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THE DETERMINANTS OF ANTI-GOVERNMENT PROTESTS IN ASIA

Abstract

What determines cross-national variations in the extent of anti-government protests in Asia? Anti-government protests have surged across Asia in recent years, with many contributing to consequential political change. However, systematic cross-national comparison of the determinants of protests in Asia is still largely missing. This article fills this important gap by quantitatively examining the explanatory power of the three main theories of contentious politics—grievance, resource mobilization, and political process theories—in the Asian context with new data on anti-government protests in all 25 Asian states from 1990 to 2016. The analysis finds that urbanization, information and communication technology, and regional demonstration effects are the strong catalysts of anti-government protests in Asia, while repressive state capacity particularly dampens protests. The findings offer important insights into the dynamics of the anti-government protests that have become increasingly salient in Asian politics.

Keywords

protest, democracy, social movement, contentious politics, Asia

Anti-government protests have surged across Asia in recent years. In March 2014, in what came to be known as the Sunflower Movement, hundreds of Taiwanese students, academics, and civil society leaders stormed the Legislative Yuan and occupied it for 24 days, protesting the government's attempt to ram the Cross-Strait Service Trade Agreement through the legislature. Outside the chamber, more than a hundred thousand people rallied in a show of solidarity with the occupiers (Ho 2015). In September that year, the Umbrella Movement erupted in Hong Kong, after China's Standing Committee of the National People's Congress instituted a significant restriction on Hong Kong people's political citizenship. Committed participants of the movement occupied the city's several key districts for over two months, with close to 1.2 million citizens joining the movement at some point during that period (Hui 2015). Less than two years later, a series of anti-government protests, even larger in magnitude, broke out in South Korea over the massive corruption scandal that engulfed the Park Geun-hye presidency. Protesters filled the streets of Seoul and other major cities every Saturday from late October 2016 until March 2017, culminating with the Constitutional Court of Korea's landmark ruling that approved the National Assembly's impeachment of the president. At the height of the protests, about 2.3 million people participated in

candlelight rallies throughout the country (Ock 2016). While public demonstrations of such epic proportions have been comparatively absent in Mainland China since the Tiananmen Square protests of 1989, the number of smaller-scale protests directed at both the Communist Party and local governments have exploded from the early 1990s on (Cai 2008; Chung, Lai, and Xia 2006; Fewsmith 2013; O'Brien 2008).

How can we account for cross-national variations in the magnitude of anti-government protests in East and Southeast Asia? As illustrated above, citizens' protests against their government's policy or authority figure prominently in the region's recent political developments, with a number of protests having major repercussions in the formal political arena or shaping the government's political calculations. However, we still know relatively little about what determines cross-national variations in the extent of anti-government protests in Asia. While there have been important contributions focusing on specific Asian country cases (Cai 2008; Ho 2005, 2015; O'Brien 2008; Pekkanen 2004; Wang 2015; Wong and Peng 2015) or investigating how particular issues such as rising food prices (Hendrix and Haggard 2015) or corruption (Yap 2017) affect protest activity globally, few works have attempted to examine the relevance of various political science theories of protests in the historically specific context of Asia. In short, the need for a systematic comparative analysis of the determinants of anti-government protests across the entire Asia has yet to be fulfilled, despite the growing salience and significance of such protests in the region's domestic politics.

This article seeks to provide a groundwork for research on anti-government protests in Asia by assessing the explanatory power and generalizability of three dominant schools within the contentious politics literature: grievance, resource mobilization, and political process theories. We do so by analyzing the most recent data on anti-government protests in all 25 Asian states for the entire post-Cold War period from 1990 to 2016, and by estimating those three theories' relative explanatory power. While the existing literature has highlighted various possible determinants of protests in and beyond Asia, we find that urbanization, information and communication technology, and regional demonstration effects (that is, protests in neighboring states) are the strong catalysts of anti-government protests in Asia, while repressive state capacity has a particularly dampening effect on protests. The finding is robust against the inclusion of various potential confounders and the use of alternative measurements of the dependent variable.

Our examination of the determinants of anti-government protests in Asia is important for several reasons. First, anti-government protest is an important form of what, according to Schmitter and Karl (1991), has been a relatively understudied aspect of democracy in Comparative Politics, that is, "associational democracy." As Schmitter and Karl (1991) emphasized, "During the intervals between elections, citizens can seek to influence public policy through a wide variety of other intermediaries: interest associations, social movements, locality groupings, clientelistic arrangements, and so forth" (1991, 78). Given that existing scholarship has concentrated on the electoral and formal-institutional aspects of democracy, our analysis of anti-government protests as the dependent variable offers new insights into the conditions under which citizens across Asian states seek to engage with the government and to shape public policies in their favor through non-electoral, informal means.

Second, our research sheds new light on the dynamics of Asia's domestic politics, given that contentious politics in general and anti-government protests in particular often have important political and social ramifications. While debates continue on the

conditions under which, and the mechanisms through which, protests lead to meaningful policy changes (Amenta and Caren 2004; Earl 2004; Tarrow 2011, 215–233), scholars generally acknowledge that protests often significantly influence policy outcomes (Bosi, Giugni, and Uba 2016; Burstein and Linton 2002; Uba 2009) and effect sociocultural shifts (Earl 2004; Polletta and Jasper 2001; Rochon 2000). In addition, recent research suggests that anti-government protests have the potential to alter the broader political landscape (Bunce and Wolchik 2011; Chenoweth and Stephan 2011; Haggard and Kaufman 2016).

Finally, our analysis complements but goes beyond the existing small-n case studies that have thus far dominated the literature on Asia's contentious politics. It does so by examining the relative explanatory power of grievance, resource mobilization, and political process theories through a series of statistical analyses including a large number of independent variables, country-year observations, and model specifications. The validity of prior findings based solely on small-n case studies has been often confounded by their confirmatory—and even outlying—case selection. Given the prevalence of small-n case studies within the existing literature in East Asian Studies, our systematic comparative research of patterns of anti-government protests across all Asian states can serve as a benchmark against which to assess the extent to which a particular country is a representative (that is, “on-the-line”) case of contentious politics in Asia (also see Lieberman 2005). In doing so, our research contributes to bridging qualitative and quantitative research traditions in Comparative Politics and East Asian Studies.

PATTERNS OF ANTI-GOVERNMENT PROTESTS IN ASIA

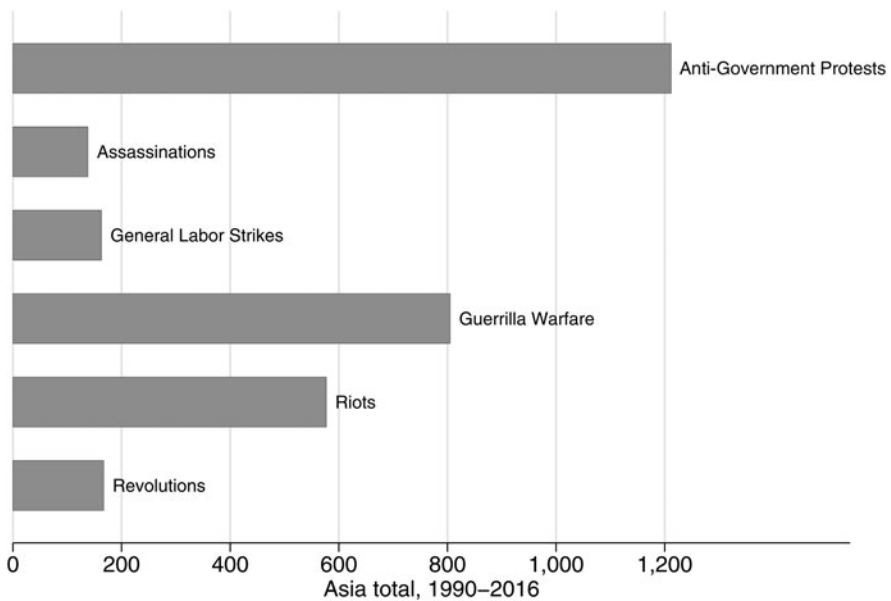
This section describes and maps out patterns of anti-government protests in East and Southeast Asia. As a prior step, however, it needs to be clarified what we mean by anti-government protests. Anti-government protests constitute a subset of contentious collective action—that is, action taken by “people who lack regular access to representative institutions, who act in the name of new or unaccepted claims, and who behave in ways that fundamentally challenge others or authorities” (Tarrow 2011, 7). According to Tarrow (2011, 7), “social movements, protests, rebellions, riots, strike waves, and revolutions” are all different forms of contentious collective action. What differentiates them are the repertoires involved—broadly, either violent or nonviolent—and the target of people's claims. Based on this scheme, anti-government protests can be defined as non-violent public gatherings organized by citizens to express their opposition to their own government. As such, the scope of this article includes neither violent forms of anti-government collective action like riot and civil war, nor peaceful forms of collective action that are directed against entities other than the government such as labor strike against a corporate employer. When citizens organize anti-government protests, their aim may be either policy or regime change.¹ In practice, however, anti-government protests would often combine various elements of those two types and hence defy a simple binary classification. For instance, citizens' protest motivated by a specific policy may escalate over time into a nationwide protest to oppose and change the government itself as an unintended consequence. Also, the two types of citizens' demands can appear within a single anti-government protest from the very beginning. Thus, while we do *not* wish to minimize the importance of context-specific heterogeneity in

conceptualizing anti-government protests, this article contributes to the literature by focusing on the “common properties” of anti-government protests that are present across dissimilar Asian states yet have been often obscured in prior research.

Anti-government protests in Asia deserve our sustained analytic attention because, as shown in [Figure 1](#), based on Banks and Wilson’s (2017) data, anti-government protest has been the most ubiquitous type of domestic political contention organized by citizens across Asia throughout the post-Cold War period. Specifically, during 1990–2016, a total of 1,212 anti-government protests occurred throughout Asia, which dwarfed other types of domestic contentious politics in terms of magnitude, such as assassinations (total 138), general labor strikes (163), guerilla warfare (805), riots (577), and revolutions (167). Our focus on anti-government protests as the dependent variable thus offers important analytic leverage to understand and explain the dynamics of contentious politics in Asia in a generalizable manner.

[Table 1](#) compares the level of democracy with the extent of anti-government protests for all 25 Asian states. The Table’s left half shows the states in the order according to the mean level of democracy over 1989–2015 on a –6 (least democratic) to +7 (most democratic) scale, based on Vreeland’s (2008) coding scheme for X-Polity scores and Marshall, Gurr, and Jaggers’ (2017) Polity IV data. The right half of the Table presents the total number of anti-government protests for each Asian state during 1990–2016 as well as its percentage share of the Asia total, using Banks and Wilson’s (2017) data that count “Any peaceful public gathering of at least 100 people for the primary purpose of

FIGURE 1 Types of Domestic Political Contention in Asia, 1990–2016



Note: The graph presents the total number of each of six types of domestic political contention organized by citizens in Asia from 1990 to 2016, using Banks and Wilson’s (2017) data. See this article’s The Dependent Variable section for more details on the data.

TABLE 1 Regime Type and Anti-Government Protests in Asia

Level of Democracy, 1989–2015			Anti-Government Protests, 1990–2016			
Rank	State	Average Score	Rank	State	Total Number	% Asia Total
1	Japan	7.0	1	India	364	30.0
1	India	7.0	2	China	191	15.8
3	Mongolia	6.4	3	Pakistan	143	11.8
4	Timor-Leste	6.3	4	Sri Lanka	69	5.7
5	The Philippines	6.1	5	Nepal	68	5.6
6	South Korea	5.7	6	Indonesia	65	5.4
7	Taiwan	5.1	7	South Korea	49	4.0
8	Sri Lanka	4.7	8	Bangladesh	37	3.1
9	Thailand	4.6	9	Thailand	33	2.7
10	Malaysia	3.8	10	Myanmar	30	2.5
11	Pakistan	3.4	11	Japan	28	2.3
12	Bangladesh	3.3	12	Malaysia	27	2.2
13	Nepal	3.2	13	Taiwan	23	1.9
14	Indonesia	2.2	14	Afghanistan	22	1.8
15	Singapore	1.0	15	The Philippines	17	1.4
16	Cambodia	0.5	16	Cambodia	15	1.2
17	Maldives	0.3	17	Vietnam	10	0.8
18	Afghanistan	-1.6	18	Mongolia	8	0.7
19	Brunei	-1.7	19	Maldives	6	0.5
20	Myanmar	-2.7	20	Singapore	3	0.2
21	Vietnam	-3.0	21	Bhutan	1	0.1
21	Laos	-3.0	21	Brunei	1	0.1
21	China	-3.0	21	North Korea	1	0.1
24	Bhutan	-3.1	21	Timor-Leste	1	0.1
25	North Korea	-5.8	25	Laos	0	0.0

Note: In the left column, the level of democracy is measured annually on a -6 (the least democratic) to +7 (the most democratic) scale, using Vreeland's (2008) coding scheme for X-Polity scores and Marshall, Gurr, and Jaggers' (2017) Polity IV data, and then averaged over 1989–2015. In the right column, the extent of anti-government protests during 1990–2016 is presented as the total number and as the percentage share of the Asia total, based on Banks and Wilson's (2017) data. See this article's Research Design section for more details on both data.

displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature" (Wilson 2017, 13). In the left column, the democracy scores are lagged by one year to be consistent with this article's statistical analysis, so that regime type temporally precedes the onset of anti-government protest.

Fundamentally, while the literature has concentrated on regime type as a key structural condition of citizens' collective action against the government, the Table shows that there still exists significant divergence between the level of democracy and the extent of anti-government protests across Asia. For instance, while both South Korea and Taiwan were similarly highly democratic during the post-Cold War period, South Korean citizens organized more than twice as many mass protests against the government as their

Taiwanese counterpart (specifically, 49 versus 23). Furthermore, although China, Laos, and Myanmar all remained the most repressive and dictatorial within Asia throughout the period, China ranked second in the region with total 191 anti-government protests whereas Laos had no such protest whatsoever. Myanmar, in contrast, ranked tenth with total 30 protests, on a par with the most democratic Japan.

These cross-national differences within Asia demonstrate that citizens' anti-government protest is more than just a matter of regime type, thereby suggesting the need to go beyond each state's level of democracy and to analyze a broader set of the determinants of such collective contention.

THEORETICAL EXPECTATIONS

Thus far, relatively few cross-national comparative studies have focused specifically on protest activity. However, a large literature on the broader phenomenon of contentious politics offers three general theories that can usefully guide our inquiry. These theories each highlight a distinct set of factors that contribute to the magnitude of protests: namely, widespread grievances, availability of resources for would-be protesters, and political opportunities.

GRIEVANCES

Since the seminal work of Gurr (1970), many scholars have focused on the grievance harbored by the population or a section of the population to explain protests and other types of contentious politics. The key insight of these works is that people are more likely to protest or take other forms of collective political behavior when they feel that they are being treated unjustly or when their needs are not adequately met. As people's actual feelings of dissatisfaction are difficult to measure, especially at times of political turmoil, most empirical investigations of grievance theory highlight the objective factors that may contribute to perceived grievances. One factor that has garnered a lot of attention is economic well-being or lack thereof. Researchers have analyzed both the effects of relative deprivation (that is, how deprived one is of economic resources compared to others in society) by utilizing measures of income inequality, and the effects of absolute deprivation (that is, how poorly one's objective economic needs are met) by employing measures of poverty or economic development (Muller 1985; Muller and Seligson 1987; Nagel 1974; Sigelman and Simpson 1977; Weede 1981, 1986). In general, research has thus far found little support for the role of relative deprivation in inducing protests (Solt 2015), but it lends stronger evidence for the claim that absolute deprivation leads to more protest activity (Chenoweth and Ulfelder 2017). In addition, some argue that what matters more for political stability than current conditions is the direction of change. Even when current economic conditions are objectively bad, if people believe that the economy is nonetheless improving, they are likely to be more tolerant toward the government. Conversely, deteriorating economic conditions can lead to simmering discontent regardless of where the starting point was. Przeworski and his colleagues (2000) find that democratic regimes are strengthened by economic growth and severely destabilized by economic crisis. Gasiorowski (1995) suggests that inflation contributed to the breakdown of authoritarian regimes in the 1980s.

Grievance theory has faced serious challenges since its inception. Specifically, critics argue that grievances can be found in nearly all societies, such that when one focuses on grievances, the real question becomes why grievances lead to political unrest only in some societies but not in others (Skocpol 1979; Tilly 1978; Fearon and Laitin 2003; Collier and Hoeffler 2004). While grievances may certainly provide an incentive for people to protest because successful protests may remove or at least alleviate the underlying cause of discontent, grievance theory has yet to incorporate theoretically the disincentives that people face in participating in protests. Resource mobilization theory and political process theory attempt to analyze systematically the factors that catalyze or hinder protest activity. Accordingly, the explanations of protests that these theories offer shift the analytic focus to conditions that are likely to mitigate the obstacles to protest activity.

RESOURCE MOBILIZATION

Resource mobilization theory seeks to explain the conditions under which self-interested individuals would devote their time and resources to furthering a common interest. The point of departure for the theory is the understanding that collective action often entails an inherent difficulty. The difficulty arises from the fact that participation in contentious politics imposes costs on individuals in terms of time spent, physical effort, and missed economic opportunities, while the collective good attained often tends to be a public good, meaning that non-participants cannot be excluded from reaping its benefits. Thus, as Olson (1965, 129) emphatically argues, theories of collective action

must show *why* the individual member of [a] large, latent group will voluntarily support the group goal when his support will not in any case be decisive in seeing that the group goal is achieved, and when he would be as likely to get the benefits from the attainment of that goal whether he had worked for its attainment or not (emphasis in the original).

In trying to explain why collective action nonetheless often occurs, resource mobilization theory focuses on the role of movement entrepreneurs (McCarthy and Zald 1973). Protests become more likely to the extent that these actors, who are willing to bear a greater burden in pursuit of a collective goal, can assemble the resources necessary for staging a successful protest—most importantly, money and human labor. When the movement entrepreneurs can easily mobilize a large amount of resources, this also has the effect of bringing down the individual costs that must be borne by the would-be protesters. Thus, protests become more likely when societal conditions facilitate resource mobilization.

One factor that aides resource mobilization is urbanization, which tends to put people in close proximity to each other. In other words, “cities bring together masses of people, improve communication links among them, and increase the ability of private grievances to accumulate and circulate,” thereby enlarging the pool of people willing to be mobilized (Wallace 2013, 632). Wallace’s empirical analysis finds that urbanization does indeed promote collective action.

Another factor that can help mobilize resources and overcome the hurdles to collective action is the development of information and communication technology. As Deutsch

puts it, “communication is the cement that makes organizations. Communication alone enables a group to think together, to see together and to act together” (1963, 77). Many researchers from various disciplines, including political science, sociology, and communication, suggest that information and communication technology can lead to a rise in contentious politics by reducing the costs of communication and coordination, which facilitates recruitment and improves the organizational effectiveness of the collectivity (Garrett 2006). However, as recent reviews of the literature suggest, empirical assessments of the effects of information and communication technology on contentious politics have thus far provided a mixed picture (Garrett 2006; Little 2016). Conflicting findings are reported, with some researchers offering support for a positive role of information and communication technology in protests and other forms of contentious politics (for example, Enikolopov, Petrova, and Zhuravskaya 2011; Howard 2010; Pierskalla and Hollenbach 2013) and others suggesting a marginal or negative role of information and communication technology (for example, Bimber 2001; Shapiro and Weidmann 2015).

A framework that can reconcile these contradictory results is offered by Little (2016), who argues that information and communication technology has two separate implications that are relevant for collective action. First, information and communication technology circulates information about the level of political dissatisfaction among the population. Second, information and communication technology helps resolve what Little (2016) calls the “tactical coordination problem” regarding the logistics of protest by reducing uncertainty about what other protesters will choose among the possible options in terms of time, location, and other points of choice. Little’s claim is that while the latter mechanism has an unambiguously positive effect on protests, the former has ambiguous consequences for protests because “better information must sometimes reveal that the regime is more popular than expected” (2016, 153). Thus, one should not expect that better information and communication technology will always promote contentious politics.

POLITICAL PROCESSES

Political process theory (also referred to as political opportunity theory) highlights the political conditions external to movement organizations and other political groups that shape the perceived costs and likelihood of success that these groups face in mounting protests (Eisinger 1973; Kitschelt 1986; McAdam 1999; Tarrow 1989; Tilly 1978). Political opportunity can be defined as “consistent—but not necessarily formal or permanent—dimensions of the political environment or of change in that environment that provide incentives for collective action by affecting expectations for success or failure” (Tarrow 2011, 163). Two central structural dimensions of a political environment are the state’s repressive capacity and the level of democracy. As Jenkins notes, “the state organizes the political environment within which social movements operate, creating opportunities for action and, alternatively, imposing restrictions on movement activities” (1995, 16), and “intermediating between the state and social movements is the political representation system, that is, the set of institutions that claim to represent social interests” (1995, 15). For Tilly as well, state capacity and democracy constitute the two dimensions of what he calls a regime—that is, “a set of relations between states and citizens” (2007, 12).

Most researchers posit a negative relationship between the state's repressive capacity and collective political action. In her classic work on social revolutions, Skocpol asserts that a necessary condition of social revolutions is a sufficient weakening of the state, which she defines as "a set of administrative, policing, and military organizations headed, and more or less well coordinated by, an executive authority" (1979, 29). In other words, as long as the state retains the capacity to repress potential challenges to its authority, social revolutions cannot occur. Similarly, Fearon and Laitin (2003) claim that state weakness is a significant predictor of civil war outbreak.

Regarding the relationship between democracy and contentious politics, scholars generally argue that democracy provides a conducive environment for contentious politics by providing an opening in the political structure, thus bringing down the costs associated with protests. Tilly notes that "from the start, social movements have occurred mainly in democratic regimes and have multiplied with democratization" (2007, 187). According to Tilly, this is because contentious collective political actions "depend on regime-backed rights, notably rights of association, assembly, and speech. Without sturdy defenses for such rights, powerful objects of unwelcome claims regularly retaliate against the claimants, call down governmental repression on the performances, and break up displays of WUNC [worthiness, unity, numbers, and commitment]" (2007, 188). Also, the opening in the political structure brought about by democracy can facilitate "cognitive liberation," that is, the process through which people begin to believe that the existing sociopolitical arrangements can be altered and that they themselves can affect such change (McAdam 1999, 48–51; Piven and Cloward 1977, 3–4). As more people adopt such a mindset, the pool of potential protest participants is likely to increase.²

Finally, protests in other countries of the same region can prompt similar action in the domestic political scene, leading to a regional contagion of protests. The fact that protests have been staged in regional neighbors who share many similarities in objective social conditions often emboldens would-be protesters to take action that they would otherwise not do in the absence of the regional precedents. According to Huntington (1991, 100–106), these regional precedents demonstrate to the potential protesters that they can achieve a similar outcome in their own country. In addition, he notes that events abroad also provide useful information about effective forms of collective action against the government. Empirical investigations thus far have found strong support for regional "demonstration effects" in contentious political behavior (Tarrow 2011, 192–193, 252–254).

All in all, the three main schools of contentious politics provide us with potentially useful theoretical tools for making sense of patterns of anti-government protests in Asia. In the remainder of the article, we seek to examine, within the Asian context, the validity of the various theoretical expectations that have been gleaned from the existing literature.

RESEARCH DESIGN

In this article, we use an event count framework to test the hypotheses from the grievance, resource mobilization, and political process theories of contentious politics in explaining cross-national variations in the extent of anti-government protests in Asia. Our analysis covers the post-Cold War period. That is, it begins in 1990, the first year after the fall of

the Berlin Wall catalyzed the end of the Cold War, and ends in 2016, the last year for which accurate data are available. The unit of analysis is the country–year, and the data set includes all 25 Asian states and 662 country–year observations. Our main statistical analysis covers 615 observations due to missing data.

THE MODEL

Our statistical analysis estimates the negative binomial (NB) regression model that can simultaneously address unobserved heterogeneity and time dependence in the event count data. Our statistical model is superior to the alternatives for several reasons. First, the ordinary least squares (OLS) model is inappropriate because our count dependent variable always takes discrete, nonnegative integers as its values and hence violates the OLS’s normality-of-residuals assumption (King 1988). Second, within the event count framework, the NB model is preferable to the Poisson model because, although the Poisson model imposes the mean–variance equality assumption that each Asian state is expected to have the same number of anti-government protests in each year, the sample mean and variance of our dependent variable are 1.83 and 70.58, respectively, thereby violating that assumption. This lack of the mean–variance equality—so-called overdispersion—indicates that unobserved heterogeneity, time dependence, or both are present across Asian states. The NB model corrects this problem by incorporating the overdispersion parameter into the Poisson variance (Hilbe 2012, 141–184). Third, our standard NB model fits our data better than the more complex zero-inflated NB (ZINB) model that accounts for excessive zeros in the count dependent variable—so-called zero inflation—as another source of overdispersion.³ Finally, our choice of the NB model facilitates direct comparison between our findings and those of prior quantitative research on contentious collective action. In other words, since most of the existing quantitative studies of protests have employed the NB model (for example, Hendrix and Haggard 2015), the use of the NB model for our analysis is better suited to fulfilling one of our main goals, which is to examine how well the previous findings from global analyses hold up in the Asian context. Substantively, in our analysis the NB model predicts how many anti-government protests are organized by citizens in an Asian state in a given year. In the analysis below, we use a *one-year lag* for all independent variables to reduce the problem of reverse causation (also known as simultaneity bias).

THE DEPENDENT VARIABLE

We begin by measuring nonnegative integers that count the number of anti-government protests occurring in a state in a given year, based on Banks and Wilson’s (2017) proprietary Cross-National Time-Series (CNTS) Data Archive. Specifically, the CNTS data define “anti-government demonstrations” as “Any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature” (Wilson 2017, 13). This definition closely matches our conceptualization of anti-government protests in that the target of contentious collective action is restricted to the government and the repertoire to nonviolent ones. While one might wish to differentiate further between protests displaying “opposition to government policies” and those voicing

“opposition to government authority,” it is exceedingly difficult in practice to determine what the goals of the protests are. This is not least because the two types of goals are not mutually exclusive and can be espoused by the same protest participants. In addition, goals can change as protests evolve over time. Thus, analyzing the full continuum of anti-government protests as a subset of contentious collective action seems to be a reasonable compromise between “splitting” and “lumping” in measuring the dependent variable. The CNTS data code anti-government protests as such, based on information from *New York Times*’ news articles on the form, actor, target, and mode (that is, repertoire) of contentious political events, and per the data publisher’s verification, the same criteria are applied to all country–years covered by the data.⁴

There are three reasons why the CNTS data are suitable for our analysis. First, as noted above, the CNTS data’s operational definition of “anti-government demonstrations” conforms to our conceptualization of anti-government protests. Second, the CNTS data explicitly distinguish “anti-government demonstrations” from seven other forms of domestic conflict events, namely, “assassinations,” “general strikes,” “guerrilla warfare,” “major government crises,” “purges,” “riots,” and “revolutions” (Wilson 2017, 12–13). Third, the CNTS data provide complete information on the extent of anti-government protests for all 25 Asian states throughout the entire period from 1990 to 2016 without any missing data. Our use of the CNTS data thus reduces measurement errors and enhances the precision of statistical inference.

To address any potential concern about the validity of the CNTS data on anti-government protest, we take two additional steps as robustness checks against alternative operationalization of the dependent variable. First, because the CNTS data rely on *New York Times*’ news reports as the source of information, it is possible that the counts of anti-government protests may be affected by any media bias of the *New York Times* in deciding whether and how much to report on different Asian states. To solve this potential problem, in the Appendix we estimate a new statistical model that includes the annual total number of *New York Times* reports on each Asian state as an additional control variable. Second, since the boundaries between different types of contentious collective action may not always be clear-cut, some anti-government protests may become erroneously categorized as some other form of domestic contention. Conversely, other types of contentious collective action may be wrongly classified as anti-government protests.⁵ To ensure that our results are not dependent on subjective judgment calls in the coding process, in the Appendix we estimate an alternative statistical model that employs the annual total sum of “anti-government demonstrations,” “general strikes,” and “riots” for each Asian state as the new dependent variable.

THE INDEPENDENT VARIABLES

Our statistical analysis includes independent variables that tap into the grievance, resource mobilization, and political process theories of contentious politics. The first three independent variables, *GDP per capita*, *per capita GDP Growth Rate*, and *Inflation Rate*, account for the grievance theory. *GDP per capita* represents the claim that absolute deprivation (that is, the inverse of economic development) increases protest activity (Chenoweth and Ulfelder 2017). It measures the natural log of real gross domestic product (GDP) per capita in constant 2005 US dollars for each state in a year, using

the Institute for Health Metrics and Evaluation (IHME) data on GDP per capita series (James et al. 2012). Both *per capita GDP Growth Rate* and *Inflation Rate* consider the argument that not the static level of poverty but short-term economic deterioration (Gasirowski 1995; Przeworski et al. 2000) is likely to spur protests.⁶ *per capita GDP Growth Rate* computes the annual percentage change in real GDP per capita for a state in a year, using the IHME data (James et al. 2012).⁷ *Inflation Rate* indicates the inflation rate measured by consumer price index, that is, the annual percentage change in the prices of a market basket of goods and services purchased by the average consumer for a state in a year, based on the World Bank's (2018) World Development Indicators data.⁸ It is expected that the higher value of *per capita GDP Growth Rate* decreases protests whereas the greater value of *Inflation Rate* increases them.

The next two independent variables, *Urbanization* and *Telephones per capita*, account for the resource mobilization theories that urbanization (Wallace 2013) and information and communication technology (Deutsch 1963; Garrett 2006) increase protest activity. Although neither of them is a direct measure of resources for would-be protesters, both urbanization and the spread of telephone subscriptions have been often seen in the literature as facilitating resource mobilization. *Urbanization* computes the percentage of total population living in cities with population greater than 100,000 in a state in a year, using the National Material Capabilities (NMC) 5.0 data (Singer, Bremer, and Stuckey 1972) and with the missing data for 2013–2015 imputed from 2012's values. *Telephones per capita* measures the number of all telephones, including mobile cellular phones, per capita in a state in a year, based on Banks and Wilson's (2017) CNTS data. As the data are available for up to the year 2014, 2014's values are used to impute 2015's.

The last three independent variables, *Democracy*, *Military Personnel per 1,000*, and *Regional Contagion*, represent the political process theories that democratic regime type (Jenkins 1995; Tilly 2007) and regional demonstration effects (Huntington 1991) create a favorable environment for protest activity whereas repressive state capacity (Skocpol 1979) curbs such activity. *Democracy* measures a state's level of democracy in a year on a –6 (the least democratic) to +7 (the most democratic) scale, based on Vreeland's (2008) method to compute X-Polity scores from the component indices of the Polity IV data (Marshall, Gurr, and Jaggers 2017). According to Vreeland (2008), X-Polity scores are the more appropriate measure of regime type than the existing Polity scores when studying contentious politics. X-Polity scores recode Polity scores by removing two component indices of political participation—"competitiveness of political participation" and "regulation of political participation"—from Polity scores. This is because those two component indices contain information on not only political participation but also the severity of contentious political activity, thereby confounding the relationship between the independent and dependent variables. We also use Gleditsch's (2018) Modified Polity P4 and P4D Data supplementarily to include in the analysis Brunei and Maldives that are not covered by the Polity IV data.

Military Personnel per 1,000 taps into repressive state capacity by computing a state's military personnel per 1,000 population in a year, using the NMC 5.0 data (Singer, Bremer, and Stuckey 1972; see also Greig and Enterline 2017). As the data coverage ends in 2012, the values of 2013–2015 are imputed from 2012's. Ideally, we wish to measure the strength of the government's repressive apparatus by focusing on the police as well as the military. This is because the government would likely use the

police rather than the military for routine domestic repression and to deal with anti-government protests, and because, as such, there certainly is an advantage of focusing on police personnel to measure the concept of repressive state capacity.⁹ However, longitudinal data on police personnel covering all 25 Asian states from 1989 to 2015 are non-existent. To the best of our knowledge, Interpol simply does not provide such data. Although the United Nations Office on Drugs and Crime's (UNODC) United Nations Survey of Crime Trends and Operations of Criminal Justice Systems has been probably the only systematic, albeit intermittent, effort to measure total police personnel at the national level, the UNODC data set suffers from the missing data problem as it covers only 14.5 percent of total 662 country-year observations in our sample, thereby rendering statistical inference very difficult.

In view of this conundrum, we examine the role of repressive state capacity in Asia's contentious politics in two ways. First, in our main analysis, we use *Military Personnel per 1,000* because the literature as well as real-life events suggests that this variable is a reasonably good, albeit not perfect, proxy for the government's repressive capacity in the context of anti-government protests in Asia. The size of the military, even on its own, still taps into the ultimate repressive potential of the government, not least because mass mobilization can often overwhelm the capacity of the police, thereby raising the need for the military to intervene (Bellin 2012, 130–131; Svolik 2012, 127). And the larger the military, the easier it becomes to successfully suppress protesters. Indeed, South Korea narrowly missed this scenario during its “candlelight” protests. On the eve of the Constitutional Court of Korea's ruling on President Park Geun-hye's impeachment in March 2017, the Republic of Korea Armed Forces' Defense Security Command drew up a secret plan to declare martial law and mobilize tanks and troops in order to crack down on anti-government citizen protesters in the event that the Constitutional Court would overturn the National Assembly's impeachment of the president (Salmon 2018). Second, as a robustness check, we examine the relationship between the police and protests by employing King and colleagues' multiple imputation model for missing data (King et al. 2001) and constructing the multiply imputed *Police Personnel per 1,000* variable from the UNODC (2001, 2005, 2019) data. While we prefer the observed data-based *Military Personnel per 1,000* variable for our main statistical model, this additional analysis is heuristically useful not only because it offers an insight into the role of the government's repressive apparatus specialized in internal pacification, but also because it helps ascertain the congruence between statistical findings based on *Military Personnel per 1,000* and *Police Personnel per 1,000*.

Regional Contagion represents regional demonstration effects. For an Asian state in a given year, it measures the percentage of all the other states within that state's geographical sub-region who have experienced at least one anti-government protest in that year. To compute this variable, we use Banks and Wilson's (2017) CNTS data on anti-government protests and the United Nations Statistics Division's categorization of Asia's sub-regions as “Eastern Asia,” “Southern Asia,” and “South-Eastern Asia.” Table 2 presents the hypotheses and summary statistics for all independent variables.

RESULTS AND DISCUSSION

The statistical results provide strong evidence that, as a whole, the grievance, resource mobilization, and political process theories of contentious politics are all relevant for

TABLE 2 Hypotheses and Summary Statistics

Variables	Hypothesis	Number	Mean	Standard Deviation	Minimum	Maximum
GDP per capita	-	662	7.31	1.57	4.61	10.59
per capita GDP Growth Rate	-	662	3.63	4.79	-23.69	50.05
Inflation Rate	+	615	13.39	122.12	-23.82	3001.00
Urbanization	+	662	23.18	23.90	0.00	100.00
Telephones per capita	+	662	0.48	0.55	0.00	2.08
Democracy	+	662	1.79	4.40	-6	7
Military Personnel per 1,000	-	662	8.38	9.90	0.67	58.93
Regional Contagion	+	662	32.63	20.33	0.00	100.00

explaining patterns of anti-government protests across Asian states. However, the results offer new insights above and beyond prior research's findings, because our analysis demonstrates that the independent variables associated with each theory vary greatly in terms of their relative importance for the number of anti-government protests. In Table 3, Model 1 presents this article's main statistical model, while Model 2 is a robustness check that replaces *Military Personnel per 1,000* with *Police Personnel per 1,000* as an alternative measurement of repressive state capacity. To begin with, the results support the adequacy of our choice of the NB model. The *Overdispersion* statistic comparing the NB versus Poisson models is highly statistically significant. This indicates that unobserved heterogeneity and temporal dependence are present in our count data. As such, the NB model that can handle them is more appropriate than the Poisson model that cannot.

In Table 3, both models have separate columns on statistical and substantive significance. In the first and third columns on statistical significance, a positive coefficient means that the independent variable increases the expected number of anti-government protests in an Asian state, and a negative one decreases that number. Also, asterisks indicate the strength of statistical significance, with the greater number indicating that the independent variable is the more systematic part of the story about anti-government protests in Asia. In contrast, the Table's second and fourth columns illustrate the substantive effects of the independent variables on the extent of anti-government protests in Asia by reporting the percentage changes in the predicted baseline number of anti-government protests, using each model's coefficient estimates. In the Table, the baseline prediction is the number of protests for the hypothetical average Asian state, for which all the independent variables are held constant at their mean value (since all the variables are continuous ones). Then, changes in the baseline prediction are computed by increasing the value of each independent variable at a time from its mean by one standard deviation while holding all the other variables constant at their mean value.

To begin with, in Model 1 of Table 3 the grievance theory of contentious politics receives mixed empirical support. *GDP per capita* is negative and weakly statistically

TABLE 3 Determinants of the Number of Anti-Government Protests in Asia

	Model 1: Main Model		Model 2: Alternative Measurement of Repressive State Capacity	
	Statistical Significance Coefficients	Substantive Significance Percentage Changes	Statistical Significance Coefficients	Substantive Significance Percentage Changes
<i>Grievance Theory</i>				
GDP per capita	-0.251* (0.139)	-32.5%*	-0.387*** (0.136)	-45.5%***
per capita GDP Growth Rate	0.061** (0.029)	+34.2%**	0.084*** (0.029)	+49.3%***
Inflation Rate	-0.003 (0.006)	-31.5%	-0.006 (0.006)	-52.9%
<i>Resource Mobilization Theory</i>				
Urbanization	0.025*** (0.007)	+82.3%***	0.017** (0.007)	+50.6%**
Telephones per capita	0.676*** (0.260)	+45.0%***	0.829*** (0.274)	+57.8%***
<i>Political Process Theory</i>				
Democracy	-0.004 (0.023)	-1.8%	0.016 (0.023)	+7.5%
Military Personnel per 1,000	-0.162*** (0.022)	-79.9%***	(replaced)	
Regional Contagion	0.029*** (0.005)	+78.7%***	0.025*** (0.005)	+65.8%***
Police Personnel per 1,000			-0.329*** (0.064)	-46.5%***
Constant	0.907 (0.849)		2.252*** (0.832)	
Overdispersion (NB vs. Poisson)	3.607*** (0.354)		4.113*** (0.393)	
Number of States	25		25	
Number of Observations	615		615	
Log Likelihood	-846.59		-864.88	
Wald χ^2	144.10***		107.53***	
Degrees of Freedom	10		10	

*** $p \leq .01$; ** $p \leq .05$; * $p \leq .10$, in two-tailed tests.

Note: The first and third columns report the sign and statistical significance of the independent variables for Models 1 and 2 respectively, with standard errors in parentheses. All independent variables use a one-year lag. The second and fourth columns present their substantive significance for each model. Changes in the baseline predicted number of anti-government protests are computed by increasing one independent variable at a time from its mean by one standard deviation while holding all the others constant at mean level.

significant, suggesting that the lower level of absolute deprivation (that is, the higher value of *GDP per capita*) is associated with the smaller number of anti-government protests as expected. Substantively, as the first line-second column of Table 3 shows, if citizens' per capita income increases (that is, their absolute deprivation decreases) in an

Asian state from its mean by one standard deviation in a given year, they will organize 32.5 percent less protests against their government in the next year. The result for *GDP per capita* accords with Chenoweth and Ulfelder's (2017) finding that absolute deprivation as a specific form of grievances increases protest activity. In contrast, both indicators of changes in the level of deprivation are consistently opposite of the hypothesized direction. Specifically, *per capita GDP Growth Rate* is positive and statistically significant, meaning that an annual increase in citizens' per capita income leads to more protests than not, with the substantive impact of one standard-deviation increase in the variable from its mean being 34.2 percent. The negative coefficient of *Inflation Rate* suggests that the higher inflation rate is correlated with the smaller number of protests, with its substantive impact of increasing the variable by one standard deviation from its mean being -31.5 percent, although the estimate is not statistically significant.

How can we make sense of these results? One possible reason is that both variables may not only capture the degree of grievances, but also tap into changes in the material resources available for citizens to organize an anti-government protest. For instance, while the high value of *per capita GDP Growth Rate* means the low level of deprivation creating a disincentive for protests, it may also indicate that now citizens have more material resources at their disposal to mobilize for anti-government protests. Likewise, *Inflation Rate* may proxy both grievances and resources because a high inflation rate often goes hand in hand with an economic boom.

Second, the explanatory factors highlighted by resource mobilization theory are at work as hypothesized. Both *Urbanization* and *Telephones per capita* significantly increase the number of anti-government protests. Substantively, if an Asian state's urbanization and telephone subscription per capita increase from the mean by one standard deviation in a given year, the number of anti-government protests will increase by 82.3 and 45.0 percent in the following year, respectively. These findings offer firm evidence for resource mobilization theories that urbanization, on the one hand, and information and communication technology, on the other, catalyze citizens' choice of anti-government protest as a way of their political expression (Deutsch 1963; Garrett 2006; Wallace 2013).

Last but not least, the explanatory factors underscored by political process theory explain much of how many protests citizens organize against the government. *Military Personnel per 1,000* is negatively signed and highly statistically significant, meaning that repressive state capacity significantly decreases the number of anti-government protests organized by citizens. The seventh line-second column of Table 3 shows what happens to the baseline number of protests if the government's repressive capacity, as proxied by the size of its military personnel, increases by one standard deviation from its mean value in a year. The impact is striking: it will decrease the number of any anti-government protests organized by citizens by 79.9 percent in the next year. This finding offers firm evidence that the government's repressive capacity creates a very strong disincentive for citizens' efforts to organize a mass protest against their government (Skocpol 1979). Furthermore, *Regional Contagion* positively and highly statistically significantly relates to the magnitude of protests in Asia, with the large substantive effect of 78.7 percent when the variable increases from its mean by one standard deviation. This result provides strong empirical support for Huntington's (1991, 100–106) insight that regional demonstration effects can catalyze pro-democracy

domestic collective actions including anti-government protest. Finally, the *Democracy* variable is opposite of the expected positive sign and is not statistically significant, with the meager substantive impact of -1.8 percent when its value increases by one standard deviation from its mean. This finding undermines Tilly's (2007) claim that democracy catalyzes protests. The reason for the negative association between *Democracy* and protests appears that in a democratic polity, citizens can find other domestic voice opportunities and remedies to redress their grievances than resorting to anti-government protest. Yet, the lack of statistical significance suggests that the level of democracy has little direct impact on the number of anti-government protests organized by citizens across Asian states.

Now, a brief discussion of Model 2 in Table 3 is in order. Here we revisit the article's main statistical model by replacing *Military Personnel per 1,000* with *Police Personnel per 1,000* as an alternative measurement of the government's repressive capacity. As previously mentioned, while we accept that the government would likely use the police rather than the military in response to anti-government protests, the extreme dearth of accurate longitudinal data on police personnel poses the missing data problem and threatens statistical inference. This is because we cannot know for sure whether any possible change in statistical findings would result from sampling variability caused by missing data or the genuine lack of the independent variables' effects.

In view of this conundrum, we construct the *Police Personnel per 1,000* variable, that is, a new, multiply imputed measurement of the number of total police personnel per capita for an Asian state in a given year, using King and his colleagues' (2001) multiple imputation model for missing data and the UNODC (2001, 2005, 2019) data. Then, we re-estimate the article's main model with this variable for the heuristic purpose only, that is, to ensure that our main model's finding about repressive state capacity using *Military Personnel per 1,000* is congruent with that based on *Police Personnel per 1,000*. In essence, just like *Military Personnel per 1,000*, *Police Personnel per 1,000* is negatively and highly statistically significantly associated with the number of anti-government protests, with the big substantive effect of -46.5 percent (see Table 3's ninth line-third and fourth columns). In addition, this re-estimation confirms our main statistical results for the other independent variables. While *Democracy* changes the sign, it is never statistically and substantively significant. Also, all the results for *GDP per capita*, *per capita GDP Growth Rate*, *Inflation Rate*, *Urbanization*, *Telephones per capita*, and *Regional Contagion* remain unchanged, both statistically and substantively.

To sum up, our statistical findings demonstrate that although grievance, resource mobilization, and political process theories all account for certain cross-national variations, overall, the variables that have been emphasized by resource mobilization and political process theories are relatively more effective than those highlighted by grievance theory for explaining the larger part of anti-government protests in Asia. In particular, the analysis shows that the effects of urbanization, information and communication technology, regional demonstration effects, and repressive state capacity are particularly strong. This indicates that the environmental factors that affect the expected cost and benefit of collective action matter more for explaining cross-national variations in the extent of anti-government protests in Asia than the factors that lead people to harbor grievances against the government.

ROBUSTNESS CHECKS

While we find firm empirical support for our main statistical model, we take several further steps to ensure that our findings regarding the grievance, resource mobilization, and political process theories of contentious politics are robust against various confounding factors. First, we guard against the possibility that the measurement of our dependent variable may be subject to bias or error. One concern in this regard is that, because Banks and Wilson's (2017) CNTS data on anti-government protests and other domestic conflict events are constructed from *New York Times*' news articles, our measurement and statistical estimation may be confounded by any potential bias of the *New York Times* in deciding whether and how much to report on different Asian states. We address this potential media bias in our measurement of the dependent variable by explicitly controlling for the annual total number of *New York Times* reports covering each Asian state in an additional model. Another related concern is that anti-governments protests might be incorrectly coded in the CNTS data as other domestic contentious activities like labor strikes or riots, and vice versa. Thus, in another model, we employ the sum of anti-government protests, labor strikes, and riots for each Asian state in a year as the new dependent variable, using Banks and Wilson's (2017) CNTS data. In essence, in both additional models, the results remain very similar statistically and substantively. (See the Appendix for our fuller discussion of robustness checks against alternative operationalization of the dependent variable.) Second, we estimate a number of additional statistical models that employ an alternative measure of democracy (the Varieties of Democracy data project's Polycharchy variable), or control for the level of globalization as another possible determinant of anti-government protests, and the results are unchanged. (See the Online Appendix for robustness checks against alternative operationalization of independent variables and omitted variable bias.)

CONCLUSION

Anti-government protests constitute one of the most intriguing and enduring aspects of Asian politics during the post-Cold War period. Thus far, however, what determines patterns of cross-national variations in the extent of anti-government protests across East and Southeast Asia has escaped sustained scholarly attention. This article offers some clear insights into this question by drawing on the grievance, resource mobilization, and political process theories of contentious politics, and by testing how those theories can explain the number of protests organized by citizens against their government across Asian states. Our multivariate statistical analysis shows that while grievance, resource mobilization, and political process theories all are relevant for explaining the extent of anti-government protests in Asia, the independent variables emphasized by resource mobilization and political process theories play especially critical roles. Specifically, urbanization, information and communication technology, and protests in neighboring states dramatically increase anti-government protests in an Asian state, whereas repressive state capacity particularly decreases them.

Why should one care about our findings? First, anti-government protest has ongoing relevance for Asia's political dynamics. For local activists and concerned citizens, anti-government protest can be an important way to express political grievances and claims

and to pressure governments for positive policy change. In contrast, for the ruling governments that are repressive or lacking in responsiveness to citizen demands, anti-government protest can be a serious challenge to government authority and regime survival. Thus, anti-government protest has been and continues to be a source of major political controversy across Asia, and should interest scholars of East Asian Studies.

Second, this article offers much needed theoretical and empirical insights into the conditions under which national governments in East and Southeast Asia face direct challenges to their policy or authority from citizens in society in the form of anti-government protests. By systematically examining the determinants of the number of anti-government protests with a large number of independent variables, country-year observations, and model specifications, we not only test the empirical validity of the grievance, resource mobilization, and political process theories of contentious politics, but also generate new theory-enriching insights into how the explanatory factors emphasized by each theory shape citizens' anti-government protest activity with differing degrees of relative causal significance. The theoretical framework and research design that we employ in this article may be readily applicable to other phenomena of contentious politics in Asia. Future research should examine the generalizability of our findings and research design to various other forms of Asia's contentious politics, such as general labor strikes and riots.

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NOTES

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1. We thank the *JEAS* editor Professor Stephan Haggard for this point.

2. We thank a reviewer for pointing out that democracy may also be linked to protests through its effect on cognitive liberation.

3. The Bayesian information criterion (BIC) for model comparison regarding the standard NB and the ZINB models was 1757.40 (with 10 degrees of freedom) and 1759.63 (with 19 degrees of freedom), respectively. Given that the smaller BIC indicates the better model fit, it showed our NB model's advantage over the latter. Also, the cutting-edge model selection strategy for count data (Desmarais and Harden 2013) showed that overdispersion caused by zero inflation actually is *not* a concern in our case. Specifically, the Vuong test statistic with the BIC correction for model selection was -0.15 , thereby rejecting a statistically significant selection of the ZINB model over the standard NB model.

4. Personal correspondence with Databanks International in Jerusalem, the coder and publisher of the CNTS data (August 13, 2018).

5. We thank a reviewer for this point.

6. We thank the *JEAS* editor Professor Stephan Haggard for this point and for suggesting those two variables.

7. Note that the correlation between *GDP per capita* and *per capita GDP Growth Rate* is very low (Pearson's correlation coefficient being -0.06).

8. Because the World Bank's data provide no information on inflation rates in Taiwan and North Korea, we collect their information from Taiwan's Statistical Bureau (<https://eng.stat.gov.tw/>) and Kim (2017), respectively.

9. We thank the *JEAS* editor Professor Stephan Haggard for this point.

10. We thank the *JEAS* editor Professor Stephan Haggard for suggesting this robustness check.

11. We thank a reviewer for this point.

12. We also recode *Regional Contagion* accordingly. For an Asian state in a given year, it now measures the percentage of all the other states within that state's geographical sub-region who have experienced at least one anti-government protest, labor strike, or riot in that year.

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Chonghyun Choi and Dongwook Kim declare none.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit <https://doi.org/10.1017/jea.2019.23>

REFERENCES

- Amenta, Edwin, and Neal Caren. 2004. "The Legislative, Organizational, and Beneficiary Consequences of State-Oriented Challengers." In *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi, 461–488. Malden, MA: Blackwell.
- Banks, Arthur S., and Kenneth A. Wilson. 2017. "Cross-National Time-Series Data Archive." Databanks International. Jerusalem, Israel. www.cntsdata.com. Accessed March 28, 2018.
- Bellin, Eva. 2012. "Reconsidering the Robustness of Authoritarianism in the Middle East: Lessons from the Arab Spring." *Comparative Politics* 44 (2): 127–149.
- Bimber, Bruce. 2001. "Information and Political Engagement in America: The Search for Effects of Information Technology at the Individual Level." *Political Research Quarterly* 54 (1): 53–67.
- Bosi, Lorenzo, Marco Giugni, and Katrin Uba. 2016. *The Consequences of Social Movements*. Cambridge: Cambridge University Press.
- Bunce, Valerie J., and Sharon L. Wolchik. 2011. *Defeating Authoritarian Leaders in Post-Communist Countries*. New York: Cambridge University Press.
- Burstein, Paul, and April Linton. 2002. "The Impact of Political Parties, Interest Groups, and Social Movement Organizations on Public Policy: Some Recent Evidence and Theoretical Concerns." *Social Forces* 81 (2): 380–408.
- Cai, Yongshun. 2008. "Power Structure and Regime Resilience: Contentious Politics in China." *British Journal of Political Science* 38 (3): 411–432.
- Chenoweth, Erica, and Maria J. Stephan. 2011. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. New York: Columbia University Press.
- Chenoweth, Erica, and Jay Ulfelder. 2017. "Can Structural Conditions Explain the Onset of Nonviolent Uprisings?" *Journal of Conflict Resolution* 61 (2): 298–324.
- Chung, Jae Ho, Hongyi Lai, and Ming Xia. 2006. "Mounting Challenges to Governance in China: Surveying Collective Protestors, Religious Sects and Criminal Organizations." *China Journal* 56: 1–31.

- Collier, Paul, and Anke Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56 (4): 563–595.
- Desmarais, Bruce A., and Jeffrey J. Harden. 2013. "Testing for Zero Inflation in Count Models: Bias Correction for the Vuong Test." *Stata Journal* 13 (4): 810–835.
- Deutsch, Karl W. 1963. *The Nerves of Government: Models of Political Communication and Control*. New York: Free Press of Glencoe.
- Earl, Jennifer. 2004. "The Cultural Consequences of Social Movements." In *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Malden, MA: Blackwell.
- Eisinger, Peter K. 1973. "The Conditions of Protest Behavior in American Cities." *American Political Science Review* 67 (1): 11–28.
- Enikolopov, Ruben, Maria Petrova, Ekaterina Zhuravskaya. 2011. "Media and Political Persuasion: Evidence from Russia." *American Economic Review* 101 (7): 3253–3285.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97 (1): 75–90.
- Fewsmith, Joseph. 2013. *The Logic and Limits of Political Reform in China*. New York: Cambridge University Press.
- Garrett, R. Kelly. 2006. "Protest in an Information Society: A Review of Literature on Social Movements and New ICTs." *Information, Communication & Society* 9 (2): 202–224.
- Gasiorowski, Mark J. 1995. "Economic Crisis and Political Regime Change: An Event History Analysis." *American Political Science Review* 89 (4): 882–897.
- Gleditsch, Kristian Skrede. 2018. "Modified Polity P4 and P4D Data." <http://ksgleditsch.com/polity.html>. Accessed August 11, 2018.
- Greig, J. Michael, and Andrew J. Enterline. 2017. "National Material Capabilities (NMC) Data Documentation Version 5.0." <http://cow.dss.ucdavis.edu/data-sets/national-material-capabilities/nmc-codebook-v5-1>. Accessed March 14, 2017.
- Gurr, Ted Robert. 1970. *Why Men Rebel*. Princeton: Princeton University Press.
- Haggard, Stephan, and Robert Kaufman. 2016. *Dictators and Democrats: Masses, Elites, Regime Change*. Princeton: Princeton University Press.
- Hendrix, Cullen S., and Stephan Haggard. 2015. "Global Food Prices, Regime Type, and Urban Unrest in the Developing World." *Journal of Peace Research* 52 (2): 143–157.
- Hilbe, Joseph M. 2012. *Negative Binomial Regression*. 2nd ed. Cambridge: Cambridge University Press.
- Ho, Ming-Sho. 2005. "Taiwan's State and Social Movements Under the DPP Government, 2000–2004." *Journal of East Asian Studies* 5 (3): 401–425.
- . 2015. "Occupy Congress in Taiwan: Political Opportunity, Threat, and the Sunflower Movement." *Journal of East Asian Studies* 15 (1): 69–97.
- Howard, Phillip N. 2010. *The Digital Origins of Dictatorship and Democracy: Information Technology and Political Islam*. New York: Oxford University Press.
- Hui, Victoria. 2015. "Hong Kong's Umbrella Movement: The Protests and Beyond." *Journal of Democracy* 26 (2): 111–121.
- Huntington, Samuel P. 1991. *The Third Wave: Democratization in the Late Twentieth Century*. Norman: University of Oklahoma Press.
- James, Spencer L., Paul Gubbins, Christopher J. L. Murray, and Emmanuela Gakidou. 2012. "Developing a Comprehensive Times Series of GDP per capita for 210 Countries from 1950 to 2015." *Population Health Metrics* 10 (12): 1–12.
- Jenkins, J. Craig. 1995. "Social Movements, Political Representation, and the State: An Agenda and Comparative Framework." In *The Politics of Social Protest: Comparative Perspectives on States and Social Movements*, edited by J. Craig Jenkins and Bert Kaldermans, 14–36. Minneapolis: University of Minnesota Press.
- Kim, Cheon Koo. 2017. "A Study on the North Korean Price: Focusing on Currency Reform." *International Area Studies Review* 21 (4): 141–158.
- King, Gary. 1988. "Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model." *American Journal of Political Science* 32 (3): 838–863.

- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. "Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation." *American Political Science Review* 95 (1): 49–69.
- Kitschelt, Herbert P. 1986. "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies." *British Journal of Political Science* 16 (1): 57–85.
- Lieberman, Evan S. 2005. "Nested Analysis as a Mixed-Method Strategy for Comparative Research." *American Political Science Review* 99 (3): 435–452.
- Little, Andrew T. 2016. "Communication Technology and Protest." *Journal of Politics* 78 (1): 152–166.
- Marshall, Monty G., Ted Robert Gurr, and Keith Jagers. 2017. "Polity IV Project: Political Regime Characteristics and Transitions, 1800–2016." www.systemicpeace.org/inscrdata.html. Accessed January 8, 2018.
- McAdam, Doug. 1999. *Political Process and the Development of Black Insurgency, 1930–1970*. 2nd ed. Chicago: University of Chicago Press.
- McCarthy, John, and Mayer N. Zald. 1973. *The Trend of Social Movements in America: Professionalization and Resource Mobilization*. Morristown, NJ: General Learning Press.
- Muller, Edward N. 1985. "Income Inequality, Regime Repressiveness, and Political Violence." *American Sociological Review* 50 (1): 47–61.
- Muller, Edward N., and Mitchell A. Seligson. 1987. "Inequality and Insurgency." *American Sociological Review* 81 (2): 425–452.
- Nagel, Jack. 1974. "Inequality and Discontent: A Nonlinear Hypothesis." *World Politics* 26 (4): 453–472.
- O'Brien, Kevin J. ed. 2008. *Popular Protest in China*. Cambridge, MA: Harvard University Press.
- Ock, Hyun-ju. 2016. "More than 2 Million Take to Streets Calling for Park's Resignation." *Korea Herald*, December 3. www.koreaherald.com/view.php?ud=20161203000136. Accessed January 5, 2018.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- Pekkanen, Robert. 2004. "After the Developmental State: Civil Society in Japan." *Journal of East Asian Studies* 4 (3): 363–388.
- Pierskalla, Jan H., and Florian M. Hollenbach. 2013. "Technology and Collective Action: The Effect of Cell Phone Coverage on Political Violence in Africa." *American Political Science Review* 107 (2): 207–224.
- Piven, Frances Fox and Richard Cloward. 1977. *Poor People's Movements: How They Succeed, Why They Fail*. New York: Pantheon.
- Polletta, Francesca, and James M. Jasper. 2001. "Collective Identity and Social Movements." *Annual Review of Sociology* 27: 283–305.
- Przeworski, Adam, Michael Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*. New York: Cambridge University Press.
- Rochon, Thomas R. 2000. *Culture Moves: Ideas, Activism, and Changing Values*. Princeton: Princeton University Press.
- Salmon, Andrew. 2018. "Sinister South Korean Military Unit Under Fire Over Martial Law Plan." *Asia Times*, July 30. <https://cms.ati.ms/2018/07/sinister-south-korean-military-unit-under-fire-over-martial-law-allegations/>. Accessed August 2, 2019.
- Schmitter, Phillippe C., and Terry Lynn Karl. 1991. "What Democracy Is ... And Is Not." *Journal of Democracy* 2 (3): 75–88.
- Shapiro, Jacob N., and Nils B. Weidmann. 2015. "Is the Phone Mightier Than the Sword? Cellphones and Insurgent Violence in Iraq." *International Organization* 69 (2): 247–274.
- Sigelman, Lee, and Miles Simpson. 1977. "A Cross-National Test of the Linkage between Economic Inequality and Political Violence." *Journal of Conflict Resolution* 21 (1): 105–128.
- Singer, J. David, Stuart Bremer, and John Stuckey. 1972. "Capability Distribution, Uncertainty, and Major Power War, 1820–1965." In *Peace, War, and Numbers*, edited by Bruce Russett, 19–48. Beverly Hills: Sage.
- Skocpol, Theda. 1979. *States and Social Revolutions*. New York: Cambridge University Press.
- Solt, Frederick. 2015. "Economic Inequality and Nonviolent Protest." *Social Science Quarterly* 96 (5): 1314–1327.
- Svolik, Milan. 2012. *The Politics of Authoritarian Rule*. New York: Cambridge University Press.
- Tarrow, Sidney G. 1989. *Democracy and Disorder: Protest and Politics in Italy, 1965–1974*. New York: Oxford University Press.

- . 2011. *Power in Movement: Social Movements and Contentious Politics*. 3rd ed. New York: Cambridge University Press.
- Tilly, Charles. 1978. *From Mobilization to Revolution*. Reading, PA: Addison-Wesley.
- . 2007. *Democracy*. New York: Cambridge University Press.
- Uba, Katrin. 2009. "The Contextual Dependence of Movement Outcomes: A Simplified Meta-Analysis." *Mobilization* 14 (4): 433–448.
- United Nations Office on Drugs and Crime (UNODC). 2001. "The Sixth United Nations Survey on Crime Trends and the Operations of Criminal Justice Systems (1995–1997)." www.unodc.org/unodc/en/data-and-analysis/Sixth-United-Nations-Survey-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html. Accessed January 9, 2019.
- . 2005. "The Eighth United Nations Survey on Crime Trends and the Operations of Criminal Justice Systems (2001–2002)." www.unodc.org/unodc/en/data-and-analysis/Eighth-United-Nations-Survey-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html. Accessed January 9, 2019.
- . 2019. "Total Police Personnel at the National Level." <https://data.unodc.org>. Accessed January 9, 2019.
- Vreeland, James Raymond. 2008. "The Effect of Political Regime on Civil War: Unpacking Anocracy." *Journal of Conflict Resolution* 52 (3): 401–425.
- Wallace, Jeremy. 2013. "Cities, Redistribution, and Authoritarian Regime Survival." *American Journal of Political Science* 75 (3): 632–645.
- Wang, Juan. 2015. "Managing Social Stability: The Perspective of a Local Government in China." *Journal of East Asian Studies* 15 (1): 1–25.
- Weede, Erich. 1981. "Income Inequality, Average Income, and Domestic Violence." *Journal of Conflict Resolution* 25 (4): 639–654.
- . 1986. "Income Inequality and Political Violence Reconsidered." *American Sociological Review* 51 (3): 438–441.
- Wilson, Kenneth A. 2017. "Cross-National Time-Series Data Archive: User's Manual." Databanks International. Jerusalem, Israel. www.cntsdata.com. Accessed March 28, 2018.
- Wong, Stan Hok-wui, and Minggang Peng. 2015. "Petition and Repression in China's Authoritarian Regime: Evidence from a Natural Experiment." *Journal of East Asian Studies* 15 (1): 27–67.
- World Bank. 2018. "World Development Indicators." <https://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>. Accessed August 11, 2018.
- Yap, O. Fiona. 2017. "When Do Citizens Take Costly Action against Government Corruption? Evidence from Experiments in Australia, Singapore, and the United States." *Journal of East Asian Studies* 17 (1): 119–136.

APPENDIX

The Appendix presents robustness checks against alternative operationalization of the dependent variable to demonstrate that our main statistical findings about grievance, resource mobilization, and political process theories are *not* an artifact of a particular measurement of the dependent variable. First, since Banks and Wilson's (2017) CNTS data on anti-government protests and other domestic conflict events—which we use to measure the dependent variable—are constructed from the *New York Times*' news articles, we address the possibility that our measurement and statistical estimation may be confounded by any potential bias that the *New York Times* may have in deciding whether and how much to cover different Asian states. We do so by revisiting the article's main model while explicitly accounting for *New York Times Coverage* as an additional control variable (see Model 1 in Table A1).¹⁰ It counts the total number of the *New York Times*' news reports covering an Asian state in a given year. Note that we do *not* use a one-year lag for this variable since we seek to address media bias that may be present at the time the dependent variable is measured.

Second, we take into account the possibility that when measuring the dependent variable, it may not always be clear and feasible to distinguish anti-government protests

TABLE A1 Robustness Checks against Alternative Operationalization of the Dependent Variable: Determinants of the Number of Anti-Government Protests in Asia

	Model 1 Protests Only, but New York Times Coverage Controlled	Model 2 Protests, Labor Strikes, & Riots Combined
<i>Grievance Theory</i>		
GDP per capita	-0.359*** (0.131)	-0.260** (0.130)
per capita GDP Growth Rate	0.008 (0.031)	0.019 (0.026)
Inflation Rate	-0.005 (0.006)	-0.005 (0.006)
<i>Resource Mobilization Theory</i>		
Urbanization	0.013** (0.007)	0.027*** (0.007)
Telephones per capita	0.697*** (0.245)	0.493** (0.239)
<i>Political Process Theory</i>		
Democracy	0.031 (0.024)	-0.003 (0.022)
Military Personnel per 1,000	-0.091*** (0.023)	-0.168*** (0.021)
Regional Contagion	0.025*** (0.005)	0.029*** (0.004)
New York Times Coverage	0.003*** (0.001)	
Constant	1.346* (0.809)	1.553* (0.799)
Overdispersion (NB vs. Poisson)	3.306*** (0.329)	3.422*** (0.307)
Number of States	25	25
Number of Observations	615	615
Log Likelihood	-834.75	-1032.48
Wald χ^2	167.78***	165.92***
Degrees of Freedom	11	10

*** $p \leq .01$; ** $p \leq .05$; * $p \leq .10$, in two-tailed tests.

Note: Coefficients are reported, with standard errors in parentheses. All independent variables use a one-year lag, except that *New York Times Coverage* is measured in the same year as the dependent variable.

from other types of domestic contention such as labor strikes and riots, because citizens' grievances against the government may come in various forms simultaneously.¹¹ Therefore, we re-estimate the article's main model by using the sum of anti-government protests, labor strikes, and riots for each Asian state in a year as the new dependent variable, based on Banks and Wilson's (2017) CNTS data on "anti-government demonstrations," "general strikes," and "riots" (see Model 2 in Table A1).¹² Table A1 presents the results of robustness checks against alternative operationalization of the dependent variable. In essence, in all cases the article's main statistical findings about grievance, resource mobilization, and political process theories remain very similar statistically and substantively, regardless of the inclusion of the *New York Times*' reporting coverage and the use of an alternative, more expansive measurement of the dependent variable.