What Drives People to Protest in an Authoritarian Country? Resources and Rewards vs. Risks of Protests in Urban and Rural China

I. Introduction

While the existing literature on social movement has provided plenty of inspiration for the motivating factors of political participation in Western liberal democracies, we know relatively little about the extent to which the literature is applicable to authoritarian states. There are several grounds for skepticism. First, there are some key distinctions between institutionalized and non-institutionalized forms of political participation, such as voting and protest. Voting is relatively effortless and incurs lower cost compared to protest. However, in authoritarian countries where voting is conspicuously absent, protests can become an important form of political participation. Second, protests incur considerably higher costs and pose higher risks for participants in authoritarian states compared to their counterparts in liberal democracies. Protestors in illiberal states face high risk of reprisal and state repression that may result in loss of income or even incarceration and loss of freedom. Third, in many authoritarian states where the governments tightly control the non-governmental organizations (NGOs), the mobilizing structures of collective action are palpably lacking, posing significant challenges for would-be protestors to organize and mobilize their actions. Social movement organizations in democracies that are funded by members' dues, and run by professional activists can openly mobilize supporters for their causes. In contrast, aggrieved in illiberal states had to rely on informal social networks and friendship to bring people together (Beinin & Vairel, *eds*, 2013; Zuo & Benford, 1995; Della Porta, 1988; Loveman, 1998; McAdam, 1986).

Many scholars have explained the durability of the authoritarian regime in China (Cai, 2008; Dickson, 2003; Gallagher, 2002; Landry, 2008; Lorentzen, 2013; O'Brien & Li, 2006; Tsai, 2006). The fact that the Chinese Communist regime has been able to withstand not only the fall of the Berlin Wall but also the "Third Wave" democratization, and more recently the "Arab Spring", has left many researchers confounded. This does not mean that China has witnessed no sign of social instability. In fact, the converse is true. There are an estimated 180,000 cases of social unrest each year, ranging from labor strikes and Not-In-My-Backyard (NIMBY) campaigns to peasant resistance and nationalist protests (Sun, 2015).

The literature on contentious politics in China has flourished from a wide range of perspectives, including framing, political opportunity and resource mobilization. China scholars have also underlined the saliency of culture, history and the authoritarian environment in which dissenters operate. The Chinese state is not a "monolith", but a "hodgepodge of disparate actors" (O'Brien & Li, 2006), which gives rise to different political opportunities. O'Brien and Li's conception of "rightful resistance" portrays activists taking advantage of "central-local divide" by using central policy or directive to legitimize their "rightful" actions. Political opportunity may also arise when local governments, acting under pressure to maintain social stability, yield to the threat of disruption by activists (Cai, 2010). Subnational political opportunities may vary according to population composition in different cities and the propensity of local leaders in permitting certain degree of dissenting voices and anger venting (Wallace & Weiss, 2015). Authoritarian leaders may tolerate selective protests as an information gathering mechanism to mitigate the absence of feedback loops in a non-democratic system (Lorentzen, 2013). Social resistance organizers also draw on the rhetoric of Maoism and the Chinese Communist Party's propaganda to frame their actions and justify their grievances. Aggrieved state-owned enterprise workers invoked the language of

class struggle and implicit social contract between state workers and the government to make their claims (Lee, 2007). "Rightful resistance" is also a framing tactic that borrows the center's rhetoric to lend legitimacy to actions targeted at local authorities (O'Brien & Li, 2006). Perry (2002) argues the repertoires of contention in contemporary China have strong historical and cultural roots. Lacking formal mobilizing structure, protestors in China have to utilize informal networks to mobilize support for their actions. These networks are often of clandestine nature, and their viability and momentum depend critically on the quality of leadership (Cai, 2002; Li & O'Brien, 1996; Shi & Cai, 2006).

Notwithstanding the rich contexts provided by the largely case-study based analyses of contentious politics in China, there are very few quantitative analyses that look systematically at the factors driving people to take their grievances to the streets in *both* urban and rural China. Su & Feng (2013) studies whether social connections of urban residents raise or reduce their *propensity* to protest. They find urban residents with better social networks or *guanxi* are more inclined to protest. A Chinese-language paper, Wu & Dong (2014) finds a positive association between one's experience of being unfairly treated and protest participation.[1] Michelson (2007, 2008) examines how social and political connections of rural residents affect their probability of utilizing legal mobilization when grievances arise. That proposition is relevant to the current study to the extent that the legal system is a formal institutional and an *alternative* means of resolving disputes compared to street protests. The Chinese government has been developing the legal system in recent years, particularly in relation to labor disputes, with the intention of absorbing some of the street protests.

The objectives of this paper are two-fold. First, drawing upon biographical data available in the

China General Survey of Social Science (CGSS) 2010, we address the question of protest participation by focusing on the factors of resources, and rewards vs. risks, that might be unique to protestors in an authoritarian state. The second objective of the paper is to delineate the drivers of protests in urban and rural China. The two regions are structurally dissimilar in terms of citizen's resources, including levels of income and education, media access, and presence of civil society organizations albeit limited. Economic reforms since 1979 have produced a growing and sizable middle class in China. Drawing upon the relationship between economic development and democratization as depicted in modernization theory, we are interested in discerning whether demand for democratization, if it happened at all, is more likely to originate from rural or urban China. That said, we are acutely aware that the rising middle class in China may not necessarily demand democracy as modernization theory has predicted (Jie Chen & Lu, 2011; Dickson, 2003). Overall, this study aims to contribute to literature on social mobilization in illiberal states and to studies of contentious politics in China.

The rest of the paper is organized as follows. Section II looks at the theoretical literature on what drives people to protest and raises a few testable hypotheses given the data in hand. Section III discusses the research design, data source and methods. Section IV presents the findings and discusses their significance to existing theories. Section V concludes the study.

II. Theoretical Framework: What Drives People in Authoritarian Countries to Protest?

This paper draws upon relevant social movement theories in the disciplines of political science, political sociology, and social psychology to analyze what drives people to protest. Given the systemic differences between democracies and non-democracies, we focus our attention on the drivers of protest from the perspectives of citizen's resources in an authoritarian state, their calcu-

lation of potential rewards vs. risks, and how these factors may play out differently in urban and rural areas.

Individuals in authoritarian states incur higher costs by being involved in protests given the higher risks associated compared to those in democratic settings. Studying the costs and benefits of contentious actions, rational choice scholars ask why rational dissidents voluntarily contribute to the public good of contentious collective action when they can free ride on other's actions (Olson, 1965). By conceptualizing calculated benefits of action as a form of efficacy, social psychologist Bert Klandermans (1997) demonstrates that people are more likely to participate when they believe this will help to redress their grievances at reasonable costs given the benefits the action may bring. We expect consideration of rewards vs. risks of actions to feature prominently in the calculus of protestors in China.

The traditional motivator for participation in contentious politics is rooted in grievance theories, chief among which is relative deprivation. Exemplified by Davies (1962) and Gurr (1970), relative deprivation implies that it is people's socially conditioned expectations *relative* to others in the society, rather than absolute deprivation, that drives them to protest. That said, grievances—on their own—are not sufficient to drive people to protest. Rather, other factors, such as resources and political efficacies, must be present before existing grievances are translated into action (Dalton, Sickle & Weldon, 2009). Resource mobilization school of theories seeks to explain not what motivates people to take to the streets but *why* some successfully mobilize while others do not. Studies based on Western democracies have consistently shown resources such as levels of income and education to be positively associated with higher rates of political participation (Lipset, 1981; Verba, Schlozman & Brady, 1995). Income and education have been shown to

provide people with the political skills and means to participate, either in institutionalized politics, such as voting, or protest politics (Inglehart, 1989; Pattie, Sevd & Whiteley, 2004).

Nevertheless, some case study research on illiberal states and low-income countries finds individual resources to have a weaker or even negative impact on political participation (Loveman, 1998; Schock, 1999). In non-liberal states where the organizational basis of collective action, such as the presence of autonomous NGOs, is feeble or non-existent, people with resources may still face challenges in mobilizing action (Earl, 2006). Separately, higher cost of reprisal in authoritarian states implies that those with higher income and education level have considerably more to lose than the impoverished and poorly educated. In other words, the opportunity cost of participating in protest actions, a high-risk activity in authoritarian states, rises as one progresses upward along the social ladder. The cost could take the form of forgone income, loss of social status or even loss of personal freedom (Campante & Chor 2014).[2]

In social psychological terms, efficacy implies the rational actor's expectation that he or she can possibly bring about a change to the unjust conditions through collective action (Gamson, 1992). There are two complementary aspects to political efficacy: a) internal efficacy refers to one's belief that he understands and has the ability to be involved in politics (Lane, 1959); and b) external efficacy indicates his faith in the government and his perceived ability to influence political outcomes (Coleman & Davis 1976; Finkel, 1985; Niemi, Craig & Mattie, 1991). Street protests can be perceived as an alternative and unofficial means of participating in politics. Citizens who have the capacity to influence political outcome through official channels, such as voting and lobbying local parliamentarians, will have lesser need to take their grievances to the streets. Therefore, we

expect efficacies, particularly external efficacy as a subjective measurement of one's ability to sway political outcome, to exhibit different dynamics in democratic and non-democratic settings.

Urban vs. Rural Protests

Existing literature leads us to expect *a priori* the drivers of protest participation in urban and rural China to differ. These are the possible factors. Firstly, urban residents have significantly higher income level than rural residents. Scholars have attributed the increase in urban protests, such as NIMBY environmental protests and homeowners' resistance, to the rise of the middle class in China (Liu, 2013; Wang, Sun, Xu & Pavlicevic, 2013). On the one hand, we borrow inspiration from modernization theory (Lipset, 1959; Przeworski & Limongi, 1997), which asserts that economic development will bring about social changes, such as higher levels of education and a larger middle class, that will result in greater demand for democracy. On the other hand, we are aware of the need for caution because existing studies illustrate that the middle class in China has not demanded greater democracy, primarily because they are dependent on the state and are the main beneficiary of the present system (Chen, 2013; Dickson, 2003; Tsai, 2007; Jie Chen & Lu, 2011). Given the higher cost of reprisal, the urban middle class in China may not be willing to "risk" what they have to participate in contentious politics.

Secondly, separate from higher income and education levels, urban residents in China also have enhanced access to resources, such as the media, and some though very *few* civil society organizations in the cities, such as environmental NGOs (Yang, 2005; Tang & Zhan, 2008) and homeowners' associations (Merle, 2014; Yip & Jiang, 2011), which play an effective role in disseminating information, if not mobilizing the public. Steinhardt & Wu (2016) argue that large-scale environmental protests in China have been leading a structural change in the landscape of conten-

tion from small-scale and narrow material grievances to more broad-based for improvement in public goods, such as clean air, that combines with elite advocacy. Prime examples of this new trend of contention include the anti-PX protests across a large number of cities in China. And, thirdly, existing evidence also suggests protests are more likely to erupt in urban cities with high population concentration (Wallace, 2014). Such is the reason why developing countries tend to adopt urban-biased policies that subsidize urban residents by taxing the peasants (Bates, 1984).

III. Research Design, Data Source and Methods

Data Source

Our data come from the CGSS 2010, a nation-wide representative survey, administered by the National Survey Research Center at the Renmin University of China. The 2010 survey used a four-stage stratified sampling scheme to sample 11,783 adults aged 18 years and above in Mainland China. The survey includes 22 provinces, four autonomous regions, and four central government-designated municipalities. Tibet, Hong Kong, Macau and Taiwan are not included in the survey.[3]

Dependent Variable

Our dependent variable is a binary variable measuring individual's participation in collective contention. It is coded as "participate=1", "did not participate=0". The original question is, "In daily life, we always observe some collective contention or activities, such as boycotting unreasonable charges, protests against demolition or land requisition, collective resistance against government projects, collective petitions, collective strikes, gatherings, demonstrations, etc. In the past three years, have you ever taken part in any of these activities?" Multiple-choice answers are "1. I have been an organizer; 2. I have been a participant; 3. I have never participated but have

provided material support; 4. I have never participated but have provided moral support; 5. Other; 6. I have never attended". For the sake of simplicity, we combine selections no. 1 (organizer) and no. 2 (participant) and recode them as "participate=1". The rest of the selections are coded as "did not participate=0" in the regression analysis.[4]

Independent Variables[5] and Hypotheses

H1: The higher the income or education level an individual has, the more likely he has taken part in collective action.

Personal resources

Income level is based on self-reported annual personal income in 2009. As previously mentioned, the impact of income level on protest participation may be positive or negative depending on whether the enabling or opportunity cost effect dominates. We do not expect either effect to dominate *a priori*. Therefore, we have included both income and income squared in the model to capture a possible reversal of relationship after income reaches a certain level.

In this case, we have decided to use personal instead of family income because we think it is more appropriate in capturing the opportunity cost of participation. If an individual were fired from his job because of participation, only his personal income would be affected.

Education level is measured in two ways, both linear and non-linear. The linear measurement is by years of schooling, while the non-linear way is by levels of education, including junior school and below, middle school, college diploma, and university bachelor degree and above.[6] Similar to income level, education could have a positive or negative effect on protest.

We have also included an interaction term between education and income to test whether increases in income level will result in *dissimilar* effects on protest participation for respondents with *different* levels of education. This allows us to project into the future as income per capita rises over time.

Rewards vs. risks of action

H2: One is more likely to have taken part in protest when the action is perceived to preserve or increase his self-interest.

H3: When non-government entities become the targets of contentious action, individuals are more likely to have been involved than in situations where actions are targeted at the government.

In the model, we capture the utility or economic returns to protests in two ways. The first is whether or not the contentious action preserves or increases the individual's *self-interest*. It is coded "1" if it did. If it reduced or had no impact on one's interest, it is coded "0".

The second is if the *targets of contention* are non-state entities, it is coded "1", and "0" otherwise. In authoritarian settings, a protestor's action is particularly risky if it is targeted at the government, state institutions or government officials. On the contrary, if the action is aimed at non-state institutions, such as a private enterprise or individuals, the risks are considerably diminished. While human rights lawyers and rights activists who target the state regularly face the risks of incarceration and loss of freedom, migrant workers employed by private firms who go on strike are most likely to lose their jobs in the worst-case scenarios.

Grievance: sense of relative deprivation

We have included several variables to capture individual's subjective evaluation of relative deprivation.

H4: *Position in society*: The more an individual feels deprived relative to others in the society, the more likely he has taken part in protest.

H5: *Perceived economic injustice*: The stronger the sense of perceived unfairness of income relative to people with similar educational qualification, background, and ability, the more likely he has taken part in collective action.

Position in society is measured by the respondent's self-evaluation of his position in the society, compared with other groups. The respondent is asked to rank one's position from "1" (lowest) to "10" (highest).[7]

Fairness of income is measured by the respondent's self-perception of income fairness *relative to those with similar* educational background, experience and qualification. The respondent is asked to rank his sense of fairness from "1" (unfair) to "5" (fair).[8] *Fairness of income* is a more precise indicator of relative deprivation than *position in society* because the question asks for comparison with a specific reference group.

Political Efficacy

H6: *Internal efficacy*: The more confident one feels about his ability to understand politics and to be involved in it, the more likely he has taken part in collective action.

H7: *External efficacy*: The more confident one feels about his ability to influence government policy outcomes through formal channels, e.g., petitions and lodging complaints with the government bureaucracy and the court system, the less likely he has taken part in the informal politics of collective action.[9]

The four *internal efficacy* items in the CGSS 2010 are 1. Government work is too complicated for someone like me to understand; 2. I consider myself to have the ability to participate in politics; 3. I am fully capable of becoming a government official; and 4. I have no self-confidence to discuss with others government work or practices. The response options are "fully disagree", "somewhat disagree", "neither agree nor disagree", "somewhat agree", and "fully agree". Each response is coded on a scale from "1" (fully disagree) to "5" (fully agree). All four items are added together to obtain a score on internal efficacy in the range of 4-20. The Cronbach's alpha test generates a score of 0.69, suggesting an acceptable measurement on internal efficacy.

The four *external efficacy* items in the CGSS2010 are 1. People like me have no influence on government policy decisions; 2. Government officials do not care about the opinions of people like me; 3. When I give suggestions to government agencies, these suggestions will be accepted; and 4. Government officials value our attitudes and views towards the government. The coding method here is the same as that for internal efficacy. The Cronbach's alpha test score for external efficacy is 0.67, which is within the range of acceptability. Our measurements of internal and ex-

ternal political efficacy are similar to the study of Niemi *et al.* on political efficacy in the U.S. (Niemi, Craig, & Mattie, 1991).

Urban middle class

H8: Increased income and/or education levels of urban residents will lead to a greater likelihood of protests in urban China.

Since the existing evidence on the effects of a rising urban middle class on their likelihood of protest participation in authoritarian countries is inconclusive, we have no clear expectation of whether the relationship will be positive or negative.

*INSERT TABLE 1

Control Variables

In all models, we include certain variables to control for biographical availability. Biographical availability data are "personal constraints that may increase the costs and risks of movement participation"(McAdam, 1986). Various studies suggest that one's age, gender, marital status, and whether or not one has children can have a bearing on the propensity to participate.

In all models, we include the logged form of *age*, *marital status* (married or cohabiting=1; single, divorced or widowed =0), and *children* (respondents with children=1, with no children=0).

The other control variables related to biographical availability included in the models are *gender* (female=1; male=0), *ethnicity* (ethnic minorities=1; Han Chinese=0), *migrant worker* and *urban vs. rural* location of survey (urban=1; rural=0) in the full-sample regression. *Migrant workers* in

urban areas include workers physically located in the cities but still held rural *hukou*. In rural areas, they are a self-identified group.

Like income, legal knowledge can also be viewed as a resource that enables and facilitates political participation. In our model, *legal knowledge* is measured by a series of self-evaluated questions on one's legal knowledge. These include basic legal knowledge, familiarity with the functions of the public security bureau, the procuratorates, the courts, and knowledge of how to enlist a lawyer, seek legal assistance, and file a lawsuit. The question adopts a 5-point Likert scale, ranging from "completely unknown=1" to "completely known=5". Legal knowledge is scaled from 7 to 35. The Cronbach's alpha test generates a score of 0.9224, indicating a high level of reliability of the indicator. We expect one's legal knowledge to have a positive effect on protest participation.

We have also included controls for individuals' *media consumption* in all models. Media has been found to affect protest in various ways.[10] However, the effect of media consumption on political participation in authoritarian countries may not be as straightforward as the existing literature on Western societies has established. While it is conceivable that individuals who consume more media content are more aware of social problems and political issues, and hence more likely to participate, the controlled nature of China media, particularly traditional state-dominated media that heavily censors information, will mitigate any enabling effect. Media consumption is measured by one's consumption of various traditional media, including newspapers, journals, television, and so forth, scoring from 1 to 20.[11] The Cronbach's alpha test generates a score of 0.6376, suggesting considerable disparity of media usage.

We have included two variables to control for the effects of organizational involvement on participation: *communist party membership* and *trade union membership*. Existing theoretical literature suggests individuals' organizational involvement matters.[12] However, both the communist party and trade unions are state-sanctioned institutions that help indoctrinate members of state ideologies. The All-China Federation of Trade Unions (ACFTU), which retains a complete monopoly on trade unionism, is co-opted by the state. While the ACFTU has been credited for its pursuit of enhanced legislative protection of workers at the national level in recent years, its effectiveness at the enterprise level is disputable (Friedman & Lee, 2010; Gallagher, 2014).

Descriptive statistics

Descriptive statistics are summarized in Table 2. Survey respondents consisted of 7,222 people (61.9 percent) from urban areas, and 4,561 people (38.1 percent) from rural areas. 261 respondents or 2.2 percent of the total sample reported that they participated in protests at least once in the past three years, as shown in Appendix B. Among them, 15 people reported playing the role of organizers, and 246 claimed to be participants. Granted, protest participation is most likely under-reported in an authoritarian state. However, other similar surveys in China have also yielded a similar response rate to protest participation.[13]

Most of the protests were targeted at the government or government-related entities: 53.4 percent were aimed at the government, 13.3 percent at government officials, 10 percent at public institutions, and 6 percent at government policies.[14] Appendices B, C, D and E contain figures of the distribution of respondents' involvement in collective action, of targets of protests, of political efficacy, and of income fairness in urban and rural areas, respectively.

*INSERT TABLE 2

IV. Analysis and Results

We first adopt logistic regression modeling to investigate factors that may affect protest participation in China. In Table 3, model 1 is the baseline model, which includes a limited set of biographical and social control variables, such as age (logged), education, gender, party membership, income and income-squared, and media consumption. Model 2 changes the linear form of education, years of schooling, into four levels of education—primary school and below (base), middle school, college diploma, and university bachelor's degree and above. Model 3 adds two additional predictors, namely, non-state protest targets and self-interest. Models 4-5 add various subjective variables, such as political efficacy, legal knowledge, grievances, and migrant worker to the baseline models. Model 6 adds interaction terms between education level and income. The Pseudo R-squared values of all of the models are between 0.009 (Model 1) and 0.524 (Model 6), indicating better fit of the more complex models.

However, given the risks associated with protest participation—and with providing an affirmative answer to that question—we decide to use the Heckman two-stage method to correct for any potential selection bias (Heckman, 1979). Respondents who chose to answer the participation question may be self-selected. *Rhos* from the various Heckman two-stage models suggest they are not statistically significant. However, we decide to take a cautious approach of reporting both sets of results and place greater confidence on the variables that are statistically significant in both models. Model 7 reports results from the Heckman selection model.

In selecting independent variables included in the selection model, we follow the advice of Sartori (2003) and Wooldridge (2002) by selecting a range of variables that may potentially affect a

respondent's choice to answer the participation question, such as the case that a married person may be more reluctant to answer compared to a non-married respondent because the former is more risk averse. However, the choice of variables in the selection equation does not appear to change the significance of the Heckman model much at all.

Generally, magnitudes of the coefficients are smaller in the Heckman model. We find personal resources to matter a great deal in explaining one's involvement in contentious politics. There is evidence that education level is negatively related to participation. Further, a higher level of education reduces the likelihood of participation more than a lower level of education does. This lends support to the opportunity-cost proposition of higher education, and that it outweighs the resource-enabler effect. It underlines the high cost of participating in contentious politics in China, where demonstrators and protestors are routinely rounded up and constantly face threats of losing their jobs and social status. Legal knowledge is another resource factor that is positively associated with participation. Media consumption does not appear to be significant in the models.

We also find strong evidence to support the hypothesis that individuals participate in contention if it preserves or enhances their interest. Individuals are also more likely to protest if the actions are targeted at non-state entities, such as private enterprises or individuals, which entail considerably less risk compared to government or government-related institutions. In China, it is highly conceivable that workers in private firms who protest against their employers may lose their jobs, while those who contend against the state are confronted with both economic and political costs for their actions.

There is some evidence that relative sense of deprivation motivates people to participate in protests. People who feel that their income levels are unfair relative to those with similar training and background, as well as those who position themselves lower than others in the society, are more likely to have taken part in protest. However, unfairness of income, with a specific reference group, has a slightly stronger and more significant relationship than position in society.

Evidence also suggests that political efficacies influence individual participation in protest. The respondents with a higher level of internal efficacy, i.e., those who believe they are capable of discussing political subjects with others and are able to participate in politics or to become a government official, are more likely to protest, controlling for other factors. On the contrary, external efficacy, such as the belief in one's ability to influence political outcomes and one's views being taken into consideration by the government, are negatively associated with protest participation, though they are not consistently significant throughout various models.

Interestingly, there is some evidence to suggest a negative association between trade union membership and protest participation. The co-opted trade unions are not mobilizing structures for collective action. Instead, our results suggest they may serve as conduits in channeling workers' grievances to the authorities, thereby reducing the likelihood of workers spilling their discontent on the street. While it is more or less mandatory for large-scale enterprises to set up trade unions, union membership is optional. Therefore, we should expect those who become union members to belong to a self-selected group of political insiders, who are less likely to take their grievances to the streets. Party membership does not appear to be significant in all models.

In the first few models, there is no evidence that rural or urban populations were more likely to protest. However, after taking into consideration indicators measuring relative deprivation, such as "position in society" and "fairness income", and interaction terms between income and education, the rural population appears more likely to protest compared to their urban counterparts. This is also the case with ethnic minorities that are found to be positively associated with protest likelihood when the above-mentioned variables are included.

*INSERT TABLE 3

Protest Participation in Urban vs. Rural China

Tables 4 and 5 present the binary logit and Heckman probit model regression results for the urban and rural samples, respectively. The split sample tests reveal a few interesting findings about the motivating factors of protests in the two areas. One's subjective perceptions of "position in society" and "fairness of income" are significant predictors of participation in the urban but not in the rural sample. This could be attributable to the lower sense of "fairness of income" observed in the urban sample (relative to rural), as shown in the descriptive statistics in Appendix E. This result is rather intriguing given that the Gini-coefficient, an *objective* indicator of income inequality, is higher in rural than in urban China (Chen *et al*., 2015).[15] However, the *subjective* sense of income fairness captured in the survey may not fully reflect the reality because what matters here is one's subjective perception and frame of reference.

Preservation of self-interest is positively associated with participation in both the urban and rural samples, as they are in the full sample. The positive effect of non-state target is statistically significant in the urban sample but becomes insignificant in the Heckman model. Meanwhile, it remains positive in the rural sample, though the size of the coefficient falls significantly in the

Heckman model. This suggests negative self-selection among the respondents whose protest actions were targeted at the state. When one's action was targeted at the state, he is less likely to answer the participation question because of the higher risks involved. Once this selection bias is taken into consideration, the positive effect of non-state targets declines or disappears altogether in the urban sample.

Compared with the full sample, the significance of political efficacy has disappeared in the urban sample but has increased in the rural sample. In rural areas, there is clear evidence that one's innate sense of internal efficacy is positively associated with protest participation, while external efficacy is negatively correlated with the outcome. This could reflect differences in the availability of and access to dispute resolution channels between the two areas. Layers of bureaucracy between the village and the formal dispute resolution channels, such as the legal system and petition system, mean rural residents are more likely to settle disputes informally or with mediation by village leaders (Michelson, 2008). According to this logic, rural respondents who are "political insiders" (with high external efficacy) or those with political and social capital that allows them to settle disputes through the formal channels or informal channels *other than* protests are less likely to bring their grievances to the streets. In contrast to Su & Yang (2013) that finds a positive association between social connections and protest propensity among urban respondents, our results for external efficacy for urban residents are not significant.[16]

Trade union membership is negatively associated with participation in the urban sample, as it is in the full sample. The relationship is not statistically significant in the rural sample. Trade unions are typically found in urban cities where large-scale factories are located.

Individuals with more legal knowledge in urban areas are more likely to protest, while the same cannot be said about the rural sample. Ethnic minorities are more likely to protest in urban not rural areas. This confirms the popular perception that ethnic minorities, such as Uighurs, face widespread discrimination in the cities and are less likely to leave their hometowns in the countryside. The other variables, such as marital status, children, media consumption, party membership, and self-identified migrant worker, are not consistently significant in either sample.

Income effect is marginally significant in rural sample, but its significance disappears after the Heckman selection model is introduced. It is not significant in the urban sample, as in the full sample.

Education is negatively associated with participation in both the rural and urban samples, as it is in the full sample. The more educated one is in urban China, the less likely he is to protest. That said, it is noteworthy that the interaction terms between income and different education level are positive and statistically significant at the 5 percent level in the *urban* sample. This suggests that even though education level, on its own, has a negative effect on participation, at successively higher income levels, the negative likelihood are successively reduced. We take this as evidence that the well-educated and high-income urban residents in China are more likely to be involved in protest. In other words, the enabler effect may begin to *outweigh* the opportunity-cost effect in high-income brackets. Nonetheless, it should be underlined that the significance in the urban sample falls off after the Heckman model is introduced.

*INSERT TABLES 4 AND 5

To investigate further this important issue of the effect of education and income on protest, we simulate the 95 percent confidence interval for the marginal effect of income given various education levels in the urban sample, with and without the Heckman selection model. See Figures 1 and 2, respectively, with standard units on the Y-axis. At successively higher levels of income, respondents with a given level of education (middle school, college diploma, and university education) exhibit a *decreasing* likelihood of *non-participation*. When income rises, the slope of each curve becomes less steep, and the confidence interval becomes narrower. In the Heckman models, the income effect for college diploma- and university-educated respondents become positive, even though the 95 percent confidence intervals are of a larger range. This leads us to conclude that there is some— though weak—evidence to support the hypothesis of increasing protest actions by a rising middle class in *urban* China.

*INSERT FIGURES 1 AND 2

V. Conclusion

Using China as a case, our findings raise a few important points regarding the motivators of participating in contention in authoritarian countries. The cost of participation is considerably higher for the citizens of authoritarian states than those of liberal democracies. We find strong evidence to support a negative association between education level and likelihood of protest. The negative effect is successively stronger for those with higher levels of education. This suggests that the opportunity cost of a higher education level in terms of higher forgone income far outweighs the positive enabling effect.

However, among the respondents with each level of education in the urban sample, the negative effect declines at successively higher levels of income. For those with middle school education,

the declining negative effect never enters into positive territory, while for those with a college diploma and university education, the positive effect starts to manifest at high-income levels. We take this as evidence, albeit weak signs, suggesting that as urban residents become wealthier over time, they will increasingly turn to protests as a form of political participation. Nevertheless, this may not necessarily translate into democratization in China, as the existing literature has warned us. Protests in China are conventionally about material grievances rather than a demand for democratization (Ong & Gobel, 2012). At best, this weak evidence lends support to a reduced form of modernization theory that predicts that increased income and education levels will lead the urban population to demand greater accountability and transparency (manifested in a greater number of protest actions) *rather than* democracy. This is consistent with the emergence of broad-based protests in the cities supported by a wide spectrum of urban population, such as those against construction of chemical plants and incinerators, as existing studies have suggested (W. Li & Liu, 2012; Lu & Chan, 2016; Johnson, 2010).

A sense of unfairness in income is a greater predictor of protest in urban than in rural areas, despite the Gini-coefficients pointing to higher income inequality in rural than in urban China. One's perception of fairness may not reflect the reality because it is a *subjective* measurement that has much to do with one's perception and frame of reference. Residents in densely populated urban cities characterized by a high degree of consumerism are conceivably more "materialistic" and are more inclined to compare themselves to their peers.

While it is not surprising that individuals with stronger internal efficacy are more likely to protest, the significant negative relationship between external efficacy and protest participation points to another peculiar feature of contentious politics in authoritarian countries. Those with

stronger external efficacy, or "political insiders" who believe they can influence political outcomes either through the formal channels or informal means other than protests, such as bribery, are *less* likely to take their grievances to the streets. This is more true in rural than in urban China, which is attributable to the higher cost of and lesser access to formal channels of dispute resolution in rural areas (Michelson, 2007).

We find the organizational basis for contentious politics (measurable in our models) to be lacking in China, which is completely unsurprising given the nature of its political system. Trade union membership has a negative association with participation. Trade unions in China are rather unlike their counterparts in Western societies that advocate for workers' rights but are subsumed within the ACFTU, which is co-opted by the state. They serve as conduits in channeling workers' grievances to the authorities, thereby reducing the likelihood of workers spilling their discontent to the streets.

Protestors in China as in other authoritarian countries have a different set of benefit-cost calculus compared to those in democratic societies. Even though the findings are based on a social survey conducted in China, we believe that the theoretical logic of political participation in authoritarian countries, such as the effects of income and education, and rewards vs. risks calculation of protestors, could be similarly applied to other illiberal states.

Table 1 Hypotheses about the Variables Affecting Protest Participation in China

Variables	Effect on Likelihood of Protest Participation
Income	?
Education	?
Self-interest	+
Risk (non-govt entities as targets)	+
Position in society	-
Fairness of income	-
Internal efficacy	+
External efficacy	-
Urban middle class	?

Table 2 Summary statistics of Key Variables

Variables	Mean			S.D.	Min	Max
	Urban	Rural	Full	Full	Full	Full
Male	.475	.492	.481	.499	0	1
Age	46.44	48.66	47.31	15.67	17	96
Years of schooling	10.24	6.302	8.720	4.648	0	20
Level of education						
Junior school & below	.503	.892	.653	.475	0	1
High school	.256	.089	.191	.393	0	1
College diploma	.123	.012	.08	.271	0	1
University & above	.116	.007	.075	.262	0	1
Income (10,000 *yuan*)	3.088	1.254	2.377	7.9743	0	600
Media consumption	9.17	5.02	7.564	4.4736	0	24
Married or cohabiting*	0.78	.842	.804	.396	0	1
With children	.846	.927	.877	.327	0	1
Ethnic minority	.074	.128	.095	.293	0	1
CCP membership	.166	.057	.124	.329	0	1
Trade union member	.178	.027	.119	.325	0	1
Relative deprivation	4.208	3.832	4.062	1.726	1	10
Fairness	2.797	2.977	2.866	1.208	1	5
Internal efficacy	11.212	10.01	10.75	3.323	4	20
External efficacy	10.432	10.26	10.366	3.012	4	20
Legal knowledge	22.747	17.791	20.829	6.755	7	35
Migrant worker	.044	.053	.119	.324	0	1
Market sector	.060	.0258	.0470	.211	0	1
Increase interest	.044	.0258	.0369	.188	0	1
Urban	-		.6107	.487	0	1

*Includes all types of relationships: never married, cohabiting, married, separated, divorced and widowed. All data are unweighted.

Source: CGSS 2010.

Table 3 Binary Logit and Heckman Selection Regression Results (Dependent Variable: Protest Participation)

							Heckman selection model	
							Probit	Selection
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Urban	0.208	0.209	-0.324	-0.427	-0.490*	-0.483*	-0.289*	
	(0.174)	(0.167)	(0.228)	(0.235)	(0.238)	(0.244)	(0.118)	
Female	-0.415**	-0.390**	-0.446*	-0.269	-0.232	-0.231	-0.0992	
	(0.147)	(0.147)	(0.202)	(0.209)	(0.215)	(0.215)	(0.104)	
Age (logged)	-0.364†	-0.632*	-0.250	-0.168	-0.161	-0.172	-0.0894	
	(0.211)	(0.255)	(0.368)	(0.372)	(0.374)	(0.374)	(0.178)	
Years of schooling	-0.0255							
	(0.0226)							
Middle school		0.237	-0.132	-0.333	-0.367	-0.605†	-0.234	0.262***
		(0.180)	(0.265)	(0.270)	(0.272)	(0.351)	(0.174)	(0.0524)
College diploma		-0.931*	-0.738	-1.096*	-1.146*	-1.379*	-0.771*	0.388***
		(0.393)	(0.490)	(0.477)	(0.479)	(0.692)	(0.352)	(0.0698)
University and above		-1.322**	-1.697**	-2.039**	-2.067**	-2.297*	-1.030*	0.407***
		(0.486)	(0.627)	(0.657)	(0.657)	(0.968)	(0.404)	(0.0772)
Income (10,000 RMB)	-0.0362	-0.0149	0.0316	0.0242	0.0697	0.0359	-0.00169	0.000564
	(0.0566)	(0.0556)	(0.0720)	(0.0716)	(0.0756)	(0.0934)	(0.0486)	(0.00637)
Income sq (100 mil RMB)	-0.00773	-0.0118	-0.0210	-0.0195	-0.0312	-0.0514	-0.0340	-0.000144
	(0.0231)	(0.0230)	(0.0270)	(0.0270)	(0.0304)	(0.0375)	(0.0311)	(0.000551)
Married	0.259	-0.314	-0.259	-0.269	-0.261	0.259	-0.00587	0.00911
	(0.301)	(0.311)	(0.307)	(0.309)	(0.312)	(0.301)	(0.165)	(0.0616)
Children	0.385	0.438	0.369	0.421	0.408	0.385	0.222	-0.0505
	(0.399)	(0.460)	(0.439)	(0.436)	(0.438)	(0.399)	(0.212)	(0.0727)
Media consump-tion	0.0157	0.0187	-0.0250	-0.0494	-0.0394	-0.0396	-0.0303*	
	(0.0215)	(0.0207)	(0.0306)	(0.0314)	(0.0314)	(0.0316)	(0.0148)	
Party membership	-0.0121	0.127	0.520	0.329	0.340	0.338	0.0616	
	(0.237)	(0.236)	(0.287)	(0.295)	(0.300)	(0.303)	(0.163)	
Ethnic minority	-0.352	-0.343	0.509	0.457	0.537†(0.321)	0.539†	0.415*	-0.260**
	(0.283)	(0.284)	(0.319)	(0.315)		(0.322)	(0.203)	(0.0822)
Trade union membership	-0.222	-0.181	-0.639	-0.737*	-0.727*	-0.725*	-0.407*	
	(0.261)	(0.262)	(0.337)	(0.345)	(0.350)	(0.351)	(0.158)	
Migrant worker	-0.0565	-0.110	-0.536	-0.637	-0.631	-0.614	-0.338	
	(0.322)	(0.322)	(0.477)	(0.465)	(0.465)	(0.467)	(0.218)	
Self-interest			4.879***	4.817***	4.824***	4.819***	1.455***	8.675 (6377.2)
			(0.245)	(0.243)	(0.247)	(0.248)	(0.143)	
Non-state target			1.453***	1.611***	1.588***	1.603***	0.301*	8.754 (6685.4)
			(0.326)	(0.324)	(0.324)	(0.325)	(0.133)	
Legal knowledge				0.0355*	0.0368*	0.0368*	0.0158*	0.0140***
				(0.0158)	(0.0161)	(0.0161)	(0.00770)	(0.00313)
Internal efficacy				0.112***	0.109***	0.110***	0.0335*	0.0164*
				(0.0317)	(0.0321)	(0.0325)	(0.0163)	(0.00697)
External efficacy				-0.0836**	-0.0710*	-0.0711*	-0.0194	-0.0289***
				(0.0320)	(0.0328)	(0.0331)	(0.0153)	(0.00680)
Position in society					-0.106†	-0.109†	-0.0691*	-0.00826
					(0.0597)	(0.0599)	(0.0295)	(0.0124)
Fairness of in-come					-0.162*	-0.165*	-0.0845*	-0.0282
					(0.0811)	(0.0815)	(0.0394)	(0.0171)
_MidSchool Xincome						0.114	0.0807	
						(0.115)	(0.0581)	
_CollegeDip Xincome						0.0933	0.0884	
						(0.144)	(0.0853)	
_University Xin-come						0.0791	0.0641	
						(0.143)	(0.0718)	
_cons	-1.874*	-1.689†	-4.281**	-5.583***	-5.107***	-4.987**	-1.213	-1.731***
	(0.938)	(0.887)	(1.355)	(1.514)	(1.520)	(1.532)	(0.736)	(0.119)
N	11783	11783	11783	11783	11783	11783	11705	11705
Pseudo R^2	0.009	0.022	0.505	0.519	0.523	0.524		
Rho								-.0537(.0939)

Note: Numbers in parentheses are standard errors. Data are weighted according to the 2005 census.
*†p<0.10 * p < 0.05, ** p < 0.01, *** p < 0.001*

Table 4 Logit Regression and Heckman Selection Results, Urban Sample

(Dependent Variable=Protest Participation)

						Heckman selection model	
						Probit	Selection
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female	-0.333	-0.317	-0.189	-0.130	-0.137	-0.0403	
	(0.185)	(0.236)	(0.242)	(0.251)	(0.251)	(0.125)	
Age (logged)	-0.587	-0.228	-0.197	-0.260	-0.304	-0.107	
	(0.337)	(0.457)	(0.462)	(0.470)	(0.475)	(0.217)	
Middle school	0.247	0.105	-0.0481	-0.121	-0.708†	-0.274	0.182**
	(0.210)	(0.285)	(0.288)	(0.292)	(0.415)	(0.211)	(0.0602)
College diploma	-0.804†	-0.647	-0.944*	-1.024*	-1.777**	-0.909*	0.346***
	(0.414)	(0.459)	(0.452)	(0.455)	(0.634)	(0.362)	(0.0754)
University and above	-1.259*	-1.404*	-1.621**	-1.681**	-2.489**	-1.155**	0.375***
	(0.495)	(0.589)	(0.591)	(0.588)	(0.876)	(0.417)	(0.0825)
Income (10,000 RMB)	-0.0517	-0.0444	-0.0472	-0.000097	-0.166	-0.0741	-0.00288
	(0.0369)	(0.0506)	(0.0513)	(0.0757)	(0.116)	(0.0635)	(0.00544)
Income sq (100 mil RMB)	0.000702	0.000215	0.000154	-0.00674	-0.0454	-0.0298	0.00000598
	(0.00090)	(0.0034)	(0.0032)	(0.0207)	(0.0354)	(0.0291)	(0.000204)
Married	0.461	-0.140	-0.113	-0.141	-0.113	-0.0226	0.0185
	(0.374)	(0.359)	(0.348)	(0.356)	(0.361)	(0.193)	(0.0710)
Children	-0.0714	0.0257	-0.00285	0.107	0.0544	0.0880	-0.0617
	(0.476)	(0.502)	(0.481)	(0.477)	(0.480)	(0.243)	(0.0816)
Media consumption	0.00817	-0.0267	-0.0503	-0.0375	-0.0372	-0.0296†	
	(0.0265)	(0.0345)	(0.0348)	(0.0351)	(0.0353)	(0.0169)	
Party membership	0.182	0.649†	0.529	0.538	0.526	0.161	
	(0.279)	(0.340)	(0.341)	(0.349)	(0.351)	(0.185)	
Ethnic minority	0.159	0.996*	0.955*	1.101**	1.121**	0.451†	-0.235*
	(0.334)	(0.387)	(0.379)	(0.385)	(0.394)	(0.247)	(0.106)
Trade union membership	-0.261	-0.683*	-0.783*	-0.792*	-0.805*	-0.485**	
	(0.289)	(0.321)	(0.325)	(0.337)	(0.336)	(0.170)	
Migrant worker	-1.345*	-1.202	-1.069	-0.935	-0.918	-0.241	
	(0.613)	(0.865)	(0.837)	(0.821)	(0.830)	(0.334)	
Self-interest		4.810***	4.736***	4.755***	4.769***	1.463***	7.780
		(0.313)	(0.317)	(0.322)	(0.324)	(0.174)	(718.7)
Non-state targets		0.887**	0.997**	0.972**	0.982**	0.158	7.892
		(0.331)	(0.332)	(0.338)	(0.339)	(0.157)	(793.6)
Legal knowledge			0.0447*	0.0484*	0.0483*	0.0256**	0.00921*
			(0.0187)	(0.0195)	(0.0198)	(0.00969)	(0.00374)
Internal efficacy			0.0675†	0.0653†	0.0641†	0.00984	0.00863
			(0.0366)	(0.0375)	(0.0386)	(0.0197)	(0.00827)
External efficacy			-0.0512	-0.0285	-0.0266	-0.00628	-0.0335***
			(0.0384)	(0.0409)	(0.0416)	(0.0189)	(0.00796)
Position in society				-0.119	-0.125†	-0.0774*	-0.0107
				(0.0727)	(0.0728)	(0.0356)	(0.0146)
Fairness of income				-0.245*	-0.255*	-0.125*	-0.0317
				(0.0993)	(0.100)	(0.0492)	(0.0204)
_MidschoolXincome					0.295*	0.143	
					(0.142)	(0.0756)	
_CollegeDipXincome					0.322*	0.166	
					(0.148)	(0.0947)	
_UniversityXincome					0.290	0.136	
					(0.157)	(0.0844)	
_cons	-1.498	-3.915*	-5.048**	-4.297*	-3.783*	-0.824	-1.361***
	(1.165)	(1.614)	(1.793)	(1.830)	(1.866)	(0.890)	(0.139)
N	7222	7222	7222	7222	7222	7156	7156
Pseudo R^2	0.029	0.499	0.509	0.518	0.522		
Rho							-.123 (.117)

Note: Numbers in parentheses are standard errors. Data are weighted according to the 2005 census.
†p<0.10 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5 Logit Regression Results, Rural Sample (Dependent Variable=Protest Participation)

						Heckman selection model	
						Probit	Selection
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female	-0.416†	-0.709	-0.441	-0.411	-0.412	-0.216	
	(0.243)	(0.387)	(0.417)	(0.413)	(0.414)	(0.203)	
Age (logged)	-0.615†	-0.275	-0.131	-0.105	-0.104	-0.0378	
	(0.365)	(0.617)	(0.609)	(0.589)	(0.588)	(0.336)	
Middle school	0.184	-0.787	-1.228*	-1.186*	-1.174†	-0.305	0.303**
	(0.342)	(0.509)	(0.523)	(0.522)	(0.660)	(0.410)	(0.114)
College diploma						-4.443	0.0280
						(9258)	(0.292)
University and above						-4.538	0.00966
						(2392)	(0.371)
Income (10,000 RMB)	0.116	0.341*	0.325†	0.343*	0.344*	0.186	0.0532
	(0.139)	(0.168)	(0.169)	(0.166)	(0.175)	(0.146)	(0.0434)
Income sq (100 mil RMB)	-0.110	-0.204†	-0.223†	-0.232†	-0.232†	-0.162	-0.0246
	(0.109)	(0.124)	(0.130)	(0.126)	(0.129)	(0.177)	(0.0338)
Married	0.00394	-0.558	-0.429	-0.369	-0.369	0.0134	0.00408
	(0.464)	(0.528)	(0.591)	(0.590)	(0.590)	(0.348)	(0.127)
Children	1.613	1.997†	1.813†	1.895†	1.894†	0.870	-0.00944
	(0.858)	(1.149)	(1.048)	(1.056)	(1.056)	(0.515)	(0.168)
Media consumption	0.0366	-0.0375	-0.0458	-0.0354	-0.0354	-0.0205	
	(0.0303)	(0.0554)	(0.0651)	(0.0642)	(0.0643)	(0.034)	
Party membership	-0.00397(	-0.194	-0.556	-0.513	-0.513	-0.343	
	0.445)	(0.479)	(0.460)	(0.460)	(0.459)	(0.378)	
Ethnic minority	-1.010	0.0505	0.0805	0.130	0.130	0.511	-0.237
	(0.531)	(0.546)	(0.545)	(0.541)	(0.541)	(0.396)	(0.134)
Trade union membership	0.228	0.609	0.867	0.914	0.914	0.584	
	(0.612)	(0.836)	(0.735)	(0.686)	(0.688)	(0.558)	
Migrant worker	0.508	-0.436	-0.828	-0.888	-0.888	-0.551	
	(0.393)	(0.690)	(0.697)	(0.728)	(0.728)	(0.328)	
Self-interest		5.358***	5.548***	5.614***	5.614***	1.732***	27.56
		(0.400)	(0.415)	(0.433)	(0.434)	(0.295)	(1119.5)
Non-state targets		2.933***	3.155***	3.181***	3.180***	0.652*	8.439
		(0.706)	(0.635)	(0.615)	(0.617)	(0.276)	(2565.8)
Legal knowledge			0.0144	0.0150	0.0150	-0.0016	0.0185**
			(0.0310)	(0.0308)	(0.0308)	(0.014)	(0.00596)
Internal efficacy			0.201***	0.211***	0.211***	0.0978**	0.0377**
			(0.0525)	(0.0525)	(0.0525)	(0.032)	(0.0132)
External efficacy			-0.179***	-0.177***(	-0.177***	-0.0614*(	-0.0140
			(0.0489)	0.0492)	(0.0498)	0.030)	(0.0134)
Position in society				-0.131	-0.130	-0.0872	-0.00943
				(0.0971)	(0.0976)	(0.057)	(0.0238)
Fairness of income				0.0502	0.0500	0.0165	0.00942
				(0.138)	(0.138)	(0.071)	(0.0324)
_MidschoolXincome					-0.00692	-0.0294	
					(0.238)	(0.196)	
_CollegeDipXincome						-0.156	
						(3238)	
_UniversityXincome							
_cons	-3.125*	-5.644*	-6.872**	-7.003**	-7.004**	-2.386	-2.521***
	(1.394)	(2.418)	(2.590)	(2.490)	(2.488)	(1.462)	(0.249)
N	4475	4475	4475	4475	4475	4549	
Pseudo R^2	0.031	0.555	0.581	0.583	0.583		
Rho							.0903 (.172)

Note: Numbers in parentheses are standard errors. Data are weighted according to the 2005 census.
†p<0.10 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1 Urban-Marginal Effects of Income on Protest Given Various Education Levels (Logit Regression)

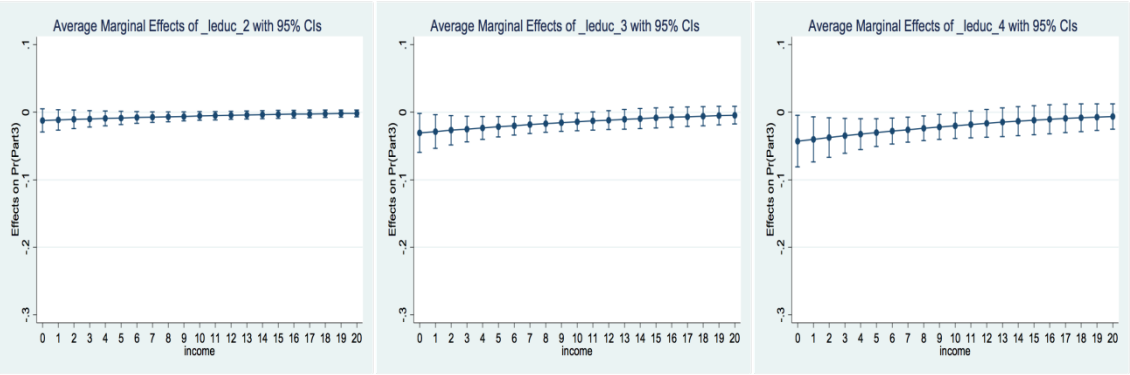
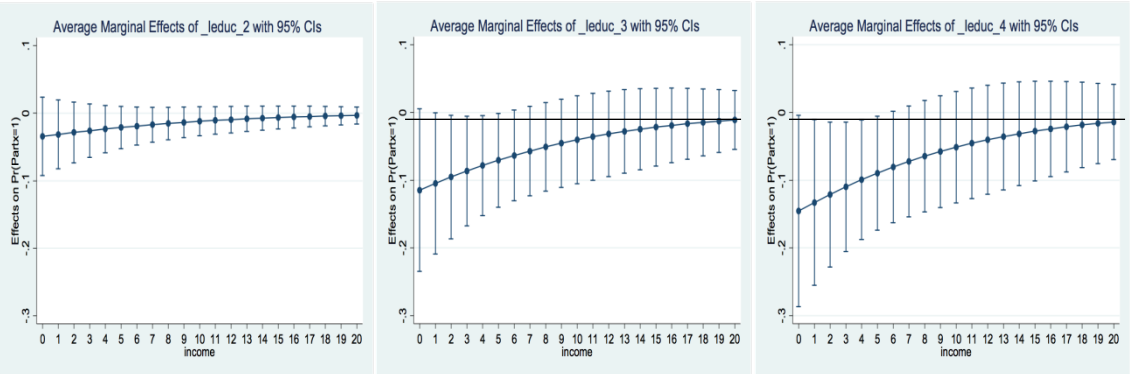


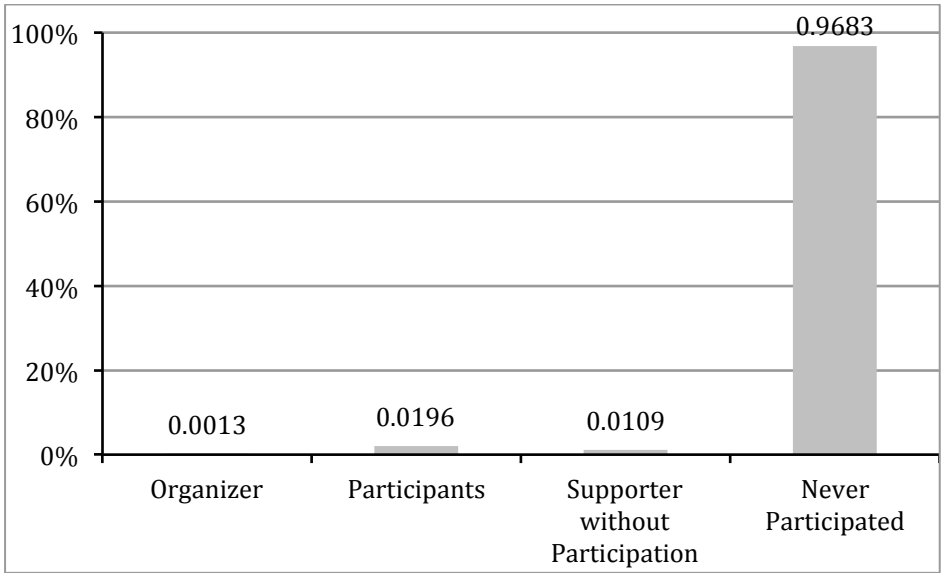
Figure 2 Urban-Marginal Effects of Income on Protest Given Various Education Levels (Heckman Selection Models)



Appendix A

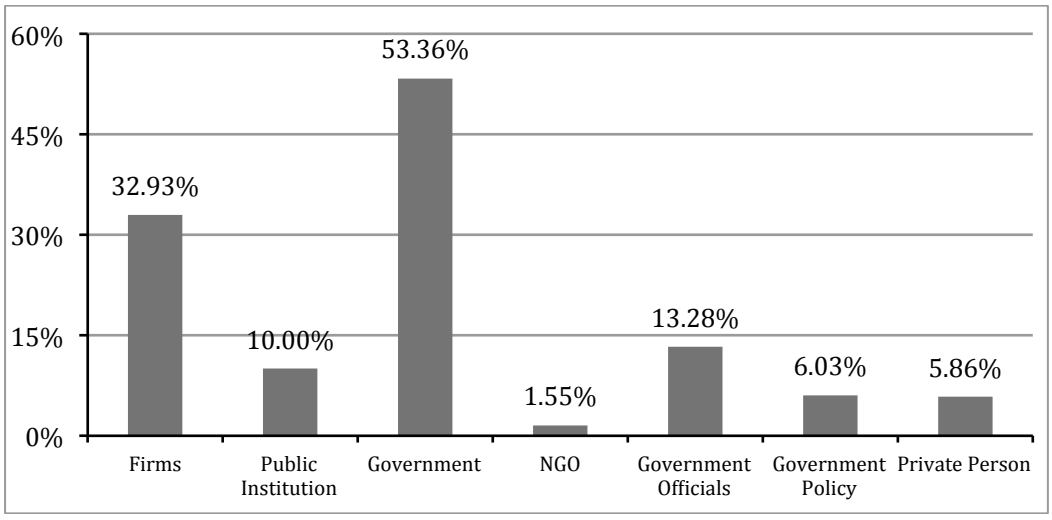
Variables	**Measurement**
Dependent Variable	
Participation in collective action	In daily life, we always observe some collective contention or activities, such as boycotting unreasonable charges, protests against demolition or land requisition, collective resistance against government projects, collective petitions, illegal gatherings, demonstrations, collective strikes, etc. In the past three years, did you take part in any of these activities? Participate=1; did not participate=0.
Independent Variables	
Urban	Survey location: urban=1; rural=0
Age	Self-reported age
Gender	Self-reported gender
Years of education	1-20
Level of education	Primary school and below=1; Middle school=2; College diploma=3; University bachelor's degree and above=4
Income	Annual personal income in 2009 (10,000 RMB)
Ethnic minorities	Ethnic minorities=1; Han Chinese=0
CCP membership	CCP member=1; non-member=0
Trade union membership	Trade union member=1; non-member=0
Marital status	Married or cohabiting=1; single, divorced or widowed=0
Children	Have children=1; no children=0
Position in society	In our society, some groups are at the top rung, while others are at the bottom. A graph from the top to the bottom rung is shown below. "10" stands for the highest rung, and "1" stands for the lowest rung. What level do you think you belong to now? Note: "10" stands for the uppermost top, and "1" stands for the lowest bottom.
Fairness of income	Given your educational background, work ability, qualifications, experience and other various factors, do you think your current income is fair? Unfair=1; Relatively unfair=2; Average=3; Relatively fair=4; Fair=5.
Media consumption	How often did you use the following media (newspapers, magazines, broadcast, television, Internet, mobile phone customized news)? Never=0; Rarely=1; Sometimes=2; Often=3; Very often=4.
Self-interest	Did these contentious activities or actions affect your interest? Preserve or increase my self-interest=1; hurt my interest or no impact=0.
Internal efficacy	1. Government work is too complicated for like me to understand. 2. I consider myself as having the ability to participate in politics. 3. I am fully capable of becoming a government official. 4. I have no confidence to discuss with others government work or practice.
External efficacy	1. People like me have no influence on the government's policy decisions. 2. Government officials do not care about the opinions of people like me. 3. When I give suggestions to government agencies, they will be adopted. 4. Government officials value our attitudes and views towards the government.
Legal knowledge	To what extent do you have an understanding of the following? 1. Basic knowledge of the law; 2. The functions of the Public Security Bureau; 3. The functions of the Public Prosecutor's Office; 4. The functions of the court; 5. How to hire a lawyer; 6. How to apply for legal aid; 7. How to litigate (file a lawsuit); 8. How to find the Letters and Visits Bureau. Coding method: Completely do not understand=1; Do not understand=2; Neither understand nor do not understand=3; Understand=4; Completely understand=5.
Non-state target	Who were the targets of these contentious activities or actions? Private companies, individuals and entities=1; others=0.
Migrant worker	Self-identified as migrant worker in the rural sample or conducting non-farming jobs and holding rural *hukou* in the urban sample.

Appendix B Distribution of Respondents' Involvement in Collective Action



Source: CGSS 2010

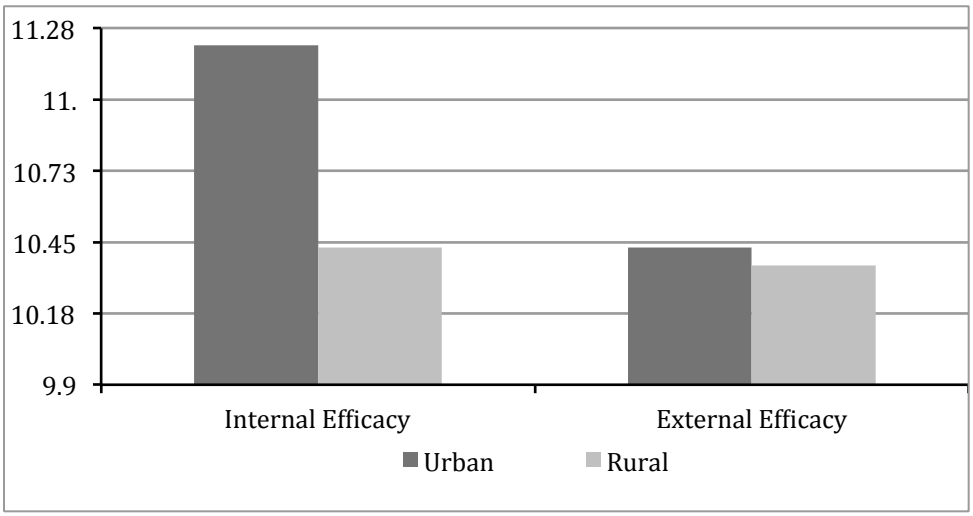
Appendix C Targets of Protests



Source: CGSS 2010

Appendix C shows that most of the protests were targeted at the government or government-related entities: 53.4 percent were aimed at the government, 13.3 percent at government officials, 10 percent at public institutions, and 6 percent at government policies.[17] Meanwhile, private firms and individuals accounted for 31.9 percent and 5.9 percent of the total, respectively.

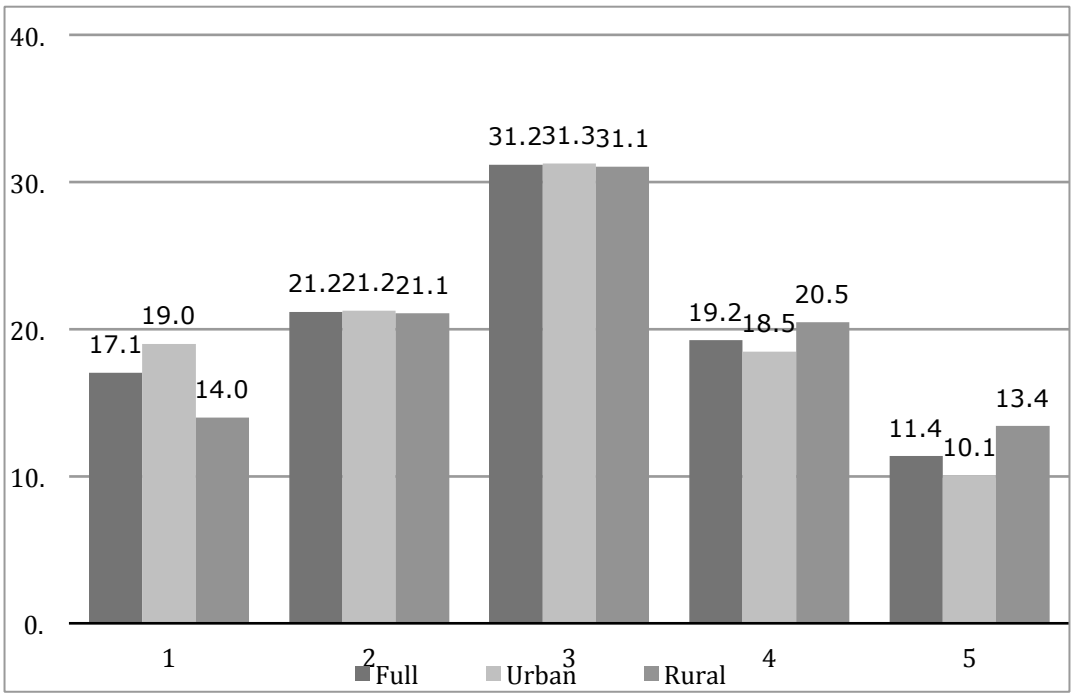
Appendix D Distribution of Political Efficacy



Source: CGSS 2010

The survey suggests that the distribution of social psychological indicators, such as political efficacy and sense of fairness, are quite different in urban and rural areas. As Appendix D indicates, political efficacy is significantly higher among the urban population compared to rural population. Urban residents score 11.2 for internal efficacy compared to 10.4 for rural residents. The gap for external efficacy scores is not as large but is still statistically significant ($p<0.05$).

Appendix E Distribution of Sense of Fairness of Income (%)



Source: CGSS 2010

In Appendix E, "1"="unfair" and "5"="fair". The urban and rural differences are significant at the 5 percent level.

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Notes:

[1] Su & Feng (2013) and Wu & Dong (2014) are based on earlier rounds of the CGSS questionnaires that contain questions which are not entirely similar to the CGSS 2010 on which this study is based.

[2] A recent study on the Arab Spring countries found that individuals with higher education whose income falls below their expectations display the greatest propensity to protest. The study argues that it is not higher educational attainment per se that led to political protest but rather unmet economic expectations due to higher education. See Campante, and Chor(2014), '"The People Want the Fall of the Regime": Schooling, Political Protest, and the Economy', *Journal of Comparative Economics*, 42, 495-517.

[3] For more details on the data, please see this website: http://www.chinagss.org.

[4] Respondents who did not answer the question are also coded as "did not participate".

[5] All relevant questions in the survey can be found in the appendix.

[6] The survey question asks respondents about their level of education. We then convert different levels of education to years of schooling. Coding method: no education/informal education=0, primary school=6, junior school=9, professional high school/high school/professional middle school=12, college diploma=15, university bachelor's degree=16, post-graduate study=20.

[7] In our society, some groups are at the top rung, while others are at the bottom. A graph from the top to the bottom rung is shown below. "10" stands for the highest rung and "1" stands for the lowest rung. What level do you think you belong to now? Note: "10" stands for the uppermost top, and "1" stands for the lowest bottom.

[8] Given your educational background, work ability, qualifications, experience and other various factors, do you think your current income is fair? Unfair=1, Relatively unfair=2, Average=3, Relatively fair=4, Fair=5.

[9] Individual petition, a constitutional right, is a formal channel for resolving disputes. However, collective petitions, lodged by more than five people, which are illegal in the Chinese context, are considered an informal or extralegal channel much like protests and demonstrations.

[10] One way is through the information dimension (Verba, Schlozman, & Brady, 1995): in the absence of political information or knowledge, individuals are unlikely to take part in any political activities, including protests (Putnam, 2000). The other channel is through stimulating political interest. Without some level of interest in politics, individuals will probably choose not to participate in any form of political activities (Verba *et al.*, 1995).

[11] The original question is the frequency of consuming media such as newspapers, journals, and television and broadcast. Codes: Always=5, Frequent=4, Sometimes=3, Very little=2, Never=1.

[12] Existing literature suggests that organizational involvement matters in two ways. First, organizations can serve as a platform for recruiting potential participants because involvement helps foster interpersonal networks that in turn facilitate recruitment to social movement (Gerlach & Hine, 1970; Klandermans, 1997; McAdam & Paulsen, 1993; McAdam, 1986). Second, organizational membership matters for political participation because people who are members of common organizations tend to hold similar ideologies or have similarities along other dimensions (McPherson & Smith-Lovin, 1987). These commonalities facilitate a sense of collective purpose and shared grievances that are essential for the mobilization of collective action (McAdam, 1982).

[13] For example, according to the "Attitudes towards Citizenship in China", a national-wide survey conducted by Peking University's Center for Contemporary China in 2008 involving 4,004 respondents found that only 1.6 percent of the respondents had participated in demonstrations or protest actions in the past. For further information, see Shen Mingming *et al.*, *Zhongguo Gongmin Yishi Diaocha Shuju Baogao* (2008); Attitudes Towards Citizenship in China: Data Report of A National Survey (2008), Beijing: Social Science Academic Press.

[14] Our results were not surprising because the content analysis on the Chinese internet found more than 20% of hot topics on the Chinese Internet in 2009 were about the misconduct of the government. Yu Guomin ed., *Zhongguo Shehui Yuqin Lanpishu*, [Annual Report on Public Opinion in China], Beijing: *Renmin Ribao Chubanshe*, 2010.

[15] Chen *et al.* (2015) found that the Gini-coefficient in 2010 was 0.3272 in urban China, and 0.3757 in rural China.

[16] To be sure, the two studies are not strictly comparable. While Su & Yang (2013) looks at protest propensity, i.e. a hypothesized question of whether one will protest in a labor dispute, we examine one's actual participa-

tion. Our indicator for external efficacy, a subjective measurement of whether one can potentially influence government outcome, is also dissimilar to their index of *guanxi* networks as an indicator of social connections. [17] Our results were not surprising because the content analysis on the Chinese internet found more than 20% of hot topics on the Chinese Internet in 2009 were about the misconduct of the government. Yu Guomin ed., *Zhongguo Shehui Yuqin Lanpishu*, [Annual Report on Public Opinion in China], Beijing: *Renmin Ribao Chubanshe*, 2010.