



Reporting after removal: the effects of journalist expulsion on foreign news coverage

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Abstract

What happens to international media reporting when governments expel foreign journalists? Countries around the world expel foreign reporters, yet there is no consensus about the effects of such expulsions. We argue there are three possible outcomes of expulsion: a chilling effect, resilience, and backlash. Using China as a case study, we evaluate these competing theories by collecting a novel dataset of foreign news stories about China and applying time-series causal inference methods to measure the effects of expulsion on information origination, composition, and reach after March 2020, when the Chinese government expelled a large number of foreign correspondents. Results show that expelled media organizations did not experience a chilling effect or backlash on reporting and may have changed their production processes to account for expulsion. These findings suggest that news organizations can remain resilient to the impact of extraordinary events which target the organization and disrupt internal production processes.

Keywords: China, journalists, news, chilling effect, gatekeeping.

In March 2020, the Chinese government expelled foreign journalists at *The New York Times*, *The Wall Street Journal*, and *The Washington Post*. This deportation of foreign correspondents is not unique. Also in 2020, authorities in Belarus withdrew press accreditations and deported foreign journalists.¹ In 2021, Russia expelled a senior BBC journalist by refusing to extend her press accreditation.² In 2022, Ethiopia expelled a reporter for *The Economist* by revoking his press accreditation, and Turkey deported a veteran foreign journalist over concerns about “public order.”³ Between 2020 and 2023, India expelled fourteen Chinese journalists by refusing to renew visa credentials, and China expelled three of four Indian journalists.⁴

Can expulsion, often enforced through bureaucratic processes such as withholding visas and press credentials, allow governments to constrain the influence of foreign media? Foreign news bureaus and correspondents occupy an outsized role in the transmission of information about foreign countries.⁵ What these foreign news bureaus report on—and what they don’t—can set the foreign policy agenda, mediate international soft power, and raise the salience of issues to domestic audiences (Chong & Druckman, 2007; Hearn-Branaman, 2017; Iyengar & Simon, 1993; Soroka, 2003). However, this concentration of power in the hands of foreign nationals can present a threat to governments interested in controlling information domestically and shaping global perceptions, especially because the incentives of foreign media organizations to retain the trust of global audiences make them challenging for governments to influence and co-opt. Although harassment, imprisonment, and violence against individual journalists may lead to changes in reporting behavior, including self-censorship (Holton et al., 2021; Larsen et al., 2021; Lewis et al., 2020; Lofgren Nilsson & Ornebring 2016; Miller, 2021; Posetti et al., 2021; Post & Kepplinger,

2019), these coercive measures may also generate international outrage, retaliation, and economic damage for the country engaging in repression (Bash & Alsaifi, 2019; Bouoiyour & Selmi 2018; Renshaw, 2018).

Expulsion does not threaten the physical safety of journalists but it does affect the news organizations’ ability to gather and re-transmit information. Despite how frequently foreign journalists are expelled, there is no agreement about what effects expulsion produces. Theories of media gate-keeping suggest that expulsion would create a chilling effect, inhibiting the news organization’s transmission of information and increasing reliance on institutional sources of information such as the government (Lofgren Nilsson & Ornebring 2016; Posetti et al., 2021; Waisbord, 2020). Alternatively, theories of journalistic resilience predict that adaptive media practices could insulate news organizations from the effects of expulsion (Christensen & Khalil, 2021; Konow Lund & Olsson, 2016; Pavlik, 2000). Finally, media organizations could operate with renewed vigor in response to expulsion to deter expulsions elsewhere or because fear of government punishment and reprisal is reduced (Eccarius-Kelly, 2002; Stern & Hassid, 2012).

In this article, we use the Chinese government’s expulsion of journalists from *The New York Times*, *The Washington Post*, and *The Wall Street Journal* in March 2020 to examine one instance of the effect of expulsion on three aspects of media reporting: information origination (e.g., whether stories are generated from institutional or regime sources), information composition (e.g., the sentiment of reporting), and information reach (e.g., the number of articles about the country in question).

By applying time-series causal inference methods on a novel dataset of over 32,000 international news stories about

China, we find no statistically significant changes to information origination, composition, or reach after expulsion. In addition, we find indications of organizational changes within expelled news outlets, possibly a type of “improvisation.” Together, these results suggest media organizations may exhibit resilience to extraordinary events with internal repercussions. One implication is that news audiences may not detect changes in the reporting they receive about the expelling nation, as news outlets compensate for the challenges introduced by expulsion.

The article proceeds as follows: The first section presents our theoretical arguments about the challenge of foreign media organizations for authoritarian regimes, as well as the possible effects of unexpected events such as expulsion on how media organizations report the news. The second section provides background on how foreign journalists report in China as well as the circumstances of the 2020 expulsions. The third section describes our data and methods. The fourth section presents the results, and the last section concludes by discussing the implications of the findings.

Theory

Authoritarian regimes seek to regulate the flow of information within their borders using a variety of control mechanisms often grouped under the terms censorship and propaganda. These mechanisms are generally believed to serve core state objectives, such as setting the agenda, shaping public knowledge (Brady, 2009; Chen & Yang, 2019), influencing attitudes and opinions (Pan et al., 2022; Stockmann & Gallagher, 2011; Tang, 2005), and raising the costs of dissent and collective action among citizens (Huang, 2015; King et al., 2013). Alongside these high-priority domestic information controls, authoritarian states also attempt to influence citizens of other nations via external propaganda (Fan et al., 2023; Thussu et al., 2017; Tsai, 2017) or by way of public diplomacy, sometimes defined as “the art of communicating with foreign publics to influence international perceptions, attitudes and policies” (Gilboa, 1998; Madrid-Morales, 2017; Repnikova, 2022; Sun, 2015; Waller, 2007). In both external propaganda and public diplomacy, the state is generally conceptualized as directly intervening in other countries’ information environments for geopolitical gain.

Foreign media organizations present a dilemma for authoritarian regimes, as they facilitate outflow of information from within a country’s borders in a manner that cannot be directly controlled by the government, complicating such regimes’ attempts to conduct public diplomacy. Authoritarian regimes tend to be suspicious of these organizations because of the perception that foreign media reporting can generate international attention that strengthens domestic opposition or attracts unwanted foreign intervention. For example, foreign media may have intensified the 1989 Tiananmen Square Protests in Beijing (Zuo and Benford, 1995), and indeed the Chinese Communist Party (CCP) appears to have been concerned about foreign media’s role in broadcasting news of the subsequent crackdown (Nathan, 2001). Many observers of the Arab Spring have argued that foreign reporting drew attention to protesters’ demands (Aday et al., 2012; Creech, 2015; Russell, 2011). More generally, scholars argue that foreign reporting can increase anti-government protesters’ bargaining power (Andén-Papadopoulos & Pantri, 2013; Hess, 2015).

At the same time, however, other countries’ correspondents bring a unique credibility to burnishing the host nation’s public image by increasing the host country’s visibility to the news organization’s domestic reading audiences (Erlbaum, 2016). For example, in advance of the 2008 Olympic Games, the Chinese government rapidly, and enduringly, relaxed restrictions on foreign reporting by canceling pre-authorization requirements on foreign journalists’ domestic travels (Zhang, 2012). Foreign news bureaus present a trade-off to authoritarian governments: On the one hand, their credibility can strengthen the public diplomacy of authoritarian regimes; on the other, they represent an alternative source of information flowing outward from a country’s borders that can create challenges for authoritarian rule and influence.

Expulsion is one method for regulating this outbound flow of information. In its scale and impact, the expulsion of a media organization’s in-country reporters can be understood as an “extraordinary event”: a “large-scale unexpected news event” (Olsson, 2010), often called “what-a-story” (Tuchman, 1973), which “cannot be accommodated by everyday work practices” (Berkowitz, 1992). Sometimes called “frame breakers” by their inability to fit into journalistic “frames,” these events challenge the news organization to respond rapidly in circumstances of incomplete information and sudden change, which is exactly what happens with expulsion. Expulsion entails the total removal of a journalist from their “place” of reporting (Usher, 2019), which both destabilizes the individual and severely disrupts the news organizations’ news production processes. The organization finds itself under attack at the same time as it attempts to report on the attack itself.

Existing research has focused primarily on disruptions from extraordinary events that are external to the news organization. For example, research has investigated the journalistic response to the September 11, 2001 attacks in the USA (Olsson, 2009; Zelizer & Allan, 2011), or of media coverage of the Fukushima nuclear accident (Lazic, 2013), grappling with issues of how media can “routinize” events with “no readymade script” (Tuchman, 1973). Other research has investigated extraordinary events which, though largely external to the media organization, nevertheless affect internal production processes by physically preventing journalists from accessing the newsroom—for example, Hurricane Katrina (Miller and Goidel, 2009), the 2011 terror attack in Norway (Konow Lund & Olsson, 2016), and of course the coronavirus disease 2019 (COVID-19) pandemic (Hoak, 2021; Tandoc Jr. et al., 2022).

The expulsion of journalists, unlike these external extraordinary events, is a direct threat on the organization itself: It threatens the *internal* ability of news organizations to produce news while having very little spillover effect beyond the media organization.⁶ Because of this impact directed at, and thus internal to, the media organization, expulsion is therefore unlike nationwide or world-wide crises, and more akin to direct attacks on the media, such as the Charlie Hebdo attacks or the Capital Gazette shootings (McCaffrey, 2023). In addition to reporting on expulsion’s geopolitical consequences, news organizations must actively reconstitute the internal news production processes which have been directly upended by expulsion.

When confronted with these threats, news organizations must decide whether to adapt news routines to continue to

produce news about the expelling country. If news organizations do choose to adapt, there is then the question of whether the adapted routines can produce news of the same character as prior to the extraordinary event. Depending on whether news organizations choose to adapt and the success of this adaption, we expect to see a *chilling effect*, *resilience*, or *backlash* to expulsion on media reporting.

Chilling effect

Narrowly speaking, a “chilling effect” occurs when government action deters private actors from exercising the right to free speech. More broadly, a chilling effect occurs when action by one party deters activity by another (Schauer, 1978). In the context of news production, a chilling effect occurs when media organizations decline to report stories in anticipation of adverse physical, legal, or economic repercussions (Hansen & Moore, 1990; Labunski & Pavlik, 1985).⁷ A chilling effect may also occur if news organizations attempt to continue reporting but fail to do so successfully because the challenges introduced by expulsion are too great. One immediate challenge, the challenge of remote reporting, has been theorized as a “negative force” (Lewin, 1951) that inhibits the news organization’s re-transmission of information (Shoemaker & Vos, 2009). Forced to rely more on social media (Christensen & Khalil, 2021), media organizations may also cede their agenda-setting abilities to institutional actors or to social media algorithms, or their journalists may succumb to a greater vulnerability to online harassment (Conway et al., 2015; Jungherr et al., 2017; Lewis and Molyneux, 2018; Livingston & Bennett, 2003; Tworek, 2018).

Resilience

Alternatively, media organizations may prove both willing and able to adapt news production processes to the challenges introduced by expulsion. When media organizations exhibit these qualities in the face of “frame breaking” events, they are said to possess *organizational resilience* (Konow Lund & Olsson, 2016). In resilient media organizations, news coverage would display no detectable change as a result of expulsion. An organization is said to possess resilience when its “routines”—the “habituated action patterns that bring the same people together around the same activities in the same time and places” (Westley, 1990)—can adapt to crises and reconstitute themselves in their wake (Weick, 1993). In news organizations, resilience entails the ability to adapt “news routines” (Becker & Vlad, 2009; Molotch & Lester, 1974) by “improvising” substitutes for components of routines that have been disrupted (Konow Lund & Olsson, 2016). There is much evidence that media organizations possess this capacity, including their ongoing adaptation to the long-running crisis in print media advertising revenues and to the challenges introduced by digital technologies (Holcomb, 2018; Lehman-Wilzig & Cohen-Avigdor, 2004; Williams et al., 2017).

There is reason to believe media organizations can display similar resilience to the expulsion of journalists. The greater availability of online sources and digital communication technologies may make journalists less reliant on in-person interviews or observation (Barnoy & Reich, 2021; Lecheler & Kruikemeier, 2016; Pantic, 2023; Schapals & Harb, 2022; Van Leuven et al., 2018). Organizations may improvise by employing contractors or freelancers to generate the

information to which full-time foreign correspondents no longer have unmediated access (Erickson & Hamilton, 2006; Palmer & Fontan, 2007; Palmer, 2019). Organizations may also dedicate more human or financial resources to compensate for the difficulties introduced by remote reporting, including by empowering auxiliary employees to take on greater reporting responsibilities (DeButts, 2020).

Backlash

Finally, media organizations may prove not just willing and able to adapt news production processes to the challenges of expulsion—they may dedicate *additional* resources to discourage governments from making similar expulsions in the future by intensifying their coverage of the expelling country. Put differently, media organizations double-down on the “ideals” of journalism—specifically, the ideal that news organizations provide “watchdog” oversight over government (Deuze, 2013), including authoritarian governments. Such an act might also aim to dissuade governments elsewhere from expelling journalists in the future. We call this outcome a “backlash effect”—opposite to the presumed objective of the expelling country.

Expelling journalists is an aggressive act which can merit additional scrutiny by media organizations. For a backlash effect to be observed, however, the expelled media outlets would provide added scrutiny above and beyond the additional scrutiny by competing non-expelled outlets. There is anecdotal evidence of backlash after attacks on media organizations. For example, while the 2023 detention of *The Wall Street Journal* Russia correspondent Evan Gershkovich received widespread media attention in U.S. newspapers, *The Wall Street Journal* has continued to publish *disproportionately* about his condition, with stories to mark 250 days in jail and updates about his ongoing detention. Similarly, while the murder of *The Washington Post* columnist Jamal Khashoggi triggered international media attention, there has been sustained reporting by *The Washington Post* on Saudi human rights abuses (Zeid et al., 2022). Beyond attacks on individuals, the invasion of Iraq, in which the U.S. government lied to journalists and fabricated evidence of weapons of mass destruction, triggered backlash in the forms of widespread calls for more rigorous journalism (Bennett et al., 2008; Rieder, 2003; Ryan, 2006).

Observable implications

These three possible outcomes of expulsion produce observable implications for information *origination*, information *composition*, and information *reach* (for summary, see Table 1).

Information origination refers to the channel by which a story was initiated, that is, who or what triggered the story’s development. Sometimes called a story’s “sourcing channel,”

Table 1. Observable implications

	Variable	Chilling effect	Resilience	Backlash
Origination	Institutional	↑	—	↓
	Regime	↑	—	↓
Composition	Sentiment	↑	—	↓
	Entities	↓	—	↑
Reach	Absolute supply	↓	—	↑
	Relative supply	↓	—	↑
	Engagement	↓	—	↑

we use the term “origination” to better differentiate between two uses of the word “source”: sources-as-initiators (the source that caused a story to be written) and sources-as-contributors (sources who add to the exposition of a story but whose intervention was not required for its creation) (Wheatley, 2020). We draw from Livingston and Bennett (2003), who differentiate between institutional and non-institutional triggers for reporting. The former refers to stories that “result from the actions and pronouncements of government and sometimes supra-governmental organizations and their spokespersons, ministers, and leaders.” When stories result from these institutional actors, those actors obtain a greater influence on the types of information consumed by foreign audiences, even if the framing and presentation of that information remain in the hands of media organizations. Given our focus on an authoritarian context, we also examine regime as a sub-category of institution, referring to stories that result from the actions of the government, Party, and other affiliates of the ruling regime.

Information composition refers to how information is presented within a story. Greater negativity, all else being equal, is consistent with more negative or critical coverage of a country, its government, or its people, while greater positivity indicates more favorable coverage of a country, government, and people. Contributing source diversity, meanwhile, measures the quantity of unique information sources cited by a news organization. A greater number of sources ensures article comprehensiveness and better representation of constituent groups (Siebert et al., 1956).

Information reach refers to the extent to which stories about the expelling country reach audiences. This includes the overall supply of news articles about the expelling country, either in absolute terms or relative to the outlet’s overall reporting, as well as audience engagement with each story.

We expect to see observable implications of chilling effect for origination, composition, and reach of stories. The chilling effect predicts greater reliance on institutional or regime sources for the development of new stories, a ceding of news organizations’ agenda-making capacity to institutional actors, including the expelling country itself (a chilling effect on stories’ “origination”). As reporters are physically removed from the in-person and unofficial sources they routinely rely on for the generation of stories, reporters may rely more heavily on institutional sources and a higher percentage of stories may originate from institutional or regime sources. The chilling effect also predicts a decline in the diversity of voices cited in articles and a rise in positive sentiment (a chilling effect on “composition”). As media organizations shift their coverage out of fear or intimidation and/or are unable to draw upon the same diversity of sources as when reporting in person, we would observe greater positivity and/or fewer sources. Finally, the chilling effect predicts a decline in the quantity of stories being produced and the amount of engagement they receive from online audiences (a chilling effect on “reach”). The presence of any of these outcomes would indicate news organizations either cannot or choose not to adapt routines to meet the “extraordinary event” of media expulsion and thus media coverage has been chilled (see first column of Table 1 for summary).

We also expect to see observable implications of backlash for origination, composition, and reach of stories (see last column of Table 1 for summary). In origination, backlash predicts that media organizations would seize the news

Table 2. Resilience robustness check

Variable	Chilling effect	Resilience	Backlash
Collaboration	–	↑	–

agenda from the expelling country by initiating fewer stories based on the timing of its actions (a backlash effect on “origination”). Backlash also predicts an increase in the diversity of voices cited in articles and a decline in positive sentiment (backlash on “composition”), and an increase in the quantity of stories being produced and the amount of engagement they receive from online audiences (evidence of news organizations’ obtaining greater “reach”).

The observable implications of organizational resilience are that news coverage does not change in terms of origination, composition, or reach after expulsion (see second column of Table 1 for summary). In the event that organizations remain resilient to expulsion, one concern could be that the small number of media organizations in our study leaves us underpowered to detect genuine changes to coverage—that is, a null effect does not mean there is no effect. Since one of the main components of news organization resilience is “improvisation” (Weick, 1993; Konow Lund & Olsson, 2016), we devise a robustness check of the resilience mechanism, measuring adaptive changes to the *production process* of each article. Changing our focus from the output of news organizations to the internal routines of the organization itself, we measure whether news organizations change their production structure—specifically, whether they alter the allocation of resources used to produce each article—to compensate for the difficulties introduced by expulsion. The alteration of resources would be detectable either in the number of authors assigned to write each article or an increase in the number of “contribution credits” assigned at the end of the article, a form of recognition awarded to either full-time journalists or news assistants who contribute to the story but for legal or editorial reasons do not receive byline credit. In the case of full-time journalists, contribution credits usually occur when the journalist’s contribution to the story is not significant enough to warrant a co-byline. In the case of news assistants in China, contribution credits are the maximum recognition possible because news assistants are legally forbidden from conducting reporting. In our robustness check, we combine the two types of contribution into a *collaboration* variable, to measure the percentage of stories each month being produced collaboratively. As shown in Table 2, an increase in the collaboration variable may indicate that news organizations are changing their production process to adapt to expulsion.

Foreign correspondents in China

The setting for this study is China. The Chinese government maintains strict limits on which foreign news organizations are permitted to employ foreign correspondents, with media organizations requiring approval from the Chinese Foreign Ministry to establish permanent offices in country.⁸ Approval is not always granted. If it is, each news organization journalist must receive additional individual approval for a special “J-visa” (journalist visa) to report from within China’s borders. Permanent offices can hire local Chinese staff to conduct “auxiliary work,” but these local staff are

legally forbidden from reporting stories.⁹ In practice, however, local staff operate in a regulatory grey area: They source stories, conduct interviews, translate, and sometimes write drafts. There is no clear delimiter between the responsibilities of local staff and foreign correspondents, and news organizations are reluctant to share details about how much these staff contribute for fear of putting them in danger. These local staff are exceptionally vulnerable: Without consular protection from another country, they can be more easily detained and interrogated (Kotířová, 2023; Palmer, 2019).

The international reporting corps in China is small. The Chinese Foreign Ministry maintains a list of all accredited foreign correspondents, but no longer releases this information publicly. Official accreditation records from 1997 show 15 countries with three or more foreign correspondents located in China. At the top of this list is the USA with 72 correspondents, followed by Japan with 53, the U.K. with 24, and South Korea with 22 (see [Supplementary Appendix A1](#)). We made calls to the Ministry of Foreign Affairs to request updated information on the number of foreign correspondents but were not given the information. Since 1997, the number of foreign correspondents in China has likely decreased due to a worldwide decline in news revenue and, consequently, the closure of many foreign bureaus (Willnat & Martin, 2020). We conducted a review of outlets from the 1997 list and find that 68% either no longer exist or no longer station journalists in China.¹⁰

Timeline of expulsions

On February 19, 2020, three journalists from *The Wall Street Journal* were expelled by China. The rationale for their expulsion is contested. The Chinese government stated that this initial expulsion of three *Wall Street Journal* reporters was the result of a February 3, 2020 headline appearing in *The Wall Street Journal* editorial section describing China as the “Real Sick Man of Asia,” which some said conjured historical stereotypes of Chinese as carriers of disease and led to outcries of anti-Chinese racism in China and in the USA (Huang & Liu, 2020).¹¹ However, those February 19 expulsions also occurred one day after the U.S. government designated five Chinese media organizations as foreign government functionaries.¹² The February 19 expulsion of *Wall Street Journal* reporters led the USA to announce that the USA would limit Chinese nationals working for five Chinese state-controlled media organizations to 100 individuals on March 2, effectively expelling over sixty people. In an apparent response, the Chinese government announced on March 17 that it would expel even more foreign journalists, ultimately expelling 16 journalists from *The New York Times*, *The Washington Post*, and *The Wall Street Journal*. This expulsion is one of the largest single expulsions of foreign correspondents in decades globally. These 16 journalists represented a large portion of the entire reporting corps for these three organizations—for all affected outlets, more than fifty percent of their journalists were expelled (Northrop, 2021).

Context of COVID-19

The expulsions occurred against the backdrop of the COVID-19 pandemic. In January 2020, COVID-19 spread from Wuhan, its epicenter, to other parts of China, and quickly thereafter, the rest of the world (see detailed timeline

of COVID-19 pandemic and expulsions in [Supplementary Appendix A3](#)).

The pandemic increased global attention on China (Lu et al., 2022), including bans on travel¹³ and criticism of China from political elites, including then-U.S. president Donald Trump and then-U.K. prime minister Boris Johnson. Foreign journalists also faced immense pressure from domestic editors to produce news about the virus’s spread even as those same journalists faced physical danger from the virus itself, whose lethality was not yet known.

Chinese authorities were slow to release detailed information about the virus, its origins, and its impact. Chinese journalists Fang Bin and Chen Qiushi disappeared after covering the virus’s early spread, and their disappearance was reported by foreign media outlets including *BBC* and *The New York Times*.¹⁴ Virtually all major foreign news organizations, including *The Financial Times*, the Associated Press, *The Guardian*, NPR, and even *Russia Today*, reported on either the origins of the virus or controversy over origins of the virus in the months prior to expulsion.¹⁵ The expelled journalists’ only commonality was the identity of their parent publications and the fact that their visas were due for renewal in 2020. There does not appear to be a correlation between expulsion and reporting on COVID-19 or reporting from Wuhan. Some of the expelled journalists were reporting in Wuhan at the time (Chris Buckley with *The New York Times* and Chao Deng with *The Wall Street Journal*), while others were located abroad (*The New York Times*’s Ian Johnson was in London). Some reporters reporting from Wuhan at the time were not expelled (Martin Pollard and Thomas Peter with Reuters, Tom Hancock with *The Financial Times*),¹⁶ and some reporters covering the coronavirus for affected publications were not expelled either (Keith Bradsher with *The New York Times*).¹⁷

Data and methods

Data

We collected the headlines and texts of articles about China from English-language news organizations with correspondents located in mainland China between January 2019 and November 2021, which spans the expulsions of foreign correspondents from China. The study period ends in November 2021 because the two countries agreed to begin reissuing journalist visas on November 16, 2021.

In addition to outlets facing expulsion of journalists, the analysis includes media outlets unaffected by the expulsions that had foreign correspondents in China in March 2020, published in English, and for which we were able to collect data.¹⁸ We exclude U.S. government-affiliated media organizations because the expulsions originated in a geopolitical dispute between those two countries.¹⁹ These criteria yielded 16 online, print, and broadcast media organizations.²⁰

Our unit of analysis is the news organization, not the individual journalist. We make this choice for three reasons. First, many news stories are co-bylined, making individual attribution difficult. Second, even when stories have only one author, journalists frequently assist in each other’s reporting, for instance by suggesting stories to colleagues located elsewhere, conducting in-person interviews with sources whom their colleagues cannot reach by phone, or visiting sites in-person to obtain details that are unavailable to remote reporters. Third, journalists’ “beats”—or typical reporting

Table 3. Journalists at treated outlets: then and now

Outlet	2020		2023	
	#	% Expelled	# Covering China	# at Same outlet
New York Times	9	77.8	4	9
Wall Street Journal	14	71.4	9	12
Washington Post	4	75.0	3	4

responsibilities—may be cycled among reporters within a given outlet as a result of expulsion. Journalists may also leave one news organization for another, or leave journalism altogether. Table 3 shows that by 2023, for the three outlets where journalists were expelled, just under half of correspondents located in China in 2020 no longer report on China.²¹ In these cases, the stable unit treatment value assumption becomes untenable as remaining journalists (those in the “control”) may assume additional or alternate responsibilities as a result of their peers being expelled (those receiving “treatment”), and expelled journalists (units in “treatment”) benefit from the reporting of their non-expelled colleagues (units in “control”). News organizations, however, are unlikely to assist each other in reporting because they compete with one another for audience and revenue. The implication of this is that “treatment” (expulsion) is not dosed by the number of expelled journalists as journalists cannot be added or subtracted in a linear and comparable manner.²²

From the selected outlets, we collect headlines containing the word “China,” “Chinese,” or “Beijing” in two waves (April and August 2022). We collected the article headline, author, subtitle, URL, URL of associated images, date of publication, and article abstract (for more details, see [Supplementary Appendix A4](#)). Between June and August 2022, we collected the full text articles from URLs we had previously collected.²³ We clean these data by removing articles that are unlikely to contain original reporting and removing duplicates (for more details see [Supplementary Appendix A5](#)). Across all outcome variables, we removed outlets which are not substantively comparable to the treated units on the variable in question.²⁴

Method

We employ generalized synthetic control to assess the impact of expulsion on information origination, composition, and reach (Xu, 2017). Generalized synthetic control (a) obtains a fixed number of latent factors by estimating an interactive fixed effects model using data from the control group (non-expelled units), (b) estimates factor loadings for the treatment group (each expelled unit) by linearly projecting pre-treatment outcomes from treated units onto the space spanned by factors from (a), and (c) imputes treated counterfactuals based on estimated factors (a) and factor loadings (b). This allows for the heterogeneity of the effects of expulsion across units and time, relaxing the often violated assumption of difference-in-differences that the average outcomes of treated and control units have parallel paths in the absence of treatment (Card & Krueger, 2000). This method extends the synthetic control method to allow for multiple treated units and variable treatment periods (Abadie et al., 2010). Finally, generalized synthetic control accounts for confounding by other events (e.g., the worldwide spread

of COVID-19, foreign media outlets’ investigations into the origins of the virus in China, and increased global antagonism toward China because of COVID-19) occurring at the same time as expulsion. Such concurrent contextual factors threaten the validity of segmented regression approaches such as interrupted time series designs, where expelled units are compared pre-post expulsion by using multiple time points to control for underlying trends.

The use of generalized synthetic control also aligns with our theoretical approach. Scholarship on news routines and the organizational response to extraordinary events is grounded in features of news organizations that are common to news organizations as a category. By conducting analysis at the organizational level, we make use of these categorical features as the common basis by which non-expelled outlets can effectively control for expelled ones.

Generalized synthetic control employs a parametric bootstrap procedure to obtain uncertainty estimates in studies with relatively few samples such as ours. We allowed for cross-validation in the selection of latent factors, and used 1,000 bootstraps for the construction of confidence intervals. The model’s functional form is:

$$Y_{it} = \delta_{it}D_{it} + \lambda'_i f_t + \varepsilon_{it}$$

where Y is the outcome of interest, i is a news organization, and t is each month. D is the treatment condition, with $D = 1$ indicating the condition of having journalists expelled from the country, and δ is the estimand, that is, the heterogeneous treatment effect on unit i at time t ; f is a vector of unobserved common factors, and λ' is a vector of unknown factor loadings. ε_{it} is a vector of unobserved error terms.

The major assumption of this research design—and the core to the identification strategy—is that assignment to treatment is not correlated with the treatment effect on the outcome variables in question. That is to say, we assume that our three treated units (*The New York Times*, *The Washington Post*, and *The Wall Street Journal*) possessed no unique characteristics that led them to be selected for expulsion where the controls were not. The Chinese government itself has supported this claim, stating that the expulsions were only “necessary and reciprocal countermeasures made in response to unreasonable oppression faced by Chinese media organizations in the U.S” (Tracy et al., 2020). To test this assumption, we ran a structural topic model (STM) on 12,920 articles written by all outlets in the period prior to expulsion with treatment status as a covariate (Roberts et al., 2019). Many topics were discussed at similar frequencies by treatment and control units. Topics that were discussed more or less by treated units resembled topics which were discussed at similar frequencies (see [Supplementary Appendix Figure A8](#)).²⁵ While this analysis gives us more assurance, it remains possible that treated and control units differ on other dimensions we do not observe.

In addition, our results rely on assumptions common to difference-in-differences estimators, including that the error term is uncorrelated with each unit at each time period, conditional on factor loadings, and that the treatment does not “spillover” to the control units. In this study, if control units observe the expulsion of treated units and alter their reporting patterns as a consequence, the difference-in-differences approach would bias us toward finding a null effect. While we do not believe this is happening—qualitative interviews

with journalists indicate that they intend to carry on reporting as before (DeButts, 2020), the tit-for-tat nature of expulsions reduces concerns of a widespread crackdown, and the majority of the control units are non-American—we cannot definitively rule out the possibility of spillover.

In sum, although we believe generalized synthetic control is the best suited to answer our research questions about the effects of expulsion, it is by no means perfect. To gain more confidence in the results, we also conduct difference-in-differences, synthetic control, and interrupted time series analysis as these methods are subject to different assumptions and constraints (see [Supplementary Appendix A11, A12, and A13](#)). Reassuringly, the same substantive findings are corroborated across all methods.

Finally, it is important to emphasize that the 2020 expulsion of journalists from China was characterized by unusual circumstances: COVID-19 and the ensuing interest in news about China, USA–China tensions, and the relatively robust foreign media presence (relative to other countries) prior to expulsion. These circumstances may also influence organizational responses to expulsion, and thus need to be taken into account before these findings are generalized to other contexts.

Outcome measures

Measures of information origin, composition, and reach are aggregated monthly: Each unit (i.e., outlet) has one aggregated outcome variable for each month, which is equal to the average of all outcomes for articles published online during that month (e.g., 149 articles in May 2021, possessing an average sentiment score of 0.1). We aggregate monthly rather than use a more granular aggregation, say weekly, because substantively, organizational change occurs on a longer time-scale in news organizations. In addition, weekly aggregation can yield very low numbers of articles for some outlets, leading to noisy data sensitive to outliers (e.g., a very negative week because of one article about the oppression of dissidents).²⁶ We did not aggregate at a less granular level, say quarterly, because it can mask meaningful changes over time, and would also have resulted in too few pre-treatment periods needed to construct counterfactuals from control units. To allow time for expulsions to occur, and in recognition of possible anticipatory behavior by organizations during the tit-for-tat escalation in that month, we do not examine data from March 2020.²⁷

Information origination

We construct two measures of information origination: (a) *institutional* origination and (b) *regime* origination. To categorize stories as being triggered by institutions, we train four independent coders to classify the origination of 32,416 headlines,²⁸ achieving an inter-coder reliability of 0.75 Krippendorff's Alpha. Stories were considered to have an institutional origination if the specific *timing* of the article was determined by a recent action or pronouncement of a government or government-affiliated institution. Institutional releases of data, including trade data, were marked as institutional, as were arrests, detentions, sentencing, or other government actions. If the headline contained a government action, but the action did not immediately prompt the article to be written (for example: "China tries to revive economy but consumer engine sputters"), or if there was not enough information to conclude either way, the article was not considered to have originated from an institution. Using the

same logic, we categorize information origination from *regime* and non-regime sources. An article is considered to originate from a regime source if there is any reference in the headline to the CCP or institutions affiliated with it, including the government, and Party or government officials, achieving an inter-coder reliability of 0.80 Krippendorff's Alpha.²⁹ Together, these two variables assess the extent to which institutions—in general or specific to the CCP regime—are initiating the transfer of information exiting the country's borders. Each new organization's outcome is the percentage of stories initiated by institutions or the Chinese regime for each month. For a detailed description of coding rules and results from inter-coder reliability tests, see [Supplementary Appendix Section A7](#).

Information composition

To measure information composition, we look at article *sentiment* and *entity diversity*. *Sentiment* is measured with FinBERT, a positive/negative/neutral sentiment classifier built atop the Bidirectional Encoder Representations from Transformers (BERT; [Araci, 2019](#)). We select FinBERT because it is trained on financial news data and performed best in our manual validation test, achieving 64% agreement with our hand-coded set across three categories (for more details on sentiment validation, see [Supplementary Appendix A9](#)). Using FinBERT, we extract sentiment labels for all articles for which full text is available. Texts are first segmented by sentence, with sentiment labels calculated for each sentence (negative sentences take on a value of -1 , neutral sentences 0, and positive sentences 1). Then, we calculate the sentiment of each article by averaging the sentiment values of its sentences, yielding a value between 1 (all sentences are positive) and -1 (all sentences are negative). Finally, each news organization receives a monthly sentiment score equal to the average article-level sentiment in that month.

Our second measure of information composition, *entity diversity*, evaluates the number of unique information source entities in each news story. We use a source attribution algorithm ([Spangher et al., 2023](#)), trained on a dataset of news stories whose sources have been manually identified and annotated by professional journalists, to identify all sourced phrases for which full texts are available (28,889) and the entities associated with these sourced phrases. We employ this approach to identify source entities instead of traditional named-entity recognition (NER) because traditional NER methods like Spacy and NLTK identify all entities in a text, including entities which are not sources. For example, in the phrase "China's foreign ministry today announced the expulsion of foreign journalists," the algorithm will identify "China's foreign ministry" as the source of information in the sentence, while traditional NER methods may identify "today" and "foreign journalists," even though those entities are not the sources of information in the sentence. Using the source attribution algorithm, we identify 483,083 sources across all articles, including 71,478 unique source entities. To calculate entity diversity, we sum the total of unique sources appearing in all articles published in that month for each outlet.³⁰ The observed outcome for each news organization is therefore the monthly sum of sources relied upon for all sourced information in that month.

Information reach

We use three measures to operationalize information reach: *absolute supply*, *relative supply*, and *engagement*. The first, absolute supply, is the raw number of articles about China published each month. The second, relative supply, is the percent of an outlet's articles each month that are about China. We construct this second measure by dividing the raw article count by an approximate measure for the total number of articles published each month (the number of articles published with the word “the”). This yields the percentage of an outlet's articles each month that pertain to China. The third, engagement, is measured by the amount of online social media engagement with each article using the CrowdTangle API, which returns each article's “total engagement,” a number representing the sum of Facebook reactions, comments, and shares associated with the article URL. We remove the highest and lowest 5% engagement stories to limit the influence of outliers (stories that go viral or stories with missing data). We then measure the average engagement across all URLs published by each outlet, each month.³¹

Robustness check

Because the population of foreign media outlets is small, and thus our sample size is small, a concern may be that our study is underpowered to detect effects. To address this concern, we include a robustness check for the resilience hypothesis that measures changes to production processes by assessing what percentage of each month's stories are being produced *collaboratively*. Specifically, we measure the percentage of stories either being co-written by multiple authors or receiving additional help from journalists or news assistants in the form of contribution credits.

We measure the number of authors by adding one author for each comma or “and” in the author field. Where no author is listed, we assume there is one author. Where the author is listed as “staff” or an independent organization, we again assume the author is singular. For contribution credits, we subset each article to its final paragraphs and look for instances of the words “contributed,” “additional reporting,” or “reported from,” which are used to assign additional credit to authors or researchers whose contribution does not rise to the level of receiving a byline or who are legally forbidden from receiving a byline.³²

The outcome variable is the percentage of articles each month produced under collaboration. Because the BBC, *The Economist*, NPR, and RT rarely (less than 10 times in the dataset) or never include more than one byline or assign additional contributing credits, they are excluded from the analysis.

Results

Across all three outcome measures, findings are mainly consistent with the observable implications of resilience. Our robustness check for changes to production processes, which we expected to observe under resilience, shows an increase in stories produced collaboratively (significant at the 5% level). We will examine each outcome in turn.

Limited change in origination

Figure 1 displays the results for information origination. The left panels contain the raw data by outlet where treated units are darker. The right panels of Figure 1 show the estimated average treatment effect on the treated (ATT) of expulsion.

Expulsion does not have a statistically significant effect at the 5% level on either of the two outcomes. There is a decrease in the percentage of institution-originated stories from expelled news organizations after expulsion (averaged ATT of -0.09) ($p = .07$), but it does not reach our significance threshold of 5%. Since we do not observe corresponding changes in regime origination, this suggests the overall pattern with respect to the effect of expulsion on information origination is primarily indicative of resilience.

No change in composition

Figure 2 shows the results for information composition. The left panel again contains the raw data by outlet, and the right panel the estimated ATT of expulsion.

Our measure of information composition shows a clear null effect of expulsion (see right panel of Figure 2). There appears to be less variance in sentiment in the months immediately after expulsion (see panel A1 of Figure 2) with sentiment converging in a negative direction for all outlets. This period coincides with the outbreak of COVID-19 globally. Reporting on disaster, suffering, and death leads to lower sentiment scores, and is probably the reason for the observed across-the-board decline. Using generalized synthetic control,

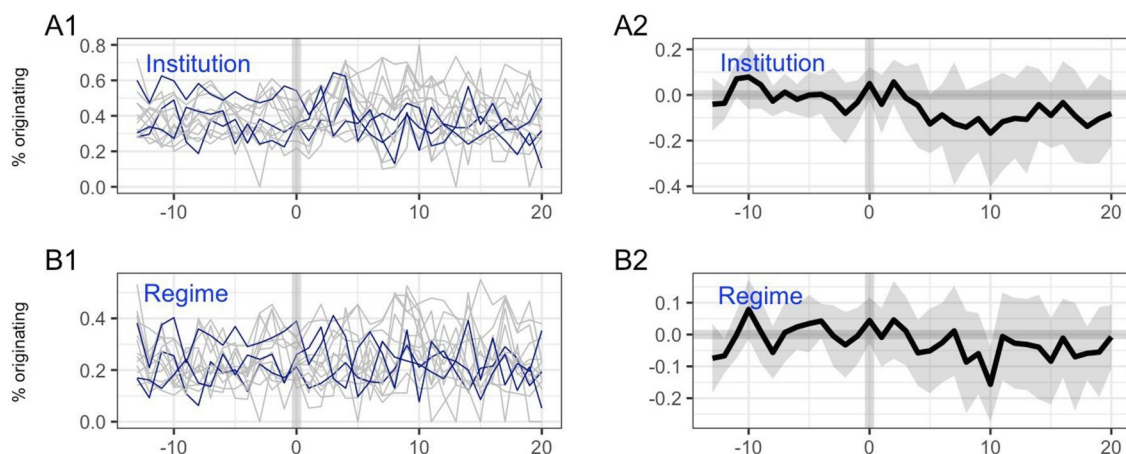


Figure 1. Effect of expulsion on information origination; left panels contain the raw data by outlet where treated units are darker; right panels show the estimated ATT; gray vertical line denotes the date of expulsion; A1 and A2 show results for institutional origination, and B1 and B2 for regime origination.

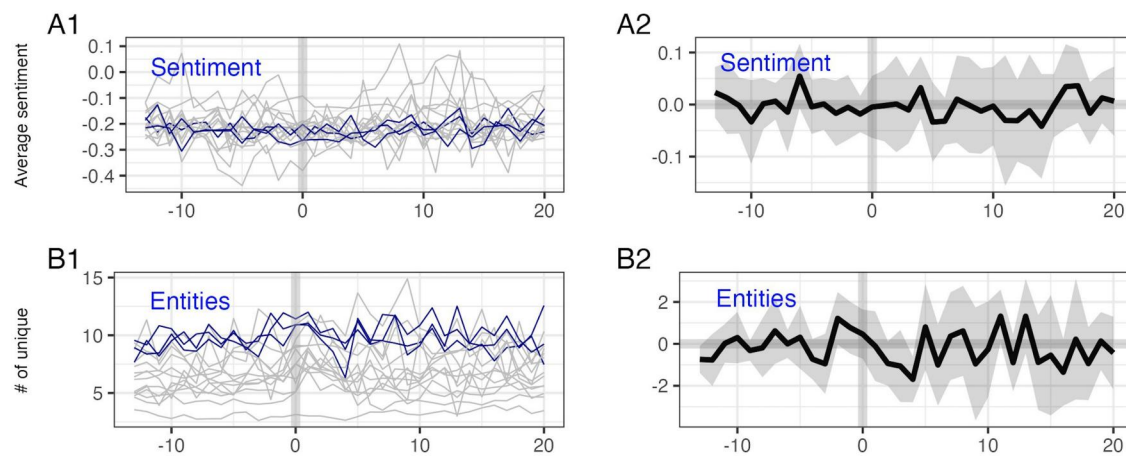


Figure 2. Effect of expulsion on information composition; left panel contains the raw data by outlet where treated units are darker; right panel shows the estimated ATT; gray vertical line denotes the date of expulsion; A1 and A2 show results for sentiment, and B1 and B2 for entity diversity.

these overall declines do not affect the ATT estimates. Results on sentiment and quantity of unique entity sources are consistent with the resilience outcome.

No change in reach

In Figure 3, we see the results for information reach, where the left panels contain the raw data by outlet and the right panels the estimated ATT of expulsion. While there does appear to be a decrease in raw article counts about China published by treated units, that decrease coincides with an overall decrease in all stories published, and thus disappears when outputs are calculated as a percentage of an outlet's overall numbers. Average engagement with each article also does not change.³³ The results are again consistent with the theory of resilience.

Robustness check: change in production processes

The left panel of Figure 4 contains the raw data on collaboration by outlet and the right panel the estimated ATT of expulsion on collaboration. The results show that the percent of collaboratively-written articles increases around the time of expulsion (averaged ATT of 0.10, $p = .04$). The increase in bylines and contribution credits at *The New York Times* appears to slightly precede the expulsion. These changes, in turn, may have led these organizations to remain more resilient to the expulsion of their journalists.

Discussion

The results indicate that media organizations did not experience a chilling effect in terms of the origination, composition, and reach of their stories after the expulsion of their journalists during the period of study. Put differently, the information produced by media organizations about China is not detectably different in terms of institutional or regime origination, sentiment, entities referenced as sources, article quantity, or audience engagement to stories produced prior to expulsion as would be expected if media outlets had changed their reporting, or had been forced to change their reporting, in response to being expelled. If anything, media organizations may have changed their production processes to account for expulsion. Together, these findings suggest that outlets successfully adapted to the challenges introduced by expulsion on the dimensions we study and in the time period of this paper.

These results have implications for theories of journalistic resilience. While this literature has shown how media organizations remain resilient in the face of external challenges—that is, large-scale unexpected news events—our findings provide empirical support for the idea that news organizations can also remain resilient to direct threats that disrupt internal processes. Furthermore, the results suggest resilience is obtained through the adaption and reconstitution of routines, namely a reallocation of resources deployed in the production of each article. Specifically, news organizations may be using additional researchers or online data to compensate for the information that can no longer be gathered by foreign correspondents. All media bureaus with correspondents in China also employ auxiliary personnel who assist in the sourcing, producing, and even drafting of news stories. If those personnel are taking on greater responsibilities, the media organizations may maintain similar reporting prior to expulsion. The large media organizations which have survived the decline in print media can perhaps afford to pay more for freelance content, assign greater research support, or make use of publicly available online data.

Our study has several limitations. One limitation is that our measures of information origination, composition, and reach do not capture all aspects of changes in reporting. For example, anecdotal evidence suggests that reporters are changing the *types* of stories they write, even if the sourcing, composition, and reach of those stories remains constant. For example, some expelled reporters have claimed to have postponed the writing of human interest stories because those stories benefit from on-the-ground (“shoeleather”) reporting and are thus not possible to conduct remotely (DeButts, 2020). Were this to be occurring at scale, we would expect to see a rise in the institutional origination of stories after expulsion. While we do not see that rise, we cannot rule out that these human interest stories are disappearing in smaller numbers. This question may be a promising area for future research, perhaps through case studies and other qualitative analyses.

Another limitation relates to generalizability. China is the world's second-biggest economy and has the world's second-biggest population: Media organizations may have greater incentives to continue reporting on China than they would on another expelling country with less global cachet. March 2020 was also an unusual time. The COVID-19 pandemic forced organizations to begin organizational transformations even unrelated to the expulsion of their journalists. Because

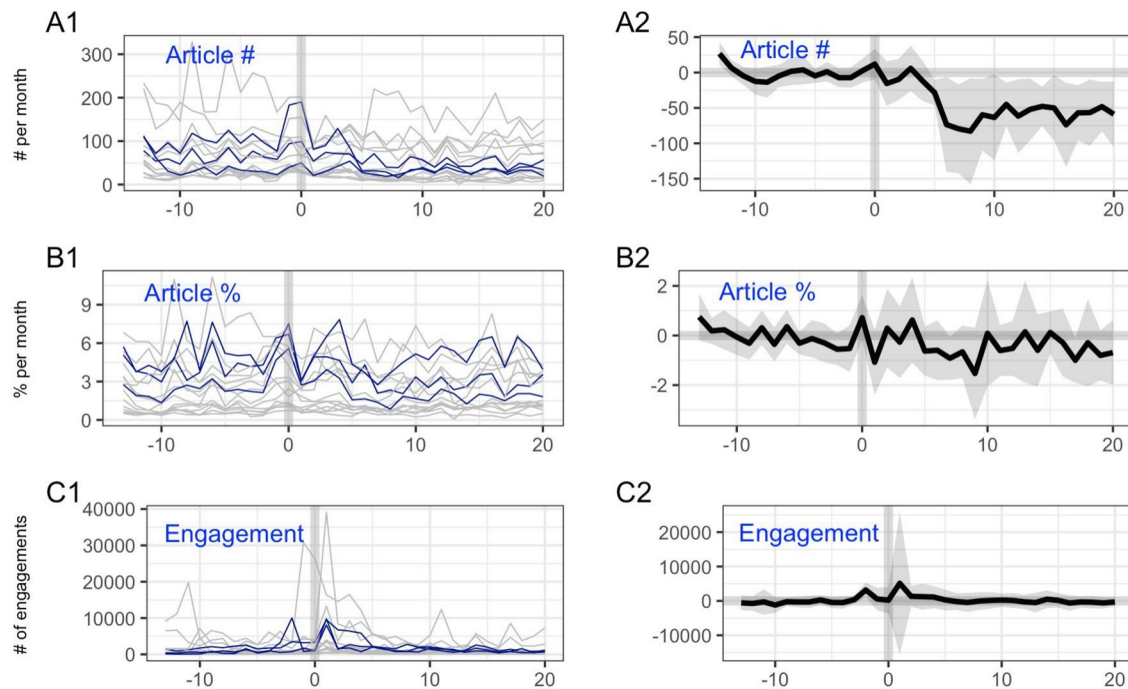


Figure 3. Effect of expulsion on information reach; left panels contain the raw data by outlet where treated units are darker; right panels show the estimated ATT; gray vertical line denotes the date of expulsion; A1 and A2 shows results for raw story counts; B1 and B2 for percent of all outlet's stories; C1 and C2 for story engagement.

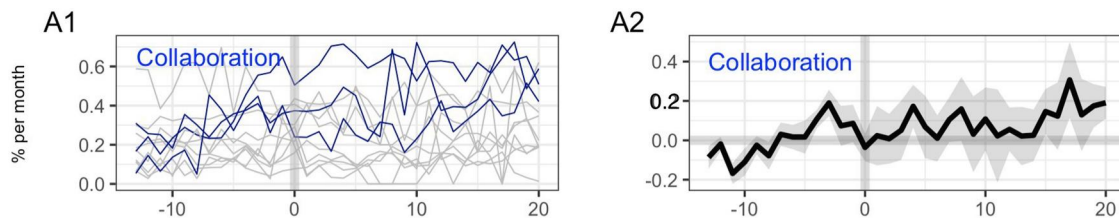


Figure 4. Effect of expulsion on production processes; left panels contain the raw data by outlet where treated units are darker; right panels show the estimated ATT; gray vertical line denotes the date of expulsion; A1 shows that the percentage of articles receiving contribution credits have increased.

of these factors, we caution against reflexive generalization of our findings, and we hope that future research can explore how the effects of expulsion might vary in other time periods and political contexts.

Finally, we note while it is promising that news media organizations have thus far not experienced a chilling effect after the expulsions of their journalists, it is possible that such an effect manifests in the longer term. News organizations are characterized by news-gathering routines, and insofar as news outlets retain journalists with previous in-country experience, outlets may be able to draw upon these connections to maintain coverage even after expulsion (Schudson, 1989). However, as seasoned journalists transfer or retire, media organizations may show the effects of expulsion in a delayed manner. Our study covers less than two years post-expulsion. It is possible that chilling effects may begin after a period of delay, as routines break down and journalists with in-country experience disappear.

News organizations are complex media institutions with professional commitments to upholding journalistic standards, even in the face of adverse reporting conditions. Our result should not be interpreted to mean that that same resiliency will apply indefinitely, or to other direct threats to media organizations and journalists. While it is undoubtedly encouraging that

media organizations have thus far insulated themselves from a chilling effect, we urge further research into how and in what ways expulsion and other non-coercive threats may influence the media production processes and reporting.

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Supplementary material

Supplementary material is available online at *Journal of Communication* online.

Data availability

Data and methods needed to recreate all tables and figures are available at: <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/YOX7CA>

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Notes

1. <https://www.aljazeera.com/news/2020/8/29/belarus-expels-journalists-withdraws-accreditation-in-crackdown>.
2. <https://www.transcontinentaltimes.com/expulsion-of-senior-bbc-journalist-from-russia-direct-assault-on-media-freedom/>.
3. <https://www.hrw.org/news/2022/11/10/congo-expels-renowned-journalist>, <https://www.voanews.com/a/optimism-of-a-more-open-ethiopia-fades-expelled-journalist-says-6660990.html>, <https://balkaninsight.com/2022/08/30/turkey-condemned-for-expelling-greek-journalist/>.
4. <https://www.thehindu.com/news/international/last-chinese-reporter-leaves-country-after-india-denies-visa-extension/article67015073.ece?>
5. This is true even as digital technologies have proliferated the channels for the consumption of information, thus diversifying who and what can play a gatekeeping role in transnational communication (Wallace, 2018), because flows of information across borders are generally thought to lag domestic information flows due to language barriers, market fragmentation (Pan, 2017), and geopolitical intervention (Malcomson, 2016).
6. The expulsion of journalists can have geopolitical repercussions. The March 2020 expulsions of journalists studied in this article originated in a geopolitical dispute and were resolved in 2021 via high-level government negotiations.
7. Digital repression is widely understood as aiming to produce a chilling effect by aiming to increase the fear of physical or digital consequences of speech acts (Earl et al., 2022).
8. Adapting from Morrison and Tumber (1985), we refer to foreign correspondents as “individuals who correspond/report, regardless of nationality, full-time, on a staff basis, for a news organization whose headquarters are located in another country.” This definition is consistent with China’s own definition of “resident foreign journalist.” From the Regulations of the People’s Republic of China Concerning Reporting Activities of Permanent Offices of Foreign Media Organizations and Foreign Journalists: “Resident foreign journalists refer to career journalists dispatched by foreign media organizations to be stationed in China for than [sic] six months for news coverage and reporting.”
9. See *Regulations of the People’s Republic of China on News Coverage by Permanent Offices of Foreign Media Organizations and Foreign Journalists, Decree of the State Council of the People’s Republic of China No. 537*.
10. It is possible that new outlets have stationed journalists since 1997. However, overall declines in newspaper revenues in recent years suggests that the number of new newspapers which can afford to station journalists in China is not likely to compensate for observed declines.
11. See reporting by China’s flagship English-language outlet CGTN <https://news.cgtn.com/news/2020-02-20/Calling-China-the-sick-man-of-Asia-is-a-racial-slur-OexguEBdMk/index.html>.
12. The Chinese government regularly denies tit-for-tat activity even while taking actions whose timing appears to be tit-for-tat. For example, one week after Canada arrested Meng Wanzhou, CTO of Huawei, China arrested two Canadian citizens in China on charges of espionage. The Chinese government did not explicitly link the two actions but their association was widely speculated, and indeed the two Canadian citizens were later released at the same time Meng Wanzhou was released as part of an apparent exchange.
13. Russia, Japan, Pakistan, and Italy implemented travel restrictions in January, and the USA and Australia followed suit in early February 2020.
14. <https://www.nytimes.com/2020/02/14/business/wuhan-coronavirus-journalists.html> <https://www.bbc.com/news/world-asia-china-51486106>
15. Note that by origins, we mean origins of the virus in Wuhan, not to allegations of a lab leak and other theories of its specific origins that began circulating more widely in the months after expulsion.
16. <https://www.reuters.com/article/us-china-health-backstory/backstory-this-is-a-special-time-reporting-from-the-edge-of-chinas-virus-lock-down-idUSKBN20B09K/>
17. <https://www.nytimes.com/2020/02/10/business/china-coronavirus-economy.html>
18. Media organizations that contracted exclusively with freelance journalists based in mainland China are excluded.
19. We exclude outlets such as Voice of America, which is affiliated with the U.S. government. We include NPR because it maintains significant editorial independence from the U.S. government.
20. We were able to identify twenty media organizations meeting the exclusion criteria. Data were not available for four of them. The 16 media organizations are: AP News, BBC, CNBC, CNN, *The Financial Times*, *The Guardian*, *Los Angeles Times*, *The New York Times* (expelled), NPR, Reuters, Russia Today, *The Daily Telegraph*, *The Economist*, *Time Magazine*, *The Wall Street Journal* (expelled), and *The Washington Post* (expelled).
21. These changes are not necessarily attributable to expulsion; journalists are regularly reassigned reporting responsibilities.
22. One consequence of examining organizational-level rather than journalist-level changes is that if journalists leave an organization after expulsion, or begin publishing outside of the organization’s official publication channels, our analysis will not take account of these extra-organizational publications. We have reason to believe that extra-organizational publication is not widespread; all of the reporters we identified as being located in China at the time of the expulsion remain employed and publishing with news organizations. For a full list of identified expelled reporters and their current employers and responsibilities, see [Supplementary Appendix A2](#).
23. Only 1.1% of articles with these terms in the headline did not relate to China. Headlines and associated data from twelve outlets were collected in April 2022; headlines from all remaining outlets subsequently identified as meeting the inclusion criteria not gathered in the first collection were collected in August 2022. We were not able to collect the text of all URLs because some URLs were videos, had migrated URL locations, or had been removed from the news organization website.
24. For information origination, we excluded *The Economist* and *Russia Today* from the institutional outcome, and *The Economist* from both outcomes. This is because articles are published weekly in the case of *The Economist*, which means the timing of articles is pre-determined by the media organization, not by external institutions. We exclude *Russia Today* because it is a Russian state-run outlet so articles are by definition determined by institutional actors (i.e., the Russian government) (Elsawah and Howard, 2020).
25. The one exception is stories about Hunter Biden, which appeared more frequently among the treated units prior to expulsion; however, Hunter Biden’s alleged dealings with China began appearing in headlines long before the expulsions occurred (as soon as Joe Biden became the presumptive Democratic nominee in early 2019), with an additional spike occurring in October 2019 with the discovery of documents allegedly pulled from his laptop. Both control and treatment units also report on a number of potentially sensitive stories related to China and the USA.
26. We replicate the main analysis on a bi-weekly basis, aggregating data in two-week chunks and discarding outlets whose data is too sparse at that interval, see [Supplementary Appendix A10](#). The results remain unchanged, but because data is discarded in bi-weekly analysis, we present results based on monthly aggregation in the main text.
27. In [Supplementary Appendix A13](#), we analyze the data using segmented regression, where we aggregate data on a weekly basis and include data from March 2020.
28. We also hand-coded 300 full-text articles by the same criteria as the headlines and found that our headline-only and full-text agreement rate was 83% for the institutional variable and 88% for the regime variable. Given the similar results, we use headlines to generate this variable to save time. We also hand-coded all source entities from a stratified sample of 160 articles (ten from each outlet) by the same criteria, finding that these source entities correlate modestly with the overall story origination, with Pearson’s product-moment correlation of 0.52 for Institutional and 0.45 for Regime Origination.
29. Taiwan and Hong Kong were not considered part of China for the purposes of hand-coding regime.
30. We clean these entities by removing all entities whose names exceed 70 characters, as our quality checks revealed that exceedingly long names resulted from parsing errors.
31. We do not measure social media engagement on other platforms. During our study period, Facebook was the most popular social media platform in the world (<https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>). Since Facebook users are older than those of other platforms (see <https://flowingdata.com/2022/04/13/social-media-usage-by-age/>), this readability measure may pertain to a slightly older demographic.
32. Because in our data almost 60% of *The Washington Post*’s full-body texts and author bylines are missing in the months between January and August 2019, we replaced those months’ data with data from ProQuest’s *Washington Post* archives, which contains author bylines but not full-body texts. As a result, to assess the percentage of stories receiving “contribution” assistance during those months, we calculated the pre-expulsion average percentage of *Washington Post* stories

receiving contribution credits for the months for which we had full-text data (September 2019 to February 2020), and added that average percentage to the months for which full-text data is missing.

33. The confidence interval is wide because it is difficult to match engagement patterns in the pre-treatment period (in particular because of the BBC, whose engagement numbers form a high and consistent outlier in Figure 3 Panel C1.)

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