial Economics* 110, 1–17.
- Liu, Laura Xiaolei, Ann E. Sherman, and Yong Zhang, 2014, The long-run role of the media: evidence from initial public offerings, *Management Science*, forthcoming.
- Masulis, Ronald W., and Shawn Mobbs, 2011, Are all inside directors the same? Evidence from the external directorship market, *Journal of Finance* 66, 823–872.
- Miller, Gregory S., 2006, The press as a watch dog for accounting fraud, *Journal of Accounting Research* 44, 1001–1033.
- Parrino, Robert, 1997, CEO turnover and outside succession: a cross-sectional analysis, *Journal of Financial Economics* 46, 165–197.
- Piotroski, Joseph D., and T.J. Wong, 2012, Institutions and information environment of Chinese listed firms, edited by Fan Joseph P.H., and Randall Morck: *Capitalizing China*, University of Chicago Press.

- Piotroski, Joseph D., T.J. Wong, and Tianyu Zhang, 2014, Political Incentives to Suppress Negative Information: Evidence from Chinese Listed Firms, working paper.
- Reuter, Jonathan, and Eric Zitzewitz. 2006. Do Ads Influence Editors? Advertising and Bias in the Financial Media. *Quarterly Journal of Economics* 121:197–227.
- Stock, James H., and Doug Staiger, 1997, Instrumental variables regression with weak instruments, *Econometrica* 65, 557–586.
- Sun, Qian, and Wilson H.S. Tong, 2003, China share issue privatization: the extent of its success, *Journal of Financial Economics* 70, 183–222.
- Tetlock, Paul C., Maytal Saar-Tsechansky, and Sofus Macskassy, 2008, More than words: quantifying language to measure firms' fundamentals, *Journal of Finance* 63, 1437–1467.
- Wang, Qian, T.J. Wong, Lijun Xia, 2008, State ownership, the institutional environment, and audit choice: Evidence from China, *Journal of Accounting and Economics* 46, 112–134.
- Weisbach, Michael S., 1988, Outside directors and CEO turnover, *Journal of Financial Economics* 20, 431–460.
- Xu, Chenggang, 2011, The fundamental institutions of China's Reforms and Development, *Journal of Economic Literature* 49, 1076–1151.
- You, Jiaying, and Jing Wu, 2012, Spiral of silence: media sentiment and the asset mispricing, *Economic Research Journal (In Chinese)* 7, 141–152.
- Zingales, Luigi, 2000, In search of new foundations, *Journal of Finance* 55, 1623–1653.

Appendix A: Variable definitions

Variable	Acronym	Definition	Data Source
A. Dependent Variable			
Forced CEO turnover	<i>CEOTurnover</i>	A dummy variable that equals one if a CEO turnover is forced	Hand-collected dataset
B. Media Variables			
Media tone	<i>Tone</i>	Number of positive articles minus negative articles reported by the media	Eight Chinese securities newspapers
Market-oriented media tone	<i>MktTone</i>	Number of positive articles minus negative articles reported by the market-oriented media	Eight Chinese securities newspapers
State-controlled media tone	<i>GovTone</i>	Number of positive articles minus negative articles reported by the state-controlled media	Eight Chinese securities newspapers
Media coverage	<i>Coverage</i>	Log of one plus the number of articles reported by the media	Eight Chinese securities newspapers
Market-oriented media	<i>MktMedia</i>	A dummy variable that equals one if an article is reported by the market-oriented media	
Article tone	<i>ArticleTone</i>	A categorical variable that equals one (zero or minus one) if the tone of an article is positive (neutral or negative)	Eight Chinese securities newspapers
Number of words	<i>ArticleWord</i>	Log of the number of words in an article	Eight Chinese securities newspapers
Article title	<i>ArticleTitle</i>	A dummy variable that equals one if an article title contains a firm's name	Eight Chinese securities newspapers
Cumulative abnormal returns	<i>CAR</i> [T_1 , T_2]	Cumulative abnormal returns during press release windows over [T_1 , T_2] multiplied by 100	CSMAR
C. Control Variables			
Return-on-asset ratio	<i>ROA</i>	Ratio of net income before extraordinary items plus interest expenses to total assets	CSMAR
Annual stock return	<i>Return</i>	Industry-adjusted annual return	CSMAR
Firm size	<i>Size</i>	Log of total assets in RMB	CSMAR
Financial leverage	<i>Leverage</i>	Ratio of total liabilities to total assets	CSMAR
Block ownership	<i>Block</i>	Sum of proportion of shares held by the top five shareholders	CSMAR
State-owned enterprises	<i>SOE</i>	A dummy variable that equals one if the firm is under control by the state	CSMAR
Board size	<i>BoardSize</i>	Number of directors on the board	CSMAR
Board size of independent directors	<i>BoardIndSize</i>	Number of independent directors on the board	CSMAR
CEO age	<i>CEOAge</i>	Log of a CEO's age	CSMAR
CEO tenure	<i>CEOTenure</i>	Number of years that the current CEO has been in the position	CSMAR
CEO/Chairman duality	<i>CEOChairman</i>	A dummy variable that equals one if the current CEO is also the board chairman	CSMAR
Foreign media tone	<i>ForeignTone</i>	News sentiment score for news articles reported by Dow Jones Newswires	RavenPack
Social media tone	<i>SocialTone</i>	Number of positive blog posts minus negative blog posts at guba.easymoney.com	Guba.easymoney.com
Changes in institutional ownership	Δ <i>Institution</i>	Institutional ownership at the end of a year minus that at the beginning of a year	CSMAR
Changes in analyst forecasts	Δ <i>AnaEPS</i>	(the latest forecasted EPS minus the oldest forecasted EPS) scaled by the oldest forecasted EPS	CSMAR
Changes in analyst rankings	Δ <i>AnaRank</i>	Revisions in a firm's investment ranking provided by analysts	CSMAR
Audit opinions	<i>AudOpinion</i>	A dummy variable that equals one if an audit opinion is modified	CSMAR

Appendix A: Variable definitions

Variable	Acronym	Definition	Data Source
D. Instrumental Variables			
Geographical distance	<i>Distance</i>	Log of one plus a firm's average geographical distance (km) to headquarters of the media	CSMAR
Industry-level ROA	<i>ROA_{Industry}</i>	Industry-level return-on-asset ratio	CSMAR
Beijing Olympic games	<i>OlyGames</i>	A dummy variable that equals one if a year is equal to or greater than 2008	CSMAR
E. Province Variables			
Government decentralization index	<i>Government</i>	Government spending as a percentage of GDP, the tax rates, and the amount of government administrative regulations for each province	The Economic Science Press
Legal environment index	<i>Legal</i>	Number of lawyers as a percentage of the population, the efficiency of the local courts, and protection of property rights for each province	The Economic Science Press

Appendix B1: Number of Stocks by Industry and Year

This table summarizes the number of our sample stocks for each industry over the 2005 to 2010 sample period. The first column reports the name of the industry. The column “N” reports the total number of observations across all sample periods for each industry. The rest of the columns report the number of stocks in each year.

Industry	N	2005	2006	2007	2008	2009	2010
Agriculture	190	30	30	33	32	32	33
Mining	155	18	21	21	22	34	39
Manufacturing	4,764	711	769	769	783	845	887
Utilities	352	51	57	60	60	61	63
Construction	176	23	27	27	29	35	35
Transportation	359	54	55	57	63	65	65
IT	517	78	84	83	86	87	99
Wholesale and retail trade	523	78	89	89	89	86	92
Real estate	408	53	60	58	67	78	92
Social Services	253	36	39	41	42	47	48
Communication	61	11	9	9	10	11	11
Comprehensive	482	103	81	76	75	75	72
Total	8,240	1,246	1,321	1,323	1,358	1,456	1,536

Appendix B2: Number of Stocks by Province and Year

This table summarizes the number of our sample stocks for each province over the 2004 to 2010 sample period. The first column reports the name of the province. The column “N” reports the total number of observations across all sample periods for each province. The rest of the columns report the number of stocks in each year.

Province	N	2005	2006	2007	2008	2009	2010
Anhui	280	38	45	46	46	50	55
Beijing	543	79	85	86	91	99	103
Chongqing	169	27	29	28	30	28	27
Fujian	258	39	40	40	43	45	51
Gansu	113	18	18	19	18	19	21
Guangdong	955	135	145	149	153	181	192
Guangxi	137	22	22	22	22	24	25
Guizhou	97	12	17	17	17	17	17
Hainan	115	19	20	19	20	18	19
Hebei	189	28	31	32	33	32	33
Henan	194	30	31	30	33	35	35
Heilongjiang	156	30	29	28	22	23	24
Hubei	343	59	58	57	56	55	58
Hunan	254	39	45	42	41	43	44
Inner mongolia	100	17	17	17	16	16	17
Jilin	177	30	30	30	27	29	31
Jiangsu	575	80	88	90	95	108	114
Jiangxi	143	22	23	23	23	25	27
Liaoning	265	47	43	42	41	45	47
Ningxia	66	10	12	11	11	11	11
Qinghai	54	9	9	9	8	9	10
Shaanxi	145	23	22	24	22	25	29
Shandong	471	66	74	72	82	84	93
Shanxi	152	24	25	26	26	25	26
Shanghai	842	137	140	137	138	143	147
Sichuan	354	60	58	60	59	56	61
Tianjin	156	25	24	24	25	29	29
Xizang	45	8	7	7	8	7	8
Xinjiang	164	26	26	25	27	31	29
Yunnan	131	17	21	21	24	23	25
Zhejiang	597	70	87	90	101	121	128
Total	8,240	1,246	1,321	1,323	1,358	1,456	1,536

Appendix C: Details of Newspapers

This table lists the details of the eight largest national-wide financial newspapers in China. Additional information includes whether a newspaper is a state-controlled or market-oriented newspaper, whether a newspaper is designated by the China Securities Regulatory Commission to disclose information for listed companies in China, and the average daily circulation in 2010.

Chinese Newspapers	Type of Newspapers	Details	Designated to Disclose Information for Public Companies	Circulation in 2010
China Securities Journal	State-controlled	It is a national securities newspaper owned by Xinhua News Agency, and Xinhua News Agency is subordinate to the State Council and reports to the Communist Party of China's Propaganda and Public Information Departments.	Yes	800,000
Securities Daily	State-controlled	It is owned by the Economic Daily Press Group. The group was established by the State Council of China and is controlled by the Propaganda Department of the Central Committee of the Communist Party of China.	Yes	200,000
Securities Times	State-controlled	It is owned by People's Daily office, and the news office is under the control of the Central Committee of the Communist Party of China.	Yes	600,000
Shanghai Securities Journal	State-controlled	It is a leading financial newspaper owned by Xinhua News Agency.	Yes	800,000
China Business Journal	Market-oriented	It was founded by the Chinese Academy of Social Sciences, which is an academic research organization in the fields of philosophy and social sciences in China.	No	850,000
21 st Century Business Herald	Market-oriented	It is founded by Nanfang Media Group and jointly owned by a public investment company, Fosun Group, which is listed in the Hong Kong Stock Exchange.	No	670,000
The Economic Observer	Market-oriented	It was previously owned by a Shandong-based private company, Sanlian Group and currently is owned by a real estate billionaire, Lu Zhiqiang.	No	600,000
First Financial Daily	Market-oriented	It is the first market-oriented financial newspaper in China, and jointed founded by Radio and Television Shanghai, Guangzhou Daily Group, and Beijing Youth Daily	No	716,000

Appendix D: Stated Reasons for CEO Turnover and Destinations of Departing CEOs

This table presents the distribution of the stated reasons for CEO turnovers in Appendix D1 and destinations of departing CEOs with an undefined type of turnover in Appendix D2. The column “Obs” reports the total number of observations, and the column “Percentage” provides the percentage of observations in the sample. Type of turnover denotes whether a CEO turnover is forced, voluntary, or undefined.

1. Stated Reasons for CEO Turnover			
Reason	Obs	Percentage	Type of turnover
Dismissal	28	1.4%	Forced
Health	38	1.9%	Voluntary
Retirement	29	1.5%	Voluntary
Corporate governance reform	19	1.0%	Voluntary
Change in controlling shareholders	8	0.4%	Voluntary
Legal disputes	5	0.3%	Voluntary
Change of job	882	44.3%	Undefined
Resignation	484	24.3%	Undefined
Contract expiration	262	13.2%	Undefined
Personal reasons	83	4.2%	Undefined
No reason given	81	4.1%	Undefined
Completion of acting duties	71	3.6%	Undefined
Total	1,990	100.0%	
2. Destinations of Departing CEOs with an Undefined Type of Turnover			
Destination	Obs	Percentage	Type of turnover
Information unavailable	415	22.3%	Forced
New position ranked lower than CEO position	282	15.1%	Forced
CEO position taken up at unlisted, smaller firm	12	0.6%	Forced
Dismissal	211	11.3%	Forced
Important government position taken	24	1.3%	Voluntary
Remaining as the board chairman or the vice chairman	313	16.8%	Voluntary
Promoted to the board chairman or the vice chairman	427	22.9%	Voluntary
CEO position taken up at another listed firm or parent firm	91	4.9%	Voluntary
Arrested or under investigation	18	1.0%	Voluntary
Health problems	11	0.6%	Voluntary
Retirement	58	3.1%	Voluntary
Going abroad to study	1	0.1%	Voluntary
Total	1,863	100.0%	

Table 1: Summary Statistics

This table presents the summary statistics and correlation coefficients of main variables used in this study. The variables are forced CEO turnover (*CEOTurnover*), media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), media coverage (*Coverage*) without taking the log transformation, return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). Panel A reports the number of observations (N), mean, median, standard deviation (STD), and the deciles (90% and 10%) and quartiles (75% and 25%) distribution of the variables. Panel B reports the correlation coefficients among the variables above, where the highlighted upper-right part (bottom-left part) of the table refers to the Spearman (Pearson) correlation matrix. The sample is between 2005 and 2010. All the variables are defined in Appendix A.

Panel A: Summary Statistics								
Variable	N	Mean	STD	10%	25%	Median	75%	90%
Dependent Variable								
<i>CEOTurnover</i>	8,240	0.115	0.319	0.000	0.000	0.000	0.000	1.000
Media Variables								
<i>Tone</i>	8,240	1.898	4.715	-1.000	0.000	1.000	2.000	6.000
<i>MktTone</i>	8,240	1.811	4.185	-1.000	0.000	1.000	2.000	6.000
<i>GovTone</i>	8,240	0.073	0.800	-1.000	0.000	0.000	0.000	1.000
<i>Coverage</i>	8,240	6.911	11.461	0.000	1.000	3.000	8.000	16.000
Control Variables								
<i>ROA</i>	8,240	0.047	0.104	-0.045	0.012	0.040	0.085	0.150
<i>Return</i>	8,240	-0.167	0.369	-0.628	-0.399	-0.170	0.054	0.297
<i>Size</i>	8,240	21.406	1.143	20.106	20.642	21.316	22.070	22.883
<i>Leverage</i>	8,240	0.551	0.347	0.251	0.378	0.523	0.652	0.769
<i>Block</i>	8,240	0.534	0.149	0.329	0.429	0.540	0.641	0.721
<i>SOE</i>	8,240	0.648	0.478	0.000	0.000	1.000	1.000	1.000
<i>BoardSize</i>	8,240	9.350	1.959	7.000	9.000	9.000	11.000	12.000
<i>BoardIndSize</i>	8,240	3.290	0.703	3.000	3.000	3.000	4.000	4.000
<i>CEOAge</i>	8,240	3.823	0.142	3.638	3.738	3.807	3.932	4.007
<i>CEOTenure</i>	8,240	1.487	0.993	0.322	0.625	1.503	2.267	2.721
<i>CEOChairman</i>	8,240	0.134	0.341	0.000	0.000	0.000	0.000	1.000

Table 1: Summary Statistics – Continued

Panel B: Correlation Coefficients ((Spearman for the upper-right part, highlighted; Pearson for the bottom-left part)																
Variable	<i>CEOTurnover</i>	<i>Tone</i>	<i>MktTone</i>	<i>GovTone</i>	<i>Coverage</i>	<i>ROA</i>	<i>Return</i>	<i>Size</i>	<i>Leverage</i>	<i>Block</i>	<i>SOE</i>	<i>BoardSize</i>	<i>BoardIndSize</i>	<i>CEOAge</i>	<i>CEOTenure</i>	<i>CEOChairman</i>
<i>CEOTurnover</i>	-	-0.107	-0.106	-0.048	0.031	-0.161	-0.044	-0.102	0.059	-0.017	-0.033	-0.033	-0.022	-0.009	0.032	-0.013
<i>Tone</i>	-0.082	-	0.974	0.386	0.504	0.330	0.037	0.337	-0.098	0.033	0.082	0.105	0.112	0.042	0.037	-0.026
<i>MktTone</i>	-0.080	0.984	-	0.249	0.522	0.325	0.028	0.338	-0.097	0.030	0.083	0.109	0.114	0.042	0.035	-0.026
<i>GovTone</i>	-0.049	0.584	0.449	-	0.114	0.154	0.051	0.150	-0.043	0.051	0.025	0.029	0.043	0.029	0.022	-0.004
<i>Coverage</i>	0.033	0.560	0.581	0.210	-	0.227	0.027	0.344	0.018	-0.030	0.028	0.075	0.109	0.045	0.008	-0.015
<i>ROA</i>	-0.147	0.272	0.273	0.144	0.200	-	0.242	0.210	-0.320	0.206	-0.013	0.045	0.047	0.038	0.054	-0.006
<i>Return</i>	-0.039	0.033	0.027	0.044	0.035	0.249	-	0.034	-0.026	0.039	0.004	0.012	0.012	0.006	0.019	0.000
<i>Size</i>	-0.102	0.396	0.395	0.219	0.392	0.205	0.027	-	-0.102	0.172	0.264	0.284	0.285	0.167	0.024	-0.111
<i>Leverage</i>	0.090	-0.114	-0.111	-0.075	-0.002	-0.307	-0.033	0.171	-	-0.117	-0.076	-0.056	-0.041	-0.043	-0.029	0.001
<i>Block</i>	-0.017	0.068	0.062	0.067	-0.008	0.174	0.037	0.104	-0.116	-	0.138	0.089	0.070	0.008	-0.005	-0.044
<i>SOE</i>	-0.033	0.088	0.090	0.036	0.039	0.021	0.000	0.257	0.002	0.135	-	0.205	0.154	0.152	0.000	-0.142
<i>BoardSize</i>	-0.032	0.135	0.136	0.054	0.096	0.056	0.010	0.253	0.026	0.086	0.205	-	0.790	0.064	0.030	-0.097
<i>BoardIndSize</i>	-0.022	0.147	0.148	0.064	0.128	0.053	0.012	0.254	0.028	0.073	0.155	0.819	-	0.056	0.006	-0.063
<i>CEOAge</i>	-0.012	0.042	0.040	0.031	0.048	0.045	-0.001	0.156	-0.016	0.018	0.156	0.073	0.055	-	0.081	0.108
<i>CEOTenure</i>	0.033	0.059	0.054	0.042	0.026	0.035	0.014	0.013	-0.035	0.003	0.006	0.039	0.004	0.087	-	0.031
<i>CEOChairman</i>	-0.013	-0.002	-0.004	0.002	-0.010	-0.018	0.002	-0.105	-0.032	-0.046	-0.142	-0.089	-0.063	0.118	0.026	-

Table 2: Market-oriented Media, State-controlled Media, and CEO Turnover

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	-0.005 (-3.04)		-0.010 (-4.68)	
<i>MktTone</i>		-0.006 (-3.50)		-0.011 (-4.99)
<i>GovTone</i>		0.005 (0.72)		0.004 (0.42)
<i>ROA</i> × <i>Tone</i>			0.042 (3.23)	
<i>ROA</i> × <i>MktTone</i>				0.052 (3.56)
<i>ROA</i> × <i>GovTone</i>				-0.029 (-0.51)
<i>Coverage</i>	0.037 (5.17)	0.039 (5.33)	0.035 (4.81)	0.036 (4.99)
<i>ROA</i>	-0.265 (-3.48)	-0.265 (-3.50)	-0.298 (-3.82)	-0.305 (-3.91)
<i>Return</i>	-0.013 (-1.04)	-0.013 (-1.06)	-0.012 (-0.99)	-0.013 (-1.04)
<i>Size</i>	-0.001 (-0.09)	-0.002 (-0.13)	-0.002 (-0.11)	-0.003 (-0.17)
<i>Leverage</i>	0.008 (0.24)	0.009 (0.26)	-0.001 (-0.02)	0.002 (0.04)
<i>Block</i>	-0.057 (-0.71)	-0.056 (-0.71)	-0.057 (-0.72)	-0.053 (-0.67)
<i>SOE</i>	0.042 (1.06)	0.042 (1.06)	0.042 (1.06)	0.041 (1.06)
<i>BoardSize</i>	0.004 (0.69)	0.004 (0.69)	0.005 (0.74)	0.005 (0.74)
<i>BoardIndSize</i>	-0.001 (-0.04)	-0.001 (-0.05)	-0.001 (-0.04)	-0.000 (-0.03)
<i>CEOAge</i>	0.137 (2.30)	0.138 (2.31)	0.138 (2.31)	0.139 (2.33)
<i>CEOTenure</i>	0.030 (6.29)	0.030 (6.27)	0.029 (6.27)	0.029 (6.28)
<i>CEOChairman</i>	-0.046 (-1.99)	-0.047 (-2.02)	-0.048 (-2.07)	-0.049 (-2.10)
Fixed Effects	FY	FY	FY	FY
Obs	8,240	8,240	8,240	8,240
Adjusted R ²	8.0%	8.0%	8.4%	8.5%

Table 3: Instrumental Variable Approach

This table presents the panel regression of forced CEO turnover ($CEOTurnover$) on media tone ($Tone$), market-oriented media tone ($MktTone$), state-controlled media tone ($GovTone$), tone variables' interaction with return-on-asset ratio (ROA), and firm-level control variables (X) as well as unreported industry and year fixed effects (FY), using geographical distance ($Distance$) and interaction between geographical distance and industry-level ROA ($ROA_{Industry} \times Distance$) as instrumental variables. Panel A provides the first-stage regression to predict media tone, market-oriented media tone, and state-controlled media tone:

$$Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) = \alpha + \beta_1 Distance_{i,t} (+\beta_2 ROA_{Industry,i,t} \times Distance_{i,t} + \beta_3 ROA_{Industry,i,t}) + \beta_4 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage ($Coverage$), return-on-asset ratio (ROA), annual stock return ($Return$), firm size ($Size$), financial leverage ($Leverage$), block ownership ($Block$), state-owned enterprises (SOE), board size ($BoardSize$), board size of independent directors ($BoardIndSize$), CEO age ($CEOAge$), CEO tenure ($CEOTenure$), and CEO/Chairman duality ($CEOChairman$). The construction of these variables is detailed in Appendix A. Panel B provides the second-stage regression on the predicted media tone (\widehat{Tone}), predicted market-oriented media tone ($\widehat{MktTone}$), and predicted state-controlled media tone ($\widehat{GovTone}$). The regression model for Models (1), (2), (5), and (6) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \widehat{Tone}_{i,t} (\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t}.$$

The regression model for Models (3), (4), (7), and (8) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \widehat{Tone}_{i,t} (\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) + \beta_2 \widehat{Tone}_{i,t} (\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. t -statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Panel A: The First-stage Regression						
Variable	Instrument on <i>Distance</i>			Instrument on $ROA_{Industry} \times Distance$		
	<i>Tone</i>	<i>MktTone</i>	<i>GovTone</i>	<i>Tone</i>	<i>MktTone</i>	<i>GovTone</i>
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
<i>Distance</i>	-0.135 (-5.54)	-0.109 (-5.22)	-0.021 (-4.79)	0.216 (4.63)	0.187 (4.73)	0.022 (2.52)
$ROA_{Industry} \times Distance$				-5.627 (-5.99)	-4.763 (-6.00)	-0.712 (-3.95)
$ROA_{Industry}$				32.319 (5.54)	27.128 (5.53)	4.582 (4.11)
<i>Coverage</i>	1.948 (18.39)	1.809 (20.28)	0.107 (5.82)	2.012 (18.62)	1.866 (20.45)	0.114 (6.16)
<i>ROA</i>	5.477 (7.69)	4.823 (7.72)	0.538 (3.97)			
<i>Return</i>	0.121 (0.95)	0.065 (0.59)	0.039 (1.38)	0.542 (4.55)	0.434 (4.14)	0.082 (3.07)
<i>Size</i>	0.828 (11.40)	0.702 (11.34)	0.104 (7.66)	0.868 (12.07)	0.738 (12.03)	0.108 (8.07)
<i>Leverage</i>	-0.699 (-3.57)	-0.601 (-3.64)	-0.084 (-2.06)	-1.191 (-6.49)	-1.033 (-6.65)	-0.131 (-3.48)
<i>Block</i>	0.174 (0.39)	0.035 (0.09)	0.150 (1.73)	0.630 (1.43)	0.439 (1.16)	0.189 (2.27)
<i>SOE</i>	0.166 (1.43)	0.180 (1.81)	-0.009 (-0.39)	0.121 (1.03)	0.139 (1.39)	-0.013 (-0.58)
<i>BoardSize</i>	0.019 (0.31)	0.020 (0.38)	-0.007 (-0.72)	0.021 (0.33)	0.022 (0.41)	-0.007 (-0.72)
<i>BoardIndSize</i>	0.145 (0.87)	0.121 (0.85)	0.020 (0.71)	0.162 (0.95)	0.134 (0.92)	0.023 (0.82)
<i>CEOAge</i>	-0.838 (-2.54)	-0.756 (-2.67)	-0.048 (-0.70)	-0.629 (-1.92)	-0.578 (-2.05)	-0.025 (-0.36)
<i>CEOTenure</i>	0.195 (3.99)	0.151 (3.65)	0.027 (2.83)	0.192 (3.83)	0.148 (3.51)	0.027 (2.74)
<i>CEOChairman</i>	0.492 (2.76)	0.416 (2.80)	0.046 (1.46)	0.459 (2.56)	0.388 (2.59)	0.043 (1.36)
Fixed Effects	IY	IY	IY	IY	IY	IY
Obs	8,240	8,240	8,240	8,240	8,240	8,240
Adjusted R ²	39.9%	42.0%	8.3%	39.5%	41.5%	8.3%

Table 3: Instrumental Variable Approach - Continued

Panel B: The Second-stage Regression								
Variable	Instrument on <i>Distance</i>				Instrument on $ROA_{Industry} \times Distance$			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
\widehat{Tone}	-0.023 (-2.07)		-0.028 (-2.57)		-0.030 (-3.90)		-0.036 (-4.62)	
$\widehat{MktTone}$		-0.266 (-8.62)		-0.267 (-8.74)		-0.161 (-4.85)		-0.169 (-5.07)
$\widehat{GovTone}$		1.391 (8.27)		1.360 (8.09)		0.897 (4.46)		0.908 (4.39)
$ROA \times \widehat{Tone}$			0.083 (7.20)				0.055 (4.29)	
$ROA \times \widehat{MktTone}$				0.064 (1.92)				0.059 (1.77)
$ROA \times \widehat{GovTone}$				0.315 (0.91)				-0.056 (-0.16)
<i>Coverage</i>	0.074 (3.36)	0.355 (8.92)	0.071 (3.26)	0.348 (8.81)	0.086 (5.33)	0.221 (5.52)	0.088 (5.56)	0.228 (5.70)
<i>ROA</i>	-0.359 (-4.55)	0.142 (1.50)	-0.491 (-6.07)	0.024 (0.23)	-0.300 (-5.80)	-0.298 (-5.76)	-0.378 (-6.83)	-0.382 (-5.84)
<i>Return</i>	-0.002 (-0.23)	-0.044 (-3.92)	-0.002 (-0.17)	-0.044 (-3.92)	-0.000 (-0.01)	-0.018 (-1.65)	0.002 (0.20)	-0.016 (-1.42)
<i>Size</i>	-0.016 (-1.49)	0.004 (0.40)	-0.013 (-1.27)	0.006 (0.62)	-0.006 (-0.76)	-0.013 (-1.59)	-0.003 (-0.41)	-0.009 (-1.19)
<i>Leverage</i>	0.057 (3.53)	0.036 (2.14)	0.034 (2.18)	0.012 (0.71)	0.028 (1.72)	0.020 (1.19)	0.015 (0.94)	0.008 (0.51)
<i>Block</i>	0.066 (2.57)	-0.143 (-4.04)	0.049 (1.94)	-0.160 (-4.57)	0.067 (2.60)	-0.061 (-1.66)	0.060 (2.31)	-0.067 (-1.85)
<i>SOE</i>	-0.007 (-0.82)	0.050 (4.60)	-0.005 (-0.60)	0.051 (4.80)	-0.001 (-0.12)	0.028 (2.68)	0.000 (0.05)	0.030 (2.85)
<i>BoardSize</i>	-0.005 (-1.41)	0.010 (2.59)	-0.006 (-1.67)	0.009 (2.29)	-0.005 (-1.37)	0.005 (1.24)	-0.005 (-1.51)	0.005 (1.16)
<i>BoardIndSize</i>	0.013 (1.44)	0.015 (1.65)	0.018 (1.93)	0.020 (2.15)	0.015 (1.62)	0.011 (1.16)	0.018 (1.93)	0.014 (1.44)
<i>CEOAge</i>	0.014 (0.52)	-0.115 (-3.71)	0.013 (0.48)	-0.115 (-3.72)	0.005 (0.20)	-0.057 (-1.87)	0.003 (0.12)	-0.060 (-1.97)
<i>CEOTenure</i>	0.018 (4.21)	0.015 (3.68)	0.017 (4.12)	0.015 (3.58)	0.020 (4.95)	0.014 (3.51)	0.020 (5.01)	0.014 (3.55)
<i>CEOChairman</i>	-0.013 (-1.14)	0.023 (1.87)	-0.015 (-1.27)	0.020 (1.70)	-0.015 (-1.36)	-0.003 (-0.29)	-0.015 (-1.37)	-0.003 (-0.23)
Fixed Effects	IY	IY	IY	IY	IY	IY	IY	IY
Obs	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240
Adjusted R ²	5.8%	7.1%	6.8%	8.1%	4.1%	4.2%	4.4%	4.5%

Table 4: An Experiment with the 2008 Beijing Olympic Games

This table presents the panel regression of forced CEO turnover ($CEOTurnover$) on media tone ($Tone$), market-oriented media tone ($MktTone$), state-controlled media tone ($GovTone$), tone variables' interaction with return-on-asset ratio (ROA), and firm-level control variables (X) as well as unreported industry fixed effects (I), using Beijing Olympic games ($OlyGames$) and interaction between Beijing Olympic games and geographical distance ($Distance \times OlyGames$) as instrumental variables. Panel A provides the first-stage regression to predict media tone, market-oriented media tone, and state-controlled media tone:

$$Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) = \alpha + \beta_1 OlyGames_t (+\beta_2 Distance_{i,t} \times OlyGames_t + \beta_3 ROA_{Industry,i,t}) + \beta_4 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage ($Coverage$), return-on-asset ratio (ROA), annual stock return ($Return$), firm size ($Size$), financial leverage ($Leverage$), block ownership ($Block$), state-owned enterprises (SOE), board size ($BoardSize$), board size of independent directors ($BoardIndSize$), CEO age ($CEOAge$), CEO tenure ($CEOTenure$), and CEO/Chairman duality ($CEOChairman$). The construction of these variables is detailed in Appendix A. Panel B provides the second-stage regression on the predicted media tone (\widehat{Tone}), predicted market-oriented media tone ($\widehat{MktTone}$), and predicted state-controlled media tone ($\widehat{GovTone}$). The regression model for Models (1), (2), (5), and (6) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \widehat{Tone}_{i,t}(\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t}.$$

The regression model for Models (3), (4), (7), and (8) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \widehat{Tone}_{i,t}(\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) + \beta_2 \widehat{Tone}_{i,t}(\widehat{MktTone}_{i,t} \text{ or } \widehat{GovTone}_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. t -statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Panel A: The First-stage Regression						
Variable	Instrument on <i>OlyGames</i>			Instrument on <i>Distance</i> × <i>OlyGames</i>		
	<i>Tone</i>	<i>MktTone</i>	<i>GovTone</i>	<i>Tone</i>	<i>MktTone</i>	<i>GovTone</i>
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
<i>OlyGames</i>	-0.949 (-11.71)	-0.918 (-12.98)	-0.009 (-0.50)	-0.485 (-2.67)	-0.562 (-3.51)	0.085 (2.22)
<i>Distance</i> × <i>OlyGames</i>				-0.090 (-2.96)	-0.069 (-2.57)	-0.018 (-2.84)
<i>Distance</i>				-0.053 (-2.02)	-0.042 (-1.86)	-0.009 (-1.94)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	I	I	I	I	I	I
Obs	8,240	8,240	8,240	8,240	8,240	8,240
Adjusted R ²	38.8%	40.8%	7.9%	39.0%	41.0%	8.2%

Panel B: The Second-stage Regression								
Variable	Instrument on <i>OlyGames</i>				Instrument on <i>Distance</i> × <i>OlyGames</i>			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
\widehat{Tone}	-0.014 (-1.86)		-0.021 (-2.92)		-0.016 (-2.25)		-0.021 (-3.07)	
$\widehat{MktTone}$		-0.065 (-4.34)		-0.070 (-4.71)		-0.017 (-2.02)		-0.022 (-2.44)
$\widehat{GovTone}$		6.092 (5.18)		6.028 (5.34)		0.078 (0.88)		0.065 (0.70)
$ROA \times \widehat{Tone}$			0.133 (11.93)				0.095 (8.04)	
$ROA \times \widehat{MktTone}$				0.078 (2.27)				0.070 (1.90)
$ROA \times \widehat{GovTone}$				0.756 (2.17)				0.398 (1.04)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	I	I	I	I	I	I	I	I
Obs	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240
Adjusted R ²	7.5%	8.1%	10.0%	10.6%	5.4%	5.4%	6.8%	6.8%

Table 5: Alternative Disciplinary Channels

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), alternative disciplinary variables, and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). Alternative disciplinary variables include foreign media tone (*ForeignTone*), social media tone (*SocialTone*), changes in institutional ownership ($\Delta Institution$), changes in analyst forecasts ($\Delta AnaEPS$), changes in analyst rankings ($\Delta AnaRank$), and audit opinions (*AudOpinion*). Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

t-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	-0.005 (-2.93)		-0.009 (-4.54)	
<i>MktTone</i>		-0.006 (-3.43)		-0.011 (-4.89)
<i>GovTone</i>		0.005 (0.80)		0.005 (0.51)
<i>ROA</i> × <i>Tone</i>			0.042 (3.16)	
<i>ROA</i> × <i>MktTone</i>				0.052 (3.51)
<i>ROA</i> × <i>GovTone</i>				-0.033 (-0.56)
<i>ForeignTone</i>	0.001 (0.96)	0.001 (0.93)	0.001 (0.40)	0.000 (0.32)
<i>SocialTone</i>	0.013 (1.31)	0.013 (1.31)	0.016 (1.57)	0.016 (1.57)
$\Delta Institution$	-0.000 (-0.24)	-0.000 (-0.22)	-0.000 (-0.21)	-0.000 (-0.22)
$\Delta AnaEPS$	-0.006 (-0.22)	-0.006 (-0.24)	-0.012 (-0.46)	-0.013 (-0.52)
$\Delta AnaRank$	0.001 (0.09)	0.001 (0.07)	-0.000 (-0.01)	-0.000 (-0.04)
<i>AudOpinion</i>	0.069 (2.16)	0.071 (2.20)	0.062 (1.94)	0.064 (1.99)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY
Obs	8,240	8,240	8,240	8,240
Adjusted R ²	8.1%	8.1%	8.5%	8.6%

Table 6: Market-oriented Media, State-controlled Media, and Article Characteristics

This table presents the panel regression of article characteristics including article tone (*ArticleTone*), number of words (*ArticleWord*), and article title (*ArticleTitle*) on the market-oriented media (*MktMedia*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model is

$$CAR_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	<i>ArticleTone</i>	<i>ArticleWord</i>	<i>ArticleTitle</i>
	Model (1)	Model (2)	Model (3)
<i>MktMedia</i>	-0.181 (-13.16)	0.416 (26.96)	0.110 (14.19)
<i>ROA</i>	0.380 (4.79)	0.131 (2.69)	-0.019 (-0.42)
<i>Return</i>	0.014 (2.81)	0.005 (1.05)	0.000 (0.05)
<i>Size</i>	0.068 (4.90)	-0.040 (-4.00)	0.021 (2.03)
<i>Leverage</i>	-0.121 (-3.09)	0.049 (1.63)	-0.036 (-1.00)
<i>Block</i>	0.221 (2.35)	-0.065 (-0.88)	0.064 (0.96)
<i>SOE</i>	0.000 (0.02)	-0.007 (-0.47)	0.026 (1.64)
<i>BoardSize</i>	0.008 (1.61)	-0.001 (-0.11)	0.000 (0.01)
<i>BoardIndSize</i>	0.026 (1.58)	-0.002 (-0.15)	-0.007 (-0.63)
<i>CEOAge</i>	-0.016 (-0.24)	-0.008 (-0.15)	-0.046 (-0.78)
<i>CEOTenure</i>	0.005 (1.09)	-0.005 (-1.21)	0.002 (0.62)
<i>CEOChairman</i>	-0.000 (-0.02)	0.007 (0.41)	0.008 (0.58)
Fixed Effects	FY	FY	FY
Obs	75,488	75,488	75,488
Adjusted R ²	14.5%	15.5%	35.5%

Table 7: Market-oriented Media, State-controlled Media, and Cumulative Abnormal Returns

This table presents the panel regression of cumulative abnormal returns (*CAR*) during press release windows over [-1,1], [0,1], [-1,5], and [0,5] days on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model is

$$CAR_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes annual stock return (*Return*), firm size (*Size*), book-to-market ratio (*BM*), financial leverage (*Leverage*), state-owned enterprises (*SOE*), stock turnover (*TV*), and stock return volatility (*STD*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	<i>CAR</i> [-1,1]		<i>CAR</i> [0,1]		<i>CAR</i> [-1,5]		<i>CAR</i> [0,5]	
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	1.007 (15.40)		0.525 (9.77)		1.037 (11.93)		0.551 (6.65)	
<i>MktTone</i>		1.053 (15.63)		0.559 (10.07)		1.102 (12.25)		0.607 (7.18)
<i>GovTone</i>		0.786 (7.11)		0.362 (4.25)		0.726 (5.10)		0.284 (2.13)
<i>MktTone minus GovTone</i>		0.267 (6.10)		0.197 (5.84)		0.376 (7.52)		0.323 (7.08)
<i>Return</i>	-0.123 (-0.58)	-0.122 (-0.58)	-0.413 (-2.37)	-0.413 (-2.37)	-0.528 (-1.50)	-0.527 (-1.50)	-0.816 (-2.54)	-0.816 (-2.53)
<i>Size</i>	-2.058 (-10.74)	-2.056 (-10.73)	-1.607 (-11.12)	-1.605 (-11.11)	-3.492 (-11.60)	-3.489 (-11.59)	-3.036 (-11.76)	-3.034 (-11.74)
<i>BM</i>	0.426 (0.86)	0.422 (0.85)	0.132 (0.34)	0.129 (0.33)	0.754 (0.99)	0.748 (0.98)	0.449 (0.68)	0.444 (0.68)
<i>Leverage</i>	0.781 (1.08)	0.779 (1.08)	0.502 (0.85)	0.500 (0.85)	1.335 (1.10)	1.332 (1.10)	1.105 (1.02)	1.102 (1.02)
<i>SOE</i>	-0.144 (-0.22)	-0.138 (-0.21)	0.015 (0.03)	0.020 (0.04)	-0.321 (-0.23)	-0.311 (-0.22)	-0.057 (-0.04)	-0.048 (-0.03)
<i>TV</i>	7.448 (1.21)	7.361 (1.19)	0.188 (0.04)	0.124 (0.02)	6.934 (0.68)	6.810 (0.67)	0.041 (0.00)	-0.065 (-0.01)
<i>STD</i>	-0.671 (-3.70)	-0.670 (-3.69)	-0.414 (-2.98)	-0.413 (-2.97)	-0.940 (-3.21)	-0.939 (-3.20)	-0.676 (-2.67)	-0.675 (-2.66)
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	76,249	76,249	76,249	76,249	76,201	76,201	76,201	76,201
Adjusted R ²	10.1%	10.1%	9.2%	9.2%	11.1%	11.2%	10.3%	10.3%

Table 8: Market-oriented Media, State-controlled Media, and ROA

This table presents the panel regression of a firm's return-on-asset ratio (*ROA*) in year *t* or *t*+1 on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model is

$$ROA_{i,t} \text{ (or } ROA_{i,t+1}) = \alpha + \beta_1 \text{ Tone}_{i,t} \text{ (MktTone}_{i,t} \text{ or GovTone}_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes annual stock return (*Return*), firm size (*Size*), book-to-market ratio (*BM*), financial leverage (*Leverage*), state-owned enterprises (*SOE*), stock turnover (*TV*), and stock return volatility (*STD*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	<i>ROA_t</i>		<i>ROA_{t+1}</i>	
	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	0.006 (7.71)		0.002 (2.49)	
<i>MktTone</i>		0.006 (8.13)		0.003 (3.17)
<i>GovTone</i>		0.004 (3.11)		-0.001 (-0.83)
<i>MktTone minus GovTone</i>		0.002 (4.07)		0.004 (10.28)
<i>Return</i>	0.023 (4.98)	0.023 (4.98)	0.034 (6.07)	0.034 (6.07)
<i>Size</i>	0.026 (5.90)	0.026 (5.90)	-0.012 (-2.45)	-0.012 (-2.45)
<i>BM</i>	-0.046 (-5.74)	-0.046 (-5.74)	-0.079 (-7.27)	-0.079 (-7.28)
<i>Leverage</i>	-0.118 (-6.07)	-0.118 (-6.08)	-0.004 (-0.17)	-0.004 (-0.17)
<i>SOE</i>	-0.005 (-0.57)	-0.005 (-0.56)	0.013 (1.18)	0.013 (1.19)
<i>TV</i>	-0.139 (-0.68)	-0.139 (-0.69)	0.032 (0.20)	0.031 (0.20)
<i>STD</i>	-0.015 (-3.26)	-0.015 (-3.26)	-0.015 (-4.63)	-0.015 (-4.62)
Fixed Effects	FY	FY	FY	FY
Obs	73,886	73,886	76,231	76,231
Adjusted R ²	59.5%	59.5%	54.1%	54.1%

Table 9: The Corporate Governance Role of Media and SOEs

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) for SOEs and non-SOEs. The regression model for Models (1), (2), (5), and (6) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3), (4), (7), and (8) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	SOEs				Non-SOEs			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	-0.001 (-0.53)		-0.000 (-0.17)		-0.014 (-3.73)		-0.025 (-6.28)	
<i>MktTone</i>		-0.002 (-0.81)		-0.001 (-0.44)		-0.016 (-3.93)		-0.029 (-7.13)
<i>GovTone</i>		0.007 (0.96)		0.010 (1.00)		-0.001 (-0.05)		-0.007 (-0.45)
<i>ROA</i> × <i>Tone</i>			-0.005 (-0.38)				0.122 (5.70)	
<i>ROA</i> × <i>MktTone</i>				-0.004 (-0.27)				0.151 (6.76)
<i>ROA</i> × <i>GovTone</i>				-0.035 (-0.50)				-0.050 (-0.60)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	5,342	5,342	5,342	5,342	2,898	2,898	2,898	2,898
Adjusted R ²	8.0%	8.0%	8.0%	8.0%	13.4%	13.5%	16.5%	16.9%

Table 10: The Corporate Governance Role of Media and Institutions

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) for bad and good provinces classified by the government decentralization index in Panel A and legal environment index in Panel B. The regression model for Models (1), (2), (5), and (6) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3), (4), (7), and (8) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Panel A: Government Decentralization (<i>Government</i>)								
Variable	Bad Provinces				Good Provinces			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	-0.001 (-0.19)		-0.004 (-1.04)		-0.007 (-3.61)		-0.012 (-4.73)	
<i>MktTone</i>		-0.002 (-0.48)		-0.006 (-1.30)		-0.008 (-3.75)		-0.013 (-4.69)
<i>GovTone</i>		0.009 (0.66)		0.006 (0.32)		0.001 (0.07)		0.000 (0.04)
<i>ROA</i> × <i>Tone</i>			0.026 (1.07)				0.051 (3.37)	
<i>ROA</i> × <i>MktTone</i>				0.031 (1.07)				0.061 (3.63)
<i>ROA</i> × <i>GovTone</i>				0.001 (0.01)				-0.032 (-0.43)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	2,388	2,388	2,388	2,388	5,852	5,802	5,802	5,802
Adjusted R ²	5.3%	5.3%	5.5%	5.5%	10.2%	10.1%	10.7%	10.7%

Panel B: Legal Environment (<i>Legal</i>)								
Variable	Bad Provinces				Good Provinces			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	-0.003 (-0.68)		-0.007 (-1.33)		-0.005 (-2.87)		-0.010 (-4.44)	
<i>MktTone</i>		-0.006 (-1.20)		-0.010 (-1.67)		-0.006 (-3.13)		-0.012 (-4.58)
<i>GovTone</i>		0.018 (1.11)		0.014 (0.64)		0.002 (0.31)		0.001 (0.14)
<i>ROA</i> × <i>Tone</i>			0.027 (0.93)				0.050 (3.71)	
<i>ROA</i> × <i>MktTone</i>				0.030 (0.85)				0.060 (3.93)
<i>ROA</i> × <i>GovTone</i>				0.012 (0.11)				-0.033 (-0.48)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	1,959	1,959	1,959	1,959	6,281	6,281	6,281	6,281
Adjusted R ²	2.8%	2.9%	3.0%	3.0%	10.6%	10.6%	11.1%	11.2%

Internet Appendix

“Who Captures the Power of the Pen?”

This appendix provides supplemental analyses and robustness tests to the main results presented in “Who Captures the Power of the Pen?”. When there is no confusion, additional tests are labelled adding the extension “IA” for “Internet Appendix” (e.g., Table IA), while the full specifications of the tables reported in the main text are labelled with the original table name. Below, we first list the content of the appendix, and then discuss the results of the additional tests. The references to page numbers in parentheses are in relation to the position in the paper where the relevant internet appendix table is cross-referenced.

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1. Additional Summary Statistics

Table IA1 provides summary statistics for other variables that are not reported in Table 1 in the main text, including instrumental variables (geographical distance and Beijing Olympic Games), alternative disciplinary variables, article characteristics, cumulative abnormal returns, and institutions. We find that these variables have reasonable distributions. For instance, changes in institutional ownership ($\Delta Institution$) have a mean value of 4.7% in our sample, which is consistent with the fact that the market shares of financial institutions are steadily increasing in recent years.

2. Portfolio Approach

As a preliminary analysis, we form single-sorted media tone portfolios as follows. First, we sort firms according to the tone of media coverage, and we perform a portfolio analysis for the likelihood of top executive turnover. We also separate our sample according to different criteria and perform subsample analysis. We report our results in Table IA2.

In Panel A, we include all firms in the sample and sort the firm-year observations by the tone of media coverage (*Tone*). We find that firms with worse tone have a significantly higher chance of executive turnover compared with firms with a better tone. For example, 13.4% of the firms with worse tone have forced executive turnover, whereas only 9.0% of the firms with better tone have forced turnover. We find that the difference between these two groups is statistically significant at the 1% level. Considering that the unconditional likelihood of forced turnover in our sample is 11.5%, the 4.4% difference is economically significant.

More notably and importantly, when we further sort firms by the tone of coverage from the market-oriented media and the state-controlled media, we find that firms negatively covered by the market-oriented media have a significantly high likelihood of forced CEO turnover, whereas firms with a worse tone that is cast by the state-controlled media do not.

To control for size and performance effects, we create double-sorted portfolios in Panels B, C, and D. First, we create two groups of firms according to *Size*, *ROA*, and *Return*, and then, within each *size*, *ROA*, and *Return* portfolio, we create two media tone portfolios. We find that across all subsamples, firms covered by worse media tone have a higher rate of forced top executive turnover. Moreover, this association is concentrated on firms with low media tone cast by the market-oriented media. Notably, we find that in subsamples of small firms and firms with poor accounting performance, this media tone effect is more pronounced. To the extent that small and poorly performing firms are subject to a higher level of

information asymmetry and managerial entrenchment, our findings suggest that the market-oriented media play a more effective role in disseminating information and thus in monitoring managers.

3. Robustness Tests on the Baseline Analysis

It is possible that omitted firm characteristics affect both media coverage and top executive turnover, which would result in a spurious correlation between these two. For example, firms with an aggressive culture may draw more coverage from the media while simultaneously (but unrelatedly) undergoing more top management reshuffling. To address this issue, we control for *unobservable* firm characteristics by including firm fixed effects in our main regressions. However, the unobservable firm characteristics may be time-varying. To tackle the possibility of time variation in unobservable firm characteristics, we also adopt a specification with changes in the tone variables and control variables. The results are reported in Table IA3. Consistent with our previous findings, we find that negative coverage by the market-oriented media significantly increases the likelihood of top executive turnover. Moreover, the results from Table IA3 suggest that poor performing firms will be more likely to have their top executive removed if they are covered negatively by the media.

Table IA4 presents the panel regression of forced CEO turnover on media tone, market-oriented media tone, and state-controlled media tone. Given that the standard deviation for *MktTone* is much greater than the standard deviation for *GovTone*, it is possible that the greater impact of the market-oriented media when compared to the state-controlled media is due to the larger standard deviation of *MktTone*. To replicate the main analysis in Table 2, we use standardized media tone, standardized market-oriented media tone, and standardized state-controlled media tone. The result reinforces the main finding that news coverage from the market-oriented media has a significant impact on forced CEO turnover directly and on performance-related turnover sensitivity, whereas news coverage from the state-controlled media does not have such an impact.

Instead of working with firm characteristics, we extend our emphasis to media characteristics and specifically to the salience of media coverage and newspaper circulation. If a newspaper issues a special report solely on a firm, such report should draw more attention from readers, which would result in a greater pricing impact (Barber and Odean 2008; Liu, Sherman, and Zhang 2014). To reflect this feature of media reporting, we construct a salience variable. The value of the salience variable equals two (more salient) if the entire article is about one particular firm and one (less salient) if a news article mentions

more than one firm. We use this measure as the weight when we calculate media tone, and we repeat all analyses. Panel A of Table IA5 shows that our results are robust with the incorporation of press salience.

The other characteristic of media coverage is the total circulation of a journal's articles. Presumably, a larger number of newspapers circulated should indicate that the impact of each news report should be more significant. In 2010, the annual circulations for each issue of the eight newspapers (*Securities Daily*; *Securities Times*; *China Securities Journal*; *Shanghai Securities Journal*; *The Economic Observer*; *21st Century Business Herald*; *First Financial Daily*; and *China Business Journal*) were 200,000; 600,000; 800,000; 800,000; 600,000; 670,000; 716,000; and 850,000, respectively. Here, we transform the circulations of the last seven newspapers relative to the circulation of the first newspaper. That is, we set 200,000 as 1, and the circulations of the last seven newspapers are 3, 4, 4, 3, 3.35, 3.58, and 4.25, respectively. We repeat our analysis using both media circulation and salience variables as weights to reconstruct the media tone variables in Panel B of Table IA5, and we find that our results are robust with the incorporation of the two characteristics of media coverage.

4. Additional Endogeneity Tests

In Table IA6, we divide our sample into the pre- and post-2008 periods and re-estimate our regression models. In Models (1) and (2), we include in the regression the media tone of all news reports and find that the coefficient of *Tone* is significantly more negative for the post-2008 period. In Models (3) and (4), we include *MktTone* and *GovTone* in the same regression and find that the coefficient of *MktTone* is significantly more negative for the post-2008 period, whereas the coefficient of *GovTone* is significant for neither the pre- nor the post-2008 periods. In Models (5) and (6), we find that the interaction is more significantly positive for the post-2008 period, which suggests that poorly performing firms were more likely to have their top executive removed if covered negatively by the media, particularly after 2008. In Models (7) and (8), we interact our performance measure with the tone of the state-controlled media and the market-oriented media and find that the coefficient on the interaction between performance and market-oriented media tone is significantly more positive for the post-2008 subsample.

5. Robustness Tests on the Informativeness of News Reports

In Table IA7, we examine article characteristics including article tone (*ArticleTone*), number of words (*ArticleWord*), and article title (*ArticleTitle*) during two types of specific events. Models (1)-(3) focus on a three-month event window after a large stock price decline, and Models (4)-(6) focus on a three-month event window after a CSRC's punishment release. Following Hutton, Marcus, and Tehranian 2009, large stock price decline is defined as the event when the firm-specific weekly returns exceed three standard deviations below its mean value over the fiscal year. During both of these two types of specific events, we find that compared with articles by the state-controlled media, articles by the market-oriented media have some unique features. They are more critical, comprehensive, and focused on covered firms.

Similarly, Tables IA8 and IA9 provide robustness checks on the fundamental differences between the disciplinary effect of the market-oriented media and that of the state-controlled media in Tables 7 and 8, using standardized media tone, standardized market-oriented media tone, and standardized state-controlled media tone. These findings further support the argument that market-oriented media reports are more informative. For example, in Model (2) of Table IA8, when we use [-1, +1] as our event window, the coefficient of *MktTone* is 0.655, whereas the coefficient of *GovTone* is 0.223. We find that the difference is significant at the 1% level.

In Table IA10, we examine the economic relevance of media coverage to firms' *current* and *future* operating performance at the firm level. If the disciplinary effect of the market-oriented media is due to the informativeness of its news reports, we would be able to observe a strong correlation between market-oriented media tone and firms' performance. To test this hypothesis, we focus on operating performance and use ROA in the year of news reports (ROA_t) and the following year (ROA_{t+1}) as our dependent variable. In Models (1) and (3), we use the tone from all media outlets in the regression and find that across all regressions, the coefficient of *Tone* is significantly positive, which suggests that in the reporting year and in the following year, firm performance is highly correlated with media tone. Moreover, we find that the coefficient on media in Model (1) is approximately identical to that in Model (3), which suggests the timeliness of the media reports.

In Models (2) and (4), we include media tone from both state-controlled media and market-oriented media in the regressions. We find that for both the reporting year and the following year, news from the market-oriented media is more informative about firm

performance. For example, the coefficient of *MktTone* is 0.004 in Model (2), whereas the coefficient of *GovTone* is only 0.002, which suggests that the market-oriented media during the year of reporting are about twice as informative as the state-controlled media. We also perform additional tests to examine the differences in the two coefficients and find that the difference is significant at the 1% level.

6. Additional Tests on the Degree of Political Capture

To examine the relationship between the corporate governance role of the media and political capture, we compare the characteristics of SOE and non-SOE firms and their turnover outcomes Table IA11. We first perform univariate tests and compare the governance, media tone, and financial variables for SOE firms and non-SOE firms. We also separate the sample by firm size and conduct a subsample analysis for various sets of variables. We find that SOEs have less forced top executive turnover compared with non-SOEs and are covered more optimistically and intensively by the media. When we turn our attention to the financial variables, we find that SOEs are larger, use less debt, and have better accounting performance. They also have older chief executives than non-SOEs. These findings suggest that the more optimistic media coverage for SOEs could be due to better accounting performance.

To complement the analysis in Table 10, we construct two additional cross-province variables to proxy for political capture based on the corruption level of political systems and report our results in Table IA12. The first additional measure of media state capture we use is the credit market development index (*Credit*) constructed as the percentage of deposits taken by non-state financial institutions and the percentage of short-term loans to the non-state sector for each province. The second measure of the level of corruption we use is the economic development (*GDP*) constructed as GDP per capita in thousands of RMB for each province in which the firm's headquarters is located. The results reinforce the evidence that the monitoring role of media—and particularly market-oriented media—is stronger in areas with less corruption.

Table IA1: Summary Statistics of Additional Variables

This table presents the summary statistics of additional variables used in this study. The variables are geographical distance (*Distance*), Beijing Olympic games (*OlyGames*), foreign media tone (*ForeignTone*), social media tone (*SocialTone*), changes in institutional ownership (Δ *Institution*), changes in analyst forecasts (Δ *AnaEPS*), changes in analyst rankings (Δ *AnaRank*), audit opinions (*AudOpinion*), article tone (*ArticleTone*), number of words (*ArticleWord*), article title (*ArticleTitle*), three-day cumulative abnormal returns (*CAR*[-1,1]), two-day cumulative abnormal returns (*CAR*[0,1]), seven-day cumulative abnormal returns (*CAR*[-1,5]), six-day cumulative abnormal returns (*CAR*[0,5]), current return-on-asset ratio (ROA_t), future return-on-asset ratio (ROA_{t+1}), government decentralization index (*Government*), legal environment index (*Legal*), credit market development index (*Credit*), and economic development index (*GDP*). All the variables are defined in Appendix A. The summary statistics include the number of observations (N), mean, median, standard deviation (STD), and the deciles (90% and 10%) and quartiles (75% and 25%) distribution of the variables. The sample is between 2005 and 2010.

Variable	N	Mean	STD	10%	25%	Median	75%	90%
<i>Distance</i>	8,240	5.172	2.592	0.000	4.927	6.214	6.833	7.498
<i>OlyGames</i>	8,240	0.363	0.481	0.000	0.000	0.000	1.000	1.000
<i>ForeignTone</i>	8,240	50.248	2.326	50.000	50.000	50.000	50.000	50.000
<i>SocialTone</i>	8,240	0.179	0.535	0.000	0.000	0.000	0.135	0.644
Δ <i>Institution</i>	8,240	4.732	14.008	-7.617	-0.711	0.198	9.924	23.394
Δ <i>AnaEPS</i>	8,240	-0.048	0.189	-0.119	0.000	0.000	0.000	0.000
Δ <i>AnaRank</i>	8,240	-0.066	0.463	-0.500	-0.037	0.000	0.000	0.200
<i>AudOpinion</i>	8,240	0.054	0.225	0.000	0.000	0.000	0.000	0.000
<i>ArticleTone</i>	75,488	0.261	0.674	-1.000	0.000	0.000	1.000	1.000
<i>ArticleWord</i>	75,488	6.669	0.647	5.820	6.209	6.678	7.106	7.494
<i>ArticleTitle</i>	75,488	0.527	0.499	0.000	0.000	1.000	1.000	1.000
<i>CAR</i> [-1,1]	76,249	1.179	7.127	-6.364	-2.905	0.290	4.345	9.965
<i>CAR</i> [0,1]	76,249	0.435	5.847	-5.614	-2.720	-0.179	2.965	7.512
<i>CAR</i> [-1,5]	76,201	0.943	9.951	-9.384	-4.757	-0.171	5.314	12.213
<i>CAR</i> [0,5]	76,201	0.208	9.102	-9.232	-4.946	-0.651	4.198	10.461
ROA_t	73,886	0.066	0.101	0.001	0.023	0.058	0.101	0.170
ROA_{t+1}	76,231	0.067	0.099	0.001	0.022	0.055	0.101	0.172
<i>Government</i>	186	5.008	2.869	1.713	3.190	4.565	6.510	9.500
<i>Legal</i>	186	5.847	3.102	3.277	4.020	4.653	6.792	10.763
<i>Credit</i>	186	6.036	3.105	2.180	4.130	6.383	8.098	9.520
<i>GDP</i>	186	21.182	14.535	8.757	11.554	16.397	24.581	41.166

Table IA2: Market-oriented Media, State-controlled Media, and CEO Turnover

This table presents portfolio analysis results between forced CEO turnover (*CEOTurnover*) and media tone (*Tone*), market-oriented media tone (*MktTone*), and state-controlled media tone (*GovTone*). Panel A includes all firms. Panels B, C, and D sort firms into small and large size, high and low ROA, high and low return groups, respectively. Within each group and each year, we sort all the firms into high and low tone groups by *Tone*, *MktTone*, and *GovTone*. *t*-statistics shown in parentheses and the number of firm-year observations for each group are included. The sample period is from 2005 to 2010.

Panel A: All Firms						
	High	Low	Low - High			
<i>Tone</i>	0.090	0.134	0.044			
	3,567	4,673	(6.30)			
<i>MktTone</i>	0.089	0.134	0.045			
	3,564	4,676	(6.50)			
<i>GovTone</i>	0.120	0.111	-0.009			
	3,133	5,107	(-1.25)			
Panel B: Small- and Large-size Firms						
	Small-size firms			Large-size firms		
	High	Low	Low - High	High	Low	Low - High
<i>Tone</i>	0.109	0.151	0.042	0.079	0.107	0.028
	1,293	2,826	(3.83)	2,274	1,847	(3.05)
<i>MktTone</i>	0.109	0.151	0.042	0.078	0.108	0.030
	1,291	2,828	(3.80)	2,273	1,848	(3.31)
<i>GovTone</i>	0.158	0.128	-0.030	0.090	0.092	0.002
	1,395	2,724	(-2.57)	1,738	2,383	(0.22)
Panel C: Low- and High-ROA Firms						
	Low-ROA firms			High-ROA firms		
	High	Low	Low - High	High	Low	Low - High
<i>Tone</i>	0.128	0.167	0.040	0.067	0.084	0.017
	1,345	2,774	(3.41)	2,222	1,899	(2.07)
<i>MktTone</i>	0.125	0.169	0.043	0.068	0.084	0.016
	1,341	2,778	(3.76)	2,223	1,898	(1.96)
<i>GovTone</i>	0.170	0.146	-0.023	0.079	0.072	-0.007
	1,434	2,685	(-1.92)	1,699	2,422	(-0.79)
Panel D: Low- and High-return Firms						
	Low-return firms			High-return firms		
	High	Low	Low - High	High	Low	Low - High
<i>Tone</i>	0.100	0.141	0.041	0.082	0.125	0.043
	1,630	2,489	(4.02)	1,937	2,184	(4.56)
<i>MktTone</i>	0.098	0.142	0.044	0.082	0.125	0.043
	1,637	2,482	(4.32)	1,927	2,194	(4.61)
<i>GovTone</i>	0.147	0.112	-0.035	0.095	0.111	0.016
	1,525	2,594	(-3.20)	1,608	2,513	(1.61)

Table IA3: Change-in-change Tests

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on changes in media tone ($\Delta Tone$), changes in market-oriented media tone ($\Delta MktTone$), changes in state-controlled media tone ($\Delta GovTone$), changes in tone variables' interaction with return-on-asset ratio (ΔROA), and changes in firm-level control variables (ΔX) as well as unreported firm and year fixed effects (FY). The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \Delta Tone_{i,t} (\Delta MktTone_{i,t} \text{ or } \Delta GovTone_{i,t}) + \beta_2 \Delta X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 \Delta Tone_{i,t} (\Delta MktTone_{i,t} \text{ or } \Delta GovTone_{i,t}) + \beta_2 \Delta Tone_{i,t} (\Delta MktTone_{i,t} \text{ or } \Delta GovTone_{i,t}) \times \Delta ROA_{i,t} + \beta_3 \Delta X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Model (1)	Model (2)	Model (3)	Model (4)
$\Delta Tone$	-0.007 (-4.26)		-0.007 (-4.26)	
$\Delta MktTone$		-0.009 (-4.63)		-0.009 (-4.65)
$\Delta GovTone$		0.003 (0.40)		0.003 (0.45)
$\Delta ROA \times \Delta Tone$			0.034 (1.99)	
$\Delta ROA \times \Delta MktTone$				0.033 (1.74)
$\Delta ROA \times \Delta GovTone$				0.062 (0.85)
$\Delta Firm\ Controls$	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY
Obs	4,951	4,951	4,951	4,951
Adjusted R ²	11.8%	11.9%	12.0%	12.1%

Table IA4: Standardized Media Tone and CEO Turnover

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on standardized media tone (*Tone*), standardized market-oriented media tone (*MktTone*), standardized state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	-0.024 (-3.04)		-0.045 (-4.68)	
<i>MktTone</i>		-0.027 (-3.50)		-0.048 (-4.99)
<i>GovTone</i>		0.004 (0.72)		0.003 (0.42)
<i>ROA×Tone</i>			0.200 (3.23)	
<i>ROA×MktTone</i>				0.218 (3.56)
<i>ROA×GovTone</i>				-0.024 (-0.51)
<i>Coverage</i>	0.037 (5.17)	0.039 (5.33)	0.035 (4.81)	0.036 (4.99)
<i>ROA</i>	-0.265 (-3.48)	-0.265 (-3.50)	-0.218 (-2.93)	-0.213 (-2.85)
<i>Return</i>	-0.013 (-1.04)	-0.013 (-1.06)	-0.012 (-0.99)	-0.013 (-1.04)
<i>Size</i>	-0.001 (-0.09)	-0.002 (-0.13)	-0.002 (-0.11)	-0.003 (-0.17)
<i>Leverage</i>	0.008 (0.24)	0.009 (0.26)	-0.001 (-0.02)	0.002 (0.04)
<i>Block</i>	-0.057 (-0.71)	-0.056 (-0.71)	-0.057 (-0.72)	-0.053 (-0.67)
<i>SOE</i>	0.042 (1.06)	0.042 (1.06)	0.042 (1.06)	0.041 (1.06)
<i>BoardSize</i>	0.004 (0.69)	0.004 (0.69)	0.005 (0.74)	0.005 (0.74)
<i>BoardIndSize</i>	-0.001 (-0.04)	-0.001 (-0.05)	-0.001 (-0.04)	-0.000 (-0.03)
<i>CEOAge</i>	0.137 (2.30)	0.138 (2.31)	0.138 (2.31)	0.139 (2.33)
<i>CEOTenure</i>	0.030 (6.29)	0.030 (6.27)	0.029 (6.27)	0.029 (6.28)
<i>CEOChairman</i>	-0.046 (-1.99)	-0.047 (-2.02)	-0.048 (-2.07)	-0.049 (-2.10)
Fixed Effects	FY	FY	FY	FY
Obs	8,240	8,240	8,240	8,240
Adjusted R ²	8.0%	8.0%	8.4%	8.5%

Table IA5: Press Salience and Circulation

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on alternative media tone (*Tone*), alternative market-oriented media tone (*MktTone*), alternative state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) In Panel A, press salience is used to calculate the alternative media tone variables. In Panel B, both press circulation and press salience are used to calculate the alternative media tone variables. The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t}(MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Panel A: Inclusion of Salience				Panel B: Inclusion of Salience and Circulation			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	-0.003 (-3.50)		-0.006 (-4.94)		-0.001 (-3.26)		-0.002 (-4.92)	
<i>MktTone</i>		-0.004 (-4.16)		-0.006 (-4.79)		-0.001 (-4.11)		-0.002 (-5.03)
<i>GovTone</i>		0.001 (0.18)		-0.005 (-1.02)		0.000 (0.26)		-0.001 (-0.97)
<i>ROA</i> × <i>Tone</i>			0.024 (3.20)				0.008 (3.45)	
<i>ROA</i> × <i>MktTone</i>				0.020 (2.47)				0.007 (2.90)
<i>ROA</i> × <i>GovTone</i>				0.060 (1.86)				0.017 (1.84)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240
Adjusted R ²	8.1%	8.1%	8.5%	8.6%	8.1%	8.1%	8.5%	8.6%

Table IA6: An Experiment with the 2008 Beijing Olympic Games

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) before and after the 2008 Beijing Olympic Games. The regression model for Models (1) and (2) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3) and (4) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Variable	Before 2008	After 2008	Before 2008	After 2008	Before 2008	After 2008	Before 2008	After 2008
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	-0.005 (-2.17)	-0.012 (-2.66)			-0.008 (-2.97)	-0.020 (-3.67)		
<i>Diff in Tone</i>		-0.007 [0.005]						
<i>MktTone</i>			-0.005 (-2.16)	-0.014 (-2.70)			-0.010 (-3.00)	-0.023 (-3.94)
<i>Diff in MktTone</i>				-0.009 [0.004]				
<i>GovTone</i>			0.012 (1.08)	-0.002 (-0.13)			0.018 (1.26)	-0.003 (-0.19)
<i>Diff in GovTone</i>				-0.014 [0.192]				
<i>ROA×Tone</i>					0.032 (1.93)	0.083 (2.53)		
<i>Diff in ROA×Tone</i>						0.051 [0.007]		
<i>ROA×MktTone</i>							0.043 (2.25)	0.107 (2.93)
<i>Diff in ROA×MktTone</i>								0.064 [0.003]
<i>ROA×GovTone</i>							-0.118 (-1.34)	-0.037 (-0.34)
<i>Diff in ROA×GovTone</i>								0.081 [0.320]
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	5,248	2,992	5,248	2,992	5,248	2,992	5,248	2,992
Adjusted R ²	10.1%	12.4%	10.3%	13.8%	10.1%	12.4%	10.3%	14.1%

Table IA7: Article Characteristics during Specific Events

This table presents the panel regression of article characteristics including article tone (*ArticleTone*), number of words (*ArticleWord*), and article title (*ArticleTitle*) on the market-oriented media (*MktMedia*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) during specific events. Models (1)-(3) focus on a three-month event window after large stock price decline, and Models (4)-(6) focus on a three-month event window after CSRC's punishment release. The regression model is

$$Article\ characteristics_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t}\ or\ GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	Three month after a large stock price decline			Three month after a CSRC's punishment release		
	<i>ArticleTone</i>	<i>ArticleWord</i>	<i>ArticleTitle</i>	<i>ArticleTone</i>	<i>ArticleWord</i>	<i>ArticleTitle</i>
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
<i>MktMedia</i>	-0.270 (-2.22)	0.519 (3.90)	0.134 (1.89)	-0.305 (-1.78)	0.315 (2.10)	0.325 (2.51)
<i>ROA</i>	-0.678 (-2.50)	-0.305 (-1.20)	0.038 (0.19)	0.032 (0.12)	0.091 (0.64)	0.063 (0.45)
<i>Return</i>	0.074 (0.69)	0.025 (0.24)	-0.002 (-0.03)	0.366 (2.56)	0.111 (1.31)	-0.035 (-0.51)
<i>Size</i>	0.143 (0.25)	0.232 (0.54)	0.134 (0.36)	-0.283 (-0.95)	0.329 (1.60)	0.204 (1.52)
<i>Leverage</i>	-0.524 (-0.35)	0.339 (0.24)	-0.386 (-0.40)	0.126 (0.39)	0.341 (1.01)	-0.044 (-0.38)
<i>Block</i>	-1.162 (-0.52)	2.612 (1.21)	-1.047 (-0.58)	-1.009 (-0.30)	-3.377 (-1.87)	-1.660 (-0.95)
<i>SOE</i>	-0.134 (-0.29)	0.260 (0.73)	-0.302 (-0.75)	0.068 (0.14)	0.029 (0.09)	-0.448 (-2.32)
<i>BoardSize</i>	0.141 (1.08)	0.110 (0.71)	0.039 (0.37)	0.160 (0.83)	0.174 (0.95)	0.047 (0.51)
<i>BoardIndSize</i>	-0.151 (-0.37)	-0.526 (-1.04)	-0.172 (-0.47)	-0.667 (-0.94)	-0.476 (-0.67)	0.025 (0.12)
<i>CEOAge</i>	0.940 (0.75)	-0.229 (-0.21)	0.585 (0.59)	0.263 (0.32)	0.144 (0.21)	-1.564 (-2.24)
<i>CEOTenure</i>	-0.052 (-0.55)	0.023 (0.20)	-0.083 (-1.00)	-0.024 (-0.12)	0.025 (0.23)	0.090 (0.62)
<i>CEOChairman</i>	0.046 (0.13)	0.017 (0.06)	-0.040 (-0.14)	-0.130 (-0.25)	-0.551 (-1.57)	0.089 (0.30)
Fixed Effects	FY	FY	FY	FY	FY	FY
Obs	597	597	597	153	153	153
Adjusted R ²	49.4%	49.5%	50.1%	55.0%	38.1%	52.0%

Table IA8: Standardized Media Tone and Cumulative Abnormal Returns

This table presents the panel regression of cumulative abnormal returns (*CAR*) during press release windows over [-1,1], [0,1], [-1,5], and [0,5] days on standardized media tone (*Tone*), standardized market-oriented media tone (*MktTone*), standardized state-controlled media tone (*GovTone*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model is

$$CAR_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes annual stock return (*Return*), firm size (*Size*), book-to-market ratio (*BM*), financial leverage (*Leverage*), state-owned enterprises (*SOE*), stock turnover (*TV*), and stock return volatility (*STD*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	CAR[-1,1]		CAR[0,1]		CAR[-1,5]		CAR[0,5]	
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	0.682 (15.40)		0.355 (9.77)		0.703 (11.93)		0.373 (6.65)	
<i>MktTone</i>		0.655 (15.63)		0.347 (10.07)		0.685 (12.25)		0.377 (7.18)
<i>GovTone</i>		0.223 (7.11)		0.103 (4.25)		0.205 (5.10)		0.080 (2.13)
<i>MktTone minus GovTone</i>		0.432 (101.93)		0.244 (53.68)		0.48 (74.79)		0.297 (36.75)
<i>Return</i>	-0.123 (-0.58)	-0.122 (-0.58)	-0.413 (-2.37)	-0.413 (-2.37)	-0.528 (-1.50)	-0.527 (-1.50)	-0.816 (-2.54)	-0.816 (-2.53)
<i>Size</i>	-2.058 (-10.74)	-2.056 (-10.73)	-1.607 (-11.12)	-1.605 (-11.11)	-3.492 (-11.60)	-3.489 (-11.59)	-3.036 (-11.76)	-3.034 (-11.74)
<i>BM</i>	0.426 (0.86)	0.422 (0.85)	0.132 (0.34)	0.129 (0.33)	0.754 (0.99)	0.748 (0.98)	0.449 (0.68)	0.444 (0.68)
<i>Leverage</i>	0.781 (1.08)	0.779 (1.08)	0.502 (0.85)	0.500 (0.85)	1.335 (1.10)	1.332 (1.10)	1.105 (1.02)	1.102 (1.02)
<i>SOE</i>	-0.144 (-0.22)	-0.138 (-0.21)	0.015 (0.03)	0.020 (0.04)	-0.321 (-0.23)	-0.311 (-0.22)	-0.057 (-0.04)	-0.048 (-0.03)
<i>TV</i>	7.448 (1.21)	7.361 (1.19)	0.188 (0.04)	0.124 (0.02)	6.934 (0.68)	6.810 (0.67)	0.041 (0.00)	-0.065 (-0.01)
<i>STD</i>	-0.671 (-3.70)	-0.670 (-3.69)	-0.414 (-2.98)	-0.413 (-2.97)	-0.940 (-3.21)	-0.939 (-3.20)	-0.676 (-2.67)	-0.675 (-2.66)
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	76,249	76,249	76,249	76,249	76,201	76,201	76,201	76,201
Adjusted R ²	10.1%	10.1%	9.2%	9.2%	11.1%	11.2%	10.3%	10.3%

Table IA9: Standardized Media Tone and ROA

This table presents the panel regression of a firm's return-on-asset ratio (*ROA*) in year *t* or *t+1* on standardized media tone (*Tone*), standardized market-oriented media tone (*MktTone*), standardized state-controlled media tone (*GovTone*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY). The regression model is

$$ROA_{i,t} (ROA_{i,t+1}) = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t}$$

where $X_{i,t}$ includes annual stock return (*Return*), firm size (*Size*), book-to-market ratio (*BM*), financial leverage (*Leverage*), state-owned enterprises (*SOE*), stock turnover (*TV*), and stock return volatility (*STD*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	<i>ROA_t</i>		<i>ROA_{t+1}</i>	
	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	0.004 (7.71)		0.001 (2.49)	
<i>MktTone</i>		0.004 (8.13)		0.002 (3.17)
<i>GovTone</i>		0.001 (3.11)		-0.000 (-0.83)
<i>MktTone minus GovTone</i>		0.003 (36.62)		0.002 (15.86)
<i>Return</i>	0.023 (4.98)	0.023 (4.98)	0.034 (6.07)	0.034 (6.07)
<i>Size</i>	0.026 (5.90)	0.026 (5.90)	-0.012 (-2.45)	-0.012 (-2.45)
<i>BM</i>	-0.046 (-5.74)	-0.046 (-5.74)	-0.079 (-7.27)	-0.079 (-7.28)
<i>Leverage</i>	-0.118 (-6.07)	-0.118 (-6.08)	-0.004 (-0.17)	-0.004 (-0.17)
<i>SOE</i>	-0.005 (-0.57)	-0.005 (-0.56)	0.013 (1.18)	0.013 (1.19)
<i>TV</i>	-0.139 (-0.68)	-0.139 (-0.69)	0.032 (0.20)	0.031 (0.20)
<i>STD</i>	-0.015 (-3.26)	-0.015 (-3.26)	-0.015 (-4.63)	-0.015 (-4.62)
Fixed Effects	FY	FY	FY	FY
Obs	73,886	73,886	76,231	76,231
Adjusted R ²	59.5%	59.5%	54.1%	54.1%

Table IA10: Market-oriented Media, State-controlled Media, and ROA at the Firm Level

This table presents the panel regression of a firm's return-on-asset ratio (*ROA*) in year t or $t+1$ on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), and firm-level control variables (X) as well as unreported firm and year fixed effects (FY) at the firm level. The regression model is

$$ROA_{i,t} \text{ (or } ROA_{i,t+1}) = \alpha + \beta_1 \text{ Tone}_{i,t} \text{ (or } MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t}$$

where $X_{i,t}$ includes annual stock return (*Return*), firm size (*Size*), book-to-market ratio (*BM*), financial leverage (*Leverage*), state-owned enterprises (*SOE*), stock turnover (*TV*), and stock return volatility (*STD*). The construction of these variables is detailed in Appendix A. Key results are highlighted in bold. t -statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-press observations. The sample period is from 2005 to 2010.

Variable	ROA_t		ROA_{t+1}	
	Model (1)	Model (2)	Model (3)	Model (4)
<i>Tone</i>	0.002 (7.05)		0.001 (4.57)	
<i>MktTone</i>		0.004 (8.35)		0.003 (5.78)
<i>GovTone</i>		0.002 (1.31)		0.001 (0.77)
<i>MktTone minus GovTone</i>		0.002 (4.06)		0.002 (3.00)
<i>Return</i>	0.036 (8.39)	0.036 (8.37)	0.044 (11.37)	0.044 (11.39)
<i>Size</i>	0.022 (6.48)	0.022 (6.49)	-0.006 (-1.77)	-0.006 (-1.94)
<i>BM</i>	-0.036 (-5.17)	-0.036 (-5.17)	-0.071 (-9.07)	-0.070 (-9.05)
<i>Leverage</i>	-0.082 (-4.92)	-0.082 (-4.90)	0.041 (2.54)	0.042 (2.57)
<i>SOE</i>	-0.003 (-0.30)	-0.003 (-0.24)	-0.002 (-0.18)	-0.002 (-0.13)
<i>TV</i>	0.218 (1.57)	0.213 (1.55)	0.120 (1.07)	0.119 (1.07)
<i>STD</i>	-0.026 (-7.05)	-0.026 (-7.04)	-0.025 (-7.12)	-0.025 (-7.11)
Fixed Effects	FY	FY	FY	FY
Obs	7,908	7,908	7,999	7,999
Adjusted R ²	51.8%	52.1%	48.2%	48.5%

Table IA11: Firm Characteristics, SOEs, and Non-SOEs

This table presents the mean comparison of main variables between SOEs and non-SOEs for all firms, small- and large-size firms. The variables are forced CEO turnover (*CEOTurnover*), media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). Obs denotes the number of firm-press observations. The sample is between 2005 and 2010.

Variable	All firms			Small-size firms			Large-size firms		
	SOEs	Non-SOEs	Difference	SOEs	Non-SOEs	Difference	SOEs	Non-SOEs	Difference
Dependent Variable									
<i>CEOTurnover</i>	0.107	0.129	-0.022 (-2.94)	0.127	0.151	-0.025 (-2.29)	0.093	0.087	0.006 (0.54)
Media Variables									
<i>Tone</i>	2.204	1.336	0.868 (8.55)	0.831	0.598	0.233 (2.66)	3.186	2.719	0.467 (2.34)
<i>MktTone</i>	2.090	1.297	0.793 (8.80)	0.858	0.642	0.215 (2.70)	2.972	2.524	0.448 (2.55)
<i>GovTone</i>	0.094	0.034	0.061 (3.41)	-0.020	-0.038	0.018 (0.98)	0.176	0.168	0.009 (0.26)
<i>Coverage</i>	9.086	6.151	2.935 (6.14)	3.867	4.481	-0.614 (-3.11)	12.823	9.283	3.541 (3.90)
Control Variables									
<i>ROA</i>	0.049	0.044	0.004 (1.75)	0.029	0.034	-0.005 (-1.32)	0.063	0.063	-0.001 (-0.17)
<i>Return</i>	-0.168	-0.167	-0.001 (0.03)	-0.175	-0.176	0.001 (0.05)	-0.162	-0.151	-0.011 (-0.81)
<i>Size</i>	21.628	20.995	0.633 (25.66)	20.624	20.414	0.211 (11.08)	22.347	22.086	0.261 (10.33)
<i>Leverage</i>	0.531	0.586	0.055 (5.96)	0.511	0.605	-0.094 (-6.38)	0.546	0.552	-0.006 (-0.99)
<i>Block</i>	0.549	0.506	0.043 (12.74)	0.526	0.513	0.014 (3.23)	0.565	0.492	0.072 (12.62)
<i>BoardSize</i>	9.645	8.805	0.840 (19.76)	9.239	8.573	0.665 (12.38)	9.936	9.239	0.697 (10.15)
<i>BoardIndSize</i>	3.370	3.143	0.227 (14.91)	3.212	3.067	0.146 (7.54)	3.483	3.287	0.196 (7.87)
<i>CEOAge</i>	3.839	3.793	0.046 (13.79)	3.820	3.788	0.032 (7.14)	3.853	3.801	0.052 (9.64)
<i>CEOTenure</i>	1.491	1.479	0.012 (0.53)	1.500	1.473	0.027 (0.87)	1.485	1.492	0.007 (0.20)
<i>CEOChairman</i>	0.098	0.200	-0.102 (-11.98)	0.123	0.214	-0.092 (-7.83)	0.081	0.173	0.092 (7.12)
Obs	5,342	2,898		2,229	1,890		3,113	1,008	

Table IA12: The Corporate Governance Role of Media and Alternative Institutional Variables

This table presents the panel regression of forced CEO turnover (*CEOTurnover*) on media tone (*Tone*), market-oriented media tone (*MktTone*), state-controlled media tone (*GovTone*), tone variables' interaction with return-on-asset ratio (*ROA*), and firm-level control variables (*X*) as well as unreported firm and year fixed effects (FY) for bad and good provinces classified by the credit market development index in Panel A and the economic development index in Panel B. The regression model for Models (1), (2), (5), and (6) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 X_{i,t} + \varepsilon_{i,t},$$

where $X_{i,t}$ includes media coverage (*Coverage*), return-on-asset ratio (*ROA*), annual stock return (*Return*), firm size (*Size*), financial leverage (*Leverage*), block ownership (*Block*), state-owned enterprises (*SOE*), board size (*BoardSize*), board size of independent directors (*BoardIndSize*), CEO age (*CEOAge*), CEO tenure (*CEOTenure*), and CEO/Chairman duality (*CEOChairman*). The construction of these variables is detailed in Appendix A. Models (3) and (4) test tone variables' interaction with *ROA*. The regression model for Models (3), (4), (7), and (8) is

$$CEOTurnover_{i,t+1} = \alpha + \beta_1 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) + \beta_2 Tone_{i,t} (MktTone_{i,t} \text{ or } GovTone_{i,t}) \times ROA_{i,t} + \beta_3 X_{i,t} + \varepsilon_{i,t}.$$

The first additional measure of media state capture we use is the credit market development index (*Credit*) constructed as the percentage of deposits taken by non-state financial institutions and the percentage of short-term loans to the non-state sector for each province. The second measure of the level of corruption we use is the economic development (*GDP*) constructed as GDP per capita in thousands of RMB for each province in which the firm's headquarters is located. Key results are highlighted in bold. *t*-statistics shown in parentheses are based on standard errors adjusted for heteroskedasticity and firm-level clustering. Obs denotes the number of firm-year observations. The sample period is from 2005 to 2010.

Panel A: Credit Market Development (<i>Credit</i>)								
Variable	Bad Provinces				Good Provinces			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	0.001 (0.26)		-0.001 (-0.32)		-0.007 (-4.00)		-0.013 (-5.47)	
<i>MktTone</i>		-0.004 (-1.04)		-0.007 (-1.41)		-0.007 (-3.63)		-0.013 (-5.06)
<i>GovTone</i>		0.033 (2.49)		0.032 (2.02)		-0.008 (-1.09)		-0.013 (-1.27)
<i>ROA</i> × <i>Tone</i>			0.020 (0.77)				0.055 (3.78)	
<i>ROA</i> × <i>MktTone</i>				0.027 (0.82)				0.063 (3.90)
<i>ROA</i> × <i>GovTone</i>				-0.010 (-0.10)				0.005 (0.08)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	2,438	2,438	2,438	2,438	5,802	5,802	5,802	5,802
Adjusted R ²	3.7%	4.1%	3.8%	4.1%	10.7%	10.6%	11.4%	11.4%

Panel B: Economic Development (<i>GDP</i>)								
Variable	Bad Provinces				Good Provinces			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
<i>Tone</i>	-0.001 (-0.14)		-0.004 (-0.84)		-0.007 (-3.86)		-0.011 (-4.91)	
<i>MktTone</i>		-0.004 (-0.89)		-0.008 (-1.46)		-0.007 (-3.43)		-0.012 (-4.51)
<i>GovTone</i>		0.025 (1.92)		0.023 (1.30)		-0.007 (-0.99)		-0.010 (-0.99)
<i>ROA</i> × <i>Tone</i>			0.026 (0.99)				0.047 (3.43)	
<i>ROA</i> × <i>MktTone</i>				0.031 (1.04)				0.056 (3.41)
<i>ROA</i> × <i>GovTone</i>				-0.001 (-0.01)				-0.016 (-0.22)
<i>Firm Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	FY	FY	FY	FY	FY	FY	FY	FY
Obs	2,401	2,401	2,401	2,401	5,839	5,839	5,839	5,839
Adjusted R ²	5.6%	5.8%	5.7%	5.9%	9.6%	9.5%	10.1%	10.1%

Figure IA1 Front Pages of Newspapers

China Securities Journal (6 Apr. 2011)



Securities Daily (20 Feb. 2013)



Securities Times (7 Feb. 2014)



Shanghai Securities Journal (10 Apr. 2014)



China Business Journal (28 Feb. 2011)



21st Century Business Herald (30 Sep. 2011)



The Economic Observer (18 Jun. 2011)



First Financial Daily (4 Jan. 2012)

