

THE ART OF SELF-CRITICISM: HOW AUTOCRATS PROPAGATE THEIR OWN POLITICAL SCANDALS

Charles Chang

Assistant Professor, Division of Social Sciences, Duke Kunshan University

Visiting Assistant Professor, Center on Religion and the Global East, Purdue University

charles.c.chang@dukekunshan.edu.cn

Abstract

In liberal democracies, journalists can engage the government by unearthing its scandals. Authoritarian regimes, where negative news about the government is heavily guarded, lack this process. Yet, rulers in China do propagate political scandals about themselves. Why? I theorize that they do so to engage citizens with propaganda and strategically control their risk with Information and Communications Technologies (ICT). I test my theory by analyzing a novel dataset of news stories and reader comments posted by Chinese citizens over the course of China's anticorruption campaign between 2012 and 2015. My findings show that users' comments about stories of corrupt national officials were unexpectedly lower than those about lower-ranking officials. Such irregularity suggests that either algorithms or censorship suppressed comments on national-level corruption, which indicates the ruler's uneasiness towards propagating scandals that may implicate themselves. I also find that China's rulers reduce their risks by outsourcing reports of their scandals to media outlets less closely linked to the state. My findings show that advancements in ICT and increasing competition among new media firms can help authoritarian rulers finetune their propaganda by promoting self-damaging political messages.

Keywords

Big data, propaganda, political scandal, social media, China

Acknowledgement

I thank the University of Wisconsin–Madison and Duke Kunshan University for supporting our research. I thank Hanyang, Ling, Qingwei, Sarah, Tami, and Wenchang for their ever-awesome research assistance and I also thank Melanie Manion and Michael Masterson for their helpful suggestions. ChatGPT was used for editing and Ms. Shannon Nagy did proofreading for the draft. Earlier versions of this paper were presented at workshops at Georgetown University, Shanghai Jiaotong University, University of Wisconsin–Madison, Chinese University of Hong Kong, and the Hertie School. I thank workshop participants for their helpful comments.

“Conscientious practice of self-criticism is still another hallmark distinguishing our Party from all other political parties. As we say, dust will accumulate if a room is not cleaned regularly, our faces will get dirty if they are not washed regularly.”

Mao Zedong, “On Coalition Government,” 1945

“Criticism and self-criticism are powerful weapons to remove political dust and microbes within the party.”

Xi Jinping, “On the Party’s Mass Education,” 2014

Introduction

Although autocrats mostly spread positive news in their propaganda, they also sometimes publish negative political news, such as corruption scandals. Publicity about official misconduct and criminal corruption in their ranks carries considerable risk for autocrats but disclosing misdeeds presumably also has political advantages. In Mikhael Gorbachev’s Soviet Union, the state candidly circulated information about rulers’ mistakes to swing public opinion (Gibbs 1999). In China, the ruling communist party (CCP) has used self-criticism as a means of propaganda and education for decades, intended to legitimize its rule and mobilize the mass public (Dittmer 1973).

Autocrats often use propaganda to their advantage: to build popular support for the regime (Geddes and Zaller 1989), to channel unfavorable topics to favorable political agendas (Rozenas and Stukal 2019; Aytaç 2021), and to encourage violence against minority populations (Yanagizawa-Drott 2014). Because authoritarian states control major media outlets, they can exaggerate achievements, spin policy failures, and ignore negative news. Existing literature shows that propaganda can be useful even when it is highly exaggerated because the intensive

dissemination of political messages still reminds citizens of the autocrats' ability to exercise control over information and to intimidate citizens (Gehlbach and Sonin 2014; Peisakhin and Roze, 2018; Huang 2015, 2018; Little 2017).

In this article, I unravel a different mechanism autocrats use for strategic publicity in the Information and Communications Technologies (ICT) era, namely promoting political scandals about themselves. I argue that political scandal becomes a special type of propaganda with the mass adoption of smartphones and the commercialization of social media diversifies information providers and intensifies competition. For rulers, propagating political scandals has two benefits: (1) it can engage with a sizable audience, which potentially lowers the cost of information dissemination; and (2) it can also distance the rulers from political risks and potential blame if the message angers the public.

I test my theory with an original large-scale database that traces news coverage and citizen responses on Sina News, a major news assembly platform in China. I focus on China's massive ongoing anticorruption campaign, which is supreme leader Xi Jinping's signature political achievement after ascending to power in late 2012. I first collected 203,492 domestic political news stories on Sina News, beginning more than two years before Xi took power to June 2015, when the highest-ranking official ever purged – Zhou Yongkang – was sentenced to life imprisonment. I also collected 5.6 million comments associated with these news stories and verified the authenticity of the commentators using a second dataset composed of 3.2 million geolocated social media user posts. I refer to the 147,847 verified comments as “individual user comments.”

To preview the results, I find that the number of individual user comments associated with news stories increased significantly over the course of the anticorruption campaign.

Interestingly, the volume of individual user comments did not notably increase when the implicated official held a ministerial or national level rank. Further, when the rank of the corrupt official is at the local level, there was a significant decrease in individual user comments. However, the number of individual user comments increased with: (1) the reporting of *lower-level corrupt officials* in state media news stories; and (2) *greater independence of the media outlet* from the state. My results remain robust even when controlling for confounders such as the mention of party leaders in the news or the presence of known paid commentators.

This paper contributes to the scholarly understanding of propaganda in authoritarian regimes. Conventionally, propaganda is cheap to make but also easily dismissed (Crawford and Sobel 1982; Huang 2015, 2018). I show that rulers can seek civic engagement at the cost of political risks. By producing and disseminating a special type of propaganda, namely scandals about themselves, rulers can engage a larger size of citizens and decrease their cost of information distribution. This indicates a recalibration in rulers' propaganda tactics, as they are prepared to engage with citizens when they control both the timing of propaganda and the tools of censorship.

My findings also contribute to the literature on the tolerance of scandals and the permissiveness of political discourse in authoritarian regimes. Conventionally, disclosing, let alone amplification, of scandalous information regarding those in power can breed citizen distrust and may lead to mass protests. Nevertheless, in the ICT era, rulers appear capable of tolerating a significant amount of criticism, provided it does not spark collective action (Stockmann and Gallagher 2011; Gehlbach and Sonin 2014; King, Pan, Roberts 2013, 2014). However, permitting criticism is not the same as spreading it. I show that authoritarian rulers not only *endure* scandal and criticism but may actively *encourage* them under certain circumstances.

Interestingly, my findings demonstrate that political scandals, even those involving rulers themselves, can sometimes be repurposed to serve their propagandist objectives. Spreading scandals also allows rulers to use citizens as their propagators in the ICT era. As ever-growing social media journalists circulate news and scandals alike, rulers can rely on some of them to reconstruct attention-grabbing narratives of their scandals and potentially captivate a growing number of social media users on smartphones. This approach normalizes negative political discourse in news reporting which may, in turn, dilute criticism against rulers.

However, the rulers' permissiveness also varies according to the type of scandal. Their tolerance of scandals becomes more limited when the scandal involves an official of higher rank. While this propensity to exploit scandal as a tool of propaganda still holds to a certain extent at the ministerial or provincial level, it vanishes when the implicated individual holds a national-level position. In other words, a ruler's willingness to propagate political scandals declines significantly when there is a tangible risk of their own entanglement in these controversies.

The paper is organized as follows. Section 2 outlines my theory. In Section 3, I contextualize my study by presenting background information on Sina News and the anticorruption campaign. Section 4 describes my data collection process, coding methods, and empirical strategy. Section 5 presents the results of my statistical tests. Section 6 addresses limitations and areas for future work. Finally, in Section 7, I discuss the implications of my findings and conclude the paper.

2. Theory

2.1. Publicizing Political Scandals in Authoritarian States

In authoritarian states, political propaganda conventionally exaggerates a ruler's

achievements. Given that authoritarian rulers control the principal conduits of information dissemination, they possess the capacity to distribute propaganda at any time for political purposes. Consequently, propaganda operates as a form of “cheap talk” where rulers lie to their citizens at practically no cost, and citizens can discern and dismiss such lies (Crawford and Sobel 1982; Austen-Smith and Banks 2002). By default, the exaggeration of a ruler’s achievements do little to change citizen beliefs other than signaling the power that rulers hold (Huang 2015).

By contrast, when rulers publicize political scandals about themselves, it inherently carries political risk. Even when the narrative is meticulously crafted in the rulers’ favor, it can still inadvertently channel public grievances toward discussions of official misdeeds, thereby aggravating citizen suspicions regarding the scope and magnitude of political problems at the apex of power. However, this public exposition of scandals also entails potential advantages as it can serve as an effective instrument for civic engagement through the propagation of information. Engaging citizens with propaganda has multiple benefits. First, it signals openness and candor, which holds the potential to pique the interest of those who have previously remained indifferent to propaganda. Second, owning up to and publicizing political scandals can also increase the perception of information transparency, which could increase the credibility of and demand for other communications regarding policies and politics.

Moreover, rulers, who hold sway over both the channels of information dissemination and the weaponry of information control, have ample means to balance the risks of propagating scandals with the reach of civic engagement. For instance, they have the ability to frame the individual involved in the scandal as distant from the core of state power, disassociating themselves from blame. They can also delegate the distribution of scandal news to information providers who are less affiliated with the state. These information providers tend to have more

incentives to sensationalize news in pursuit of advertising revenues. Such an approach was not possible in the print and television era due to the limited number of media outlets, but the widespread use of new Information and Communication Technologies, such as smartphones and social media, has provided rulers with new opportunities.

The advent of ICTs led to a large increase in media outlets and citizen journalists. In the new information environment, not only do traditional state media outlets endeavor to propagate political news, but commercial outlets, celebrities, social media influencers, and ordinary citizens also compete for the attention of social media users (Zhuravskaya et al. 2021). This dynamic environment heightens the competitiveness of scandal reporting as different entities manipulate narratives to captivate their respective audiences. This shift has several implications. Firstly, the information shared by ordinary citizens provides an alternative, non-official viewpoint on news events, which are usually based solely on official accounts (Lawrence 2022). This alternative narrative can be particularly appealing to citizens in the reporting of high-profile scandals, as it often adds entertaining plot twists that official accounts lack. Secondly, these new journalists can exploit the negativity biases of their audience to escalate political scandals and attract more followers (Rozin and Royzman 2001). Thirdly, spontaneous reporting on social media expands coverage of newsworthy events, as even minor incidents or social disturbances can quickly go viral (Livingston and Bennett 2003). Finally, the increased number of citizen reports also offers rulers a new channel to monitor local officials and political grievances (Lorentzen 2014; Qin, Stromberg, and Wu 2017).

All of these benefits enable rulers to use scandals to engage citizens. Research shows that negative political messages that are attention grabbing and sensational tend to be cheap to produce but attract a large audience (Ansolabehere and Iyengar 1995; Fowler et al. 2021). Also,

given that readers are more likely to pay attention to negative news about society and politics (Aday 2010; Soroka, Fournier, and Nir 2019; van der Meer and Hameleers 2022), publicizing political scandals can fill an information gap in authoritarian states where negative coverage of politics is often lacking.

Given these developments, it is possible for autocratic rulers to utilize the dissemination of political scandals as a mechanism to increase their reach and the size of their audience. The rulers understand that a serious admission of wrongdoing might alert citizens of institutional failure. Instead, they can use sensational narratives targeting lower-ranking officials and still capture the benefit of a pluralistic media environment and citizen negativity bias. The large pool of media newcomers also means rulers can scapegoat or punish single information providers at a minimal cost. In a nutshell, this approach allows the ruler to engage citizens at a low cost of information dissemination and low risk of political repercussions.

2.2. Publicizing Political Scandals in China

I focus on China, a major authoritarian regime where the CCP presides over a formidable media and information management system (Brady 2009a, 2009b). However, the CCP also recognizes the important function of publicizing its self-criticism to the mass public through propaganda (Dittmer 1973). After the economic reform in the 1980s, the Chinese government encouraged state-sponsored media to self-finance through advertising revenues, which allowed commercial media to become a major player in news reporting (Stockmann 2010, 2013). This change allowed commercial media to report political scandals, but these reports must still follow the CCP narrative at times of heightened political sensitivity (Stockmann 2010, 2013).

The rise of the internet, social media, and smartphones has largely transformed the Chinese media landscape. Compared to traditional media, which is tightly controlled by the state,

it allows citizens to discuss topics of interest (e.g., entertainment and sports) and to interact with other citizens (e.g., commenting on others' posts). In 2009, Sina, a major internet firm in China, first launched Weibo (literally, "micro-blog" in Chinese), a Twitter-like social media site, and integrated Sina News with it to capture news audiences consisting of internet users. This integration allows traditional media outlets to act as prominent opinion leaders on social media, and in the meantime enables a large number of bloggers and citizen journalists to also become news disseminators (Nip and Fu 2016).

More to the point theorized here, this integration also provides the CCP with multi-layered and decentralized controls to engage citizens and swing public opinion, not by manipulating news stories but by manipulating responses to the stories. Already, the CCP has developed and deployed various information control techniques, such as keyword filtering (Ng 2013), censors (Fu, Chan, and Chau 2013; King, Pan, and Roberts 2013; Tai and Fu 2020; Gallagher and Miller 2021), paid commentators (King, Pan, and Roberts 2017), and bots (Jin and Teng 2017). This additional capacity of information control further allows the CCP to filter comments that it deems unfavorable, enabling it to neutralize some incendiary comments.

As the CCP disseminates information regarding its scandals, it can optimize the number of engaged citizens based on the risk the scandal poses. Existing literature posits that the CCP may permit negative news and criticism on media and social media, especially when these criticisms are directed at local governance (Stockmann and Gallagher 2011; King, Pan, Roberts 2013, 2014, 2017; Roberts 2018). The strategy of propagating scandals involving low-level officials allows the CCP to directly engage with a larger fraction of the citizenry without resorting to overt suppression and control. Nevertheless, when a scandal implicates entities closer to the CCP's core, it becomes imperative for the party to activate their information control

measures, as a “safety valve” to disengage the population (Hassid 2012).

2.3. Hypotheses

I test my theory by using Sina’s circulation of CCP anticorruption stories on its news platform. After ascending to power in 2012, Xi quickly pledged to investigate and punish both “flies” and “tigers” (i.e., local and state officials). Indeed, this campaign has lasted longer and implicated greater numbers of officials, including ranking officials, than any previous campaign. The campaign not only sheds light on the extent and severity of corruption within the CCP, but also offers the party a unique opportunity to showcase its efforts to address such misconduct through a prolonged propaganda campaign.¹

High level officials’ admission of corruption and wrongdoing can still be risky. As theorized above, the distribution of news is tactical: it seeks to engage and possibly persuade citizens to believe that the CCP takes responsibility for the misbehavior of its officials. However, the intention is not to lead citizens to believe that the party is fundamentally corrupt. To manage the potential risk, the CCP can differentiate news narratives according to the official’s rank. The risk escalates with the rank of the corrupt official, as this connects the corruption directly to other high-level CCP leaders, thereby threatening the party’s rule. This yields my first hypothesis.

H1. The CCP publicizes news reporting about lower-ranking officials but not on higher-ranking officials.

Secondly, the CCP can also downgrade its risks by selling their scandals indirectly, namely outsourcing reporting on corruption to information providers that are less closely

¹ Xi repeatedly emphasized that the CCP’s “ideological construction,” which calls for indoctrination and propaganda, plays a crucial role in the ongoing anticorruption campaign (<http://fanfu.people.com.cn/n1/2018/0102/c64371-29740872.html>, accessed on July 27, 2023).

affiliated with the state. In China, because economic reforms commercialized many media outlets and they thus receive few state subsidies, they often depend on advertising revenue, which they generate by sensationalizing news reporting to attract readership (Stockmann 2013). As social media brought more outlets, celebrities, and citizens to write stories, the CCP has gained more choices from which to select a propaganda narrative. It can permit information providers – state owned, partially commercialized, or privately funded – to compete on scandal reporting and then piggyback on those whose perspective is most engaging to citizens. Another benefit of this approach is that when the reporting of scandals backfires, the CCP can scapegoat the information providers for mis-reporting the news. This yields my second hypothesis.

H2. The less state subsidies a media outlet receives, the more likely the CCP will permit it to report on corruption.

3. Xi Jinping's Anticorruption Campaign on Sina News

3.1. News Coverage on the Anticorruption Campaign

In China and other non-democracies, which lack popular elections to legitimize leadership transitions, an anticorruption campaign often serves as a way for new incumbents to establish their legitimacy (Fu 2015; Wedeman 2017). Since its inception, Xi has used the anticorruption campaign to justify the party's accountability to the people, despite its resemblance of political infighting. However, to convince the public of the campaign's success, the regime must know what ordinary citizens think and what they expect from it. Such knowledge is not easy to come by in the absence of democratic elections. Moreover, to effectively communicate the campaign's message and address citizens' interests, the regime must be able to craft compelling and convincing anti-corruption stories. Obviously, if citizens believe

that the campaign targets only low-ranking officials, they will conclude it is only window dressing. On the other hand, targeting the powerful, as Xi's campaign has done, runs the risk of citizens concluding that all senior party leaders are corrupt.

3.2. Sina News and Its Social Media Audience

Sina is a leading Chinese media and social media company, incorporated in 1999 and listed on NASDAQ since 2000. Its success, as indicated by its growing advertising revenue, is based on expanding its reader base. Sina measures its daily performance by user engagement. Users interact with the platform by clicking, commenting, and reposting news stories. Every day, Sina publishes hundreds of news stories derived from a variety of sources, including traditional newspapers, news magazines, government websites, smaller news websites, independent columnists, bloggers, and social media influencers. The stories are subsequently edited by Sina and placed on its website with a layout that has the look of a daily newspaper: important news stories are given top billing, exciting stories illustrated with photographs appear near the top of the page, and suggestive advertisements are everywhere. All stories – important, mundane, and trivial – are itemized on the page as abbreviated headlines, and readers can access the full article by clicking on the associated headline or image. Over the course of the anticorruption campaign, Sina published many articles related to corruption and corrupt officials. Some articles were published concurrently with the government agency websites and contained identical content, which suggests that Sina was following the party's directives. Other articles were compiled from a range of external sources, including nationalistic tableaus and liberal-leaning newspapers.

To attract a bigger audience, Sina News integrates its massive social media presence (Sina Weibo users) into its business, encouraging social media users to spend more time on the Sina News site. Weibo users can log into Sina News, share stories within their apps, or make

comments using their Weibo accounts.² A prominent icon of Sina Weibo appears on Sina News to encourage users to visit its website. Additionally, newly registered Weibo users are automatically recommended to follow the Sina News account, which regularly posts links to new stories on Sina News. Each news story also has a Bulletin Board System (BBS) forum where users, whether anonymous or using a Weibo nickname, can comment on the story.

The presentation of news and its associated comments reflects the constraints embedded in Chinese politics. Executives at Sina, who aim to increase user engagement, must also be mindful of correctly interpreting political nuances, as they bear ultimate responsibility for the content. Among commercial media companies, Sina counts as a very compliant partner of the Chinese state (Cairns, 2016), as it adheres to state censorship and paid commenting (King, Pan, and Roberts 2013, 2017). However, a company's success also depends on the number of independent genuine users, not bots or paid commentators. Overbearing information control can discourage genuine users and negatively impact Sina's advertising profits, so it has every incentive to resist the more blatant forms of state control (Gallagher and Miller 2021).

4. Data

4.1. *Sina News Stories and Associated Comments by Social Media Users*

To test my theory, I create an original dataset that includes Sina News stories and social media users who commented on stories from June 15, 2010 to June 15, 2015. During this time, more than 83% of China's internet users obtained their news online.³ I choose Sina News

² WeChat, Sina Weibo, and QQ are most prominent, but there are over 100 additional icons with quick links to facilitate sharing. These include Facebook and Twitter, both banned in China for years but available to Sina News readers globally.

³ See the 2015 report on internet development by the China Internet Network Information Center at <http://www.cnnic.com.cn/IDR/ReportDownloads/201601/P020160106496544403584.pdf>, accessed on July 30, 2023

because it specializes in aggregating and publishing news for online consumption and is one of the most popular websites in China.⁴ It offers comprehensive news coverage, including stories on the economy, society, and politics, often with captivating headlines. As depicted in Figure 1, during President Xi's anti-corruption campaign, news stories related to corruption charges appeared almost daily. Next to its news stories, Sina displays a substantial number of comments. Sina is motivated to foster user interaction through comments, but for politically sensitive stories, it also has the incentive to shut down or manipulate the comment section.

[Figure 1 about here]

These visible user comments are presumably an indication of public reaction to the news story, and they vary widely in number. I introduce three caveats to this. First, comments may be inflated by bots or paid commentators. I want to eliminate them from my analysis. Second, Sina must also be concerned about crossing the party line. This second concern may reduce or even completely remove the number of citizens' comments to avoid the possibility of publicizing inflammatory anti-regime rhetoric. For example, prominent headlines that feature Xi simply generate no comments. Third, similar to other social media sites, Sina has its own optimization algorithm to limit the visibility of news comments in exchange for website performance, such as webpage loading speed, reciprocal linking, and automated engagement-boosting (Petre, Duffy, and Hund 2019). To address these potential biases, my analysis focuses on investigating Chinese citizens' genuine comments about corruption across officials' different ranks. I expect that corruption at high levels will generate more interest among users than low-level corruption.

I scrape all 203,492 domestic news stories appearing from June 15, 2010 to June 15,

⁴ It is hard to know the exact number of Sina News users. In one internal report available online (<https://data.weibo.com/report/reportDetail?id=399>, accessed 8 January 2023), Sina claims its Sina News smartphone application has more than 72 million users.

2015. These five years comprise two periods of approximately equal length, separated by the ascension of Xi to CCP leadership and the beginning of his signature anticorruption campaign. For most Sina stories, not a single comment is visible, but a small proportion of stories apparently elicit hundreds or even thousands of visible comments.⁵ I collect all 5,678,491 visible comments associated with the 203,492 articles.

4.2. Identification of Genuine Comments by Ordinary Citizens

My analysis focuses on genuine comments posted in the Sina News comment section by individual users who are ordinary Chinese citizens, not fake comments generated by bots and paid commentators. To distinguish genuine from fake comments, I leverage the fact that Sina brings users of its massive Twitter-like social media platform – Weibo – directly into its news comment section: the same 10-digit unique ID associated with a user’s comments on Sina News and posts on Sina Weibo is visible in the metadata in the developer interface for both services.

Specifically, to authenticate the identity of users who post comments on Sina News stories, I turn to an original dataset of geotagged Sina Weibo posts that I collected between 2013 and 2015 in Beijing, Guangzhou, Chengdu, and Kunming. Chinese who live in the country’s capital city are generally highly politically attentive; Chinese who live in the more open and even politically progressive Guangdong, which adjoins Hong Kong’s New Territories, enjoy access to a range of information sources, including those in the Cantonese dialect that they share with Chinese in Hong Kong. In addition, I also include Chengdu and Kunming, for citizens in Chengdu and Kunming are less politically charged than those from Beijing (Pan and Xu 2016).

⁵ Based on my estimation, only 3.4% of 203,492 news stories in my database elicit genuine comments by ordinary citizens. While it is possible that some stories simply do not inspire comments, it is also likely that state manipulation plays a role in the majority of daily news stories about the CCP’s leadership not receiving comments.

To further validate that these geotagged Weibo users are indeed mainland Chinese residents, not frequent travelers or overseas Chinese, I compare their geolocations with their self-reported hometowns to validate their consistency.

Geotagged posts are dispatched by Sina Weibo users from mobile devices that enable GPS on their Weibo App.⁶ For several reasons, ordinary Chinese people are very likely to be the source of geotagged Sina Weibo posts. First, posts originating from mobile devices are less likely to be generated by bots, which typically use non-mobile devices such as desktops or servers that can more conveniently post batches of propaganda. Second, geotags expose paid commentators who use the same GPS coordinates for repeated posts, which undermines their purpose.⁷ I identify 3,244,019 Weibo users with unique Sina IDs. I then identify the comments on Sina News using these unique Sina IDs. Altogether, these Weibo users made 147,847 comments, about 2.6 percent of the 5,678,491 visible in my study period. I consider these 147,847 comments genuinely posted by ordinary Chinese citizens.⁸

4.3. Corrupt Officials and Sina News Stories about Corruption

From the Central Discipline Inspection Commission (CDIC) website, I collect information about the 112 officials above ministerial level who were purged for corruption between 2010 and 2015, including the position they held and the date their case was first

⁶ Geotagged posts come with precise geolocation data in the developers' interface. Although users can create geotagged posts from a non-mobile device, they will be designated with a gray tag on the Weibo App to indicate the absence of precise geo-coordinates.

⁷ I also note that although geotagged Weibo posts are estimated to comprise less than 10 percent of total posts, the users who post them do not significantly differ in their political views from other users (Chang and Manion, 2021).

⁸ Even though these genuine comments were made by ordinary citizens, their presentation by Sina may not necessarily reflect their genuine sentiment and certainly does not represent public opinion. Potential internal manipulations could distort their portrayal on the webpage, a factor that partly motivates my continued examination into the nature of the comments that are preserved.

announced. This includes 107 party, government, or military officials at the deputy ministerial or ministerial level before their removal.⁹ The other five ranked at the state level prior to their fall: Bo Xilai, Xu Caihou, Su Rong, Ling Jihua, and Zhou Yongkang.¹⁰ These individuals' offices were almost the highest attainable in the CCP. For example, prior to his retirement in 2012, Zhou was one of only nine members of the Communist Party Politburo Standing Committee. I list these 112 officials in Appendix A.

In addition, I code the 203,492 Sina News domestic news stories that appeared in my five-year period of study. I first randomly select 3,000 stories and manually code them into corruption-related stories and other stories. In corruption-related stories, the reporting explicitly states or clearly implies an abuse of power in public office (see Figure 1 for examples). I then use the coded stories as a training sample and train a supervised machine-learning model using Transformer and BERT (Appendix B).

Altogether, in my 203,492 Sina News domestic news stories, I identify 655 stories about reportedly corrupt state-level officials, 1,426 stories about reportedly corrupt ministerial officials, and 17,876 other corruption-related stories. The remaining 183,535 stories are unrelated to corruption. I also code the stories' sources, using four categories: government, government media, government-subsidized media, and commercial media (Appendix C). In addition, I code other variables, for example, whether a Politburo Standing Member is mentioned in the news story. Stories featuring Politburo Standing Members, for example, with Xi or Li

⁹ To construct the list, I use the administrative level of the ministerial and provincial cadre defined by the CCP. For example, the former mayor of Guangzhou, Wan Qingliang, was still ranked at the deputy governor level because he was also a member of the Guangdong Provincial Party Committee's standing member.

¹⁰ Su and Ling were in office when the CDIC began investigating them; Xu and Zhou had retired in 2012. As Xu was a general, the anticorruption agency in the military (not the party) investigated and indicted him.

Keqiang in the headline, may have different political objectives other than eliciting user comments, which may confound my estimation. In addition, I control for comments from known paid commentators, which can deflate the number of individual user comments in a comment section. I report summary statistics in Appendix D.

5. Empirical Strategy and Main Results

5.1. Baseline Analysis

To test my theory, I first run a baseline regression to assess how news articles about corruption attract individual user comments in general. All models are negative-binomial linear models because the dependent variable is a count with a standard deviation greater than its mean. As suggested in my theoretical framework, I expect that news articles about corruption can attract readers, just like other news articles that report on society and the economy. My baseline specification is as follows:

$$Y_i = \alpha + \beta X_i + \varepsilon$$

My dependent variable is Y_i , which equals the count of individual user comments in each news article. If Y_i is large, it indicates that the article has attracted many readers. However, if Y_i equals 0, it can indicate that the news did not attract any readers or that the government imposed censorship by closing the comment section altogether or by populating it with fake comments. My explanatory variable ranks corruption-related articles in four ordinary levels of decreasing political sensitivity: (1) national leader, (2) ministerial leader, (3) ordinary corruption, which includes articles about leaders at ranks below the ministerial level or corruption news that do not specifically name a person, and (4) unrelated. Furthermore, I also implement another negative-binomial model to evaluate the propensity of a news article to elicit comments before and after

the launch of the anticorruption campaign.

Table E.1 reports the baseline results. I find that, over my five-year study period, each ordinary corruption article attracts fewer individual user comments. There are two possible explanations. One is that corruption news on low-rank officials or on general misbehavior of officials is not interesting enough compared to other societal or economic news. The other is that the CCP has applied control measures to the comment section to prevent individual users from commenting. However, because I also find that, on average, each article on corrupt ministerial officials increases the expected count of individual user comments by 4.8, it suggests that the latter explanation is unlikely. Citizens are more interested in corruption scandals about senior-level officials than those of low rank. However, the news on corrupt national leaders attracts significantly fewer individual user comments. Given that individual users would certainly be more interested in the corruption scandals of national leaders, my finding implies strong intervention from the CCP.

I also employ a difference-in-differences (DID) approach to investigate how the ascendance of Xi affects the reporting of corruption news. Because Xi's anti-corruption campaign targets an unprecedented number of senior officials within the CCP, I expect the party manages the corruption news more carefully than before, especially when it concerns senior officials. I update my model specification as follows:

$$Y_i = \alpha + \beta X_i \times \text{Anticorruption}_t + \gamma X_i + \delta \text{Anticorruption}_t + \varepsilon$$

My explanatory variable is the interaction of an anti-corruption dummy and the news category related to corruption, which I discussed above. I code the dummy variable as 0 for articles published before November 15, 2012 when Xi ascended to power and 1 for the other articles. I examine whether the rank of corrupt officials in the news articles affects the number of

individual user comments. Given that the CCP wants to contain the spread of corruption scandals concerning their most senior officials, I expect that the comments on articles about national and ministerial leaders are closely watched and possibly limited when politically sensitive. As such, the interaction term captures the change in individual user comments before and after the anti-corruption campaign.

Table E.2 reports the results. The categories of news articles on corrupt ministerial leaders and local officials show a significant decrease in individual user comments. This suggests two possibilities: either the CCP has tightened their information control on news commentary after the launch of Xi's anti-corruption campaign, or ordinary Chinese citizens are simply less interested in engaging with these stories. However, I do not find similar effects on articles about corrupt national officials. This indicates that the CCP's control measures on commentary haven't significantly deviated from the pre-campaign period. I include full statistical results in Appendix E.

5.2. Triple Difference Estimate

For my main analysis, I further conduct a triple difference (difference-in-difference-in-differences) analysis to investigate whether the CCP has altered its assessment on the risks of propagating corruption news over Xi's campaign (Olden and Møen, 2022). I examine whether the CCP has changed its propaganda practices after the anti-corruption campaign to elicit or avoid individual user comments. As my theory suggests, the CCP can mitigate its risks by propagating more news on lower-ranking officials (*H1*). I slightly modify my model specification to include interaction terms with a dummy variable that indicates whether the media source is government media (Appendix C).

$$\begin{aligned}
Y_i = & \alpha + \beta X_i \times \text{Anticorruption}_t \times \text{Government_Media}_i + \gamma X_i \times \text{Anticorruption}_t \\
& + \delta \text{Anticorruption}_t \times \text{Government_Media}_i + \theta X_i \times \text{Government_Media}_i \\
& + \vartheta X_i + \mu \text{Anticorruption}_t + \rho \text{Government_Media}_i + \varepsilon
\end{aligned}$$

In this specification, *Government_Media_i* is a dummy variable that indicates whether the source of news directly comes from the government media, such as *People's Daily*, *Xinhua News*, or a news release from a government agency. Over the anti-corruption campaign, the government media must report on corruption without sparking public demands for more investigations into the party's misconduct. Similar to DID, triple difference requires a parallel trends assumption. I find evidence that this assumption is plausible (Appendix G).

[Table 1 about here]

Table 3 reports the results. Compared to my previous DID results where ordinary corruption news elicits fewer individual user comments over the anti-corruption campaign, the news articles from government media actually elicit more comments. This suggests that the CCP tries to engage citizens with scandalous corruption news. In articles about ministerial officials, the result reverses the significantly negative result from previous DID results, which suggests that the government media still actively seeks to engage with citizens. However, I do not find any significant effects on corruption articles about national officials. It lends support to my first hypothesis that the CCP differentiates their propaganda strategy according to official rank.

[Figure 2 about here]

I also investigate whether the government-subsidized media propagates corruption news differently. Because subsidized media receives less government funding compared to fully funded government media, they have more incentive to take the risk and disseminate scandalous news to attract readers. Therefore, they may be willing to circulate sensational news about

corruption, even at the risk of government punishment. I use the same model specification but replace the government media variable with a variable indicating the government-subsidized media.

I report my findings in Table 2. I find that similar to government media, subsidized media elicits significantly more individual user comments by circulating corruption news on lower-ranking officials. The magnitude of this effect is larger than that of government media. For ministerial level officials, it also reverses the previous DID result that is significantly negative, instead indicating a similar level of permissiveness compared to the period before the anticorruption campaign. However, the effect of articles on corrupt national officials is not significant. It lends support to my H2 that subsidized media spread scandalous news above the level of the government media. This also suggests that subsidized media accepts some risk of government punishment.

[Table 2 and Figure 3 about here]

5.3. Synthetic Control Estimate and Robustness Checks

The drawback of DID and triple-difference is that the treatment and control groups are not always truly comparable. For example, corruption articles on senior officials may receive much more information control than other news. To better understand the effects of media type on spreading corruption scandals, I further investigate it using the Generalized Synthetic Control Method (GSC). GSC can construct a “synthetic” group by using the control variables for the comparison to the treated unit. Also, compared to the conventional synthetic control method, GSC can produce easily interpretable results (Xu 2017). To construct the panel data required by GSC, I only examine the articles about the 112 officials at ministerial or national level and aggregate the average of all variables by day. Because not all corrupt senior officials are covered

every day, I code days without reports as zero. I then use GSC to estimate the treatment effects for both government-subsidized media and government media with the same dependent variable and the covariates from my previous analysis.

My GSC estimation shows that the treated and counterfactual average for the government-subsidized media exhibits a significant gap (Figure 4). This indicates that, for corruption news on ministerial and national officials, government-subsidized media articles attract significantly more individual user comments. By comparison, the treated and counterfactual average for the government media does not show much difference (Figure 5). This suggests that government media is more cautious in reporting corruption scandals that involve senior officials. I include additional graphs on the estimated Average Treatment Effects in Appendix F and H.

[Figure 4 and 5 about here]

6. Limitations and Areas for Future Work

My study has several limitations. First, it is important to recognize that civic engagement, as explored in this study, should not be conflated with public opinion. In other words, the citizens who engage with scandalous stories in the news comment section may not be a representative sample of Chinese population. Second, while my analysis focuses on Chinese citizens' comments, it does not imply the absence of other forms of information control deployed by the state. In fact, the existence of various information manipulation tools – both within and outside of Sina – might actually explain the allowance of user comments. Third, Xi's anticorruption campaign has slowed its purges since his second term as CCP secretary. Due to the lack of data, I am unable to test my theory for the period after 2015. Fourth, I lack the data to evaluate change in what citizens believe, including their attitude towards the state. I hope future

research can address these lacunae.

7. Discussion and Conclusion

Taken together, my findings show that the CCP is able to use its controlled media to publicize scandals involving party and government official corruption, and even officials at the ministerial or national level. The CCP's circulation of its *mea culpa* risks provoking unwanted responses from ordinary Chinese citizens, including criticism. However, such a propaganda strategy also has the potential benefits of attracting citizen attention and enhancing the credibility of the CCP's information. As I have shown, many individuals living in China during the anti-corruption campaign have been so engaged with these corruption stories that they are prompted to comment on them.

However, individual users may not know that the CCP intends to solicit their comments. Nor do they necessarily know that the CCP can manipulate the comments so that the public responses to the news article are flooded with fake comments (King, Pan, Roberts 2017). By examining the individual user comments, I find that stories about corruption scandals involving national officials elicit significantly fewer comments. This suggests that the CCP limits individual users from commenting on senior officials, especially those at the national level who were close colleagues of Xi. Considering that scandals about a national leader can imply political incompetence or power struggle at the core of the CCP, it is not surprising that the CCP only discloses – and does not widely spread – such scandals on government media.

Nevertheless, the CCP makes use of two mitigating strategies to lower its risks. I find that during Xi's anticorruption campaign, the party permitted the government media to publish more ordinary corruption stories that can engage individual users. Propagating the corruption scandals

of lower-ranking officials can distance top CCP leaders from potential blame. Another way to distance themselves is to permit state-subsidized media to spread news on corrupt ministerial or national officials, particularly after an official corruption announcement is made. Even if the propaganda from the subsidized media backfires, the CCP can always scapegoat the subsidized media for their mistakes.

My findings supplement the existing literature on propaganda and, by extension, the permissiveness of political discourse in an authoritarian state. I show that propaganda in the ICT era is no longer “cheap talk.” Because ICTs decentralize information distribution channels, rulers must strategically use information dissemination and propaganda to engage citizens while lowering their own risk. Existing literature has already shown that rulers can use propaganda to divert citizens’ attention during times of political sensitivity (Roberts 2018). My results go one step further by showing that rulers can also capture citizens’ attention by aggressively spreading news of government scandals, which potentially increases the reach and credibility of their propaganda.

Crucially, encouraging propaganda on political scandals does not imply freedom of political speech. On the contrary, the boundaries of this permissiveness are also clear: discussions about local officials are permitted while discussions about national leaders are off-limits. I have also expanded the literature on the permissiveness towards social media content in China. Existing studies show that the CCP is more interested in suppressing speech that potentially incites collective action rather than critical speech (King, Pan, Roberts, 2013, 2014). Moreover, the CCP also suppresses speech from political activists and celebrities (Gallagher and Miller 2021). My study expands upon this literature to show that the CCP engages with citizens while also suppressing criticism. Further, the party focuses its suppression on criticism of

national officials.

Furthermore, the CCP's use of political scandals shows authoritarian rulers' boldness and readiness to propagate their political narratives. Because of the large number of newcomers in information dissemination and the sophisticated manipulation technologies, rulers can upgrade their propaganda from a uni-directional model, where the party distributes all the political information, to a bi-directional model, where many individuals rapidly spread information and misinformation on social media. By publicizing its own political scandals, the CCP balances citizen attention with negative news coverage. Given that rulers have the capacity to manipulate citizen responses, propagating scandals should in general be a safe communication strategy for authoritarian rulers in the ICT era.

References

Aday, Sean. 2010. "Chasing the Bad News: An Analysis of 2005 Iraq and Afghanistan War Coverage on NBC and Fox News Channel." *Journal of communication* 60(1): 144-64.

Ansolabehere, Stephen, and Shanto Iyengar. 1995. *Going Negative: How Campaign Advertising Shrinks and Polarizes the Electorate*. New York: Free Press

Austen-Smith, David, and Jeffrey S. Banks. 2002. "Costly Signaling and Cheap Talk in Models of Political Influence." *European Journal of Political Economy* 18(2): 263-80.

Aytaç, Selim Erdem. 2021. "Effectiveness of Incumbent's Strategic Communication during Economic Crisis under Electoral Authoritarianism: Evidence from Turkey." *American Political Science Review* 115(4): 1517-23.

Brady, Anne-Marie. 2009a. *Marketing Dictatorship: Propaganda and Thought Work in Contemporary China*. Rowman & Littlefield Publishers.

_____. 2009b. "Mass Persuasion as a Means of Legitimation and China's Popular Authoritarianism." *American Behavioral Scientist* 53(3): 434-57.

Cairns, Christopher. 2016. "The 'Social Media Shock.'" *unpublished dissertation chapter*.

Chang, C., & Manion, M. 2021. "Political self-censorship in authoritarian states: The spatial-temporal dimension of trouble." *Comparative Political Studies*, 54(8), 1362-1392.

Crawford, Vincent P., and Joel Sobel. 1982. "Strategic Information Transmission." *Econometrica* 50(6): 1431.

Dittmer, Lowell. 1973. "The Structural Evolution of 'Criticism and Self-Criticism.'" *The China Quarterly* 56: 708-29.

Fowler, Erika Franklin et al. 2021. "Political Advertising Online and Offline." *American Political Science Review* 115(1): 130-49.

Fu, Hualing. 2015. "Wielding the Sword: President Xi's New Anti-Corruption Campaign." In *Greed, Corruption, and the Modern State*, Edward Elgar Publishing, 134-58.

Fu, King-wa, Chung-hong Chan, and Michael Chau. 2013. "Assessing Censorship on Microblogs in China: Discriminatory Keyword Analysis and the Real-Name Registration Policy." *IEEE Internet Computing* 17(3): 42-50.

Gallagher, Mary, and Blake Miller. 2021. "Who Not What: The Logic of China's Information Control Strategy." *The China Quarterly* 248(1): 1011-36.

Geddes, Barbara, and John Zaller. 1989. "Sources of Popular Support for Authoritarian Regimes." *American Journal of Political Science*: 319-47.

Gehlbach, Scott, and Konstantin Sonin. 2014. "Government Control of the Media." *Journal of public Economics* 118: 163-71.

Gibbs, Joseph. 1999. *Gorbachev's Glasnost: The Soviet Media in the First Phase of Perestroika*. Texas A&M University Press.

Hassid, Jonathan. 2012. "Safety Valve or Pressure Cooker? Blogs in Chinese Political Life." *Journal of Communication* 62(2): 212-30.

Huang, Haifeng. 2015. "Propaganda as Signaling." *Comparative Politics* 47(4): 419-44.

———. 2018. "The Pathology of Hard Propaganda." *The Journal of Politics* 80(3): 1034-38.

Jin, Dan, and Jieqi Teng. 2017. "Study of Bot Detection on Sina-Weibo Based on Machine Learning." *In 2017 International Conference on Service Systems and Service Management, pp. 1-5. IEEE*

King, Gary, Jennifer Pan, and Margaret E Roberts. 2013. "How Censorship in China Allows Government Criticism but Silences Collective Expression." *American Political Science Review* 107(2): 326-43.

———. 2014. "Reverse-Engineering Censorship in China: Randomized Experimentation and Participant Observation." *Science* 345(6199): 1251722.

———. 2017. "How the Chinese Government Fabricates Social Media Posts for Strategic Distraction, Not Engaged Argument." *American Political Science Review* 111(3): 484-501.

Lawrence, Regina G. 2022. *The Politics of Force: Media and the Construction of Police Brutality*. Oxford University Press.

Little, Andrew T. 2017. "Propaganda and Credulity." *Games and Economic Behavior* 102: 224-32.

Livingston, Steven, and W Lance Bennett. 2003. "Gatekeeping, Indexing, and Live-Event News: Is Technology Altering the Construction of News?" *Political Communication*, 20(4): 363-80.

Lorentzen, Peter. 2014. "China's Strategic Censorship." *American Journal of Political Science* 58(2): 402-14.

van der Meer, Toni GLA, and Michael Hameleers. 2022. “I Knew It, the World Is Falling Apart! Combatting a Confirmatory Negativity Bias in Audiences’ News Selection through News Media Literacy Interventions.” *Digital Journalism* 10(3): 473-92.

Ng, Jason. 2013. *Blocked on Weibo: What Gets Suppressed on China’s Version of Twitter (And Why)*. The New Press.

Nip, Joyce YM, and King-wa Fu. 2016. “Challenging Official Propaganda? Public Opinion Leaders on Sina Weibo.” *The China Quarterly* 225: 122-44.

Olden, Andreas, and Jarle Møen. 2022. “The Triple Difference Estimator.” *The Econometrics Journal* 25(3): 531-53.

Peisakhin, Leonid, and Arturas Rozenas. 2018. “Electoral Effects of Biased Media: Russian Television in Ukraine.” *American Journal of Political Science* 62(3): 535-50.

Petre, Caitlin, Brooke Erin Duffy, and Emily Hund. 2019. “‘Gaming the System’: Platform Paternalism and the Politics of Algorithmic Visibility.” *Social Media+ Society* 5(4): 2056305119879995.

Qin, Bei, David Strömberg, and Yanhui Wu. 2017. “Why Does China Allow Freer Social Media? Protests versus Surveillance and Propaganda.” *Journal of Economic Perspectives* 31(1): 117-40.

Roberts, Margaret. 2018. *Censored: Distraction and Diversion inside China’s Great Firewall*. Princeton University Press.

Rozenas, Arturas, and Denis Stukal. 2019. “How Autocrats Manipulate Economic News: Evidence from Russia’s State-Controlled Television.” *The Journal of Politics* 81(3): 982-96.

Rozin, Paul, and Edward B Royzman. 2001. “Negativity Bias, Negativity Dominance, and Contagion.” *Personality and Social Psychology Review* 5(4): 296-320.

Shadmehr, Mehdi, and Dan Bernhardt. 2015. "State Censorship." *American Economic Journal: Microeconomics* 7(2): 280-307.

Soroka, Stuart, Patrick Fournier, and Lilach Nir. 2019. "Cross-National Evidence of a Negativity Bias in Psychophysiological Reactions to News." *Proceedings of the National Academy of Sciences* 116(38): 18888-92.

Stockmann, Daniela. 2010. "Who Believes Propaganda? Media Effects during the Anti-Japanese Protests in Beijing." *The China Quarterly* 202: 269-89.

———. 2013. *Media Commercialization and Authoritarian Rule in China*. Cambridge University Press.

Stockmann, Daniela, and Mary E Gallagher. 2011. "Remote Control: How the Media Sustain Authoritarian Rule in China." *Comparative Political Studies* 44(4): 436-67.

Tai, Yun, and King-wa Fu. 2020. "Specificity, Conflict, and Focal Point: A Systematic Investigation into Social Media Censorship in China." *Journal of Communication* 70(6): 842-67.

Wedeman, Andrew. 2017. "China's Corruption Crackdown." *Current History* 116(791): 210-16.

Xu, Yiqing. 2017. "Generalized Synthetic Control Method: Causal Inference with Interactive Fixed Effects Models." *Political Analysis* 25(1): 57-76.

Yanagizawa-Drott, David. 2014. "Propaganda and Conflict: Evidence from the Rwandan Genocide." *The Quarterly Journal of Economics* 129(4): 1947-94.

Zhuravskaya, Ekaterina, Maria Petrova, and Ruben Enikolopov. 2020. "Political Effects of the Internet and Social Media." *Annual review of economics* 12: 415-38.

Data Availability

Replication data and code replicating the tables and figures in this article can be found in Chang (2023) in the Harvard Dataverse, <https://doi.org/10.7910/DVN/VXVEV3>, and replication data are publicly hosted at .

Table 1. Triple Difference Results on Government Media

	Dependent variable: Individual user comments
Constant	-4.33*** (0.05)
Ordinary corruption	1.64*** (0.17)
Corrupt ministerial leaders	4.10*** (1.22)
Corrupt national leaders	-11.98 (525.85)
Campaign	4.72*** (0.06)
Government media	0.21* (0.08)
Campaign x Corrupt national leaders	10.59 (525.85)
Campaign x Corrupt ministerial leaders	-3.43** (1.25)
Campaign x Ordinary corruption	-2.27*** (0.19)
Government media x Campaign	-0.29** (0.11)
Government media x Ordinary corruption	-0.53 (0.32)
Government media x Corrupt ministerial leaders	1.08 (1.90)
Government media x Corrupt national leaders	-0.21 (713.70)
Government media x Campaign x Corrupt national leaders	0.25 (713.70)
Government media x Campaign x Corrupt ministerial leaders	-0.30 (1.99)
Government media x Campaign x Ordinary corruption	1.19** (0.37)
Observations	203,492
Log Likelihood	-50,249.71
AIC	100,531.40
BIC	100,070.52

Independent variables are measured as dichotomous (0,1)

Probability: *** < 0.001, ** < 0.01, * < 0.05

Table 2. Triple Difference Results on Government-Subsidized Media

	Dependent variable: Individual user comments
Constant	-4.30*** (0.04)
Ordinary corruption	1.61*** (0.15)
Corrupt ministerial leaders	4.54*** (0.96)
Corrupt national leaders	-12.0 (384.02)
Anticorruption Campaign	4.69*** (0.05)
Subsidized media	0.42*** (0.12)
Campaign x Corrupt national leaders	10.57 (384.02)
Campaign x Corrupt ministerial leaders	-3.58*** (1.00)
Campaign x Ordinary corruption	-2.06*** (0.17)
Subsidized media x Campaign	-0.60*** (0.16)
Subsidized media x Ordinary corruption	-2.25*** (0.64)
Subsidized media x Corrupt ministerial leaders	-1.53 (4.13)
Subsidized media x Corrupt national leaders	-0.42 (1,016.03)
Subsidized media x Campaign x Corrupt national leaders	0.96 (1,016.03)
Subsidized media x Campaign x Corrupt ministerial leaders	-3.36 (4.22)
Subsidized media x Campaign x Ordinary corruption	2.42*** (0.72)
Observations	203,492
Log Likelihood	-50,247.27
AIC	100526.5
BIC	100700.3

Independent variables are measured as dichotomous (0,1)
 Probability: *** < 0.001, ** < 0.01, * < 0.05

Figure 1 Examples of anti-corruption stories published on Sina News

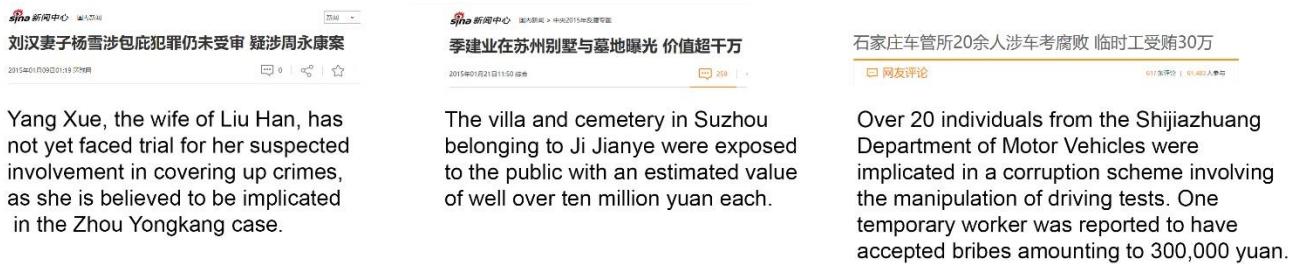


Figure 2. Predicted Count of Individual User Comments by Government Media on Ordinary Corruption

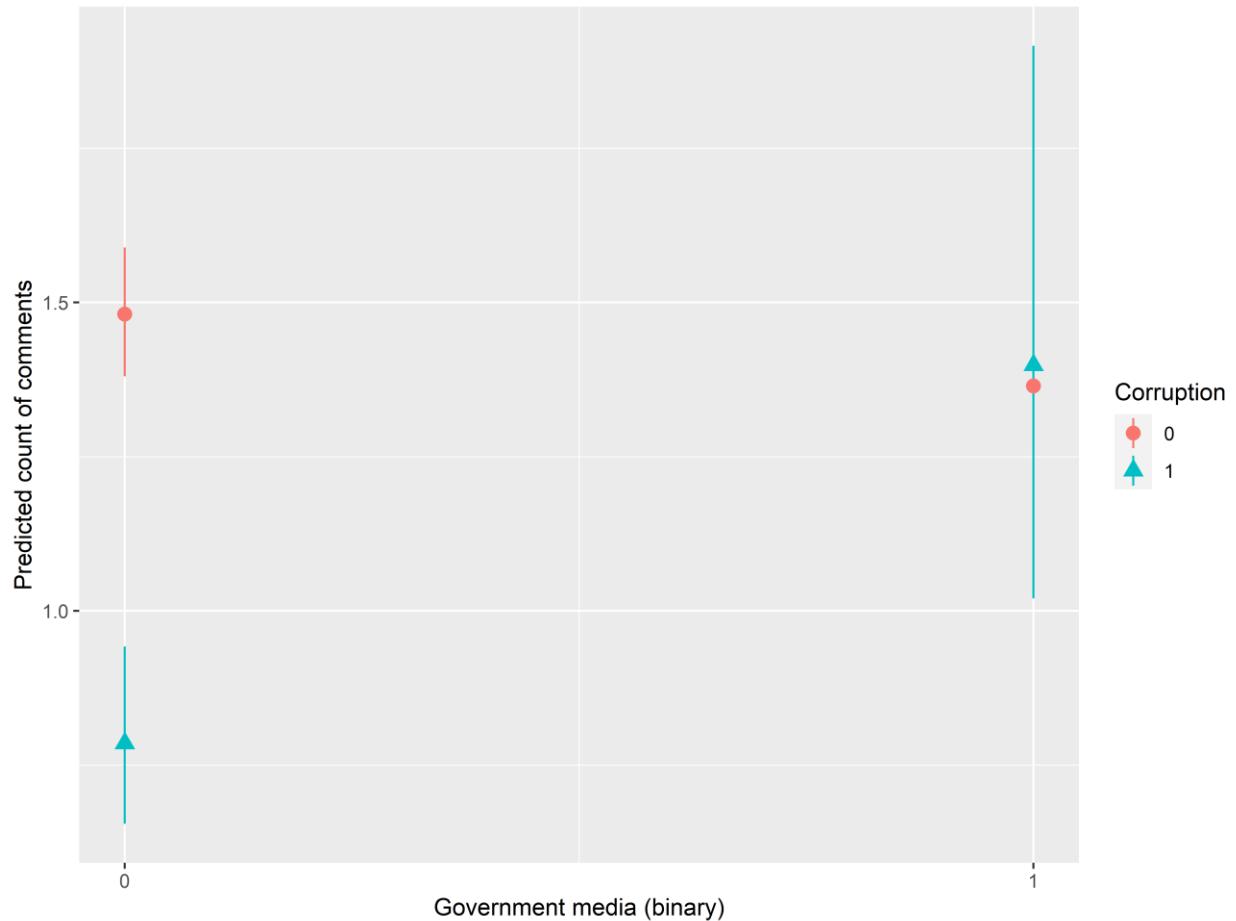


Figure 3. Predicted Count of Individual User Comments by Government-Subsidized Media on Ordinary Corruption

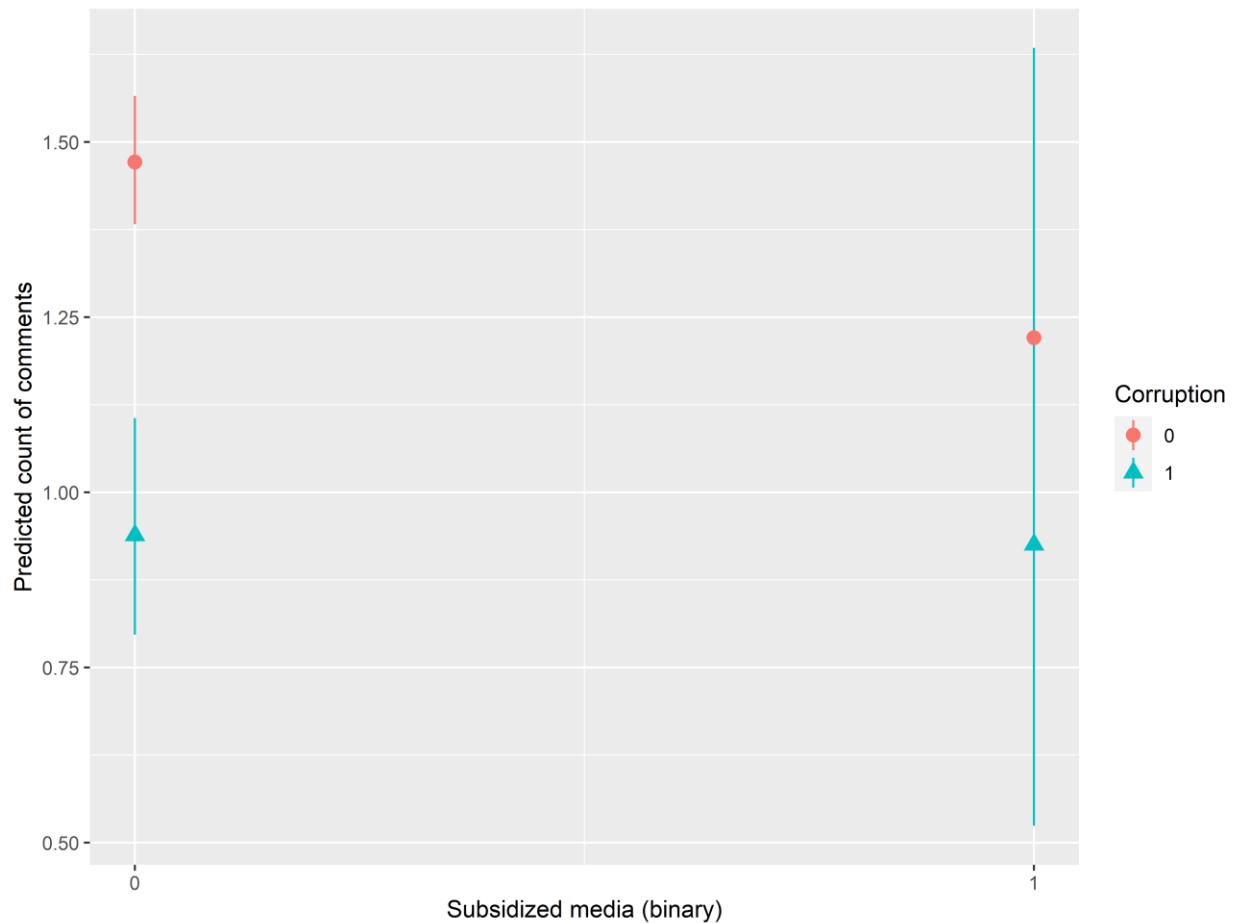
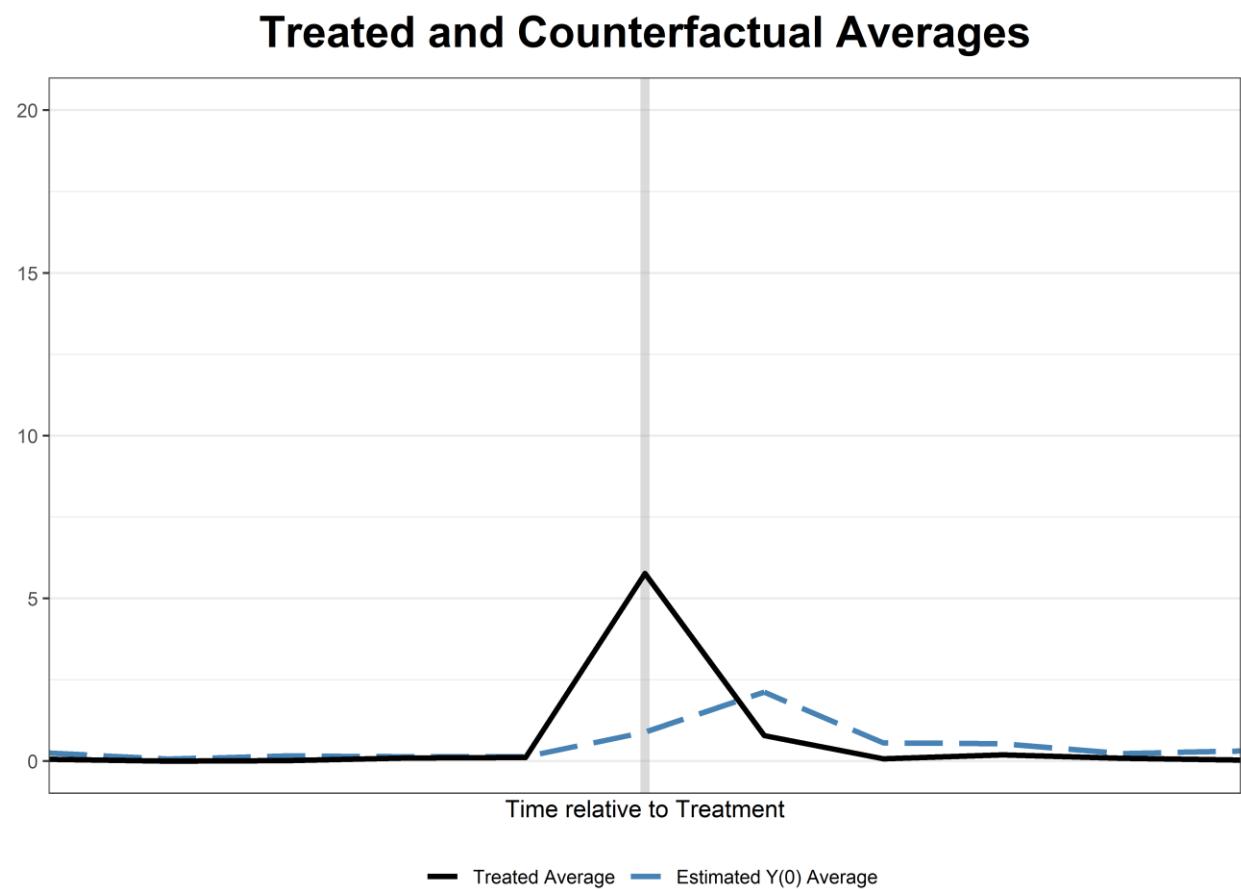
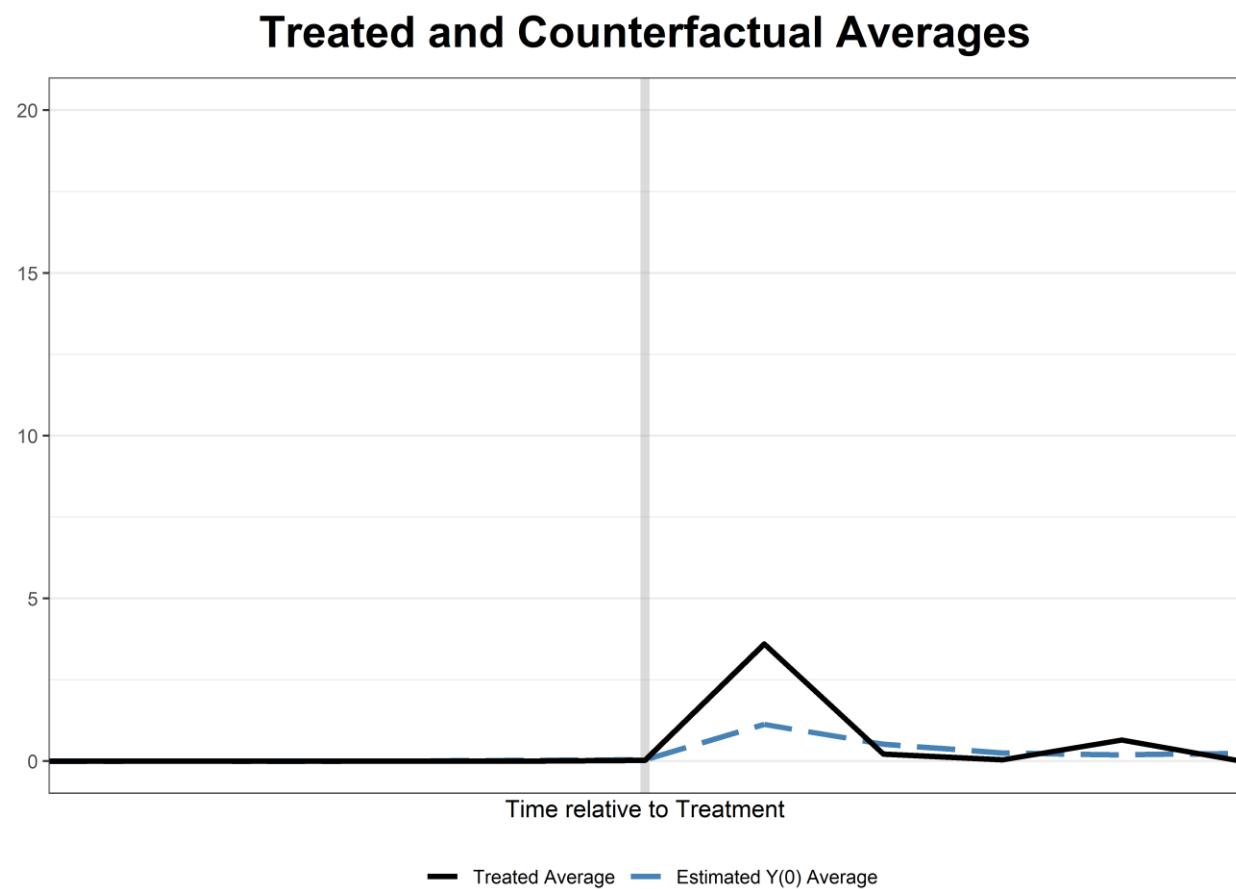


Figure 4. Estimated Treated and Counterfactual Average for Government-Subsidized Media at Ministerial and National Level



Note: control variable includes: national leader (binary), government media (binary), commercial media (binary), campaign (binary)

Figure 5. Estimated Treated and Counterfactual Average for Government Media at Ministerial and National Level



Note: control variable includes: national leader (binary), government-subsidized media (binary), commercial media (binary), campaign (binary)