The Role of Media in Autocracies: Evidence from China (Preliminary and Incomplete)*

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Abstract

This study investigates the role of media in autocracies. In addition to promoting government propaganda and censoring politically harmful news, the media can be used to monitor the performance of local bureaucrats. This means that news outlets must be allowed some discretion to report truthfully, even if the news is potentially sensitive. Relatedly, there are news that the autocrat cannot censor because the events are publicly observable. In this case, news outlets can change public opinion by shifting their priors. We provide a large body of micro empirical evidence for our working theory from Chinese news coverage of coal mine accidents, which are highly politically sensitive and a source of public discontent. All news outlets are ultimately controlled by the state and censor negative information about the central government. However, amongst regional newspapers, there is significant variation in the coverage of coal mine accidents. In comparison to relatively independent newspapers, "Party" newspapers with direct government management provide more coverage to local and publicly observable accidents in privately owned mines. The results are driven by news articles with emotionally provocative content.

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1 Introduction

How autocratic regimes govern is a central question to researchers in political economy, as well as economic development, since the vast majority of autocratic regimes are in fact low and middle income countries and a large literature in political economy and development economics have connected institutional structure to economic performance. Government-controlled media is a powerful instrument for promoting official interests since censorship can be applied to both reduce unwanted information as well as to promote wanted information (i.e., propaganda). In principle, censorship would ideally remove all unwanted news and flood news outlets with propaganda. However, this is usually not possible because some unwanted news is verifiable and observed by citizens and complete censorship would undermine the credibility of the government.[1] Thus, understanding how governments balance news and censorship is necessary for unraveling the mechanisms of autocratic news manipulation and governance. In addition, media can provide a positive function for autocrats by monitoring the performance of bureaucrats.

Our study attempts to make progress on this agenda in the context of Chinese newspaper coverage of coal mine accidents, which are politically sensitive. The goal of our paper is to document the detailed processes of how government-controlled news outlets address the occurrence of a politically sensitive event which cannot be hidden from the public. These results will allow us to develop a theory about the role of media in an autocracy.

The main empirical challenge is to credibly identify variation in the conceptual dimensions that we care about – e.g., political sensitivity, degree of state control, etc. As such, China is an exemplary context for our research question for several reasons. The central regime is an autocracy that openly controls much of the media. Coal mine accidents are widely acknowledged as politically sensitive and are easily observable by the public within a given geographic region. In 2007, China produced over twice as much coal as the United States, but the number of those that died from mining accidents was more than 100 times higher.[2] There

[1] This is similar in spirit to the ideas explored in Chen and Yang (2019a). They argue that survivors of China's Great Famine (1959-61) who are all exposed to government propaganda that the famine was caused by drought, are less likely to trust the government if they did not actually experience a drought.

[2] Jia and Nie (2017) reports that in 2007, coal production as share of world production in China and the

also exists variation along three dimensions that are useful for the empirical strategy: reader interest in a given accident, the degree of political sensitivity of the accident and the degree of state control over the newspaper.

Our analysis begins by comparing news coverage of coal mine accidents that are local to accidents that occur in other regions, across mines that are owned by the state (central government) to those that are not owned by the state. The logic is that readers care more about local accidents because it is more likely to affect them directly (e.g., they may know someone who works at the mine) and that the state will want to censor news about accidents in state-owned mines because it directly reflects negatively on the state. In addition, because local accidents are more emotional and sensitive, the state will especially wish to censor coverage of local accidents of state-owned mines. We first examine coverage in newspapers directly managed and controlled by the Party, which is one of the main platforms for the government to convey news and propaganda and is subscribed to by every government agency, most large private organizations, and posted on kiosks and bulletin boards in central public locations such as parks, post offices, schools, activity centers, etc. Second, we examine newspapers that have relatively independent management, which are mostly subscribed to by private individuals. The two types of newspapers are broadly read by the same constituents. They key difference is the identity of who pays for the subscription. A typical individual reads the Party newspaper, which a work unit pays for during the day, and the independent newspaper, which she pays for at home.

Each examination is a *differences-in-differences* estimate, where we controls for accident and newspaper fixed effects. The comparison of the two types of newspapers is similar in spirit to a triple-difference estimate. For simplicity, we present the results as two double differences instead of a triple difference. Our data are constructed from the universe of newspaper articles and administrative data on serious coal mine accidents for the years 2000 to 2018.

Our first finding is that when a coal mine accident occurs, "Party" newspapers provide similar coverage as "independent" newspapers for local accidents at state-owned mines. However, Party newspapers provide *more* coverage for accidents that occur in local privately owned

United States were 41% and 18%; mortality numbers were 3,598 and 34.

mines, whereas independent newspapers provide similar levels of coverage for local accidents regardless of mine ownership. These results suggest that in a context where it is impossible to suppress sensitive news, Party newspapers increase coverage of other news on similar topics. This is consistent with the belief that attention is limited and focus on a particular issue can be crowded out.

The main analysis focuses on the years after the introduction of a policy in 2007 that increased central government scrutiny over coal mine accidents. This highly publicized policy was a reaction to intense public dissatisfaction regarding mine safety and highlighted the political sensitivity of accidents. The change in government awareness allows us to examine the pre-reform years to conduct a quasi-placebo experiment. If the difference in coverage between Party and independent newspapers are driven by the desire of the state to censor sensitive news, then we would expect a smaller difference prior to 2007, when the central government placed less importance on public reaction to mining accidents. This is indeed what we find. Before 2007, Party and independent newspapers provided similar levels of coverage. Consistent with citizens being more interested in local accidents, both types of newspapers provided more coverage for local accidents than accidents taking place in other regions. However, the coverage was similar between local accidents in state-owned mines and other mines.

There are several caveats to our preferred interpretation. First, the findings that local accidents at state-owned mines receive less coverage than those at privately owned mines may reflect less interest in state-owned mines from citizens. This is prima facie highly unlikely because state-owned mines are usually larger, older and better known. The finding that a similar distortion does not exist for independent newspapers also goes against this alternative. Second, one may be concerned that Party and independent newspapers differ in ways that could drive our main findings. For example, they may cater to different constituencies. Again, this is unlikely, since by and large, both are read by the same local population. In addition, the fact that our results are only present in the post-2007 period, after the government highlighted the sensitivity of coal mine accidents goes against this second alternative.

To provide more evidence on the mechanisms, we supplement the main results with a deeper examination of news content. We find that Party and independent newspapers provide similar coverage for highly politically sensitive news that name the central government or Party leaders: both types of papers provide *fewer* such articles about local accidents in state-owned mines than local accidents in other mines. This is consistent with the fact that all newspapers are ultimately controlled by the state, which strictly controls news about the central government and its leaders. They also provide similar coverage for relatively uncontroversial articles about compensation, which are usually quite formulaic in our context. In contrast, we find stark differences between the two types of newspapers for articles on emotionally sensitive topics, but which are not politically taboo, over which independent newspapers may be allowed some discretion: articles about the family members of injured or killed miners. Coverage for such articles resemble those in our main results. These results are all consistent with our preferred interpretation that our main findings reflect different levels of political censorship between Party and independent newspapers.

Taken together, our findings suggest a sophisticated censorship strategy. For news of sensitive incidents that cannot be fully suppress, the government responds by providing more information about similar incidents in other places, which can shift the readers' benchmark for the acceptable level of accidents.

We are in the process of developing a formal theory motivated by the empirical evidence. The basic logic is as follows. The central government wants to maintain popular support and need to monitor the local bureaucrats. Thus, the central government allows some local media outlets to be relatively independent. At the same time, the need for propaganda motivates the state to retain more control over other outlets. Since the country is large, the state-controlled outlets are necessarily managed by local bureaucrats, who will exercise their discretion to minimize news that are unflattering to themselves (e.g., local coal mine accidents owned by the gov). For news that cannot be completely censored, they increase news about accidents in other regions. This shifts the reference point for the natural/unavoidable level of accidents in the mind of the public. Thus, it reduces public dissatisfaction. In this model, the cen-

tral government does not care why public satisfaction increases (whether accidents decline or whether the citizens accept a higher level of accidents). However, because each region increases news reporting of accidents in other regions, there is a positive spillover effect for the central government in the form of better information about accidents overall.

In documenting the detailed methods of censorship, we contribute to recent studies of how autocrats govern (Egorov and Sonin, 2018; Martinez-Bravo et al., 2017). Our work builds on the theoretical study about strategic censorship in China by Lorentzen (2014) and the general theory of media in autocracies by Egorov et al. (2009). In providing empirical evidence from the Chinese context, we add to two recent studies. Qin et al. (2018) studies the effect of market competition on newspaper content and amongst other results, finds that lower level governments produce less government-biased content, and that competition from such newspapers reduces overall exposure to propaganda. Our study complements this one by considering the role of the media from the perspective of the autocrat. Chen and Yang (2019b) uses a field experiment to document the effects of allowing VPN access on college students online browsing behavior and beliefs. Our findings complement existing evidence for the effect that media can have on beliefs in non democracies (e.g. Adena et al., 2015; DellaVigna et al., 2014; Enikolopov et al., 2011; Yanagizawa-Drott, 2014) and the larger literature on the determinants of news, which has mostly focused on the U.S. context (e.g. Eisensee and Stromberg, 2007; Gentzkow and Shapiro, 2006; Gentzkow et al., 2015; Qian and Yanagizawa-Drott, 2009).

This paper is organized as follows. Section 2 presents the background. Section 3 describes the data. Section 4 presents the results. Section 5 concludes.

2 Background

2.1 Newspapers

Newspapers are an important source of information for the masses in modern China. According to the Thirteenth National Readership Survey in 2015, the national newspaper readership rate

was 45.7% and the annual per capita number of articles read was 54.76. Along with other media outlets, they are an important tool for disseminating information and propaganda. As such, they had been funded and directly managed by the Communist Party since the 1950s (Shue, 1981). At the time of our study, 2000-2018, all newspapers in China are state-owned (Li, 2013), and can be categorized into two groups. Party newspapers, which comprise mostly of Dailies, are directly managed by the Party and mainly subscribed by party and government institutions, with the explicit goal of broadcasting the voice of the Central Committee of the Communist Party of China through influencing the social and political elites and directing work on behalf of the Party. The content is highly censored and must be in strict uniformity with the Party (Hassid, 2008). The papers are subscribed by all rural village and urban governments and organizations. These are also the papers posted on billboards in public places such as parks, school, and village centers so that all citizens may read them. According to a survey by the China Journalists Association, more than 90% of provincial Party newspapers' circulation comprises of subscriptions demanded by administrative order (Yang and Sun, 2001). What we call "independent" newspapers are subsidiaries of Party newspapers. They are are not directly managed by the Party, although the government has ultimate control over them. Examples of independent papers include Evening and Metro papers. With the premise of obeying the Party, independent newspapers focus more on practical day-to-day issues and provide more features of people's life and entertainment. Independent newspapers are mostly subscribed by individuals (Liang, 1996). Circulation surpassed that of Party newspapers in 2002. Because they rely less on government subscriptions and are managed relatively independently from the Party, independent newspapers are less likely to promote government propaganda and more likely to offer alternative view points, as long as they do not directly contradict or criticize the central government (Latham, 2000).

Besides newspapers, other important sources of news include radio, television, the internet and mobile social media technologies. We will discuss this more in the conclusion.

2.2 Coal Mines

Mining is an important industry in China that has always received a large amount of public and government attention. Chinese mines can be very large, with the number of employees as high as over ten thousand. Often they are the main industry in a county or even a province, which means that a large share of the population will be personally connected to the mine through his own employment or that of a relative or friend. This is important to keep in mind when we consider the sensitivity to local mining accidents.

Mining is widely perceived in China to be a very dangerous occupation and accidents are salient and politically costly. The salience of the political costs of coal mine accidents for the central government can be observed from the demotion of politicians associated with accidents, which we will discuss in detail later in the paper, and the fact that mining was one of the very few professions granted exemptions to family planning restrictions. Miners have been allowed to have three children since 1979/80, when most Chinese families were only allowed one child (1979/80-2016) or two children (2016 –).

The mines that we refer to as state-owned are those that are owned by the central government and managed by provincial-level officials. Other mines are owned and managed by lower levels of government and private or joint entities. For simplicity, we refer to the second group as "privately" owned mines. Ownership of mines is widely known by the local population since it is usually stated in the name of the mine (e.g., "Shanxi Province Coal Mine Number Three") and mines are usually historically important employers in the region.

Coal mining accidents in China tend to be large in terms of mortality. Relative to the United States, which produces a third of total coal as China, total mining mortality is 101 times more in China Jia and Nie (2017). Even compared to poor countries such as India, mining mortality per unit of production is ten times higher (Wright, 2004). In response to the public dissatisfaction with mine safety, the central government introduced a set of new regulations in the highly published *Reports and Investigation Regulations of Production Safety Accidents* in June 1st, 2007. The reform requires the State Council to conduct investigations for accidents with thirty or more deaths, and specifies the process of investigations. Specifically, it requires

that mines report any accidents with ten or more deaths within one hour of its occurrence. If/when mortality reaches thirty, the State Council takes over the investigation. Regardless of which levels of government investigates, officials should visit the affected coal mine, and provide a written report that explains the cause and nature of the accident, and describes mortality rates, other damages, and accountability. Investigations need to include interviews of both managers and miners. Mining accidents and negative public attention often result in the demotion of the associated bureaucrat or politician.

Note that that Jia and Nie (2017) studies a reform which decentralized regulation of mining safety to the provincial governments in 1998, which led to higher mortality arguably because of collusion between mines and the regional government. Then, in 2001, regulation was recentralized. Our study takes place almost entirely in the recentralized period, 2000-2018.

Victims of mine accidents receive compensation based on a centrally set formula. Until 2004, the average compensation was around 50,000 RMB (7,146 USD) per person. After December 2004, provinces such as Shanxi and Shaanxi regulated that compensation should not be lower than 200,000 RMB (28,571 RMB) per person if the deaths were caused by coal mine accidents in order to urge the mine owners to increase investment in production safety. Other provinces followed soon afterwards. Centrally set laws are also very specific about lesser injuries, and also for things such as bereavement. There is also a well-developed procedure for seeking compensation.[3]

3 Data

3.1 Coal Mine Accidents

The main data source is a list of accidents with thirty or more deaths. It is constructed using two publicly available sources. The first one is The State Administration of Work Safety (SAWS), which is an agency directly under the State Council. It administers the State

[3]See Article No. 48 of the *Production Safety Law of the People's Republic*, implemented on November 1, 2002; Article No. 11 of the *Supreme People's Court on Several Issues Concerning Cases of Compensation for Personal Injury,* implemented on May 1, 2004; and Articles No. 39 and No. 40 of the *Regulations on Industrial Injury Insurance*, implemented on January 1, 2011.

Administration of Coal Mine Safety and directs the overall supervision of coal mine safety. All production safety accidents in China are required to be reported to SAWS within one day of its occurrence. Mis-reporting or not reporting is a criminal offense. Since 2000, SAWS has used these reports to generate a comprehensive list of accidents with ten or more deaths each year.

The second source is the EM-DAT database organized by the Center for Research on the Epidemiology of Disasters in Brussels, which is used by Qin et al. (2018). The database is made up of information from various sources, including United Nations agencies, non-governmental organizations, insurance companies, research institutes and press agencies.[4] Like SAWS, it includes Chinese mine accidents with ten or more deaths.

We cross-reference the two sources of data and compile a comprehensive list that is the union of mining accidents of the two lists during 2000 to 2018.[5] The final dataset of accidents that we use contains information on a mine's name, location, date of the accident, ownership and size. We restrict our attention to accidents with thirty or more deaths because they are the focus of the 2007 reform, which we will use later as a placebo exercise. Also, one might be concerned that some mines strategically avoid reporting accidents to SAWS or other agencies by understating mortality. This is particularly a concern for smaller accidents which are presumably easier to avoid detection. However, since we focus on accidents with thirty or more deaths, our analysis is unlikely to be biased by measurement error of accidents.

3.2 News Coverage

We construct the news coverage data by conducting text analysis on newspapers in the WiseSearch database, which includes all registered newspapers in China during 2000 to the present day. This database has recently been used in the study by Qin et al. (2018).

To make the more advance text searches feasible, we first restrict the sample to newspapers that have ever reported any articles containing the phrase "coal mine accident". This step excludes specialized newspapers on topics such as entertainment and sports. Given the interest

[4]Priority is given to data from UN agencies, governments, and the International Federation of Red Cross and Red Crescent Societies.

[5]There is near, but not complete, overlap in the two datasets.

to coal mine accidents, it is unlikely to exclude any general interest newspapers. In order to compare newspaper coverage for local (occurred in the same province) and non-local accidents, we also exclude national-level newspapers.

Based on manually reading a large sample of articles, we find that most news reporting the occurrence or magnitude of an accident occurs within one, and at most two weeks within the accident. More than 65% reports are within two weeks after accidents. Articles written two weeks or longer after the accident are often review articles of major recent events, history of mines, or instructions from the State Council for the supervision of mines. Reports within the first two weeks, especially during the first week, will typically report the number dead, the date and location of the accident. We did not find any evidence of variation in the facts across accidents or newspapers. Similarly, we found little evidence to suggest variation in the accuracy of the facts checked against the official SAWS report. This may partly be due to the fact that the Ministry publishes its official report within a couple of days after the accident, so there is little incentive for the manipulation of these facts.

Thus, our empirical analysis will focus on news coverage the first two weeks after the accident, and on the number of articles and length of coverage as the relevant margins for distortions. There are eighty coal mine accidents with thirty or more deaths during 2000 to 2018. Within the sample of newspapers after the restrictions discussed earlier, we search for articles with accident-specific keywords and the name of the coal mine. The keywords are official categorizations of the accident reported in the SAWS report: explosion, permeation, etc. The keywords vary across accidents. We identify an article as being about a mining accident if it contains the mine name and one of the accident-specific keywords. The main advantage of our method over the alternative of identifying articles with the mine name and "accident" in the article is that the latter types of articles are often not about specific mining accidents.[6]

The final sample contains 31,249 articles from 684 newspapers about 80 accidents during

[6]We manually read a large number of articles that resulted from our search algorithm and found no articles that were not about the accident of interest. Alternatively, articles with "accident" and the mine name but no keyword were often about other subjects – e.g., a mine receives commendation for reducing accidents in the past ten years.

2000 to 2018. For each article, we know the name of the newspaper and coal mine, the date of the accident and article, and the word count of the article.

We categorize Party newspapers as those that are managed directly by the regional governments (*Jiguan Bao*). For the most part, Daily newspapers are Party newspapers while Evening and Metro newspapers are independent newspapers. There are some exceptions. For instance, Haikou Evening is a Party newspaper. Shenzhen Special Zone News is also a Party newspaper even though there is no "Daily" in its name. We obtain information about the management of each newspaper from the newspaper's website, official Weibo (Chinese Twitter-like platform) account or the China National Knowledge Infrastructure. From the same sources, we observe the province from which the newspaper is based. Thus, we are able to identify whether an accident was local – i.e., occurred in the same province which publishes the newspaper.

3.3 Descriptive Statistics

3.3.1 Means

Table 1 presents the descriptive statistics for Party and independent newspapers. Circulation is similar across the two papers. Party papers are much older and has much lower revenues. The urban-rural division is also similar, with around 98% of each type of papers being based in urban areas. On average Party newspapers publish fewer articles about all mining accidents. Interestingly, for overall news coverage, Party newspapers provide more coverage about local news, both in terms of total amount of coverage and as a share of total coverage. This is not true for news about mining accidents.

Panel B examines coal mines for all of the accidents in our sample. State-owned mines are much larger with average employment of 45,556 versus 744 of privately owned mines. The size of the accidents are also larger, though the difference is much less notable than that for employment, 64 deaths versus 47 deaths on average. State-owned mines are two years older on average than privately owned mines. This should be interpreted carefully as the age of the current mine owner. In fact, many state-owned mines have physically existed for much longer.

State-owned mines are slightly nearer the provincial capital in terms of straight-line dis-

tance . Provincial GDP and the share of mining as a share of provincial GDP are similar across provinces with state and privately owned mines.

3.3.2 Political Turnover and Mining Accidents

Before we present our main findings, we first document the relationship between political turnover and the occurrence of a mining accident in a state-owned and privately owned mine. For this exercise, we construct a province level panel containing information on the identity of the Communist Party Secretary (the highest ranking bureaucrat and politician) of each province, the Deputy Party Secretary, Governor and Deputy Governor and the occurrence of mining accidents from 2000-2018. We regress a dummy variable which indicates that there is Party Secretary turnover (i.e., the Party Secretary for year t is not the same as in year $t-1$) on a dummy variable indicating the occurrence of a mining accident during the same year, and province and year fixed effects. We code turnover as a dummy variable that equals one if leadership changes identity and the incumbent did not face either a term limit or age restriction. Party Secretaries and Governors in China have five-year terms with a limit of two consecutive terms and of three total lifetime terms and must retire at the age of 55 for women and 60 for men.[7] Since turnover is a dummy variable, we use both a Linear Probability Model as well as a Logit model.

Table 2 presents the results. Column (1) examines the entire period of 2000-12016. Column (2) examines the "pre-2007" (2000-2006) sample and shows no relationship with accidents in either types of mines. The correlations are small in magnitude and statistically insignificant. Column (s) examines the "post-2007" (2007-2016). It shows that the occurrence of an accident in a state-owned mine is positively associated with turnover by 29.2 percentage-points. This is statistically significant at the 10% level. The correlation with privately owned mines is also positive, 12.6 percentage-points, but insignificant at conventional levels. The Logit estimates in columns (4)-(6) show a similar pattern.

[7]For example, see the *Interim Provisions on the Term of Office of Party and Government Leading Cadres*, implemented on 7th August, 2006 — "Article 3: The term of office of Party and government leaders is 5 years... Article 6: Party and government leading cadres who serve for two consecutive terms in the same position shall not be recommended, nominated or appointed to the same position". Our coding takes into account changes in regulation over time.

The descriptive evidence is consistent with the conventional wisdom that mining accidents became politically sensitive after the 2007 reform, and that accidents in state-owned mines were more so than those in privately owned ones.

3.3.3 Compensation

We were able to find information about compensation for 39 of the eighty accidents in our sample from news articles. By manually reading these articles, we find that almost all of the accidents in our sample compensated victims Section. There was no difference between state and non-state mines.[8]

4 Results

4.1 Party Newspapers

The goal of the empirical analysis is to examine whether Party newspapers censor information about relatively politically sensitive accidents that occur in state-owned mines. We begin by examining whether they censor by reducing the amount of coverage for state-owned mines relative to privately owned mines.

Identification

We use a second-difference estimate that compares coverage for different ownerships and for local versus non-local accidents. The logic is that local accidents are more salient for readers. They are more likely to be personally connected to someone involved in the accident. Local accidents are also better observed by readers. Thus, these are the accidents affected by our mechanisms of interest. The baseline equation is the following.

$$y_{ij} = \alpha + \beta Local_{ij} + \gamma(Local_{ij} \times StateOwned_i) + \delta_i + \eta_j + \varepsilon_{ij} \quad (1)$$

[8]There are two exceptions where the compensation was higher. Further manual reading indicates that these were cases where the mine owners attempted the bribe the relatives of victims.

The number of articles about an accident in mine i reported by newspaper j, y_{ij}, is a function of: a dummy variable indicating whether mine i and newspaper j are in the same province, $Local_{ij}$; the interaction of whether the accident is local and whether mine i is state-owned, $Local_{ij} \times StateOwned_i$; accident (mine) fixed effects, δ_i; and newspaper (region) fixed effects, δ_i. Since number number of articles is a count variable, we estimate Poisson regressions. The standard errors are clustered at the accident level.

We are interested in the variation from the interaction variable, which varies by the ownership of a mine and whether the accident is local. If readers are more interested in local accidents and newspapers respond to reader interest, then we expect $\beta > 0$. At the same time, if Party newspapers try to censor bad news about state-owned mines, then we expect $\gamma < 0$.

Since we do not have any mines with more than one accident in our sample, the accident fixed effect is equivalent to a mine fixed effect, which controls for differences across accidents such as the size of the accident or the size or general importance of the mine. Since mine ownership status is fixed for a given mine, the fixed effects also control for all differences between state-owned and privately owned mines that are similar across regions. For example, one may be concerned that state-owned mines are of less interest to readers because they have been around for a long time. As long as this feature is common between local state-owned mines and distant ones, the effect will be captured by the fixed effects.

Similarly, the uninteracted variable, $Local_{ij}$, is absorbed by newspaper fixed effects. This means that features about local mines that make them more or less interesting to readers are controlled for as long as these features are common to state and privately owned mines. For example, readers are always more interested in local events close to home, which are more likely to involve people they know. This will increased demand for news about local events. This force is controlled for by the fixed effects. Newspaper fixed effects are also important because the composition of newspapers differ across regions and each paper may vary in content for reasons other than the ones we are interested in (e.g., staff composition, editorial focus). Controlling for newspaper fixed effects assures that this does not confound our main results.

After we examine Party newspapers, we will repeat the baseline equation for independent newspapers. The interpretation of the DD estimates is similar as for Party newspapers. The interesting exercise in the comparison of the estimates of the two types of papers. We discuss this more when relevant.

Results

We estimate the baseline equation. Table3 Panel A presents the estimates. Columns (1) and (2) examine the number of articles within seven or fourteen days of the accident. Columns (3) and (4) examine the total word count across all articles published within seven or fourteen days of the accident. The findings are similar, so we will focus our discussion on column (1) for brevity.

The dependent variable mean shows that on average, Party newspapers publish approximately one article per every two accidents. The uninteracted coefficient for the local accident dummy is 1.17 and it is statistically significant at the 1% level. This indicates that relative to the reference group of accidents which occur in other provinces, Party newspapers publish one additional article if it is a local accident in a privately owned mine. The interaction coefficient of the local accident dummy and state-ownership dummy is -0.681 and is statistically significant at the 5% level. This indicates that a Party newspaper will publish half an article less on a local accident at a state-owned mine than a local accident at a privately owned mine. The sum of the two coefficients is presented at the bottom of Panel A. It is 0.489 and the p-value shows that it is statistically significant at the 5% level. This means that relative to accidents in other provinces, Party newspapers publish half an article more for local accidents in state owned mines. The estimates are consistent with the belief that Party newspaper do respond somewhat to reader demand, and also that they attempt to censor bad news of state-owned mines.

4.2 Independent Newspapers

One concern for our interpretation is that there are other reasons that accidents at local State-owned mines receive less coverage. For example, readers may be less interested in local accidents at State-owned mines. This is counter to our prior since state-owned mines are typically larger and older, which would suggest more interest from local citizens.[9] However, to address this, we can repeat the analysis with independent newspapers. If the difference in coverage between state and privately owned mines is driven by reader interest, then we would expect similar patterns in independent newspaper coverage. Panel B presents these estimates. They show a very different pattern.

Again, for brevity, we focus on column (1). The uninteracted dummy variable for local accident is 0.744 and is statistically significant at the 1% level. This means that independent newspapers publish 0.744 additional articles of local accidents at privately owned mines relative to the reference group of accidents in other provinces. The interaction coefficient of the local accident dummy and the state owned dummy is statistically insignificant and small in magnitude, which means that local accidents receive similar amounts of coverage from independent newspapers regardless of mine ownership. The p-values at the bottom of the table show that both coefficients differ from their analogues in Panel A at 10% or higher levels. These are obtained from Seemingly Unrelated Regressions.

A comparison of Panels A and B provide two insights. First, the fact that the interaction coefficient is only negative for Party newspapers means that only Party newspapers try to reduce coverage of accidents in local state-owned mines relative to those in local privately owned mines. Second, note that the uninteracted coefficient is statistically larger for Party newspapers. This means that Party newspapers publish more articles than independent newspapers of accidents at local privately owned mines. Interesting the sum of the two coefficients at the bottom of Panels A and B are similar, which means that Party and independent newspaper

[9] According to Tianyancha (https://www.tianyancha.com/, a Chinese website for company information inquiry), for state-owned mines, the average employment is 13,757 persons and average registered capital is 3,016 million RMB. For other mines, the average employment is 977 persons and average registered capital is 134 million RMB. The average projected yearly output of state-owned mines is approximately 1,743 thousand tons while that of other mines is around 260 thousand tons.

publish similar numbers of stories of accidents at local state owned mines relative to accidents elsewhere. Together, these results imply that Party newspaper attempt to censor bad news of state-owned mines by increasing coverage of bad news in privately owned mines.

The main caveat for our interpretation is that there may be other differences between Party and independent newspapers, such as a difference in reader interest. We do not find this alternative very likely ex ante since both types of newspapers are read by nearly all local citizens (Party newspapers are read at the office during the day, and independent newspapers are read at home). We provide evidence against this in the next section.

4.3 Pre-2007

Since the 2007 policy highlighted the importance and sensitivity of coal mine accidents, we can repeat our analysis for the pre-2007 period, when coal mine accidents were arguably less sensitive for the government, or rather, the government was less intent on improving its reputation with respect to coal-mine accidents. Ex ante, this has the spirit of a placebo exercise but is not a perfect placebo because some degree of political sensitivity may still be present.

Table 4 presents the results. Both the uninteracted and interaction coefficients are similar in Panels A and B. They show that Party and independent newspapers provided similar coverage for local accidents at state-owned and privately owned mines. Party newspapers do not try to provide more coverage of local privately owned mines than independent newspapers. Nor do they try to reduce the amount of coverage for local accidents at state-owned mines relative to those at privately owned mines. Moreover, a comparison of Tables 4 and 3 show that there is no change in coverage behavior by independent newspapers, where as Party newspapers begin to censor after the central government highlights the importance of mining accidents.

These results are interesting for several reasons. First, the fact that Party newspapers increase censorship after the reform is consistent with our interpretation that the main post-2007 results are driven by the desire of Party newspapers to censor bad news for the state. Second, the results go against the concern that the interpretation of the main post-2007 anal-

ysis is confounded by other potential differences between Party and independent newspapers, such as a difference in reader interest, because there was no systematic change in newspaper circulation or management in 2007.

4.4 Other Industrial Accidents

Next, we examine news coverage about industrial accidents due to human-error that are unrelated to coal mines. These include phenomenon such as fires (e.g., in hospitals or schools), explosions (e.g., in factories), traffic accidents (e.g., between two buses or trains). As with mining accidents, we are able to identify whether the accident involves a state entity. The exercise is motivated by the presumption that other accidents are on average less politically sensitive than mining accidents. We expect there to be less distortion by Party newspapers for state-connected non-mining accidents. Finding similar patterns for mining and non-mining accidents would undermine our interpertation that the differential coverage for mining accidents is driven by political motivations.

The list of accidents are also reported by SAWS. Criteria for being part of the SAWS sample is similar as for mining accidents. We define a dummy variable for state liability that equals one if one of the firms involved in the accident or the accident occurred was state owned (e.g., gas explostion at a state-owned factory, collision that involves public transportation). We construct the measure of news coverage in the same way as we do for mining accidents (e.g., identify articles with the name of the firm and accident-specific keywords as reported by SAWS).

Table **??** Panel presents the results for coverage by Party newspapers. The statistically zero interaction effect shows that coverage does not vary between local accidents involving state-owned firms versus those that do not. A comparison of Panels A and B shows that coverage in Independent papers are similar to that in Party papers. These results are consistent with our preferred interpretation that the pattern of coverage for mining accidents is due to their political sensitivity.

4.5 Robustness

4.5.1 Outliers

Given that mine accidents are rare events, one concern is that our result are driven by outliers – i.e., a particularly large accident that was very controversial. To address this, we systematically omit the accident-newspaper level observations for the five largest accidents (ranked in terms of mortality). We focus on Party newspapers for brevity.[10] Table 5 shows that the results are very robust to their exclusion. Thus, our results are unlikely to be driven by any one large accident.

4.5.2 Controls

Next, we consider omitted variables. Given our empirical strategy, for the omitted variable to confound our estimates, it would be need to be newspaper-type-mine-ownership-accident locality–post 2007 specific. Ex ante, it is difficult to think of an obvious omitted factor of this type. Nevertheless, Table 6 controls for additional factors that may be related to newspaper coverage – i.e., readers' interest in state mines or the desire for Party newspapers to censor bad news about state-owned mines. Column (2) controls for provincial GDP, growth, and GDP from mining as a share of GDP. Column (3) additionally controls for the interaction of these variables with the State-owned dummy variable. Alternatively, column (4) controls for the variables in column (2) and their interactions with the local dummy. Column (5) includes the union of controls from columns (2) and (3). Column (6) controls for province-year fixed effects to address the possibility that our results are confounded by region-specific spurious trends. Columns (7) and (8) control for the interactions of whether the accident takes place in the provincial capital with whether its a local accident or whether the mine is state owned. Column (9) controls for both interactions. These estimates address the possibility that political sensitivity is higher in the provincial capital, where the regional representative of the central government is located. Similarly, columns (10) and (11) control for the interactions of the distance of the accident from the provincial capital interacted with whether it is a local

[10]The results for independent newspapers are similarly robust and available upon request.

accident or whether the mine is state-owned. Column (12) includes both interactions. The magnitudes of the coefficients change slightly across specifications. But they all present a similar picture as the baselines, shown in column (1) for comparison purposes.

4.5.3 Spurious Trends

Another concern is that our estimates are driven by spurious trends in reporting patterns across the different types of newspaper. To address this, we examine a placebo outcome – coverage during the seven days prior to the accident. Table 7 shows that there is no effect – the coefficients are statistically zero.

4.5.4 Alternative Clustering

The baseline specification clusters the standard errors at the accident level to address the possibility that the error terms are highly correlated across articles of the same accident. One can make a case that it is better to cluster at the newspaper level, or to do two-way clustering at the accident and newspaper level. Alternatively, one may believe that clustering at any level is too conservative and produces false negative results. The latter is particularly relevant for considering our finding no interaction effect for independent newspapers. To address these concerns, we alternatively cluster at the newspaper level, two-way cluster at the newspaper and accident level, or estimate Newey-West standard errors. The estimates are shown in Table 8. Our results change little.

4.6 Heterogeneous Effects by News Content

We delve further into the mechanisms of our preferred interpretation by examining newspaper coverage of different content. The conventional wisdom is that the difference in coverage resulting from the relatively independent management of some news outlets should not manifest for extremely sensitive content. For example, articles about the central government or its highest leaders are strictly controlled for all news outlets, and direct criticism is taboo. This is because all newspapers are ultimately controlled by the central government and editors and

news outlets seen as being in direct violation are promptly dismissed or re-organized.[11] At the same time, there is unlikely to be a difference for uncontroversial topics because no outlet is incentivized to distort coverage. The difference should emerge for sensitive topics that are not taboo.

For our context, we are able to identify articles with highly sensitive, moderately sensitive and relatively insensitive content. For the reasons we just discussed, highly sensitive includes articles that contain the phrases "Central Government", "Beijing", "Party" or names of National or Provincial Leaders.[12] Moderately sensitives include articles that contain "family". After manually reading a large number of such articles, we determine that most of these articles are about the emotional and financial sufferings of the family members of victims. As such, they attract significant attention and can be very provocative. Some are believed to have led to local protests.[13] For relatively insensitive news, we examine articles that include "compensation". These articles are mostly factual reports of the compensation received by miners, mines and family members. While compensation is very important, it is usually not considered to be sensitive because it is rather formulaic for the large mining accidents that we study.[14]

Table 9 presents the results for these three types of articles. We find that Party and

[11]For example, in November, 2009, *Southern Weekly*'s chief editor Xi Xiang was demoted after pursuing and attempting to publish an interview with U.S. President Barack Obama, where the latter criticized the Chinese Government. The article was censored by he Central Propaganda Department (and others) and not published.

[12]For an example, consider the following. *Beijing Evening*'s report on Sujiawan Coal Mine on February 15, 2005 "Leaders of Party Central Committee and the State Council attached great importance to the accident. Jintao Hu, Jiabao Wen, Ju Huang and leaders made important instructions, requiring local and relevant departments to take all measures immediately to rescue the trapped underground workers... State Council working group headed by Jianmin Hua was sent to the scene to supervise and guide the rescue work. Jianmin Hua rushed to the scene of the accident in the morning on the 15th. Till the time of publication, there had been 336 workers safely lifted out of the well, 203 miners dead, 22 miners injured, and 13 miners still trapped underground. At present, the rescue work is still in intensive progress. . . .".

[13]For example of articles about victims, consider the following. *Nanguo Morning Post*' s report on Dongfeng Coal Mine accident on November 29, 2005 "The large conference room was crowded with 500 to 600 relatives of miners, sending messages, making phone calls and constantly inquiring the conditions of their relatives. Cries kept coming from all the corners of the conference room. Ping Wang, wife of miner Wenchang Ding, said that she wanted to but did not dare to hear her husband's name from the staff members because the announcement of a miner who comes out of the well represents two fates - survival or death. . . . Xianshu He, sister of the 50-year-old miner Zhonghua He, told reporters that her sister-in-law has been ill in bed and her brother is now underground in the well. Her sister-in-law has been lying in bed and crying for the past two days....".

[14]For an example, consider the following. *Beijing Morning Post*'s report on Dongfeng Coal Mine accident on November 30, 2005 "Reporters learned from Heilongjiang Qitaihe Coal Mine Accident Rescue Headquarters that the families of miners killed in the accident will receive compensation ranging from 200,000 yuan to 220,000 yuan. Body identification work started yesterday...."

independent newspapers behave similarly for highly sensitive articles. Both reduce coverage for accidents at local state-owned mines relative to local privately owned mines. For moderately sensitive articles, Party and independent newspapers behave differently in the same way as our main results. For relatively insensitive news, we see that Party and independent newspapers both provide similar coverage for local accidents regardless of ownership type. These results are consistent with our interpretation that the main results are driven by Party newspapers censoring bad news of state-owned mines.

5 Conclusion

All governments use mass media to promote their interests and views to some extent. Autocratic governments, which often directly own or manage the media, typically have more leeway. A important tool is censorship, which since time immemorial, has comprised of two strategies: increasing information that are in the interests of the government, and reducing information that are against the interests of the government. In this paper, we document that the Chinese government implements both in the context of politically sensitive coal mine accidents.

These results demonstrate that a sophisticated government can censor by simultaneously distracting the public and reducing unfavorable information. More generally, they shed light on the detailed processes and methods of censorship by modern autocracies, which is somewhat of a black box relative to the large amount of evidence we have for how the media functions in democracies.

By the time of our study, radio and television access is nearly ubiquitous across populated areas of China, and internet and social media, which are relatively less regulated, are becoming increasingly prevalent. The latter naturally raises the question of how access to relatively less controlled outlets would affect the information that the public can access, and news content in outlets that are directly controlled by the government (newspapers, radio, television). On the one hand, a naive view is that this could increase exposure to news that is not aligned with government views. On the other hand, the government can respond by flooding the internet and social media with their preferred content. It is interesting to note that most print

newspapers have their own websites and social media accounts (Weibo and WeChat, analogous platforms to Twitter and Facebook), which post e-versions of print reports. These reports, as well as the original print version, are often cited by other internet websites and social media. In an online search for news about the coal mine accidents in our study, we found that all the major internet news providers (e.g., NetEase News, Sohu News) cited Party newspapers as their original source of information. Thus, an interesting an important avenue for future research is to understand how internet access affects news content and the government's censorship strategy.

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Table 1: Descriptive Statistics

	(1) Obs	(2) Mean	(3) Std Dev	(4) Obs	(5) Mean	(6) Std Dev
	A. Newspapers					
	Party			Independent		
Circulation	6,775	18.22	13.85	10,325	20.44	15.81
Age	6,775	46.35	21.32	10,130	17.53	14.89
Revenues	184	8472	16842	473	19057	28319
# per Province	6,775	29.96	14.66	10,325	29.99	13.64
Urban	6,775	0.982	0.135	10,325	0.978	0.146
# Articles						
State Owned Mine	1,084	2.382	4.453	1,652	2.693	5.235
Privately Owned Mine	5,691	0.646	2.043	8,673	0.714	1.695
Total Word Count						
State Owned Mine	1,084	1,456	3,334	1,652	2,015	4,807
Privately Owned Mine	5,691	297	1,156	8,673	350	1,047
# Articles						
Local	257	2.444	7.307	354	1.559	4.069
Not Local	6,518	0.864	2.274	9,971	1.012	2.643
Total Word Count						
Local	257	1,383	4,511	354	877	3,006
Not Local	6,518	447	1,539	9,971	607	2,201
	B. Coal Mines					
	State Owned			Privately Owned		
Size (Employment)	1,368	45,556	42,780	1,368	744	444
Accident Size (# Deaths)	2,736	64	30.96	14,364	46.90	33.25
Revenues	2,052	853,848	1,149,471	8,892	34,869	93,897
Age	2,736	10.25	1.921	10,260	8.467	6.120
Distance to Prov Capital	2,624	69,092	103,938	15,994	87,637	128,225
Province GDP	2,736	18,566	12,260	14,364	19,434	14,978
Province GDP Growth	2,736	0.137	0.054	14,364	0.155	0.055
Mining % of Prov GDP	2,736	0.012	0.022	14,829	0.012	0.022

Notes: Observations are at the accident-newspaper level.

Table 2: Political Turnover and Mining Accidents

	Dependent Variable: Political Turnover Dummy Variable					
	LPM			Logit		
	(1)	(2)	(3)	(4)	(5)	(6)
Sample:	All	Pre-2007	Post-2007	All	Pre-2007	Post-2007
	A. Deputy Governors (in charge of Production Safety)			B. Party Secretaries, Deputy Party Secretaries, Govenors		
Dep Var Mean	**0.669**	**0.562**	**0.731**	**0.552**	**0.604**	**0.522**
# of State Owned Accidents	-0.0287	0.0745	-0.114	0.0181	0.0431	0.123
	(0.0625)	(0.1230)	(0.1280)	(0.0679)	(0.1250)	(0.1330)
# of Non-State Owned Accidents	0.0597	-0.157	0.368**	0.0181	0.0431	0.123
	(0.1460)	(0.1440)	(0.1430)	(0.0679)	(0.1250)	(0.1330)
Constant	0.655***	0.546***	0.717***	0.519***	0.578***	0.479***
	(0.0073)	(0.0197)	(0.0081)	(0.0106)	(0.0231)	(0.0102)
Observations	589	217	372	589	217	372
	0.342	0.319	0.385	0.181	0.213	0.228

Notes: The sample comprises of an unbalanced panel of provinces 2000 to 2016. All regressions control for province FE and year FE. The standard errors are clustered at province level.

Table 3: News Coverage in Party and Independent Newspapers

	Dependent Var:			
	# Articles		# Total Words	
	(1)	(2)	(3)	(4)
	7 Days	14 Days	7 Days	14 Days
	A. Party Newspapers			
Dep Var Mean	**0.600**	**0.783**	**337.9**	**482.8**
Local Accident	1.170***	1.381***	1.799***	2.053***
	(0.233)	(0.242)	(0.289)	(0.287)
Local Accident x State-owned Mine	-0.681**	-0.856**	-0.978***	-1.231***
	(0.306)	(0.371)	(0.300)	(0.358)
Constant	-2.316***	-2.311***	2.952***	2.941***
	(0.168)	(0.140)	(0.196)	(0.155)
Observations	6,775	6,775	6,775	6,775
Local Accident+Local Accident x State-owned Mine	0.489	0.526	0.821	0.822
p-value	0.0352	0.0985	0.000367	0.00551
	B. Independent Newspapers			
Dep Var Mean	**0.660**	**0.837**	**447**	**616.5**
Local Accident	0.744***	0.830***	1.257***	1.313***
	(0.230)	(0.229)	(0.283)	(0.288)
Local Accident x State-owned Mine	-0.175	-0.459	-0.376	-0.685
	(0.423)	(0.585)	(0.489)	(0.663)
Constant	-4.271***	-3.875***	2.921***	3.068***
	(0.546)	(0.555)	(0.600)	(0.502)
Observations	10,325	10,325	10,325	10,325
Local Accident+Local Accident x State-owned Mine	0.569	0.371	0.882	0.628
p-value	0.119	0.499	0.0326	0.307
Party-Ind: Local Accident p-value	0.0236	0.0019	0.0316	0.0068
Party-Ind: Local Accident x State-owned Mine p-value	0.0905	0.244	0.1295	0.267

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present poisson regressions, which control for accident FE and newspaper FE. Standard errors are clustered at the accident level.

Table 4: News Coverage in Party and Independent Newspapers – Pre 2007

	Dependent Var: # of Articles			
	# Articles		# Total Words	
	(1)	(2)	(3)	(4)
Sample:	7 Days	14 Days	7 Days	14 Days
	A. Party Newspapers			
Dep Var Mean	**0.754**	**0.917**	**323.8**	**415.4**
Local Accident	0.855***	0.880***	1.336***	1.287***
	(0.131)	(0.113)	(0.00568)	(0.00474)
Local Accident x State-owned Mine	0.145	0.227	0.249***	0.303***
	(0.266)	(0.235)	(0.0113)	(0.00988)
Observations	2,090	2,090	2,090	2,090
	B. Independent Newspapers			
Dep Var Mean	**0.755**	**0.886**	**365.3**	**446.1**
Local Accident	0.822***	0.898***	0.755***	0.805***
	(0.108)	(0.0940)	(0.00481)	(0.00406)
Local Accident x State-owned Mine	0.160	0.185	0.408***	0.343***
	(0.188)	(0.172)	(0.00830)	(0.00752)
Observations	4,125	4,180	4,125	4,180

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present poisson regressions, which control for accident FE and newspaper FE. Standard errors are clustered at the accident level.

Table 5: Robustness to Outliers

	Dependent Var: # of Articles in 7 Days					
Exclude Largest Accidents One at a Time (# of Deaths)	(1) Full Sample	(2) Largest	(3) 2nd Largest	(4) 3rd Largest	(5) 4th Largest	(6) 5th Largest
Dep Var Mean	**0.600**	**0.619**	**0.541**	**0.599**	**0.591**	**0.596**
Local Accident	1.170***	1.213***	1.197***	1.153***	1.173***	1.109***
	(0.233)	(0.230)	(0.229)	(0.238)	(0.232)	(0.250)
Local Accident x State-owned Mine	-0.681**	-0.729**	-1.730*	-0.681**	-0.595**	-0.611*
	(0.306)	(0.303)	(1.019)	(0.296)	(0.298)	(0.321)
Constant	-2.316***	-2.308***	-2.321***	-2.271***	-2.284***	-2.292***
	(0.168)	(0.168)	(0.194)	(0.163)	(0.170)	(0.172)
Observations	6,775	6,504	6,504	6,504	6,504	6,504

Notes: The sample comprises of news articles during 2007-2016. Additional restrictions are stated in the column headings. Observations are at the accident-newspaper level. All columns present Poisson regressions, which control for accident FE and newspaper FE. Standard errors are clustered at the accident level.

Table 6: Robustness to Additional Controls

	Dependent Var: # of Articles in 7 Days											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Baseline	Province GDP, GDP Growth, Mining share of Province GDP	State Owned x: Province GDP, GDP Growth, Mining share of Province GDP	Local x: Province GDP, GDP Growth, Mining share of Province GDP	State Owned x: Province GDP, GDP Growth, Mining share of Province GDP; AND Local x: Province GDP, GDP Growth, Mining share of Province GDP	Province FE x Year FE	Local x Provincial Capital Dummy	State Owned x Provincial Capital Dummy	Local x Provincial Capital Dummy; AND State Owned x Provincial Capital Dummy	Local x Distance of Newspaper from Provincial Capital	State Owned x Distance of Newspaper from Provincial Capital	Local x Distance from Provincial Capital; AND State Owned x Distance from Provincial Capital
	A. Party Newspapers											
Dep Var Mean	**0.600**	**0.600**	**0.600**	**0.600**	**0.600**	**0.600**	**0.600**	**0.600**	**0.600**	**0.626**	**0.626**	**0.626**
Local Accident	1.170***	1.167***	3.961***	1.167***	3.962***	1.170***	1.034***	1.170***	1.034***	0.819***	1.123***	0.819***
	(0.233)	(0.233)	(0.858)	(0.233)	(0.866)	(0.265)	(0.0963)	(0.0763)	(0.0963)	(0.0992)	(0.0799)	(0.0992)
Local Accident x State-owned Mine	-0.681**	-0.671**	-2.277***	-0.671**	-2.250***	-0.949***	-0.664***	-0.681***	-0.664***	-0.626***	-0.624***	-0.626***
	(0.306)	(0.302)	(0.526)	(0.302)	(0.522)	(0.285)	(0.199)	(0.199)	(0.199)	(0.200)	(0.200)	(0.200)
Constant	-2.316***	-2.102***	-2.279***	-2.102***	-2.125***	-1.226***	-2.315***	-2.316***	-2.315***	-2.257***	-2.274***	-2.257***
	(0.168)	(0.316)	(0.164)	(0.316)	(0.302)	(0.367)	(0.334)	(0.334)	(0.334)	(0.334)	(0.334)	(0.334)
Observations	6,775	6,775	6,775	6,775	6,775	6,775	6,775	6,775	6,775	6,275	6,275	6,275
	B. Independent Newspapers											
Dep Var Mean	**0.767**	**0.660**	**0.660**	**0.660**	**0.660**	**0.660**	**0.660**	**0.660**	**0.660**	**0.666**	**0.666**	**0.666**
Local Accident	0.744***	0.715***	2.089***	0.744***	2.089***	0.716**	0.534***	0.744***	0.534***	0.825***	0.724***	0.825***
	(0.230)	(0.236)	(0.802)	(0.230)	(0.802)	(0.278)	(0.110)	(0.0760)	(0.110)	(0.0884)	(0.0767)	(0.0884)
Local Accident x State-owned Mine	-0.175	-0.0364	-0.126	-0.175	-0.126	-0.0746	-0.234	-0.175	-0.234	-0.199	-0.157	-0.199
	(0.423)	(0.392)	(0.577)	(0.423)	(0.577)	(0.382)	(0.175)	(0.174)	(0.175)	(0.176)	(0.175)	(0.176)
Constant	-4.271***	-3.955***	-4.275***	-4.271***	-4.275***	-4.049***	-4.268***	-4.271***	-4.268***	-4.261***	-4.260***	-4.261***
	(0.546)	(0.533)	(0.545)	(0.546)	(0.545)	(0.515)	(0.540)	(0.540)	(0.540)	(0.540)	(0.540)	(0.540)
Observations	10,325	10,325	10,325	10,325	10,325	10,325	10,325	10,325	10,325	10,125	10,125	10,125

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present Poisson regressions, which control for accident FE and newspaper FE. Additional controls are stated in the column headings. Standard errors are clustered at the accident level.

Table 7: Placebo: Newspaper Coverage 7 Days Before the Accident

	Dependent Var: # of Articles during the 7 Days after, or before the accident			
	Party Newspapers		Independent Newspapers	
	(1)	(2)	(3)	(4)
	Baseline, 7 days after	7 days before	Baseline, 7 days after	7 days before
Dep Var Mean	**0.600**	**0.152**	**0.660**	**0.201**
Local Accident	1.170***	-0.385	0.744***	-0.196
	(0.0763)	(0.215)	(0.0760)	(0.160)
Local Accident x State-owned Mine	-0.681***	-23.45	-0.175	-24.28
	(0.199)	(111,124)	(0.174)	(127,382)
Constant	-2.316***	-4.160***	-4.271***	-3.257***
	(0.334)	(0.706)	(0.540)	(0.512)
Observations	6,775	6,775	10,325	10,325

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present Poisson regressions, which control for accident FE and newspaper FE. Standard errors are clustered at the accident level.

Table 8: Robustness to Alternative Clustering

	Dependent Variable: # of Articles in 7 Days			
	(1)	(2)	(3)	(4)
	Baseline, Cluster at Accident	Cluster at Newspaper	Robust	Cluster at Accident and Newspaper
	A. Party Newspapers			
Dep Var Mean	**0.600**	**0.600**	**0.600**	**0.600**
Local Accident	1.170***	1.170***	1.170***	1.170***
	(0.233)	(0.169)	(0.149)	(0.272)
Local Accident x State-owned Mine	-0.681**	-0.681**	-0.681***	-0.681*
	(0.306)	(0.268)	(0.251)	(0.361)
Constant	-2.316***	-2.316***	-2.316***	-2.316***
	(0.168)	(0.313)	(0.351)	(0.128)
Observations	6,775	6,775	6,775	6,775
	B. Independent Newspapers			
Dep Var Mean	**0.660**	**0.660**	**0.660**	**0.660**
Local Accident	0.744***	0.744***	0.744***	0.744***
	(0.230)	(0.149)	(0.136)	(0.284)
Local Accident x State-owned Mine	-0.175	-0.175	-0.175	-0.175
	(0.423)	(0.277)	(0.250)	(0.532)
Constant	-4.271***	-4.271***	-4.271***	-4.271***
	(0.546)	(0.218)	(0.578)	(0.196)
Observations	10,325	10,325	10,325	10,325

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present Poisson regressions, which control for accident FE and newspaper FE. Standard error estimation is stated in the column headings.

Table 9: Heterogeneous Effects by Article Content

	Dependent Variable: # Articles within 7 Days					
	Extremely sensitive articles containing "Central Government", "Beijing", "Party" or names of National or Provincial Leaders		Sensitive articles containing "Family"		Less sensitive articles containing "Compensation"	
	Party	Independent	Party	Independent	Party	Independent
	(1)	(2)	(3)	(4)	(5)	(6)
Dep Var Mean	**0.213**	**0.273**	**0.110**	**0.158**	**0.0372**	**0.0549**
Local	1.510***	0.968***	1.651***	1.182***	1.831***	1.221***
	(0.125)	(0.114)	(0.165)	(0.136)	(0.290)	(0.243)
Local x State-owned Mine	-0.899***	-0.594*	-0.988***	0.0446	-0.749	0.0718
	(0.291)	(0.310)	(0.368)	(0.305)	(0.772)	(0.568)
Constant	-4.452***	-4.563***	-5.631***	-6.735***	-41.57	-27.00
	(0.781)	(0.658)	(1.155)	(1.225)	(11,237)	(30,254)
Observations	6,775	10,325	6,775	10,325	6,775	10,325

Notes: The sample comprises of news articles during 2007-2016. Observations are at the accident-newspaper level. All columns present Poisson regressions, which control for accident FE and newspaper FE. Standard errors are clustered at the accident level.