

REPRESSION, REGIME, MOBILIZATION, WEALTH AND PROTEST: A  
STATISTICAL CROSS-NATIONAL STUDY 1990-2004

by

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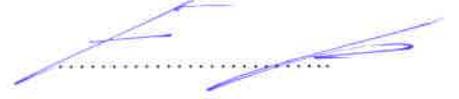
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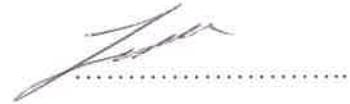
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## ABSTRACT

### REPRESSION, REGIME, MOBILIZATION, WEALTH AND PROTEST: A STATISTICAL CROSS-NATIONAL STUDY 1990 – 2004

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**Keywords:** Protest, collective action, repression, regime

What are the motives behind protests and what factors increases (decreases) the total number of protests countries experience? Previous empirical studies have explored protest's relationship with state repression, regime type, mobilization and wealth. However, they have provided conflicting explanations and theories that are antithetical to one another. Within the rational actor and value-expectancy frameworks, this thesis aims to analyze causes of protests across countries from 1990 to 2004. It concludes that (i) repression and protest have a dynamic relationship when regime type is included as a conditioning factor. The interaction of both independent variables in a multivariate regression test evinces that high level of repression has a deterring effect on the total number of protests if the regime is autocracy and an increasing effect if the regime is a democracy or full democracy. Moreover, (ii) constraints on freedom of media and domestic movement damage mobilization of the dissident and conduce to fewer protest activities. (iii) Contrary to the theories of deprivation, this study infers that nations will be more inclined to protest as per capita wealth increases. Ultimately, (iv) results reveal that components of democracy – the absence of repression, media and domestic movement freedoms – vary within democracies, indicating that some of our definition and measurements of regime types suffer from conceptual stretching and should be revised.

## ÖZET

### BASKI, REJİM, TOPLUSAM HAREKETE GEÇİŞ, ZENGİNLİK VE PROTESTO: ÜLKELER ARASI İSTATİSTİKSEL BİR ARAŞTIRMA 1990 - 2004

Deren Onursal

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**Anahtar Kelimeler:** protesto, toplu eylem, baskı, rejim

Protestoların gerçekleşmesindeki sebepler nelerdir ve hangi unsurlar ülkelerin tecrübe ettikleri toplam protesto sayısını arttırır (azaltır)? Önceki ampirik çalışmalar protestonun, devlet baskısı, rejim çeşidi, toplumsal harekete geçiş ve zenginlik ile olan ilişkisini incelemiştir. Ancak, bu çalışmalar çelişkili açıklamalar ve birbirine karşıt teoriler sağlamaktan öteye geçememiştir. Bu tez, rasyonel aktör ve değer-beklenti tasarımlarını uygulayarak, 1990 ve 2004 arasında ülkeler çapında protestoların sebeplerini çözümlmeyi amaçlamaktadır. Tez, (i) rejim çeşidi koşullandırıldığında, baskı ve protestonun dinamik bir ilişkiye sahip olduğu sonucuna varmıştır. Her iki bağımsız değişkenin çok değişkenli regresyon analizindeki etkileşimi, yüksek seviyede baskının toplam protesto sayısı üzerinde, eğer rejim otokrasi ise caydırıcı, demokrasi veya tam demokrasi ise arttıran bir etkiye sahip olduğunu açığa çıkarmıştır. Ayrıca, (ii) medya ve yurt içi hareket özgürlüklerinin kısıtlanması, karşıt görüşlü kişilerin toplumsal harekete geçişine zarar vermekte ve protesto etkinliklerinin daha az sayıda olmasına neden olmaktadır. (iii) Yoksunluk kuramı teorilerinin aksine, bu araştırma, kişi başına düşen zenginliğin arttıkça, ülkelerin protestoya daha çok yatkın olduğu çıkarımını yapmaktadır. En nihayetinde, (iv) sonuçlar, demokrasinin bileşenlerinin – baskının olmayışı, medya ve yurt içi hareket özgürlükleri – demokrasiler içindeki çeşitliliğini ortaya çıkarmıştır. Bu da göstermektedir ki; rejim türlerinin bazı tanım ve ölçümleri kavramsal genişleme yaşamaktadır ve gözden geçirilmelidir.

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*To my mother and Turi*

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## **CHAPTER 1**

### **INTRODUCTION**

The notion of democracy has long been regarded as one of the most dangerous and the least efficient types of governance until the Late Medieval Ages. Today, however, most people find democracy more convenient and secure in comparison with other types of governing systems because, in principle, democracy guarantees fundamental rights to everyone indiscriminately. And the right to protest is one of them. How do we define political protests beyond a simple political right? When a group of people is not satisfied with a political situation or decision, regardless of the state's regime, they mobilize, gather together and attempt to change the policy or the situation that displeases them by making authorities hear their voices. Political protest is an action and an attempt to divert the course governments follow.

The concept of protest is a vital study for political scientists due to two main reasons. First, even simple protests, under certain conditions, can turn into social movements, rebellions and civil wars. Seemingly the most innocuous protests may lead to violence. Protests for the unification of Germany and tearing down the Berlin Wall resolved peacefully. Nonetheless, protests for the removal administrations in Libya, Syria, and Yemen conducted to bloody conflicts. Protests not only create political pressure on governments but also have the potential to shape the political culture and system of a nation. We must understand the concept of protest initially if political scientists wish to analyze and explain democracy, repressive regimes and other forms of political violence such as civil wars and terrorism.

Second, protest is a daily occurring phenomenon and a political resource that provide citizens direct access to policy making (Lipsky, 1968). In some democracies, where people are actively interested in shaping policies, the masses may influence decision makers more than electors (Offe, 1985). Regardless of the country, type of the regime, repressiveness, culture, wealth, ethnic problems, people protest. Some actively demonstrate on streets and clash with

the licit forces of the authority; whereas, some passively write petitions to their local governments. In either case, people express their opinions by protesting every day. Thus, a detailed and accurate analysis of the causes of the phenomenon protest will form a basis for other studies.

Therefore, my research question is the following: at a cross-national level, what are the causes of protest activities? The importance of regime type (i.e., full democracy, democracy, open anocracy, closed anocracy and authoritarian) in answering this question is self-evident. Democracy, as a system, may have a substantial effect on protests; however, how do components of democracy individually affect protests? More specifically, how is protest related to repression, media independence and freedom of domestic movement?

Scholars have attempted to explain the causes of protests with deprivation (Gurr, 1970; Gurr, 1993; Aytac et al., 2017), greed (Regan and Norton, 2005), repression (Khawaja, 1993; Francisco, 1995; Pierskalla, 2009), and collective action (Olson, 1971; Hardin, 1982; Lichbach, 1995). Also, many cross-national studies and game theoretical approaches have focused on alternative drivers of protests: economic conditions (Acemoglu, 2001; Brancati, 2013), regime type (Gupta, 1993; Carey, 2006), ethnicity (Fearon and Laitin, 2003; Cederman, 2010), precipitation (Madestam et al., 2013), and the power of media (Kern, 2011; Kim et al., 2014). Ultimately, political scientists produced five major competing theories, namely relative deprivation theory (RD), collective action theory (CA), the inverted-U hypothesis, backlash theory and value-expectancy (VE).

All five theories present antithetical explanations on causes of protest. RD theory argues that political repression induces anger because repressive governments deprive citizens of their rights and freedom. Anger causes grievance and grievance leaves citizens no option but protest (Gurr, 1970). According to RD theory, deprivation is not limited to political grievances. In addition to repression, economic inequality and ethnic discrimination are also some of the characteristics of a deprived society. On the contrary, CA theory asserts that repression produces a deterring effect on the decision to protest and proposes that the cost of protest might be too high under repressive regimes. Thus, people are less inclined to become protesters (Olson, 1971). The inverted-U hypothesis, on the other hand, suggests that people protest less in countries with low and high levels of coercion. Nevertheless, governments that coerce citizens moderately experience more protests (DeNardo, 1985; Muller and Weede, 1990). Backlash theory maintains that intense coercion stimulates people to protest (Francisco, 1995). Finally, value-expectancy model propounds that high level of repression encourages

protests if the cost of collective action is low and benefits of the public good is likely to be achieved (Muller and Opp, 1986).

In the light of current major theories, this thesis creates a statistical model to test causes of protest and verifies that the effect of repression is adverse for autocracies and positive for democratic nations. It also attempts to contribute to the existing theories by demonstrating that specific dimensions of democracy (i.e., freedom of media and domestic movement, the absence of repression) might have an impact even within democracies. First, I argue that government repression does not entail grievance and even if it does, repression has a deterring effect because protest always has a cost for individual participants. Second, repression level and regime type alone may not be sufficient to explain the frequency of protests because repression varies across regime type. The cost of protest may be different for the dissident in democracies than autocracies when governments execute repressive policies. Hence, this thesis explores the effect of both variables' interaction on protest, asserting that repression in democratic nations has a positive impact on protest; whereas the effect is negative should the state is an autocracy. Third, I propound that greater number of protests are organized in nations where media is free and domestic movement is unrestricted. The flow of information through media and ability to move domestically make mobilization easier and more efficacious. Moreover, I predict that poor economic conditions do not encourage people to protest. Contrarily, wealth causes more protests. When the poor do not have any hope to improve their standards of living, they may be content with what they already have and may not regard poverty as unjust. Nonetheless, the fear for losing wealth may lead the economically advantageous classes to have incentives to protest and the rich may have more resources to start and sustain protests. They may also pursue further wealth and its failure may cause grievances. This argument is central to the theory of this thesis because it adduces to support that protests are not motivated by grievances. Ultimately, this thesis controls other factors, i.e., regime durability, the percentage of the agricultural land, population and ethnic fractionalization.

I test the hypotheses of this study with multivariate multiple regression analyses to answer the research question, what factors increase or decrease the total number of protesting events, and also to check the robustness of findings. To elucidate the determinants of protest, I gathered a dataset using two cross-national panel datasets: *World Handbook of Political Indicators IV* (WHIV) and *Mass Mobilization* (MM). Due to reliability issues, which I will address in the following chapters, I include *Cross National Time Series* (CNTS) dataset solely with the purpose of demonstrating evidence for the robustness of particular variables.

This thesis proceeds as follows: next chapter, I will review studies that have previously controlled the effects of political, economic and social factors on protest. In Chapter 3, I will present the theory I apply to this study and my testable hypotheses, most prominently state repression, regime type, freedom of domestic movement and media. Chapter 4 will explicate the research design. Chapter 5 will demonstrate statistical results of the analysis and its robustness; and in Chapter 6, I will discuss the interpretation of findings. The final chapter will recapitulate the key findings.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The phenomenon of political conflict has attracted great philosophers and scholars since the times of Ancient Greece. Aristotle (2016) thought that the primary motive of revolutions was the urge for obtaining economic and political equality because the common people did not have it, and oligarchs were aspired to access greater inequality in their favor. During the Early Modern Ages, Karl Marx argued the involvement in collective action to be a class related issue. He thought that individuals got involved in collective action, when “their social class is in fully developed contradiction with its antagonists” and revolutions often failed because a considerable proportion of workers did not cooperate (Tarrow, 1994, 11). About a century later, Antonio Gramsci (1971) emphasized the importance of organizations for mobilization. Nevertheless, he added that it was necessary to develop workers’ own consciousness to engender a revolution and, thus, the organization’s message of revolution could be transmitted to the masses.

In the Modern Era, we still ask the same questions: How and why do social movements, protests, revolutions and civil wars happen? Yet, our methods to study protest and interpretations of findings have evolved throughout the time. Using formal modeling and cross-national studies, researchers have tried to understand causal linkages of protest with rational choices of individuals (Lichbach, 1995), grievances (Gurr, 1970), mobilization (DeNardo, 1985), population (Fearon and Laitin, 2003), policy changes (Tilly, 1978; Giugni et al., 1999), economic factors (Maher and Peterson, 2008), freedom of media (Kim et al., 2014), ethnicity (Cederman, et al., 2010; Mele and Siegel, 2017), personal availability (Schussman and Soule, 2005) etc. The most prominent debate in the literature is, however, about the impact of economic and political grievances on protest. Despite the amount of abundant scientific research, theoretical disagreements on protest are salient, and there is little consensus among scholars.

## 2.1 Repression

Mancur Olson's book *The Logic of Collective Action*<sup>1</sup> (1971) and his model of *Collective Action* (CA) theory that mainly forms the starting point for the disagreement among scholars disclose that provision of collective goods through the collaboration of all members in a group is destined to fail due to free rider problem. Olson discusses why domestic political conflict (e.g., protest, revolution, rebellion, civil war) does or does not occur and how groups can overcome the problem of free riding. He delineates that unless groups have specific characteristics, they cannot eschew the free rider problem for two reasons. First, defection costs an individual member less if everyone else in the group cooperates. Second, a single individual's contribution makes no "perceptible difference to the group as a whole" as the group size enlarges (Olson, 1971, 44).

Nonetheless, Olson suggests that organizations with formal structures and unyielding leaders may overcome the free rider problem with negative and positive incentives. Group leaders can punish group members who refuse to deliver their share of the cost or leaders can convince members that their participation is vital by providing positive "selective incentives" for those who show willingness to contribute and act in group's interest (Olson, 1971, 51). Consequently, CA approach asserts that coerced individuals do not rebel against repressive governments if they expect repression (Hardin, 1982). In other words, the core assumption of CA theories is that an individual joins collective dissent when "his or her individual benefits exceed the individual cost" (Lichbach, 1995).

Olson receives three significant criticisms from the skeptics of CA theory (Tarrow, 1994). First, the marginal utility does not have to be the main purport of an individual's affiliation with protest. Although high repression increases risks and costs of violent protests, people associate with political action for various reasons, not solely marginal utility. Second, even though the number of participants in a protest can be a crucial factor to measure the strength of protest, protests often have no explicit membership and its strength can be inversely proportional to the number of participants. Third, many protests do not have to be backed up by organizations, nor have leaders and formal structures. Some influential social movements are not organizations and organizers have little control over the participants.

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<sup>1</sup> First published in 1965. Second edition in 1971.

Ted Gurr (1970) also rejects theories of CA and constructs a competing theory to comprehend collective actions. He explains collective actions through the *Relative Deprivation* (RD) theory, which he defines as “actor’s perception of discrepancy between their value expectations and their value capabilities” (p. 24). Value expectations are the goods people believe that they deserve to have, and value capabilities are the goods people are capable of obtaining. Simply, people have the feeling of deprivation when their expectations and capabilities do not match. Deprivation leads people to have grievances, which refer to the widely shared dissatisfaction of a group in society about their cultural, political and/or economic standing, in comparison to the dominant group (Gurr and Moore, 1997).

The discussion of emotions-based explanation such as RD theory is vital for protest because state repression is one of the major components of grievances. From a broad perspective, grievances eventually engender frustration among the members of a deprived group. Frustration does not necessarily lead to political violence; however, anger entailed by frustration aspires people to aggression. Within the framework of protest, “repression produces anger, and anger encourages collective action among the opponents of the ruling party” (Aytaç et al., 2017, 10). Put differently, when the state confronts aggression of the deprived group, repression antagonizes the resistance of those against whom coercion is directed (Gurr, 1970), and Hibbs (1973) congruently verifies that the knowledge of the previous repression exerted by the elite does not deter protest. Saxton (2005) argues that groups that suffer from repression are prone to rebel if they have cohesive and mobilized characteristics. The notion that dissident activities escalate, as repression increases people’s sense of deprivation is supported by Lohmann (1993) who argues that rational, self-interested individuals may have incentives to participate in political actions despite costs and free rider problem.

Charles Tilly (1978) also acknowledges the importance of grievances for social movements, expounds the theories of RD and provides a different perspective. He maintains that grievances do play a role in civil unrests; however, they alone are not sufficient. Tilly and others (DeNardo, 1985; Tarrow, 1994) place mobilization as a key ingredient for internal political conflicts. Tilly argues that repression enhances the cost of collective action and, thus, affects mobilization negatively. He also emphasizes that apparent changes in a government’s policy of repression “will rapidly encourage or discourage collective action” (Tilly, 1978, 114).

Nevertheless, CA theorists conflict with proponents of RD approach and voice three central criticisms. The initial criticism is regarding the explanation of grievance and the conceptual confusion it entails. Bandura (1973) states that frustration, an essential element for grievance, is an ambiguous concept because it subsumes “a diverse set of conditions” (p. 33).

The second criticism is that rational action perspective does not gainsay that protestors may feel deprived and deprivation can be compatible with RA models. Howbeit, deprivation is more or less irrelevant (Tullock, 1974) and insufficient to explain political violence (Muller and Opp, 1986; Muller and Weede, 1990).

The final criticism is theoretical. Since the impact of a single individual’s contribution on the outcome is negligible, and this particular individual cannot be excluded from public goods, CA theorists assert that it is irrational to participate in collective activities (Olson, 1971). Thus, people will prefer a free ride, instead of contributing. Presuming that regime responsiveness has a direct impact on the effectiveness of demonstrations (DeNardo, 1985), rational actor (RA) models denote that constant repressive policies of a government decrease dissent (Lichbach, 1987). The deterrence effect of coercion “ought to reduce the amount of any dissident activities, including violence” on the condition that the government enforces harsh negative sanctions (Muller and Weede, 1990, 647). Similarly, Opp and Roehl (1990) espouse the notion that repression is a negative incentive to protest and has a direct effect because repression is a cost for individuals who consider civil unrest.

Although some empirical evidence adduces to support Lichbach’s proposition (1987) and denotes that “repression can be used to shape dissident behavior” (Moore, 1998, 870), RA theorists also recognize the fact that we sometimes observe some people in some places who do protest and defeat the Rebel’s Dilemma. This fact generates a paradox, namely the “*puzzle of CA*” (Lichbach, 1995, 12). Howbeit, RA models remind that rebellion of the grieved rarely take place because it is not in every rebel’s interest to rebel. In a nutshell, RA models point out that rational people do not rebel, which Lichbach (1995, 5) demonstrates in a simple thought experiment.

**Figure 1: Jane’s Dilemma**

		Everyone Else’s Choices	
		Demonstrate	Stay Home
Jane’s Choices	Demonstrate	Benefits = Diversity Costs = Time Lost	Benefits = 0 Costs = Time Lost
	Stay Home	Benefits = Diversity Costs = 0	Benefits = 0 Costs = 0

As shown in the figure, Jane receives the benefit, if she joins everyone else to protest. However, her choice of demonstrating with everyone else has a cost – her valuable time at the event. In real life, the cost can vary from loss of time to arrest, injury or even death. If Jane stays at home, while everyone else protests, not only she avoids a loss, but also receives her

share of the public good. In this particular game, rational people will choose the option that minimizes costs. Rational people do not protest but expect others to protest for his or her own benefit, considering that participation may result in “possibly disastrous private costs” and public benefits are “uncertain” (Lichbach, 1995, 5). Furthermore, a recent application of RA model (Pierskalla, 2009) elucidates that a government should be able to deter protest, as long as it has the capability, determination and enough power to repress the dissident. Nevertheless, if a government is feeble, it is more likely that seeking compromise is a better option since coercion might not deter the opposition. In addition, Pierskalla underscores the difference between random and strategic protests. Provided that protests commence randomly due to recent and sudden economic shocks (e.g., recent fuel and food riots), repression can be a useful political tool for deterrence (p. 135). On the contrary, if the dissident groups trigger protests strategically in a nation with a weak government, repression has the potential to escalate protest because governments with inadequate capabilities of repression cannot successfully deter protest.

The literature provides two more competing theories alternative to the theories of CA and RD, namely the Inverted-U hypothesis and backlash theory. Instead of the linear relationship proposed by CA and RD theories (Olson, 1971; Lichbach 1987; Gurr 1970), DeNardo’s (1985) RA model predicts a curvilinear relationship between repression and protest. The curvilinear suggestion implies that states are more likely to experience an increase in protest should they move from low or high repression to midrange repression. Put differently, people in highly coercive states do not or cannot protest due to destructive risks, and people do not protest in non-repressive states either because they do not have any deprivation or potential benefits are lower than costs. However, according to the inverted-U approach, states, where the coercion level is intermediate, confront protest more frequently. Tsebelis and Sprague’s (1989) analysis with the predator-prey model indicates that protest and coercion diverge and oscillate. In other words, coercion might succeed at suppressing protest at one time, but it ferments protest at another. Scholars have tested DeNardo’s (1985) curvilinear prediction and empirically confirmed the inverted-U hypothesis (Muller and Weede, 1990; Opp, 1994). Muller and Weede (1990; 1994) state that the deprivation effect declines as state repression reaches extreme levels. They add that the findings of the scarcity of collective action at low and high repression can be interpreted with both rational action and deprivation approaches, notwithstanding their findings seem to favor a rational action explanation.

The relationship between coercion and dissent continues to breed more disagreement because the inverted-U approach is challenged by the backlash hypothesis, according to which

extreme coercion is followed by surges of protest (Khawaja, 1993). Regardless of its high costs for protesters, severe coercion can have an increasing effect on protest if coercive regimes overstep their boundaries. Francisco's (1995; 1996; 2004) case studies confirm that unduly harsh coercion accelerates protest and the inverted-U hypothesis receives less support than backlash. Francisco (1996) concludes that even though "protest and coercion are interrelated," the lack of repression "does not preclude protest" (p. 1201).

Ultimately, value-expectancy model (VE) emphasizes that repression is always a cost that hurts the likelihood of protest occurrences and, thus, it "has a direct negative (detering) effect on protest" (Opp and Ruehl, 1990, 521). However, average citizens may participate in protests regardless because it may be "individually rational" to protest (Muller and Opp, 1986; 484). Therefore, the effect of repression can be reversed and escalate protests depending on the cost of collective action and people's expectation of success. It is possible to overcome the free-riding problem should individuals think that their participation is efficacious (Finkel et al., 1989). VE model, in sum, argues that greater number of protests are likely to take place, on the condition that people "become convinced that dissent will achieve the collective good" (Rasler, 1996, 134). When the likelihood of achieving the public good is high, people protest in spite of repression because costs remain lower than potential benefits. And, costs are low, especially when the government has an accommodating behavior (Carey, 2006). Such behavior is observed more in democracies than non-democracies, implying that regimes, as a system, also have an impact on protest.

## **2.2 Regime Type**

The institutional approach to the puzzle of protest is relatively new in comparison to repression. For a long time, scholars have presumed that repression and authoritarianism have an identical impact on domestic political conflict. Although some studies have shown a strong association between democracy and low levels of political repression (Henderson, 1991), the presumption that two concepts are equivalent is fallacious. Under certain conditions, even democracies resort to repression when their authority is challenged (Davenport, 2007) and find themselves in the dilemma of choosing between coercion and accommodation (Della Porta, 1995).

Democracies are still less likely to repress, especially if they are stable. Nonetheless, how do people react to repression, when democracies implement repressive policies? The

evidence indicates that repressive policies “provoke a higher level of protest demonstrations” and for autocracies, “severe sanctions can impose an unbearable cost, resulting in an inverse relationship between sanctions and political deaths” (Gupta et al., 1993, 301). Brancati’s (2013) analysis addresses this inverse relationship and supports that the probability of protest is less likely to take place in strongly authoritarian states than autocracies, as a result of the use of repressive force. Benson and Kugler (1998) show that democratic nations alleviate violent conflict if the institutions are “highly competitive and participatory” (p. 196).

Fein’s (1995) “murder in the middle” hypothesis represents a different view. She asserts that gross violations of human rights occur in nations, in which democracies are not “fully institutionalized” (p. 170). Pierskalla (2009) applies this framework to the concept of protest, and his extensive strategic game confirms that murder does happen in the middle. In other words, semi-democracies and transitioning regimes face more protests than full democracies or authoritarian regimes because the ‘middle’ regimes do not have enough power to debar dissident groups from organizing and engaging in demonstrations (Hegre et al., 2001).

### **2.3 Economic Conditions**

Identical to repression-protest nexus, the opinion on whether poor economic conditions incite people to protest diverges among political scientists. The first divergence is based on the measure of poor economic conditions. Unemployment, GDP/capita, GNP/capita, discrimination, landlessness, poverty and inequality are the most common ones when scholars seek for a causal relationship between economy and protest (Hibbs, 1973; Muller and Seligson, 1987; Gurr, 1994; Fearon and Laitin, 2003; Schussman and Soule, 2005; Maher and Peterson, 2008; Cederman, et al., 2010). The second is about how economic conditions of individuals and the state affect protests. Scholars from Aristotle and de Tocqueville through Lipset and Dahl have thought poor economic conditions to be a plausible idea as a major cause of political conflict. It has been traditionally theorized that countries with unequal distribution of income and wealth are prone to conflict (Russett, 1964; Huntington, 1968;). Nevertheless, there are a great number of scholars who offer alternative views as well (Tilly, 1978; Skocpol, 1979; Lichbach, 1989).

RD models depict that government repression is not the only cause for relative deprivation. Economic conditions are also another form of deprivation, which may generate grievance. Gurr (1970) assumes that material values are the greatest and most common

concerns of people. Our hopes and fears are primarily due to the personal economy; therefore, people's economic concerns affect the intensity of relative deprivation even more than security. Gurr (1993) contends that political and economic differentials, poverty and discrimination "have a major impact on the grievances" and economic disadvantages are consistently correlated "with demands for greater political rights" (p. 188). Regions and countries with systemic poverty are prone to more frequent and intense conflicts because "systemic poverty means limited state capacity," which exacerbates power and material related problems between the dissident and state (Gurr, 1994, 359). Panning (1983) discusses the effects of economic conditions on relative deprivation and agrees on the implications of RD concerning inequality's effect on political instability. However, he points out a curvilinear relationship, arguing that "relative deprivation is greatest at intermediate levels of inequality and lowest when inequality is either very high or very low" (p. 77).

On the other hand, RA theorists suggest that economic inequality does not turn into dissent because rational actors care about the wages they earn "relative to what they can do, not relative to what others receive" (Lichbach, 1989, 460). Furthermore, Lichbach's (1990) game theoretical model of IC nexus explicitly dismisses the direct effect of inequality on conflict and "show that people neither rebel against inequality in wealth nor inequality in income" even if rational actors are relatively deprived (p. 1052). In fact, rational actors are more concerned with maximizing "their opponent's pain rather than their own pleasure" (ibid.). The reason RD models find a significant relationship between inequality and conflict is that "changes in economic and political conditions affect both inequality and strategic considerations, but only strategizing affects conflict" (ibid.).

On the contrary, further empirical studies provide evidence in support of RD theory. Midlarsky (1988) finds that economic inequality and political violence are strongly associated in Latin America. Fearon and Laitin (2003) note that per capita income is one of the conditions that favors the probability of the outbreak of a civil war. Maher and Peterson (2008) observe mixed results with regard to the impact of weak economic conditions on dissent. They postulate that when citizens experience progress in their economic conditions, they may be less willing to dissent, and states may prefer to use nonviolent means to preclude the disruption of the status quo. Moreover, Cederman et al. (2010) also report that GDP per capita exhibits a negative effect on ethnonationalist conflict. A recent study (Brancati, 2013) demonstrates that overall economic performance, not solely income per capita, is essential for pro-democracy protests. If the economy performs poorly on inflation, employment, growth, and GDP per capita, an increase of pro-democracy protests is more likely.

Some scholars espouse the idea that wealth and collective action are indeed related, but the relation is inverse. Brady et al. (1995) assert that high political activity requires time, money and civic skills because citizens with wealth have more resources to sustain and remain in political activity. Schussman and Soule (2005) partially agrees with a resource-based approach to political participation and conditionally maintain that higher income increases the possibility of protesting. The effect of income on the probability of protesting loses its significance when authors introduce measures of political engagement and structural availability into the analysis. They also denote that unemployment does not affect protest. Regan and Norton (2005) acknowledge that the incentive to free ride for rational actors is always a problem; however, grievance is “the backbone of protest and rebellious movements” (p. 322). Contrary to their expectations, their analysis evinces that GDP per capita positively affects the onset of rebellion. Su (2015) argues that high level of economic development provides more resources for protest and GDP per capita is one of the indicators for economic development, along with inflation and GDP growth. Although inflation and GDP growth are insignificant, he finds a positive relationship between GDP per capita and anti-government protests. Finally, Kim (2016) propounds that income, which she measures with GDP per capita, mobilizes masses and confirms that it increases protest activity.

## **2.4 Further Explanations**

So far, I have shown that conventional discussion on protest and other internal political conflict types has produced five major theories – relative deprivation, collective action, inverted-U, backlash, value-expectancy. These theories are mainly based on two indicators, namely repression and inequality. Nevertheless, explanations of the protest puzzle are not circumscribed with coercion, economic conditions, political discrimination and demographic characteristics. Political scientists attempt to expound protest with ethnic fractionalization, regime duration, population and civil liberties such as freedom of media and movement.

Freedom of movement is one of the fundamental rights guaranteed by the Universal Declaration of Human Rights. Signatory states recognize “the right to freedom of movement and residence within the borders of each state” and “to leave any country, including his own, and to return to his country”<sup>2</sup> as a human right (UN General Assembly, 1948). Yet, states still impose sanctions on their citizens and limit their right to move within and without their

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<sup>2</sup> Universal declaration of human rights (217[III]A). Paris

countries. Moller and Skaaning (2013) demonstrate that states coerce the freedom of movement more than the freedom of religion among the civil liberties. This argument can be explained with domestic and international effects of freedom of movement. When foreign movement has no or little restrictions, states are exposed to an international environment that can often be volatile and some regimes might regard such environment as a threat and a destabilizing factor. Hence, some authoritarian states do not allow dissidents to leave and, instead, eliminate them (Gregory et al.,2006). Other regimes, on the other hand, encourage dissidents to leave the country anticipating that they are potential troublemakers (Pfaff, 2006). Besides foreign movement, states limit freedom of domestic movement because mobilization for collective action is “easier when there are fewer constraints on internal mobility” (Barry et al.,2014, 582). Violation of domestic movement freedom damages the opportunity to mobilize and, in return, make protest activities harder to coordinate and organize. Thus, freedom of domestic movement constitutes a cardinal mechanism for the studies of protest. Nonetheless, the literature about the impact of freedom of domestic movement on protest is strikingly scarce.

Unlike domestic movement, scholarly opinions on freedom of media and its relationship with protest are more abundant. Media freedom has long been associated with democracy and suggested that media freedom assists in improving government treatment of citizens and free press is necessary to expose the violation of rights and abuses (Amnesty International, 2006). Therefore, regimes are inclined to “keep people poorly informed” (Moore, 1995, 447). Whitten-Woodring (2009) confirms that free press can act as a watchdog over government behavior, but this is “the case only in highly democratized countries” (p. 616). Media’s role as a watchdog does not fruit better and fair treatment of citizens in all nations. Game-theory models support previous empirical findings and exhibit that both protest and media watchdogging events rarely occur unless a country scores a high level of democracy (Kim et al., 2014).

Tarrow (1994) states that media serves social movements as an external resource in three stages. First, the media facilitate the diffusion of consensus. Second, it helps movements to gain the initial attention. Finally, it sustains movements by galvanizing the feelings of protesters. Also, the media are, Tarrow highlights, far from being disinterested notwithstanding. Social movements can benefit from media coverage under specific conditions, one of which is democratic ruling of a nation. However, democratic regime is not enough for media to publish and air news about social movements and help them gain popularity. It is the capitalist societies, in which the media may avail social movements in

diffusing consensus, gaining attention and galvanizing participants since the media stay in business and profit “only if they report on what will interest readers” (p. 128).

Kern (2011) provides empirical results for some of Tarrow’s theoretical arguments. He finds no evidence that news coverage of West German television was able to facilitate the diffusion of protest in East Germany during the 1989 revolution. Another study, on the other hand, shows that protests in countries with high levels of media freedom have an exasperating impact on coups because “the publicity of the protest causes elites to sharpen their beliefs about what other elites will do” (Casper and Tyson, 2014, 562). Therefore, it lowers the uncertainty of elite’s decision

The epidemic use of social media in the last decade and global events like Arab Spring gave students of protest the idea that Tarrow’s three stages of the conventional media as an external resource could also be applied to the social media. Shelley Boulianne (2015) asserts that the use of social media and participation in civic and political life have a positive relationship. However, she notes that her survey-based study of social media does not explain whether the relationship is causal or transformative. Brancati (2013) refuses to undermine the potency of social media because social media indeed make it easier and faster for protesters to communicate. Yet, her results indicate that the use of internet and cell phones do not affect the likelihood of pro-democracy movements occurrence, although such new technological developments might influence the size and duration of protests.

In addition to freedom of media and domestic movement, scholars have also explored the relationship between domestic political conflict and ethnicity. Ethnic differences, directly or indirectly, have affected some of the most remarkable political conflicts in our history. Therefore, it would be anomalous to omit the ethnicity. Scholars have traditionally argued that nations, in which sharp ethnic cleavages exist, are exposed to political violence and these cleavages intensify the conflict (Tarrow, 1994; Gurr, 1994). Gurr (1993; 1994) tenaciously maintains that states are prone to ethnic conflicts, especially if they are in the process of democratization. A recent game theoretical work (Mele et al.; 2017) supports the conventional assumptions and concludes that oppressed minority groups may engage in anti-state operations even under strong repression.

Collier et al. (2001) provide empirical evidence that is antithetical to the theories that propound a positive association with ethnic fragmentation. Authors evince that ethnic diversity reduces the risk of civil war and “makes societies safer, while dominance increases the risk of conflict” (p. 127). On the other hand, some scholars present no statistical significance between

ethnic fragmentation and conflict (Fearon and Laitin, 2003; Regan and Norton, 2005; Maher and Peterson, 2008).

Lastly, scholars have also attempted to explain protest activity with regime duration, population and agriculture. Regime duration implies the “temporal length” of a nation’s political institutions (Grzymala-Busse, 2011, 1269) and although regime age and durability are not exactly the same thing, scholars have posited that they have a positive relationship (Huntington, 1968; Svobik, 2012). Gurr (1994) maintains that interrupted democratic years is one of the conditions for the emergence and persistence of ethnopolitical conflicts. Although Saxton’s (2005) replication of Gurr fails to confirm that regime duration is among the determinants of rebellion, the general view suggests that “newer regimes are more likely to suffer” (Levitsky and Way, 2012, 873). Population is another commonly used explanation for types of protest. Gurr and Moore (1997) demonstrate that large population causes grievances and, thus, indirectly influence rebellion. Moreover, Su (2015) finds that countries with large population experience anti-government protests more often. However, when looked from a rationalistic perspective, group size actually offers individual actors incentives to free ride as it enlarges (Olson, 1971).

Despite Marx’s predictions, history has shown us that some of the greatest revolutions broke out in agrarian societies. Skocpol (1979) argues that prerevolutionary France, Russia and China were predominantly agrarian societies and agriculture was economically more important than commerce and industry. Peasant exploitation by the upper class in these agrarian states caused peasants to rebel and the spread of peasant rebellions produced revolution. Nonetheless, this historical comparative method has received numerous criticisms. Although Skocpol’s historical approach is notably informative about the past peasant revolutions, today, many scholars lean towards the notion that protests are more likely to occur in urban areas, not rural (Hibbs, 1973; Muller and Seligson, 1987; Maher and Peterson, 2008). Lichbach (1994), from a rationalist perspective, claims that benefits of the collective action are not enough to start a peasant rebellion. Therefore, peasants need selective incentives that will motivate them to rebel. Nevertheless, even if selective incentive solution to the free rider problem manages to start a peasant rebellion, it alone is not enough to sustain it. Hence, selective incentives tied to ideological appeals are necessary for an efficacious peasant rebellion because participants with stronger ideological conviction will be eager to pay more costs (North, 1981).

In conclusion, this chapter introduced repression, regime type, economic conditions as the main explanations of internal political conflicts (protests, civil wars, rebellions and

revolutions) in the literature. Although scholars primarily focus on these three explanations, they have also inquired into how freedom of domestic movement, freedom of media, regime duration, population and agriculture affect protests. Academic disagreements on how each explanation affects protest is notably abundant.

## **CHAPTER 3**

### **THEORY AND HYPOTHESES**

Students of conflict have attempted to explain why protests occur more often in some countries than others, focusing on state repression and regime type. Nevertheless, results are contradictory. Analyses of CA and RD theories denote incongruous empirical evidence for the impact of wealth on protest. Although some studies on media freedom do exist, social scientists seem to have failed to pay adequate attention to the relationship between protest and freedom of domestic movement, which is the essence of mobilization. This chapter concisely examines the value-expectancy model with respect to the concept of protest; presents hypotheses mostly based on the teachings of the RA research program and extend the rational approach that conventionally uses formal game theoretical models with empirical evidence at the cross-national level.

#### **3.1 Theory**

As explained in Chapter 2, CA theorists argue that people are deterred from protesting because protest, like all types of collective action, bears a cost that actors must overcome. Although theories of CA do not gainsay that people might have grievances, they assert that grievance is not a sufficient condition to partake in protest. Albeit motivated with grievances, it is not in every disaffected citizens' interest to protest due to the costs. Thus, grievances induced by state repression, non-democratic regime type, barriers on mobilization and poor economic conditions should not stimulate protest but preclude it. Causes of grievances are usually factors that raise costs of CA. As the level of repression increases, the cost of CA also increases and outweighs the benefits of public good, which then leads actors to prefer free-ride, instead of contributing. Hence, people demur at protesting (Olson, 1971; Hardin, 1982; Lichbach, 1995)

However, for some countries, cost of CA does not exceed the expected benefits, in spite of high level of repression. When costs remain lower than benefits, people do protest even under growing repression (Muller and Opp, 1986; Finkel et al., 1989; Opp and Roehl, 1990; Rasler, 1996; Carey, 2006). Conditional on cost-benefit balance, repression has both positive and negative effects on protest, and we call this value-expectancy model. When dissidents believe that public good is achievable, protest becomes a rational action and the opposition acts collectively. In sum, based on the value-expectancy model, this thesis argues that countries, in which repression has a positive effect on protest, are the ones with democratic regimes because democratic governments are cooperative, compromising and concessive.

Repression and regime type are interrelated with each other. Previous studies show that democracies perform low levels of repression (Davenport and Armstrong, 2004) and some scholars consider democracy as “a proxy for repressive behavior” (Gurr and Moore, 1997, 1083). Since they are interrelated, their combined effect on protest is crucial for studies of domestic conflict. Nonetheless, repression and regime type are two different concepts and, thus, it is imperative to account for the individual effects of both concepts on protest. Since high levels of coercion in democracies are relatively rare phenomena, one may assert that democracy reduces the cost of collective action and, consequently, we observe more protests in democratic nations. Nevertheless, the system of a government alone, irrespective of repression, also has an impact on protest. Democracy, as a system, should have a decreasing effect on protest due to the fact that democracies incentivize rulers and the ruled to cooperate. Citizens of democratic nations can bring conflicts with the government to an end without a mass action. In autocracies, however, conflicts may escalate and never end.

Regardless of regime type and repression, participation in political activities requires an entry cost. Citizens must have adequate resources to act collectively (Lee, 2011). Beyond this argument, some might think that people who are economically disadvantaged and cannot afford collective action tend to stay at home, instead of protesting. Putatively, wealth will reduce the entry cost; therefore, economy related grievances will not ferment collective action. The rationalistic approach follows a similar path for any situation that may generate grievances, i.e., population, ethnic fractionalization, media censorship and freedom to move within a country. For instance, CA theories posit an adverse effect of high ethnic fractionalization on protest (Mele and Siegel, 2017) since ethnicity is an obstacle for reaching consensus among actors from different ethnic identities to act collectively. The same thought process can be applied to the effect of media and domestic movement freedom. Citizens do not venture on a costly activity because state silences the media and controls the movement within the country.

They choose not to protest, as mobilization is virtually impractical as a result of coercive government policies.

Based on the discussion about rational choice and grievance-related theories, I argue that some grievances may conduce deprived people to protest, but the essential condition to protest is based on whether the cost of collective action is low. It is often democracies where costs are lower, and benefits of public good are achievable. Therefore, people in democracies act collectively, when repressed. In autocracies, on the other hand, people rationally decide to avoid high costs by staying at home when coerced. Therefore, we can conclude that repression works in autocracies. Guided by this rationalistic stand, I formulate that censorship on media and restrictions on domestic movement will make mobilization more difficult and costlier for potential protesters. Once freedom for the media and domestic movement is secured, protest aggravates on account of quick and efficient mobilization. Nonetheless, we still see acts of political terror practiced by governments on citizens, restrictions on media freedom and constraints of domestic movement in democracies. Why do we observe repression and limits on freedom of media and domestic movement even in democratic states? The notion that these three policies differentiate between different types of regimes is plausible, but differentiation within the same regime type is arresting. Since we expect that democracies do not repress and allow freedom of media and domestic movement and these practices should be attributes of democracy, then, the question evolves into whether we have an accurate definition of democracy.

In sum, the theory presented in this thesis construes that low level of repression is conducive to protests; however, the repressive behavior of a government has mixed effects on protest once regime type is employed into the equation as a conditional factor. Similarly, civil liberties also account for civil unrest considering that they ease mobilization and reduce the costs of collective action. Deprivation and grievances are determining factors but limited to a certain extent. The theory overall favors rational choice approach.

### **3.2 Hypotheses**

As briefly introduced, I assert that repression intimidates citizens due to costly consequences of participation, including jail time, injury, and death. Because repression is a tool, which governments use to display their strength, “people who come to dislike their government are apt to hide their desire for change” and hesitate becoming protesters (Kuran,

1989, 41). In other words, repression should work for individuals who wish to eschew harmful outcomes. This reasoning leads us to the first hypothesis:

H1a: The higher level of political violence a state exercises on its citizens, the fewer numbers of protests occur.

Regime type designates the institutional settings of a country and shapes the interaction between the government and citizens. Hence, the ruling system is a determinant of how citizens react to the government within a regime. Despite the solidity of the idea that democracies tend to be less coercive, democracy does not necessarily measure repression and is not tantamount to low repression. Nevertheless, democratic institutions “are designed to facilitate compromise and cooperation”; whereas, autocracies usually lack “institutionalized channels that accommodate popular discontent and opposition” (Carey, 2006, 4). Due to the absence of the norms that favor dialogue and institutions that placate refractory citizens, autocracies face more demonstrations. Thus, the next hypothesis is:

H1b: The higher level of democracy a country achieves, the fewer number of protests it experiences. And, conversely, greater number of protests are organized if the regime system is autocratic.

In a nutshell, the first hypothesis predicts that repression will deter demonstrations and the latter suggests that autocracies will be more vulnerable to protests. These hypotheses may seem to be contradictory since democracies are usually less repressive than others. However, they are, in fact, complementary with each other. Regime type determines whether the interaction between the state and citizens is based on compromise or refusal of cooperation. Yet, how regime type influences collective action is by no means straightforward because repressive policies can also be found in democracies. I expect that an interacted effect of repression and regime type provides a better explanation and, therefore, postulate the following hypothesis:

H1c: High level of political violence a state exercises on its citizens will have a positive effect on the number of protests, as the regime gets more democratic but a negative effect as the regime behaves more autocratic.

The success of organizing collective action mainly depends on actors’ ability to mobilize other individuals. Provided that government confines mobilization effectively, a surrender or clandestineness (Francisco, 2000) are the only two viable options for the dissenter. Hence, taking coercive measures is vital for governments that desire to deter actors from protesting and protect the status quo. One of the most vigorous ways to limit mobilization is to constrain the freedom of movement within the country. If the government does not allow

citizens to move freely within a country and impose harsh sanctions, the number of dissenters or the strength of action will substantially diminish. An opposition without the ability to change location will pose less threat for the ruler.

H2a: Freedom of domestic movement is positively associated with the frequency of protests.

Consequently, media freedom is also essential for mobilization. Media support and power provide the initial attention protests desperately need to recruit and to sustain protest (Tarrow, 1994). The opposition will have a hard time to mobilize and organize should government keeps people ill-informed by disallowing the media to report the truth. Strictly state-controlled media has two major outcomes for the disaffected individuals. First, people will not know that the government does not perform well and fulfill its responsibilities. Second, without the media that can “facilitate coordination”, people may not even be aware of planned protesting events (Casper and Tyson, 2014, 549). Hence, I expect that constraints of fundamental civil liberties, particularly freedom of media and domestic movement, will inversely influence the frequency of protests because mobilization will be limited.

H2b: The freer media operate in a country, the more protests it experiences.

As discussed in H1b and H1c, democracy affects protest as a system, and I hypothesize that repression, media, and movement freedom also have a significant influence independently of regime types. However, we usually characterize repression, media and movement freedoms as some of the core attributes of democracy. Therefore, we do not anticipate observing coercion or restrictions on aforementioned freedoms in democratic nations. Democracy, after all, should be the antonym of restrictions on any freedom and should not exclusively refer to political competition. Nonetheless, I expect to see repression, and limitation on freedom of movement and media even within democracies. The vital implication of the hypotheses stated so far is that these three fundamental dimensions, not only vary between different regime types, but also within regimes – more importantly, democracies. The reason behind the variation is our inadequate measures and problematic definition of democracy. Thus, H1 and H2 each require careful analysis.

Finally, next major hypothesis is germane to economic conditions. Do we feel grieved when our neighbors have more resources to live while we have only so little? Do we act collectively, when we are deprived of economic equality? Gurr (1970; 1993; 1994) have repeatedly argued the answer to be yes. On the contrary, I maintain that wealth influences the frequency of protesting events positively for three reasons. First, economic inequality and poverty are two ubiquitous phenomena for all nations. Some do a better job at closing the gap than others. Inequality might not turn into dissidence even when absolute poverty is present

(Lichbach, 1989). Second, wealth provides resources and incentives to sustain protest. No matter how grieved individuals are, protests are not viable without economic resources. The poor economy may cause individuals to have grievances; however, it is not sufficient to start a social movement. Third, as people get wealthier, they are apt to be politically risk-averse because affluent people have more to lose than the destitute (Przeworski et al., 2000). The fear of losing material goods induces conflict. Therefore, the final hypothesis is as follows:

H3: The higher per capita GDP a country achieves, the more exposed it is to protest activities.

Ultimately, my analysis also controls for regime duration, population, ethnic fractionalization, and percentage of the agricultural land area. In brief, I predict that regimes that last a long time without any breakdown are eventually occupied with fewer protests because people get accustomed to the environment they live and are born into over the years. Young regimes, on the other hand, are more likely to suffer from the public disorder. I anticipate that countries with a large population have protests more often. Large population requires more effort, time and resources to surveil the activities of the opposition (Gurr and Moore, 1997). I also argue that ethnic fractionalization is negatively associated with protests. Ethnically diverse societies are not in constant conflict, albeit the popular belief. The notion that it is more difficult to cooperate in ethnically diverse nations is spurious because ethnic dominance eliminates the need to compromise and cooperate (Collier et al., 2001).

Finally, I consider agricultural factors by controlling for the effects of the percentage of agricultural land area to the total area. Peasants may have reasons to challenge the authority that continually attempts to exploit them (Skocpol, 1979). Therefore, a high agricultural land percentage is expected to indicate potential conflict because agricultural land provides insurgents with “rural base areas” (Fearon and Laitin, 2003, 79), which host rebels and hide them from government forces. Moreover, agricultural goods may play a role in financing to start and sustain a protest (ibid.). Hence, a nation with large agricultural lands should experience protest more often (Bernstein and Lü, 2003, 6; Li and O’Brien, 2008, 22).

Indeed, this variable has some limitations. For instance, it does not necessarily measure some of the agriculture related variables, such as land inequality (Panning, 1983; Midlarsky, 1988) and rural population (Madestam et al., 2013). However, neither land inequality nor rural population provide a more fulfilling alternative than agricultural land percentage. First of all, “land is everywhere distributed unequally” including the most egalitarian states (Russett, 1964, 449). Second, equal distribution of agricultural land’s effect on protest can be a fallacy since the distributed land may “invariably include the highest, driest, and least fertile tracks”

(Zamosc, 1994, 43). If that was the case, peasants would still be discontent because it is the efficacy of land distribution that matters to the peasants. Rural population assumedly demonstrates the group size for peasants and their potential strength for collective action. It could also be supplementary to the protest and agricultural land relationship. Nevertheless, nations' rural population and their overall population have high correlation since population variable is the sum of both rural and urban populations.

In conclusion, this thesis bases its theory on rational choice and shapes the framework with value-expectancy model. It formulates protest's relationship with state behavior, mobilization and economic conditions under five hypotheses. Next chapter introduces the design, data and models. The following chapter will present the statistical findings.

## **CHAPTER 4**

### **RESEARCH DESIGN, DATA AND MODEL**

The central question of this thesis is what causes protest and it aims to test specific factors that might be increasing (decreasing) the total number of protests that are held around the globe for each year from 1990 to 2004. The study has a greater purpose than solely analyzing the five competing theories of protest and showing that they, in fact, complement each other in various ways. The first purpose is to show how repression affects protest conditional on regime type. Second, it is to contribute to previous theories by demonstrating that some civil and political liberties that indicate causal relationships with protest show variances within democracies, although one would innately presume the utter absence of constraints on liberties under democratic regimes. Thus, I constructed a design, collected appropriate data and analyzed them.

#### **4.1 Design**

I assembled a panel dataset gathered from a variety of sources on 158 countries for the years 1990 through 2004 to test hypotheses outlined in Chapter 3. I need a systematic analysis to control for multiple causal factors; therefore, I have decided to conduct a multiple regression analysis. Since one of the hypotheses posits a conditional theory, I introduce an interaction variable for the regression model. This kind of large-N quantitative design is in line with previous arguments. The total amount of observations is 2,322 and unit of analysis is country per year. The selection of countries and time frame are both critical for two reasons. First, I demur from the idea that the focus of the research should be specific countries or continents when the data is available for the majority of the world. Large samples are always better at avoiding multicollinearity and selection bias (King et al., 1994). Second, 158 countries from 1990 to 2004 are common observations of three different datasets, namely World Handbook

of Political Indicators IV (WHIV), Mass Mobilization (MM) and Cross-National Time Series (CNTS). The common observations will later be used to demonstrate the robustness of findings.

#### **4.2 Data Collection and Variables**

The dependent variable is the total number of protest events in 158 nations from 1990 through 2004. I do not separate the dependent variable as violent and non-violent because protests consist of confrontational actions and “violence ordinarily grows out of collective actions that are not intrinsically violent” (Tilly, 1997, 79). Therefore, violent and non-violent activities are parts of “one continuum” (Carey, 2006, 2). Several quantitative datasets are publicly available for this kind of study; however, WHIV, MM, and CNTS are some of most regularly used datasets to test theories of protest (Muller and Weede, 1990; Maher and Peterson, 2008; Barry et al., 2014; Kim, 2016). The annual version of WHIV (Jenkins et al., 2012) provides comprehensive information on political conflict with more than 11,000 observations from 1990 to 2004. Some actions of political conflict on WHIV include protest obstruction, procession, rally support, censorship, political arrest, assassination, suicide bombing, riot, etc. WHIV’s definition of protest is considerably broader than MM and CNTS; therefore, I generate a new dependent variable for the total number of protests that share common components with datasets mentioned above. These components include strikes and boycotts, riots and demonstrations. Furthermore, WHIV codes protestors separately under three types of actors, i.e., civilians, state and unknown. By doing so, the database underlines that not all protesters are civilians. Military officers, for instance, can organize a rally to support the incumbent government. Nevertheless, I focus on the civilian actors because MM and CNTS disregard state actors as protesters.

Mass Mobilization (Clark and Regan, 2015) cover the globe, observing 162 countries from 1990 to 2014. The time range makes MM the most recent dataset. Authors define protest as “a gathering of 50 or more people to make a demand of the government” and generate the dataset based on searching four keywords in Lexis-Nexis, which are protest, demonstrations, riot and mass mobilization (MM, 2015). They also code protests concerned with industrial enterprise such as labor rights, on the condition that people demand improved labor conditions, wages and safety by demonstrating on the streets. Since the unit of analysis of the dataset from

protest-country-year, I aggregated the protest variable and converted the unit of analysis to country-year.

Cross-National Time Series (Banks and Kenneth, 2010) offers over 200 variables for more than 200 countries since 1815. It provides eight types of domestic conflict mostly derived from The New York Times. Nonetheless, only the variables general strikes, riots and anti-government demonstrations suffice the common definition of protest. Only the events that involve 100 or more citizens are regarded as riots and anti-government demonstrations and 1000 or more workers as general strikes. The unit of analysis on CNTS was country-year; therefore, I created a new variable for protest by summing up general strikes, riots and anti-government demonstration for each country in a given year.

As for the explanatory and control variables, each one of them requires an explicit definition. Repression level, regime type, the interaction of repression and regime type, freedom of media, freedom of domestic movement and wealth are the independent variables I predict to have a strong causal relationship with the dependent variable, the total number of protests. I also control for regime duration, population, ethnic fractionalization, and percentage of the agricultural land area.

Political Terror Scale (PTS) is a compiled index that comes from the annual country reports of Amnesty International, U.S. State Department, and Human Rights Watch. It measures violations of basic human rights and physical integrity by the state in a particular year and country. Hence, the term political terror does not construe terrorism. I use PTS to measure states' repression levels and argue that protests are more viable in less repressive nations. The scale of political terror ranges from 1 to 5. A country assigned with a score of 5 indicates that citizens experience the highest level of political terror and a score of 1 indicates the lowest. Since a great number of observations are missing for Amnesty International and Human Rights Watch, the repression variable mainly relies on scores from US State Department. Authors warn users about computing the average scores of three reports due to each report's different methodology for generating the dataset (Gibney et al., 2017). Therefore, Amnesty International substituted US State Department if US State Department scores were missing.

A country's political system (regime type) should affect the number of protests that organized per year. I measure regime type using Polity IV (Marshall et al., 2016) to assert that people challenge authority by protesting less in democratic nations than they do in autocracies because democratic institutions, unlike their counterparts, promote compromise and cooperation. Despite heavy criticisms on both, Freedom House's (FH) measure of democracy

is as popular as Polity among scholars. However, FH is substantially biased and inconsistent with its coding criteria (Steiner, 2016). Scholars have expressed concerns that democracy scores in FH are biased towards US, US allies and US friendly states (Hartman and Hsiao, 1988; Mainwaring et al., 2001). In addition, in terms of its democracy definition and conceptualization, Polity IV is more fruitful for this research's statistical results than FH and Chapter 6 addresses the reasons why the source of regime scores is Polity IV in depth. Polity IV assigns scores for countries from -10 to +10 depending on competitive and participatory attributes of democracy. I reframe Polity IV scores, as often been practiced antecedently (Benson and Kugler, 1998; Davenport and Armstrong, 2004; Whitten-Woodring, 2009) and define five types of regime – autocracy (-10 to -6), closed anocracy (-5 to 0), open anocracy (1 to 5), democracy (6 to 9) and full democracy (10).

To reduce varied components of regimes that generate ambiguity, I recode five regime types ordinally, unlike some of the scholars who use binary categorization for democracy (Przeworski et al., 2000). The measure of regime types here is not dichotomous because they “fail to – indeed, cannot – capture” partial democracies (Epstein et al., 2006, 555). Yet, three-category scale (autocracy, anocracy, and democracy) is also ambiguous, as it lumps diverse characteristics of anocracies into one scale (Treier and Jackman, 2008). Thus, this study divides anocracies into two and generates another regime type for nations with 10-perfect-score, called “full democracies” to avoid lumping characteristics into one types of regime, as Goldstone et al. (2010) suggested (p. 195).

Although the central mechanism that triggers protest is how individuals react to the state repression, it is fallacious to gainsay that the political system itself influences protest. Autocracy is not synonym with repression. Autocracy and democracy are systems, and repression is a policy carried out by the government. However, how does repression under a particular political system affect protests? The effect of repression depends on the level of regime type is interactive and the interaction is measured with the product of repression and regime type scores.

Violation of freedom of media and domestic movement is also expected to have an impact on the frequency of protests. Restrictions on these two types of freedom should decrease the total number of protests because they limit mobilization. It is important to note that freedom of media and domestic movement are two of the attributes of democracy. Especially press freedom is widely recognized as a key component of democracy (Bollen, 1980; Dahl, 1998; Diamond, 1999; Choi and James, 2007; Schedler, 2010). Data for freedom of the press are drawn from Global Media Freedom Dataset that covers the globe from 1948

through 2012. It is a categorical scale from 1 to 3 indicating that 1 is free press, 2 is imperfectly free, and 3 is not free (Whitten-Woodring and Van Belle, 2015). As for the data on freedom of domestic movement, CIRI Human Rights Data Project includes information on over 200 countries from 1981 to 2011, and it also has a categorical three scale measurement. A score of 0 is an indicator of severe restriction, a score of 1 somewhat restriction and a score of 2 unrestricted freedom of domestic movement. The variable denotes citizens' freedom to travel within their own country (Cingranelli et al., 2014).

Economic development has always been a great personal concern for most people and thought to be one of the primary causes for deprivation and grievances (Gurr, 1970). Contrary to grievance arguments, Hypothesis 4 maintains that grievances induced by weak economic conditions do not increase the number of protests. I measure wealth with logged GDP per capita,<sup>3</sup> instead of overall GDP, GNP, poverty and inequality indexes. I do not include nations' overall GDP in the analysis because the use of GDP without its share per capita is misleading. A country may have very high GDP; however, when distributed, citizens might be claiming only a small share in extremely populated nations. GDP per capita avails this study better than GNP since the GDP per capita, unlike GNP, "includes all economic activity that occurs within the borders of the given country" (Whitten-Woodring, 2009, 609).

Finally, I carefully use the word wealth, not poverty because absolute poverty, as Gurr (1970) puts it, is not "necessarily thought to be unjust or irremediable by those who experience it" (p. 24). Without a "reason to expect or hope for more than they can achieve," the poor are usually content with what they already have (Runciman, 1966, 9). Moreover, poverty and inequality data such as GINI have a substantial amount of missing values for the timeframe and countries I intend to research. Poverty and inequality are two economic measurements that require further research for studies with large-N observations, like this one. Thus, the measure of economic conditions is wealth, not income inequality or poverty. Data for GDP per capita is obtained from the Quality of Government Dataset (QOG) (Teorell et al., 2017).

With respect to control variables, large population is anticipated to be positively associated with protest because large population makes government monitoring on citizens difficult and recruitment easier for disaffected individuals and groups (Gurr and Moore, 1997; Fearon and Laitin, 2003). Population is also logged to account for skewness and the data on population<sup>4</sup> are pulled from UNdata. Moreover, since entrenched and long-lived nations may

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<sup>3</sup> GDP per capita is computed in current US dollar

<sup>4</sup> Values represent the estimated population with medium variant.

be associated with lower levels of political conflict (Hegre et al., 2001; Gurr, 1993) and newer regimes have greater likelihood to suffer (Levitsky and Way, 2012), I control for regime duration, in terms of the numbers of years that elapse without a major change in its political institutions (Saxton, 2005). I draw on Boix-Miller-Rosato Dichotomous Coding of Democracy (Boix et al., 2012) for regime duration.

Furthermore, ethnic fractionalization is another factor expected to affect the total number of protests negatively. Based on Collier et al. (2001), I argue that it is the ethnic dominance and heterogeneity that incite conflict. The initial plan was to utilize Baldwin and Huber’s (2010) dataset for ethnic fractionalization. Nonetheless, it is limited to forty-six countries; therefore, ethnic fractionalization is drawn from QOG. QOG defines ethnicity as a combination of racial and linguistic components, and fractionalization as the probability that two randomly selected individuals from a given country will not share particular characteristics. A high number of fractionalization purports less probability that the two will share these characteristics (Teorell et al., 2017).

Ultimately, I consider the effect of agricultural land (% of land area), which connotes the share of arable land area under permanent crops and pastures and the data is obtained from the World Development Indicators dataset. Despite the RA theorists’ criticism on grievance-based explanations of peasant rebellions (Lichbach, 1994), the contribution peasantry makes to historically great revolutions ought not to be ignored (Skocpol, 1979). In addition, goods produced from agriculture may reinforce financing protest and rural areas may serve as a base for the opposition (Fearon and Laitin, 2003). Hence, I expect countries where agriculture plays a significant role in the society to have a positive impact on the number of protests.

Table 1: Summary Statistics

	N	Mean	Min	Max
Protest WHIV	2113	9.52	0.00	195.00
Protest MM	2113	2.74	0.00	63.00
Repression (PTS)	2113	2.55	1.00	5.00
Regime Type	2113	3.01	1.00	5.00
Repression*RegimeType	2113	6.95	1.00	20.00
Domestic Movement	2113	1.39	0.00	2.00
Media Freedom	2113	2.28	1.00	3.00
Ln(GDP/capita)	2113	7.46	4.40	11.24
Regime Duration	2113	36.68	1.00	205.00
Ln(Population)	2113	16.07	12.74	21.00
Ethnic Fractionalization	2113	0.46	0.00	0.93
Agricultural Land	2113	41.72	0.47	85.49

Statistics based on observations from Model 1 shown in Table 2  
Excluding missing values

### 4.3 Model and Estimation

The objective of this thesis is to explain the causal relationship between the dependent variable – the total number of protests across countries- and explanatory variables I have outlined thus far. I chose multiple regression analysis as the model of this study for two reasons. First, multiple regression evinces valuable information about the combined effects of independent variables. Second, multiple regression analysis allows us to discriminate between the effects of the independent variables by quantifying the impact of each explanatory variable. Some of the independent variables may be correlated such as regime type and repression or GDP per capita and media freedom. However, multivariate regression makes allowances for high correlation (Dougherty, 1992). Thus, I use multiple regression for this large-N cross-national analysis.

In total, this study presents eleven models.<sup>5</sup> I begin with a regression analysis with the dependent variable, protest from WHIV dataset, which constitutes the primary model of the thesis. Then, I compare the findings of the primary model with protest data from MM. Hence, I run two separate multiple regression analyses for two dependent variables from two different sources, namely WHIV and MM.<sup>6</sup> Model 3 demonstrates the analysis of the dependent variable, Protest WHIV without the interaction variable.

Initially, the goal was to extend the comparison of the primary model with an additional regression analysis using CNTS. Considering this plan, CNTS played a role in case selection process.<sup>7</sup> However, I report summary statistics and regression results of protest variable from CNTS in *Appendix A* because of its reliability issues, which are, in fact, common for protest datasets since they rely on news reports. In some countries, local media might be operated or heavily influenced by the state and, consequently, some protests lack news coverage and go unpublished. International corporate media are not usually worried about the political pressure coming from autocratic nations; however, not all protests are news-worthy. Therefore, small-scale protests may go unnoticed in this scenario as well. Domestic conflict data on CNTS solely rely on one source (The New York Times), and, as a result, almost 70% of the total

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<sup>5</sup> Models 10 and 11 located in Appendix.

<sup>6</sup> Although these dependent variables are coming from two different sources, they consist of same three components i.e., strikes, riots and demonstrations. CNTS also have the same definition.

<sup>7</sup> As previously mentioned, the dataset is composed of common country-year observations on WHIV, MM and CNTS. I excluded a country or a year if it did not exist in one of the three datasets.

amount of protests are coded as 0.<sup>8</sup> Not every country has to have protests every year. Some do, and some do not. Nevertheless, the absence of protests on CNTS is excessive, in comparison to WHIV and MM. Both WHIV and MM might also be suffering from underreporting, but the reliability issues of CNTS is more salient. For instance, Bangladesh in 2000 faced a violent wave of demonstrations and general strikes, which resulted in dozens of deaths (Rashiduzzaman, 2001). Similarly, the UK had significant live animal export protests in 1994 (Joyce, 2016). While WHIV and MM manage to capture these incidents, CNTS shows no anti-government protests, riots or general strikes in Bangladesh and the UK in these years. As a consequence, I only report results of CNTS in the appendix.

Next three models check the robustness of the primary data with standard error estimation techniques since panel data have some drawbacks such as omitted variable bias, heteroscedasticity, and contemporaneous correlation. Models 4 through 6 handle these potential problems with lagged dependent variable, robust and clustered standard error techniques, respectively. Note that panel data covers the years from 1990 through 2004 and an omitted dependent variable bias may occur if the number of protests before 1990 affects protests in 1990 and onwards. For instance, we may observe a remarkable number of protests in the former Soviet states in 1990 due to the dissolution of the USSR started in 1989. Put differently, protests in 1989 could be the reason behind protests in 1990 but the dataset lacks protest reports from 1989. Fixed effect estimator controls for this bias. However, fixed effect is not very useful when the dependent variable does not vary within years substantially (Beck and Katz, 2001). None of the models contains a fixed effect option and the reason is that the lagged dependent variable in Model 4 demonstrates that temporal variance is discrete and a model with fixed effect is not necessary. By lagging the dependent variable, Model 4 thereby aims to demonstrate that the primary model does not suffer from omitted variable bias.

Due to high correlation of different units within the same time frame, biased standard error estimates caused by heteroscedasticity and observations with large residuals, default standard error settings can largely overstate estimator precision (Cameron and Miller, 2015). Model 5 aims to improve the precision of standard error estimates through dealing with these concerns. In case of heteroscedasticity, robust option is usually stancher than default OLS because OLS makes the assumption that errors are both identically distributed and independent; whereas, robust option relaxes the assumption of identical distribution. Furthermore, robust controls and corrects the problems in the standard error.

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<sup>8</sup> See Table A1 in Appendix A

Model 6 clusters observations into countries and relaxes OLS' latter assumption. In other words, it demonstrates that units can be correlated within countries but would be independent between them. Since cluster option allows correlation between observations and typically has more estimation variance, Model 6 may exhibit larger standard errors and higher p-values. Model 6 is an important part of the robustness check because robust is implied with cluster, which checks the correlation of different units both for the same period of time and the same units for different years. More importantly, failure to control for cluster can misleadingly conduce to small standard errors, narrow confidence intervals and large t-statistics, resulting in Type I error (Thompson, 2011).

In models 7 through 9, three different measures of democracy<sup>9</sup> and their interaction with repression replace Polity IV to show how each different measure affects protest and other explanatory variables. Models intend to provide evidence that all respected regime type measurements suffer from a conceptual problem at a certain extent and the level of civil liberties show variances among democracies. Thus, the use of Polity IV's regime scores to define regime types serves the purpose of this thesis better than the other measures.

Finally, the equation of the primary model for multiple regression is as stated below. Next, I present the results of the analyses in Chapter 5 and continue with the discussion of findings in Chapter 6.

$$\text{Protest WHIV} = -\beta_0 - \beta_1 \text{Repression(PTS)} - \beta_2 \text{Regime Type} + \beta_3 \text{Repression*Regime Type} \\ + \beta_4 \text{Domestic Movement} - \beta_5 \text{Media Freedom} + \beta_6 \text{Ln(GDP/capita)} - \beta_7 \text{Regime Duration} + \\ \beta_8 \text{Ln(Population)} - \beta_9 \text{Ethnic Fractionalization} + \beta_{10} \text{Agricultural Land} + \varepsilon$$

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<sup>9</sup> Freedom House (FH), Electoral Democracy and Liberal Democracy are in Models 7, 8 and 9, respectively.

## CHAPTER 5

### RESULTS

Model 1 through 6 (except Model 4) analyze 2,113 observations out of 2,322. As seen in Table 2, primary model (Model 1) verifies all hypotheses by elucidating that frequency of protest is significant with all of the explanatory variables, except for regime duration. R-square indicates that independent and control variables in Model 1 explain 38.8% of the variance in the dependent variable. The second model demonstrates almost identical results, confirming primary model's results. Media freedom in Model 2 is insignificant, casting doubt on media freedom's significant causal relationship found in Model 1. Apart from Model 3 that excludes the interaction variable, none of the models captures significance for regime duration at 5% level. Four out of ten variables are statistically significant at 99.9% level on both Model 1 and 2, displaying great confidence in findings. F-test shows that variables in the regression analysis are jointly significant.

Models 4 through 6 (Table 2) provide a robustness check for the results in Model 1. Model 4 indicates that the primary model does not suffer from omitted dependent variable bias, but Model 5 hints the existence of some heteroscedasticity. When clustered, contemporaneous correlation in Model 6 appears to increase standard errors and p-values; however, cardinal explanatory variables are still significant. The last three models (Table 3) include different regime measures, instead of Polity IV and serve the purpose of supporting the findings in the first six models. Nonetheless, models 7, 8 and 9 demonstrate that the conceptual problem of regime types is general, not limited to Polity IV but Polity IV is still more useful for this study. Models 7 through 9 not only fail to capture a causal explanation for non-democracies, but also display insignificant results for mobilization variables (freedom of media and domestic movement). The aggregated regime scores in FH and V-Dem contain these variables and regard them as civil liberties, which causes high correlation. Ultimately, it is essential to control for multicollinearity, mainly if a model contains interaction variables due to their

tendency to cause variance inflation. Variance Inflation Factor (VIF) test indicates that there are no concerns regarding multicollinearity.<sup>10</sup>

Table 2: Multivariate Regression Analysis on Protest: 158 Countries, 1990-2004

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Repression (PTS)	-2.299*** (0.682)	-0.835*** (0.213)	0.403 (0.373)	-0.410 (0.470)	-2.299*** (0.488)	-2.299* (1.142)
Regime Type	-2.101*** (0.610)	-0.490* (0.190)	0.295 (0.340)	-0.757 (0.419)	-2.101*** (0.553)	-2.101 (1.470)
Repression*RegimeType	0.958*** (0.203)	0.333*** (0.063)		0.224 (0.140)	0.958*** (0.188)	0.958* (0.427)
Domestic Movement	1.033* (0.473)	0.468** (0.148)	1.390** (0.470)	0.256 (0.326)	1.033** (0.380)	1.033 (0.755)
Media Freedom	-1.636** (0.613)	-0.092 (0.191)	-1.069 (0.604)	-0.942* (0.421)	-1.636* (0.691)	-1.636 (1.710)
Ln(GDP/capita)	3.091*** (0.284)	0.218* (0.089)	3.060*** (0.285)	0.849*** (0.199)	3.091*** (0.287)	3.091*** (0.811)
Regime Duration	-0.011 (0.008)	-0.000 (0.002)	-0.017* (0.008)	0.000 (0.005)	-0.011 (0.008)	-0.011 (0.020)
Ln(Population)	5.992*** (0.232)	0.761*** (0.073)	6.052*** (0.233)	1.523*** (0.182)	5.992*** (0.314)	5.992*** (0.865)
Ethnic Fractionalization	-4.249** (1.414)	-1.022* (0.441)	-3.253* (1.405)	-0.434 (0.971)	-4.249*** (1.259)	-4.249 (3.629)
Agricultural Land	0.054*** (0.015)	0.016*** (0.005)	0.049** (0.015)	0.020 (0.010)	0.054*** (0.015)	0.054 (0.045)
Lagged(ProtestWHIV)				0.737*** (0.015)		
Constant	-101.896*** (5.190)	-10.443*** (1.620)	-111.900*** (4.762)	-25.601*** (3.875)	-101.896*** (4.938)	-101.896*** (13.701)
R <sup>2</sup>	0.388	0.135	0.381	0.731	0.388	0.388
F	133.2046	32.76357	144.0642	488.0352	68.80024	10.02353
df	10	10	9	11	10	10
Observations	2113	2113	2113	1990	2113	2113

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## 5.1 Findings

**Repression, Regime and Interaction:** Results of the Model 3 in Table 2 demonstrate that repression and regime type are not statistically significant with protest when we assume that these variables do not interact with each other. However, the primary model, along with Model

<sup>10</sup> Refer to Chapter 5.2 for detailed explanation.

2, 5 and 6, illustrates that repression, regime type, and their interaction behave largely as expected. All three variables are statistically significant within 99.9% confidence interval in Model 1. Had regime type taken a value of zero,<sup>11</sup> we could say that as states coerce more, they experience fewer numbers of protest. Identically, if repression was not ordinal and had a value of zero, we could interpret the finding as autocratic countries experience more protests and, conversely, fewer protests are held in democracies. Although it may seem to constitute a discrepancy, both interpretations would be consistent with previous studies (Muller and Opp, 1986; Opp, 1990; Carey, 2006). Nevertheless, it perspicuously requires an explanation, for which we must first ask: How do we explain the findings of repression and regime type if neither variable takes the value zero? And, then, how is protest affected by the level of state repression conditional on regime type?

The interaction of Repression (PTS) and RegimeType is the answer. The interaction variable (Repression\*RegimeType) alone is not very informative unless we calculate the marginal effect and look at t-statistics. 95% confidence intervals around the marginal effect line in Figure 2 enable us to determine the conditions, under which level of repression has a statistically significant effect on the number of protests. As Brambor et al. (2006) put it plainly, the effect is statistically significant “whenever the upper and lower bounds of the confidence interval are both above (or below) the zero line” (p. 76). Since T-values of closed and open anocracies are below 1.96, the marginal effect is substantially meaningful and significant only for autocracy, democracy, and full democracy. The figure explicates that repression has a reductive effect on the number of total protests when the regime is autocracy. This reductive effect of repression declines, as countries get more democratic. Nevertheless, note that both types of anocracies are statistically insignificant. We can conclude that states benefit from repression to retain their autocratic status quo; however, repression has a positive (increasing) effect on protest if the regime is democracy or fully democratic.

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<sup>11</sup> Each coefficient value and sign are individually meaningful only when other variables can be hold constant at zero.

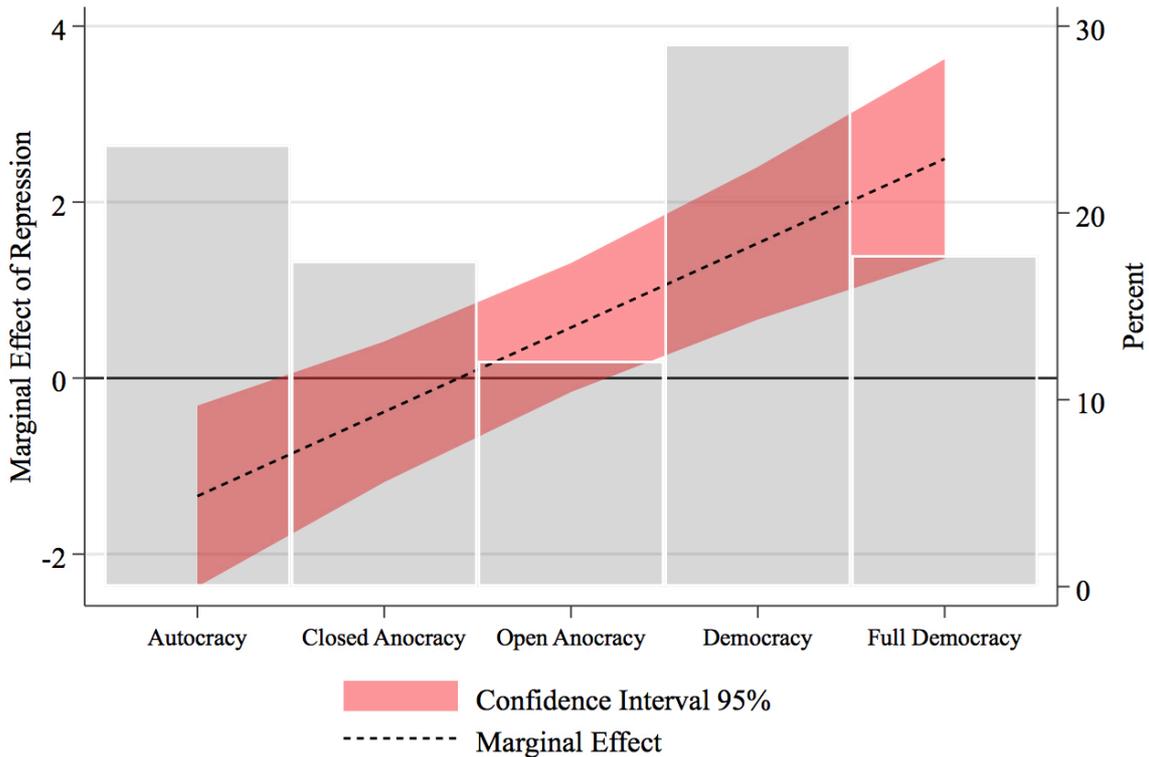


Figure 2: Marginal Effect of Repression Conditional on Regime Type for Model 1

**Mobilization:** In Model 1, both freedoms of domestic movement and media are statistically significant. However, p-values display different levels of significance. Freedom of domestic movement is significant at the 5% level; whereas, freedom of media at 1%. Greater freedom of domestic movement permits mobilization to occur and, consequently, people organize or attend protests when they are free to move within their country, thanks to the lack of fear of persecution. Results on media freedom also lend support on hypotheses formulated in Chapter 3. Countries that allow freedom of media<sup>12</sup> are at risk of experiencing a higher number of protests. People become disaffected or are informed about planned protests if the media is disinterested. Nonetheless, despite being attributes of our democracy definition (Bollen, 1980; Dahl, 1998; Diamond, 1999; Choi and James, 2007; Schedler, 2010), both types of freedom show variances within democracies in a reasonably substantial amount of observations, which I will address in the Chapter 6 with detail.

**Economic Conditions:** Logged GDP per capita has a positive and statistically significant relationship with the dependent variable in Model 1, delineating that the probability that this relationship did not occur by chance is 99.9%. As the estimated coefficient value depicts, it

<sup>12</sup> Table 2 shows negative coefficient for freedom of media due to the direction of the coding for media freedom. As explained in Chapter 4, 1 is free, 2 imperfectly free and 3 not-free press.

has a large contribution to the effect on protest. It suggests that states with economically grievied individuals do not face more demonstrations, contrary to theories of RD. In fact, countries, in which distribution of wealth per person is greater, protest activities become more frequent (Brady et al., 1995; Schussman and Soule, 2005; Regan and Norton, 2005). Economically developed countries experience protests more often, and this could be interpreted as the rich either want to get richer or fear that they will lose their possession. Alternatively, the poor in richer countries tend to protest more.

**Control Variables:** Coefficient value indicates that regime duration has a negative relationship with the total number of protests, as predicted. However, it fails to attain significance at 5% level and, yet, the insignificant outcome is consistent with previous studies (Gurr and Moore, 1997; Saxton, 2006). Logged population and agricultural land area (% of land area) are both significant for  $p\text{-value} < 0.001$ . While logged population has a large positive conditional effect on the number of protests, the agriculture appears to be also positive, but weak. High population complicates monitoring citizen activities for the state. Refractory citizens under weak surveillance organize faster and more efficient. Greater agricultural land has a strengthening force on mobilization. Agricultural goods may be used to support protest activities financially. The direction of ethnic fractionalization's effect is negative, and the model displays a  $p\text{-value}$  lower than 0.001 for ethnicity. Results adduce support for the argument that ethnic dominance entails conflict, not vice versa.

## 5.2 Robustness

This thesis sets out three strategies to check the robustness of Model 1. First, I compare the findings of Model 1 with Model 2, in which the source of the dependent variable is MM dataset. The expectation is that both protest data should provide similar results. The vital part of the first strategy is to ensure that the dependent variables of protest in Model 1 and 2 carry the same components of protests, which are designed to be riots, demonstrations and general strikes per country-year. I exclude an additional model with CNTS due to large amounts of underreported protest activities, which poses a threat to reliability. Second, unbalanced data in panel datasets may cause errors due to contemporaneous correlation and heteroscedasticity (Bailey and Katz, 2011). Therefore, I run three models to detect whether the inferences of Model 1 are biased or incorrect. Third, the robustness check includes three more models, using

regime scores from FH and V-Dem, instead of Polity IV. The goal is to show that Polity IV explains protest better, despite its imperfect definition of regimes.

Model 2 explains the variance in the dependent variable with R-square 0.1348 – much less than Model 1. Model 2 indicates that all of the significant findings in Model 1 is robust, except for media freedom. Although media freedom in Model 2 confirms the coefficient sign in the primary model, it fails the significance test at 5% level. Regime duration is statistically insignificant in both models. Regime type, logged GDP per capita and ethnic fractionalization in Model 2 satisfy statistical significance at a lower p-value than Model 1. Freedom of domestic movement in Model 2 is significant for  $p\text{-value} < 0.01$ ; whereas,  $p\text{-value} < 0.05$  in Model 1. One of the most salient differences between the first two models is that all of the estimated coefficient effects of explanatory variables on Model 1 have a substantially stronger effect on the dependent variable than Model 2. The dependent variable on Model 2 systematically reports fewer protests per country/year than the dependent variable on Model 1. To be precise, only 20% of the observations in Model 2 are greater than Model 1. As a matter of course, coefficient values and R-square are lower in one of the models.

Regardless of lower coefficient values, freedom of domestic movement, repression, regime type and marginal effect of repression conditional on regime type provide similar results. All aforementioned variables are statistically significant and have the same coefficient signs. Repression in Model 2 has a reductive effect on the total number of protests if the regime is autocracy and a converse effect if the regime is democracy and full democracy. T-values for closed and open anocracies are below 1.96 critical value on both models; therefore, the model fails to verify the statistical significance of repression's conditional effect of both anocracies on protest.<sup>13</sup> VIF tests on both models demonstrate that all independent and control variables, except for the interaction variable and two interacted variables, are below Diamantopoulous and Sigauw's (2006) 3.3 excellent value.<sup>14</sup> Repression(PTS), RegimeType and Repression\*RegimeType are still below the score of 10, pointing no signs of multicollinearity (Hair et al., 1995).

Panel data comes with potential flaws by its nature and “often show non-spherical errors because of contemporaneous correlation across the units and unit level heteroscedasticity” (Bailey and Katz, 2011, 1). Regression analysis in Model 1 may have overestimated (or underestimated) standard errors, variances, confidence intervals and p-values

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<sup>13</sup> Refer to Appendix B for t-Statistics results of the interaction variable and the marginal effect graph.

<sup>14</sup> For VIF test results, see Appendix B Table B4.

since estimations may be biased or incorrect, as a result of omitted variables, observations with limited of variances, autocorrelation, and large residuals, along with heteroscedasticity and contemporaneous correlation. Considering that the number of protests held in a nation prior to 1990<sup>15</sup> might influence the protests from 1990 onwards, Model 4 controls for omitted dependent variable bias by lagging the dependent variable, Protest WHIV. The lagged dependent variable is statistically significant with the dependent variable for  $p\text{-value} < 0.001$ . The same bias poses a threat to independent variables as well. For example, past repression may influence people's decision to protest (Maher and Peterson, 2008; Kim et al., 2014). Nonetheless, standard errors and coefficient values do not display a meaningful change when repression is lagged.<sup>16</sup>

Model 5 controls for heteroscedasticity and handles correlation of different units for the same time span. When dependent and independent variables in Model 1 regressed with the option robust, half of the variables have lower standard errors. three variables have larger standard errors and two are almost the same. Model 5 points out two important issues. First, the primary model slightly suffers from heteroscedasticity. Standard error values in Model 1 differ from Model 5 but the difference is relatively small. Had there been more heteroscedasticity, the robust option would have probably displayed bigger changes. Second, higher standard error means higher variance (because standard error is the square root of variance) and the higher variance is, the more unbiased estimates analysts produce. Although robust option in Model 5 provides more precise standard error, confidence interval and t-statistics estimates, hypothesis testing of the five of the independent variables with lower standard errors may be more inaccurate than the rest.

Model 6 introduces another robust standard error technique, in which standard error is adjusted for 150 clusters in country codes (ccode). In addition to the robust option in the previous model, cluster checks the correlation of different units, not only for the same period of time, but also the same units for different years. Clustered standard errors appear to be conspicuously inflated, in comparison to the original standard errors. Clustered standard errors are up to (approximately) four times larger than the standard errors in the primary model. Moreover, among ten independent variables in Model 6, only repression, the interaction of repression and regime type, logged GDP/capita and logged population are statistically significant. However, it is not unexceptional that clustered standard error estimates “are

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<sup>15</sup> Once again, note that the time frame of the dataset is from 1990 through 2014.

<sup>16</sup> For model with lagged repression and the marginal effect graph, see Appendix B.

several times larger than default standard errors that ignore such correlation” (Cameron and Miller, 2015, 2). It is also typical that more than half of the variables are statistically insignificant because cluster option “leads to over-rejection” when there are few clusters (ibid, 24). Overall, results of the robustness check with cluster option is still satisfactory because significant variables are the key components of the theory.

### 5.3 Further Tests

In models 1 through 6, analyses are based on the regime scores of Polity IV. A problem with this measure is that it assigns scores considering governments’ performance on participation and competition in elections but undermines the contribution individual rights and freedoms make to the quantification of regimes. It is possible that isolation of civil liberties from regime scores may affect the relationship between regime type and protest. To check this possibility models 7 through 9 test to determine whether different measures of regimes have different impacts on protest when measure comprises civil liberties. Numerous datasets measure regimes; however, only two of them have the least amount of missing values, namely Freedom House (FH) and Varieties of Democracy (V-Dem) Project.

Models in Table 3 analyze the effect of FH scores, electoral democracy index and liberal democracy index on protest, which come from V-Dem (Coppedge et al., 2017). FH in Model 7 is a three-scale ordinal data<sup>17</sup> combines the average ratings for political rights and civil liberties. Electoral democracy in Model 8 and liberal democracy in Model 9 are five-scale measures of democracy.<sup>18</sup> Electoral democracy variable attempts to measure the extent of ideal electoral democracy achieved in its fullest sense and liberal democracy, the extent of ideal liberal democracy achieved in its fullest sense.

None of these three measures used to replace Polity IV show statistical significance with the number of protests. Repression is significant only in the Model 7 and contrary to expectations, its coefficient has a positive sign. Nevertheless, for models with interaction variables, what matters is how each interacted variable behave. In addition to “not free” nations in FH, “closed autocratic” and “autocratic” in V-Dem are below the critical value for t-statistics. Nonetheless, all three regime variables in the last three models verify that repression

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<sup>17</sup> Freedom House: 1 Free, 2 Partly Free 3 Not Free.

<sup>18</sup> V-Dem: 0.0 Closed Autocratic, 0.25 Autocratic, 0.50 Ambivalent, 0.75 Minimally Democratic and 1.00 Democratic.

increases protest as governments score higher score on democracy.<sup>19</sup> Perhaps, the most important implication of the use of FH and democracy indexes of V-Dem is that mobilization variables, freedom of domestic movement and media appear to be insignificant. Such finding is far from being shocking and it signals a conceptual problem of regime types. How other measures of regimes apart from Polity IV affect protest and why FH and V-Dem do not work as well as Polity IV will be discussed in detail in the next chapter.

Table 3: Protest WHIV and Other Measures of Democracy

	Model 7	Model 8	Model 9
Repression (PTS)	3.772*** (0.908)	-0.723 (0.531)	-0.219 (0.471)
Freedom House(FH)	1.534 (1.203)		
Repression*FH	-1.481*** (0.393)		
Domestic Movement	0.613 (0.488)	0.701 (0.488)	0.790 (0.485)
Media Freedom	-0.669 (0.613)	-0.404 (0.630)	-0.066 (0.633)
Ln(GDP/capita)	3.043*** (0.300)	2.917*** (0.306)	2.747*** (0.316)
Regime Duration	-0.005 (0.008)	-0.005 (0.008)	-0.007 (0.008)
Ln(Population)	5.946*** (0.236)	5.882*** (0.240)	5.887*** (0.239)
Ethnic Fractionalization	-3.654** (1.414)	-3.502* (1.427)	-3.341* (1.424)
Agricultural Land	0.053*** (0.015)	0.054*** (0.015)	0.050*** (0.015)
Electoral Democracy		-1.868 (2.560)	
Repression*ElectoralDem		3.158*** (0.863)	
Liberal Democracy			-0.216 (2.541)
Repression*LiberalDem			3.271*** (0.977)
Constant	-112.941*** (5.068)	-107.844*** (4.952)	-108.497*** (4.848)
$R^2$	0.387	0.387	0.386
F	131.2803	130.4229	130.1832
df	10	10	10
Observations	2088	2078	2078

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

<sup>19</sup> See Appendix B for t-statistics results and the marginal effect graph.

## CHAPTER 6

### DISCUSSION

Findings, in general, follow the argument that the cost of collective action is the essential determinant of the total number of annual protests held in 158 countries from 1990 to 2004. Results are consistent and can be interpreted with rational and value-expectancy.<sup>20</sup> Repression increases costs of action and, thus, high repression has an inverse causal relationship with protest. Autocracies are known to be more repressive, concurring to the assumption that they would face fewer protests, but results show otherwise. If regime type is autocracy, protests occur more frequently because protest is the only viable option to voice concerns in non-democracies. Nevertheless, citizens of democratic countries, where institutions promote compromise and cooperation, have the capability of expressing or solving their problems before taking their action to streets.

In other words, regression analysis concludes that states' repressive policies have a reductive effect on the number of protests due to high costs of collective action. Yet, the frequency of protests increases if the regime type is autocracy, despite routinely and systematically imposing repressive policies. Interaction of repression and regime type solve this dilemma. Repression has a decreasing impact on protest for autocracy but a positive effect for democracy and full democracy. Cooperative and compromising features of democracy create three perceptions: concessions from the government, low cost for collective activities and higher probability to achieve the desired public good (Muller and Opp, 1986). As Rasler (1996) puts it, concessions "produce more protest behavior" (p. 145). Regime type alone may show that frequency of protests increases, as regimes lean towards autocracy. Nonetheless, once regime is employed in the repression-protest relationship, repressive states experience

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<sup>20</sup> The first model maintains that individuals do not act collectively because actors are likely to think that they can receive the benefits of the public good without participation (Olson, 1971; Hardin, 1982; Lichbach, 1995). The latter argues that people will rise up if they believe that protesting will achieve the public good. They will be less inclined to protest if they expect repression (Muller and Opp, 1986; Finkel et al., 1989; Opp and Roehl, 1990; Rasler, 1996; Carey, 2006).

fewer protests should the nation is autocracy. In a nutshell, repression works in autocracies but incites protest in democracies and full democracies. It has a negative effect for closed anocracies and positive for open anocracies; however, neither closed anocracy nor open anocracy is statistically significant.

The explanation of the causal relationship between mobilization and protest is based on the same cost-benefit argument. As supported by the literature (Myers, 2000; Andrews and Biggs, 2006; Whitten-Woodring, 2009; Casper and Tyson, 2014), the primary model indicates fewer protests in countries, where the government limits media independence and neutrality. In the absence of criticism of government through the channels of media, individuals do not organize or partake in demonstrations. They are afraid to mobilize against the government; therefore, they remain compliant. However, note that Model 2 reveals an insignificant relationship for media. Furthermore, constraints on freedom of domestic movement evince the same relationship in both models. State control of movement within a country makes coordination and organization difficult for mobilization (Barry et al., 2014). When mobilization has undesired and costly consequences, individuals are dissuaded from protesting. Alternatively, countries with higher levels of domestic movement freedom reduce costs of collective action and protest events eventuate from easier mobilization.

All of the findings so far draw one fundamental conclusion: protests occur more frequently when people can protest without concerns about safety. This notion constitutes the foundation of rational actor models on internal political conflict. In this regard, the positive effect of wealth on protest is not an exception. Greater GDP/capita entails the number of protests to increase due to two reasons. First, people who experience absolute poverty are grateful for what they already have, but the rich are always afraid to lose their assets. Therefore, it is the rich that have incentives to act collectively, not the poor. Second, protesters need resources to start or sustain a popular movement. Wealth ensures that individuals have resources for that purpose.

Thus far, I have demonstrated that repression, media<sup>21</sup> and domestic movement have an effect on protest. These two variables form the essence of this study, not only because their causal relationships with protests are statistically verified, but also, they are cardinal dimensions that define regime types. Each dimension is an important variable that helps us understand why some countries are exposed to larger numbers of protests. Additionally, these

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<sup>21</sup> Note that media freedom is not significant in Model 2, in which the dependent variable is Protest MM.

dimensions are distinctively vital to this study since they reflect the image of democracy and constitute some of the core attributes of democracy.

Despite their individual contribution to the model, we still instinctively presume that democracies and full democracies do not practice political terror on its citizens, allow media freedom and movement within the country. If a state controls the media, restricts domestic movement or exercises political violence on its citizens, we hesitate to classify its regime as a democracy. Then, why do we need to test all three dimensions of democracy in addition to regime types? First, as these three variables are subsets of democracy, the notion that the regression analysis might suffer from multicollinearity is plausible but inaccurate for this thesis.<sup>22</sup> Second, the absence of repression, high levels of media and domestic movement freedoms are subsumed under a broad category, i.e., democracy, and, therefore, they are not expected to vary within democracies, but they surprisingly do. Figure 3 illustrates how three characteristics of democracy vary among and between regime types.

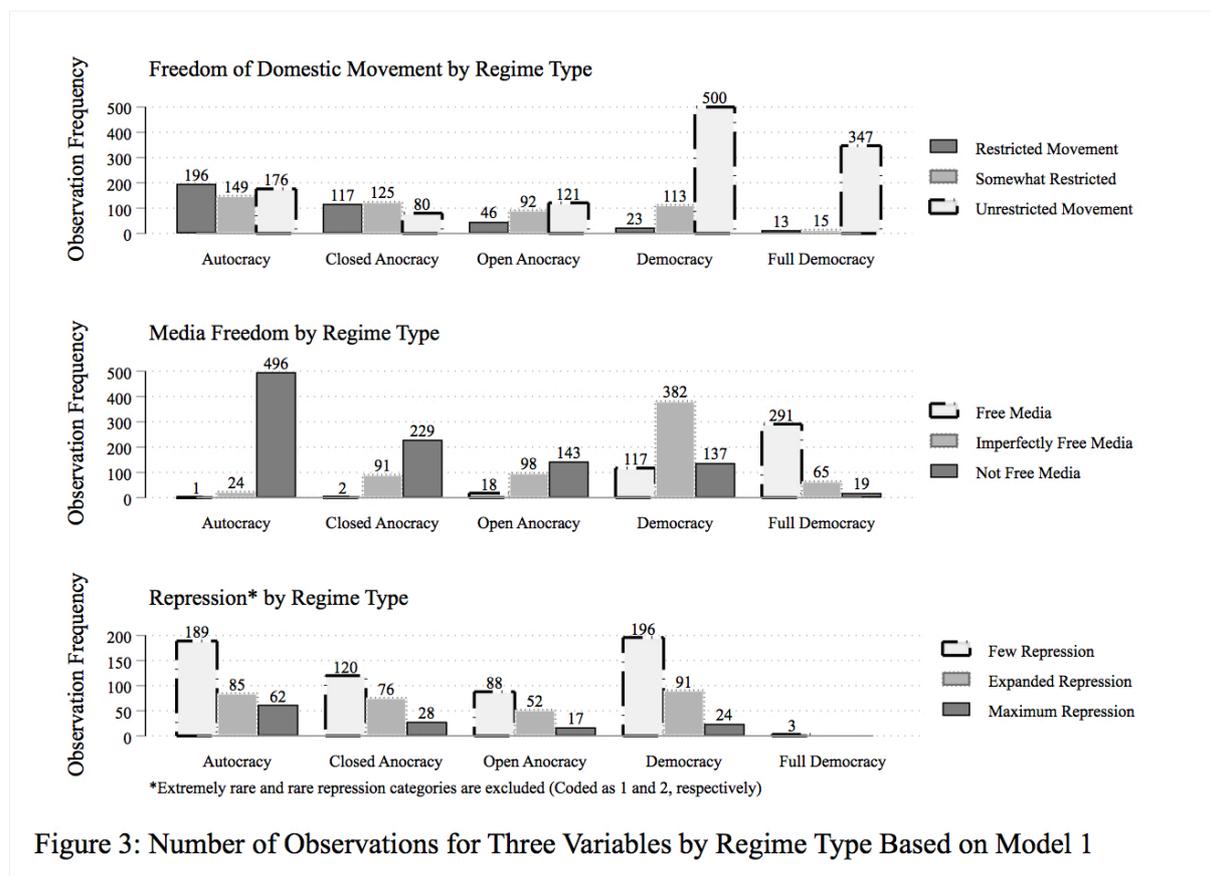


Figure 3: Number of Observations for Three Variables by Regime Type Based on Model 1

Numbers above each bar belong to a certain regime type and represent the number of country-year observations. There is a total of 2113 observations in the multivariate regression analysis, 1011 of which are classified as either democracy or full democracy (See, Table 4).

<sup>22</sup> VIF test reveals no signs of multicollinearity.

Among these observations, there are only a few cases of full democracies that repress and limit domestic movement at least at an intermediate level – 31 country-years, to be exact.

Table 4: Tabulation of Regime Types

	Regime Type Frequency
Autocracy	521
Closed Anocracy	322
Open Anocracy	259
Democracy	636
Full Democracy	375
Total	2113

Statistics based on Model 1

It is evident that three cases of full democracy in the bottom subgraph that enforce repressive policies are residuals and may be ignored. Nonetheless, as we move from full democracy to democracy, the graph elucidates that observations, once thought to be extreme cases, eventually accrue and cast doubt on our universal definition and quantitative measure of regime types. In fact, democracies perform almost as poor as open anocracies on media freedom. More interestingly, only one-third of the observations categorized under democracy and full democracy rarely or almost never repress, enjoy free media and have unrestricted domestic movement.<sup>23</sup> It is then imperative to ask ourselves why there is a substantial amount of variation within democracies.

Table 5: Variation of Non-Democratic Behaviors

	Regime Type Frequency
Democracy	575
Full Democracy	102
Total	677

For observations categorized as democracy and full democracy with a score of above 1 on Media Freedom, above 2 on Repression(PTS) OR below 2 on Domestic Movement  
Summary statistics based on Model 1

There are two reasons why some democracies or full democracies tend to display behaviors that are incompatible with the norms of democracy. First, dichotomous and trichotomous scales omit transitional regimes. This omission causes countries to be categorized as autocracy or democracy; whereas, they are, in fact, neither. Some nations systematically violate civil liberties, but they hold regular and tolerably free elections. Some may justifiably assume that cases like Tunisia, Ukraine and Russia are too liberal to be labeled as authoritarian when compared to North Korea or Saudi Arabia. In like manner, some

<sup>23</sup> The number of democracy and full democracy country-year observations that score 1 (free) on Media Freedom, 2 (unrestricted) on Domestic Movement AND below 3 (2 for rarely and 1 for almost never) on Repression(PTS) divided by the total number of democracy and full democracy country-year observations.

democracies are too restrictive to count as a democracy despite indisputably free, fair and regular elections such as the US, Hungary, and Kenya. Moreover, when regimes are coded as a dummy – 0 for autocracy and 1 for democracy– we do not measure autocracy but only the absence of democracy. Unless the model requires regime types to be binary explicitly, dichotomization of regimes should be avoided for the betterment of analyses. Knowing this, none of the models in this thesis contains dichotomous or trichotomous scales of regime types. The expansion of narrow regime scales is a perspicacious attempt but still problematic. FH offered a seven-point rating system and categorized the average ratings under three ordinal responses until 2003. Polity IV still scores regimes on a total of twenty-one points. Nevertheless, large scales do not treat the disease either, since FH and Polity have “flawed” and “questionable aggregation technique” (Coppedge et al., 2011, 249).

Second, no matter what kind of taxonomy scholars implement, they are likely to encounter conceptual problems because of the wanting attributes of regimes. Regime types should be controlling for dimensions of regimes by default. Nonetheless, our definition – especially, of democracy – is insufficient to capture the concept as a whole. Regime scores on Polity IV are mainly based on competition and participation. Yet, the election is not the only component and democracy is more than a mere apparatus for choosing political leaders, despite the suggestion that it is (Schumpeter, 2013). In addition to fair, free and regular elections, civil rights and liberties are also some of its dimensions (Rueschemeyer et al., 1992). Table 5 demonstrates that there are 677 cases labeled as democracy and full democracy that exhibit non-democratic behaviors. Figure 3 shows twenty-four observations classified as democracy where heavy (maximum level) repression is a part of daily life and twenty-eight full democracies where domestic movement is not unrestricted. Perhaps, some of these cases should never have been linked with democracy or full democracy. The goal here is not to imply that democratic governments never treat their citizens unjustly or harm them. However, due to the exclusion of civil liberties in Polity IV, some democratic and fully democratic countries appear to be indistinguishable from non-democracies.

The concept of democracy should be comprehensive and meet further conditions such as civil and political liberties (Dahl, 1989; Schmitter and Karl, 1996; Held, 2006; Tilly, 2007; Schedler, 2010). The solution of the conceptual problem of democracy is the strategy of increasing differentiation (Sartori, 1970). Particularly, media freedom, domestic movement freedom and freedom from coercion can play a vital role in this strategy. Howbeit, apart from Polity IV, datasets on regime types and democracy that take civil liberties into account are available, e.g. FH and V-Dem. Then, three questions arise: First, how should we interpret the

results when Polity IV is replaced with FH, Electoral Democracy, and Liberal Democracy? Second, why do results differ from Polity IV? Third, why does this study insist on Polity IV?

To answer the first question, note that none of three regime type variables used as replacements for Polity IV is statistically significant (Table 3). Therefore, it is inconclusive whether the level of democracy in a given country affect protest, except for Polity IV. Repression has a causal relationship with protest only when Freedom House replaces Polity IV. However, its coefficient sign is positive, notwithstanding a negatively significant relationship in models 1, 2, 5, 6, and 11. The interaction variables in each one of the last three models provide the same results with the primary model: repression increases protests if the state is a democracy. Nevertheless, “not-free” nations (FH) and “closed autocracies” (V-Dem) are insignificant, unlike the primary model. More importantly, freedom of media and domestic movement also fail to pass the significance test in none of the models from 7 through 9. In Model 7, there are 413 cases of “free” states; in Model 8, 474 cases of “minimally democracies” and “democracies”; and in Model 9, 244 cases of “minimally democracies” and “democracies”, in which governments exercise repression, control the media or restrict domestic movement.<sup>24</sup>

This interpretation leads to the second question. Findings of Model 7 through 9 have stark differences from Model 1, and as well as Model 2. Contrary to the first two models, protest’s causal relationship with freedom of media and domestic movement is indeterminate in models 7, 8 and 9. Although these two variables are indicators of mobilization, they are also civil liberties. The definition of freedom in FH and electoral and liberal democracies in V-Dem contain not only media freedom but also domestic movement. Therefore, when FH country statuses and V-Dem democracy indexes replace Polity IV as a regime type variable, models 7, 8, and 9 end up measuring freedom of media and domestic movement twice. Double measurement leads into a false notion that mobilization variables (freedom of media and domestic movement) are not causally related to protest.

When we exclude essential factors such as repression, media and domestic movement freedom from the concept of democracy, we limit ourselves with an imperfect definition, which then leads to flawed measurements, like the ones we widely use. Imperfect definitions and flawed measurements inhibit generation of empirical studies that depict a stronger analysis of protest. If Polity IV lacks civil liberties and, therefore, is a flawed measurement with an imperfect definition, why does this study tenaciously use Polity IV in the primary model? First, autocratic behaviors also seem to exist in democratic states in Freedom House and democracy

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<sup>24</sup> Refer to Appendix C.

indexes of V-Dem. Even though variation is not as high as Polity IV, free and democratic states repress, restrict media and domestic movement in these two datasets. Thus, the definition of democracy is unsatisfactory regardless of the measure. Second, mobilization variables of this study are also some of the components of democracy definition in FH and V-Dem. Measuring the same things distorts the results, causing very high correlation and multicollinearity. Lastly, FH is not even a measurement of democracy because it, in fact, measures freedom. In addition, V-Dem's Electoral and Liberal Democracy measures are specifically democracy indexes. Although V-Dem authors label states with the lowest scores as autocracies, they, in essence, measure the least democratic states, not the most autocracies. The definition of autocracy is not strictly the opposite of democracy. Hence, Polity IV is more constructive than FH and V-Dem, although both FH and V-Dem have more comprehensive definitions of democracy.

High variation of autocratic behaviors among democracies, regardless of the measurement, have some implementations in our studies, including this one. Repression's effect over protest conditioned on regime type fails to produce a significant relationship for closed and open anocracies. It is conceivable that the reason could be the incomprehensive definition and measure used for political regimes. Had we increased differentiation between/among regimes and overarched the concept of democracy/autocracy without going "down the ladder of generality" (Collier and Levitsky, 1997, 449), we would avoid conceptual stretching and results here might have presented a more robust analysis. Adding further defining attributes and establishing cutoff points between democracies and non-democracies is useful to characterize and capture regimes in transition.

Nevertheless, note that multiple regression analysis assumes that the relationship between protest and repression's conditional effect of regime type is linear. Thus, when the effect of repression travels from negative to positive, the slope must pass by zero and cases with confidence intervals that contain zero are, of course, below the critical t-value. Even if it is the author who statistically forces some cases of anocracies to be insignificant with a linear assumption, political scientists should revise our understanding and measurement of regimes, especially for democracy, and reach a consensus. Only then we have none or at least, inconsiderable amounts of conflictive observations such as democratic states with repression or limited media and domestic movement freedoms.

## **CHAPTER 7**

### **CONCLUSION**

The findings of this thesis support rational and value-expectancy models, suggesting that a country's level of repression, regime type, media freedom, wealth and citizens' ability to mobilize are determinants of the number of protests. More specifically, repressive policies under autocracies increase the cost of protest and deter individuals from collective action. Inversely, repression incites protest should the regime is democracy or full democracy where costs are usually low. Repression's conditional effect adduces to support the rationalistic notion that high costs have a reductive effect on collective action. When benefits exceed costs, citizens show less reluctance to protest. In a nutshell, the frequency of protest events across nations from 1990 to 2004 is contingent on whether the combination of a state's repression level and regime type increases (decreases) costs and decreases (increases) benefits, affecting the achievability of the public good. Unlike autocracies, government concession is a viable option in democracies and perceived as an opportunity by the dissident. Hence repression aggravates protests.

Placed within the rationalist context, the increment of wealth displays a positive and statistically significant effect on protest, which suggests two interpretations. First, the poor do not get as deprived as the wealthy once threatened with the seizure of assets because economically advantaged individuals have more to risk and lose. Absolute poverty is not necessarily iniquitous for the ones who experience it every day. Second, wealth is a crucial factor to provide resources to mobilize individuals, start and sustain protests. Political activities require actors an entry cost for participation and wealth enables them to afford the entry cost. GDP/capita serves as an indicator of a country's wealth without consideration of how that wealth is distributed. Therefore, it may have some limitations on reflecting economic inequalities. Howbeit, it gives us valuable insight into the relationship between wealth and protest.

Mobilization also appears to play a prominent role in shaping protests. Although media freedom has failed to the robustness test, constraints on freedom of the press and domestic movement have been demonstrated to be important motives behind the civil unrest. This outcome also relates to the rational actor-based models. Strict control of the media has several implications. First, the media have the power to mislead citizens to think that the government is performing well. Second, the media may justify government's authoritarian behaviors. Third, the state may use media as a tool to repress by airing or publishing that ones who challenge the authority are reprimanded harshly and ones with a predilection for the government are rewarded. Fourth, even if the disaffected manages to organize a protest, the news about the event can be stopped before it reaches the large masses without the media. People cannot attend a protest, of which they are not aware. The first two implications preclude individuals from being refractory. The latter two make them remain compliant.

Restrictions on domestic movement freedom lead to a similar inference. Provided that the state does not allow its citizens to move within their country and punishes for disobedience, people will not be able to or prefer not to participate in protests. Residents of City A will have difficulties to drive to City B for a protest because they face the consequences if they travel. City A is an open-air prison for its residents, forcing them to seek opportunities to protest inside their city. Nevertheless, domestic movement subsume restrictions of intra-city movements as well. Governments can effectively surveil its citizens who cannot travel. Hence, the lack of free domestic movement damages the success of mobilization.

In addition to repression, limiting the freedom of media and the ability of domestic movement should not be regarded as a standard behavior of democratic states, and yet analysis here demonstrates a considerable number of democracies with such restrictions. This thesis, strikingly, shows that even full democracies have authoritarian tendencies and policies. Therefore, the ultimate conclusion of this thesis is that our definition of regimes, especially democracy, cause some limitations on studies of domestic political conflict. We can deduce that a universally accepted taxonomy of regime types is a necessity to develop vigorous theories. Dichotomous and trichotomous scales of regimes lump countries with saliently different characteristics into same categories and omit transitional regimes. Although extended categorization helps us achieve more valid and reliable analyses of protest, we are not likely to be satisfied with our results before we determine the components of regime types and improve their definitions.

One of the most important discoveries of this thesis is that democracies and full democracies also repress citizens, control the media and/or constrain domestic movement. The

reason for this outcome is that scholars could not succeed in defining democracy and differentiating democratic nations. When the definition of democracy is narrowed down to one component, the negligence of democracy's other dimensions causes unexpected variations. All respected measures of democracy focus on some components and ignore others. For instance, Freedom House takes individuals' rights and freedoms into account, pretermittting competitive, regulative and participative features of regimes. On the other hand, Polity IV – the source of regime scores employed in this thesis – essentially assesses nations' governing performances. Although V-Dem's both democracy indexes seem to offer a balanced definition, democracies still vary among each other in V-Dem. Regardless of the measure, it is conspicuous that a conceptualization problem of regimes exists in general and it is not limited to Polity IV. It is possible that insignificant results of repression's marginal effect on protest for closed and open anocracies are due to this conceptual problem. Therefore, further empirical tests should be conducted with a meticulous classification of regime types.

Another possible area of research on protest includes an in-depth investigation of the relationship between protest and media freedom. Primary model evinces that the lack of media freedom conduces to fewer protests; however, it remains undetermined whether their causal relationship is robustly significant. Furthermore, the freedom of alternative media sources is encouraged for further analyses. Four implications of the conventional media's freedom may not be applied to social media. State control of the social media is more difficult than the control of printing and broadcasting. Hence, the spread of protesting news and political discontent may become inexorable.

Moreover, freedom of domestic movement can be expanded with the physical ability of domestic and international movement. The total length of rail lines, highways, number of privately owned vehicles and passengers carried with airlines may be causally related to protest. Nonetheless, a substantial amount of work is needed to avoid high correlation and multicollinearity between the ability of movement and indicators of national wealth such as GDP/capita. Finally, exogenous factors may uncover further explanations. For example, a country's level of political globalization can be applied to the model. A nation's bilateral and multilateral relations with other nations and supranational organizations may have an impact on domestic conflict. Ideas and social movements can spread globally and exposure to a volatile international environment may foment protests.

In conclusion, this thesis demonstrates that repression, regime type, level of repression conditional on regime type, freedom of domestic movement, freedom of media and wealth are some of the core explanations that determine the number of protests nations experience. It

suggests that rationalist approach is more epideictic than the theories of relative deprivation and the majority of the findings should be interpreted with a cost-benefit perspective. This study also reveals an urgent need for a conceptual revision of regime types, upon which studies on civil unrest can be ameliorated.

## REFERENCES

Acemoglu, D., & Robinson, J. A. (2001). A Theory of Political Transitions. *American Economic Review*, *91*(4), 938-963.

Amnesty International. (2006, May 3). *Press Freedom: Journalists in need of protection* (Rep. No. ACT 78/001/2006). Retrieved <https://www.amnesty.org/en/documents/act78/001/2006/en/>

Andrews, K. T., & Biggs, M. (2006). The Dynamics of Protest Diffusion: Movement Organizations, Social Networks, and News Media in the 1960 Sit-Ins. *American Sociological Review*, *71*(5), 752-777.

Aristotle. (2016). *The Politics of Aristotle* (J. E. Welldon, Trans.). Palala Press.

Aytaç, S. E., Schiumerini, L., & Stokes, S. (2017). Why Do People Join Backlash Protests? Lessons from Turkey. *Journal of Conflict Resolution*, 1-24. doi:10.1177/0022002716686828

Bailey, D., & Katz, J. N. (2011). Implementing Panel-Corrected Standard Errors in R: ThepcsePackage. *Journal of Statistical Software*, *42*(Code Snippet 1), 1-11.

Baldwin, K., & Huber, J. D. (2010). Economic versus Cultural Differences: Forms of Ethnic Diversity and Public Goods Provision. *American Political Science Review*, *104*(04), 644-662.

Bandura, A. (1973). *Aggression: a social learning analysis*. Englewood Cliffs, NJ,: Prentice-Hall.

Banks, A. S., & Wilson, K. A. (2010). *Cross-national time-series data archive*. Jerusalem, Israel: Databanks International. Retrieved from (<https://www.cntsdata.com>)

- Barry, C. M., Clay, K. C., Flynn, M. E., & Robinson, G. (2014). Freedom of foreign movement, economic opportunities abroad, and protest in non-democratic regimes. *Journal of Peace Research*, *51*(5), 574-588.
- Beck, N., & Katz, J. N. (2001). Throwing Out the Baby with the Bath Water: A Comment on Green, Kim, and Yoon. *International Organization*, *55*(2), 487-495.
- Benson, M., & Kugler, J. (1998). Power Parity, Democracy, and the Severity of Internal Violence. *Journal of Conflict Resolution*, *42*(2), 196-209.
- Bernstein, T. P., & Lü, X. (2003). *Taxation without representation in contemporary rural China*. Cambridge: Cambridge University Press.
- Boix, C., Miller, M., & Rosato, S. (2012). A Complete Data Set of Political Regimes, 1800–2007. *Comparative Political Studies*, *46*(12), 1523-1554.
- Bollen, K. A. (1980). Issues in the Comparative Measurement of Political Democracy. *American Sociological Review*, *45*(3), 370-390.
- Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, Communication & Society*, *18*(5), 524-538.
- Brady, H. E., Verba, S., & Schlozman, K. L. (1995). Beyond SES: A Resource Model of Political Participation. *American Political Science Review*, *89*(02), 271-294.
- Brambor, T., Clark, W. R., & Golder, M. (2006). Understanding Interaction Models: Improving Empirical Analyses. *Political Analysis*, *14*(01), 63-82.
- Brancati, D. (2013). Pocketbook Protests: Explaining the Emergence of Pro-Democracy Protests Worldwide. *Comparative Political Studies*, *47*(11), 1503-1530.
- Cameron, A. C., & Miller, D. L. (2015). A Practitioner's Guide to Cluster-Robust Inference. *Journal of Human Resources*, *50*(2), 317-372. doi:10.3368/jhr.50.2.317

- Carey, S. C. (2006). The Dynamic Relationship Between Protest and Repression. *Political Research Quarterly*, 59(1), 1-11.
- Casper, B. A., & Tyson, S. A. (2014). Popular Protest and Elite Coordination in a Coup d'état. *The Journal of Politics*, 76(2), 548-564.
- Cederman, L., Wimmer, A., & Min, B. (2010). Why Do Ethnic Groups Rebel? New Data and Analysis. *World Politics*, 62(01), 87-119.
- Choi, S., & James, P. (2007). Media Openness, Democracy and Militarized Interstate Disputes. *British Journal of Political Science*, 37(01), 23-46.
- Cingranelli, D. L., Richards, D. L. & Clay, K. C. (2014). *CIRI human rights dataset*. Retrieved from (<http://www.humanrightsdata.com>)
- Clark, D. C., Regan, P. M. (2015). *Mass mobilization data project*. Arlington, VA: Political Instability Task Force, George Mason University. Retrieved from (<https://www.binghamton.edu/massmobilization/index.html>)
- Collier, D., & Levitsky, S. (1997). Democracy with Adjectives: Conceptual Innovation in Comparative Research. *World Politics*, 49(03), 430-451.
- Collier, P., Honohan, P., & Moene, K. O. (2001). Implications of ethnic diversity. *Economic Policy*, 16(32), 128-166.
- Coppedge, M., Gerring, J., Altman, D., Bernhard, M., Fish, S., Hicken, A., . . . Teorell, J. (2011). Conceptualizing and Measuring Democracy: A New Approach. *Perspectives on Politics*, 9(02), 247-267.
- Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Carl Henrik Knutsen, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Moa Olin, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Constanza Sanhueza Petrarca, Johannes von Römer, Laura Saxer, Brigitte Seim, Rachel Sigman, Jeffrey Staton,

- Natalia Stepanova, and Steven Wilson. (2017). *V-Dem [Country-Year] Dataset v7.1*. Varieties of Democracy (V-Dem) Project. Retrieved from (<https://www.v-dem.net/en/data/data-version-7-1>)
- Dahl, R. A. (1989). *Democracy and its critics*. New Haven: Yale University Press.
- Dahl, R. A. (1998). *On democracy*. New Haven: Yale University Press.
- Davenport, C., & Armstrong, D. A. (2004). Democracy and the Violation of Human Rights: A Statistical Analysis from 1976 to 1996. *American Journal of Political Science*, 48(3), 538-554.
- Davenport, C. (2007). *State repression and the domestic democratic peace*. New York: Cambridge University Press.
- Della Porta, D. (1995). *Social movements, political violence, and the state: A comparative analysis of Italy and Germany*. New York: Cambridge University Press.
- DeNardo, J. (1985). *Power in numbers: The political strategy of protest and rebellion*. Princeton, NJ: Princeton University Press.
- Diamantopoulos, A., & Sigauw, J. A. (2006). Formative Versus Reflective Indicators in Organizational Measure Development: A Comparison and Empirical Illustration. *British Journal of Management*, 17(4), 263-282.
- Diamond, L. J. (1999). *Developing democracy toward consolidation*. Baltimore: Johns Hopkins University Press.
- Dougherty, C. (1992). *Introduction to econometrics* (5th ed.). New York: Oxford University Press.
- Epstein, D. L., Bates, R., Goldstone, J., Kristensen, I., & Ohalloran, S. (2006). Democratic Transitions. *American Journal of Political Science*, 50(3), 551-569.

- Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, Insurgency, and Civil War. *American Political Science Review*, 97(01), 75-90.
- Fein, H. (1995). More Murder in the Middle: Life-Integrity Violations and Democracy in the World, 1987. *Human Rights Quarterly*, 17(1), 170-191.
- Finkel, S. E., Muller, E. N., & Opp, K. (1989). Personal Influence, Collective Rationality, and Mass Political Action. *The American Political Science Review*, 83(3), 885-903.
- Francisco, R. A. (1995). The Relationship between Coercion and Protest. *Journal of Conflict Resolution*, 39(2), 263-282.
- Francisco, R. A. (1996). Coercion and Protest: An Empirical Test in Two Democratic States. *American Journal of Political Science*, 40(4), 1179-1204.
- Francisco, R. A. (2000). *The politics of regime transitions*. Boulder, CO: Westview Press.
- Francisco, R. A. (2004). After the massacre: mobilization in the wake of harsh repression. *Mobilization*, 9(2), 107-126.
- Gibney, M., Cornett, L., Wood, R., Haschke, P., & Arnon, D. (2017). *The political terror scale 1976-2016*. Retrieved from (<http://www.politicalterroryscale.org/>).
- Giugni, M., McAdam, D., & Tilly, C. (Eds.). (1999). *How social movements matter* (Vol. 10). Minneapolis, MN: Univ. of Minnesota Press.
- Goldstone, J. A., Bates, R. H., Epstein, D. L., Gurr, T. R., Lustik, M. B., Marshall, M. G., . . . Woodward, M. (2010). A Global Model for Forecasting Political Instability. *American Journal of Political Science*, 54(1), 190-208.
- Gramsci, A. (1971). *Selections from the prison notebooks of Antonio Gramsci* (Q. Hoare & G. Nowell-Smith, Trans.). New York: International.

Gregory, P. R., Schröder, P. J., & Sonin, K. (2006). Dictators, Repression and the Median Citizen: An Eliminations Model of Stalins Terror (Data from the NKVD Archives). *SSRN Electronic Journal*.

Gupta, D. K., Singh, H., & Sprague, T. (1993). Government Coercion of Dissidents. *Journal of Conflict Resolution*, 37(2), 301-339.

Gurr, T. R. (1970). *Why Men Rebel*. Princeton, NJ: Princeton University Press.

Gurr, T. R. (1993). Why Minorities Rebel: A Global Analysis of Communal Mobilization and Conflict since 1945. *International Political Science Review*, 14(2), 161-201.

Gurr, T. R. (1994). Peoples Against States: Ethnopolitical Conflict and the Changing World System: 1994 Presidential Address. *International Studies Quarterly*, 38(3), 347-377.

Gurr, T. R., & Moore, W. H. (1997). Ethnopolitical Rebellion: A Cross-Sectional Analysis of the 1980s with Risk Assessments for the 1990s. *American Journal of Political Science*, 41(4), 1079-1103.

Grzymala-Busse, A. (2011). Time Will Tell? Temporality and the Analysis of Causal Mechanisms and Processes. *Comparative Political Studies*, 44(9), 1267-1297.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis with readings*. Englewood Cliffs, NJ: Prentice-Hall International.

Hardin, R. (1982). *Collective action*. Baltimore: Johns Hopkins University Press.

Hartman, J., & Hsiao, W. (1988). Inequality and Violence: Issues of Theory and Measurement in Muller. *American Sociological Review*, 53(5), 794-799.

Held, D. (2006). *Models of democracy* (3rd ed.). Cambridge: Polity Press.

Hegre, H., Ellingsen, T., Gates, S., & Gleditsch, N. P. (2001). Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816-1992. *The American Political Science Review*, 95(1), 33-48.

Henderson, C. W. (1991). Conditions Affecting the Use of Political Repression. *Journal of Conflict Resolution*, 35(1), 120-142.

Hibbs, D. A. (1973). *Mass political violence: A cross-national causal analysis*. New York, NY: Wiley.

Huntington, S. P. (1968). *Political order in changing societies*. New Haven, CT: Yale University Press.

Jenkins, J. C., Taylor, C. L., Abbott, M., Maher, T. V. & Peterson, L. (2012). *The world handbook of political indicator IV*. Columbus, OH: Mershon Center for International Security Studies, The Ohio State University. Retrieved from (<https://sociology.osu.edu/worldhandbook>)

Joyce, P. (2016). *The policing of protest, disorder and international terrorism in the UK since 1945: Britain in comparative perspective since 1945*. London: Macmillan.

Kern, H. L. (2011). Foreign Media and Protest Diffusion in Authoritarian Regimes: The Case of the 1989 East German Revolution. *Comparative Political Studies*, 44(9), 1179-1205.

Khawaja, M. (1993). Repression and popular collective action: Evidence from the West Bank. *Sociological Forum*, 8(1), 47-71.

Kim, H., Whitten-Woodring, J., & James, P. (2014). The Role of Media in the Repression–Protest Nexus. *Journal of Conflict Resolution*, 59(6), 1017-1042.

Kim, W. (2016). Economic globalization, inequality, and protest movements under capitalist political regimes, 1970–2007. *International Journal of Comparative Sociology*, 57(5), 267-287.

- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry*. Princeton, NJ: Princeton University Press.
- Kuran, T. (1989). Sparks and prairie fires: A theory of unanticipated political revolution. *Public Choice*, 61(1), 41-74.
- Lee, A. (2011). Who Becomes a Terrorist?: Poverty, Education, and the Origins of Political Violence. *World Politics*, 63(02), 203-245.
- Levitsky, S. R., & Way, L. A. (2012). Beyond Patronage: Violent Struggle, Ruling Party Cohesion, and Authoritarian Durability. *Perspectives on Politics*, 10(04), 869-889.
- Li, L., & O'Brien, K. J. (2008). Protest Leadership in Rural China. *The China Quarterly*, 193, 1-23.
- Lichbach, M. I. (1987). Deterrence or Escalation? The Puzzle of Aggregate Studies of Repression and Dissent. *Journal of Conflict Resolution*, 31(2), 266-297.
- Lichbach, M. I. (1989). An Evaluation of "Does Economic Inequality Breed Political Conflict?" Studies. *World Politics*, 41(4), 431-470.
- Lichbach, M. I. (1990). Will Rational People Rebel against Inequality? Samson's Choice. *American Journal of Political Science*, 34(4), 1049-1076.
- Lichbach, M. I. (1994). What Makes Rational Peasants Revolutionary? Dilemma, Paradox, and Irony in Peasant Collective Action. *World Politics*, 46(03), 383-418.
- Lichbach, M. I. (1995). *The Rebel's Dilemma*. Ann Arbor, MI: The University of Michigan Press.
- Lipsky, M. (1968). *Protest as a political resource*. Madison, WI: Institute for Research on Poverty.

- Lohmann, S. (1993). A Signaling Model of Informative and Manipulative Political Action. *American Political Science Review*, 87(02), 319-333.
- Madestam, A., Shoag, D., Veuger, S., & Yanagizawa-Drott, D. (2013). Do Political Protests Matter? Evidence from the Tea Party Movement\*. *The Quarterly Journal of Economics*, 128(4), 1633-1685.
- Maher, T. V., & Peterson, L. (2008). Time and Country Variation in Contentious Politics: Multilevel Modeling of Dissent and Repression. *International Journal of Sociology*, 38(3), 52-81.
- Mainwaring, S., Brinks, D., & Pérez-Liñán, A. (2001). Classifying Political Regimes in Latin. *Studies in Comparative International Development*, 36(1), 37-65.
- Marshall, M. G., Gurr, T. R. & Jaggers, K. (2016). *Polity IV project: Political regime characteristics and transitions 1800-2013*. Arlington, VA: Center for Systemic Peace, George Mason University. Retrieved from (<http://www.systemicpeace.org/polity/polity4.htm>)
- Mele, C. S., & Siegel, D. A. (2017). Identity, repression, and the threat of ethnic conflict in a strong state. *Journal of Theoretical Politics*, 29(4), 578-598.
- Midlarsky, M. I. (1988). Rulers and the Ruled: Patterned Inequality and the Onset of Mass Political Violence. *The American Political Science Review*, 82(2), 491-509.
- Møller, J., & Skaaning, S. (2013). Respect for Civil Liberties During the Third Wave of Democratization: Presenting a New Dataset. *Social Indicators Research*, 117(3), 1069-1087.
- Moore, W. H. (1995). Rational Rebels: Overcoming the Free-Rider Problem. *Political Research Quarterly*, 48(2), 417-454.
- Moore, W. H. (1998). Repression and Dissent: Substitution, Context, and Timing. *American Journal of Political Science*, 42(3), 851-873.

- Muller, E. N., & Opp, K. (1986). Rational Choice and Rebellious Collective Action. *American Political Science Review*, 80(02), 471-487.
- Muller, E. N., & Seligson, M. A. (1987). Inequality and Insurgency. *The American Political Science Review*, 81(2), 425-452.
- Muller, E. N., & Weede, E. (1990). Cross-National Variation in Political Violence. *Journal of Conflict Resolution*, 34(4), 624-651.
- Myers, D. J. (2000). The Diffusion of Collective Violence: Infectiousness, Susceptibility, and Mass Media Networks. *American Journal of Sociology*, 106(1), 173-208.
- North, D. C. (1981). *Structure and change in economic history*. New York: Norton.
- Offe, C. (1985). New Social Movements: Challenging the Boundaries of Institutional Politics. *Social Research*, 52(4), 817-868.
- Olson, M. (1971). *Logic of collective action: Public goods and the theory of groups* (2nd ed., Vol. 124). Cambridge, MA: Harvard University Press.
- Opp, K., & Roehl, W. (1990). Repression, Micromobilization, and Political Protest. *Social Forces*, 69(2), 521-547.
- Opp, K. (1994). Repression and Revolutionary Action: East Germany in 1989. *Rationality and Society*, 6(1), 101-138.
- Panning, W. H. (1983). Inequality, Social Comparison, and Relative Deprivation. *American Political Science Review*, 77(02), 323-329.
- Pfaff, S. (2006). *Exit-voice dynamics and the collapse of East Germany: The crisis of Leninism and the revolution of 1989*. Durham, NC: Duke University Press.
- Pierskalla, J. H. (2009). Protest, Deterrence, and Escalation: The Strategic Calculus of Government Repression. *Journal of Conflict Resolution*, 54(1), 117-145.

Przeworski, A., Alvarez, M. E., Cheibub, J. A., & Limongi, F. (2000). *Democracy and development: Political institutions and material well-being in the world, 1950-1990*. Cambridge: Cambridge University Press.

Rashiduzzaman, M. (2001). BANGLADESH IN 2000 Searching for Better Governance? *Asian Survey*, 41(1), 122-130.

Rasler, K. (1996). Concessions, Repression, and Political Protest in the Iranian Revolution. *American Sociological Review*, 61(1), 132-152.

Regan, P. M., & Norton, D. (2005). Greed, Grievance, and Mobilization in Civil Wars. *Journal of Conflict Resolution*, 49(3), 319-336.

Rueschemeyer, D., Stephens, E. H., & Stephens, J. D. (1992). *Capitalist development and democracy*. Chicago: Univ. of Chicago Press.

Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social, inequality in twentieth-century England*. Berkeley: University of California Press.

Russett, B. M. (1964). Inequality and Instability: The Relation of Land Tenure to Politics. *World Politics*, 16(03), 442-454.

Sartori, G. (1970). Concept Misformation in Comparative Politics. *American Political Science Review*, 64(04), 1033-1053.

Saxton, G. D. (2005). Repression, Grievances, Mobilization, and Rebellion: A New Test of Gurr's Model of Ethnopolitical Rebellion. *International Interactions*, 31(1), 87-116.

Schedler, A. (2010). Authoritarianisms Last Line of Defense. *Journal of Democracy*, 21(1), 69-80.

Schmitter, P. C., & Karl, T. L. (1996). What democracy is and is not. In L. J. Diamond & M. F. Plattner (Authors), *The Global resurgence of democracy* (pp. 49-62). Baltimore: Johns Hopkins University Press.

- Schumpeter, J. (2013). *Capitalism, socialism and democracy*. London: Routledge.
- Schussman, A., & Soule, S. A. (2005). Process and Protest: Accounting for Individual Protest Participation. *Social Forces*, 84(2), 1083-1108.
- Skocpol, T. (1979). *States and social revolutions: A comparative analysis of France, Russia, and China*. Cambridge: Cambridge University Press.
- Steiner, N. D. (2016). Comparing Freedom House Democracy Scores to Alternative Indices and Testing for Political Bias: Are US Allies Rated as More Democratic by Freedom House? *Journal of Comparative Policy Analysis: Research and Practice*, 18(4), 329-349.
- Su, Y. (2015). Anti-Government Protests in Democracies: A Test of Institutional Explanations. *Comparative Politics*, 47(2), 149-167.
- Svolik, M. W. (2012). *The politics of authoritarian rule*. New York, NY: Cambridge University Press.
- Tarrow, S. G. (1994). *Power in movement: social movements, collective action and politics*. New York: Cambridge University Press.
- Teorell, J., Dahlberg, S., Holmberg, S., Rothstein, B., Khomenko, A., & Svensson, R. (2017). *The quality of government standard dataset*. Gothenburg: The Quality of Government Institute, University of Gothenburg. Retrieved from (<http://www.qog.pol.gu.se> doi:10.18157/QoGStdJan17)
- Thompson, S. B. (2011). Simple formulas for standard errors that cluster by both firm and time. *Journal of Financial Economics*, 99(1), 1-10.
- Tilly, C. (1978). *From mobilization to revolution*. New York: McGraw-Hill.
- Tilly, C. (1997). *Roads from past to future*. Lanham, MD: Rowman & Littlefield.
- Tilly, C. (2007). *Democracy*. Cambridge: Cambridge University Press.

Treier, S., & Jackman, S. (2008). Democracy as a Latent Variable. *American Journal of Political Science*, 52(1), 201-217.

Tsebelis, G., & Sprague, J. (1989). Coercion And Revolution: Variations On A Predator–Prey Model. *Formal Theories of Politics*, 547-559.

Tullock, G. (1974). *The social dilemma: The economics of war and revolution*. Fairfax, VA: Center for the Study of Public Choice.

UN General Assembly. (1948). "Universal declaration of human rights" (217 [III] A). Paris. Retrieved from <http://www.un.org/en/universal-declaration-human-rights/>

Whitten-Woodring, J. (2009). Watchdog or Lapdog? Media Freedom, Regime Type, and Government Respect for Human Rights. *International Studies Quarterly*, 53(3), 595-625.

Whitten-Woodring, J., & Van Belle, D. A. (2015). The Correlates of Media Freedom: An Introduction of the Global Media Freedom Dataset. *Political Science Research and Methods*, 5(01), 179-188.

World Bank Indicators. 2017. Washington, DC: World Bank. Retrieved from (<http://www.worldbank.org>)

World Population Prospects: The 2017 Revision. (2017). New York, NY: UNdata. Retrieved from (<http://data.un.org>)

Zamosc, L. (1994). Agrarian Protest and the Indian Movement in the Ecuadorian Highlands. *Latin American Research Review*, 29(3), 37-68.

## APPENDICES

### Appendix A

Table A1: Summary Statistics of Protest CNTS

	10th Pct	25th Pct	50th Pct	75th Pct	90th Pct	Min	Max
Protest CNTS	0	0	0	1	3	0	37
Observations	2113						

Ptc stands for percentile

Based on Model 3 on Table A2

Table A2: Multivariate Regression Analysis on Protest Using CNTS

	Model 3-CNTS	
Repression (PTS)	-0.151	(0.109)
Regime Type	-0.190	(0.098)
Repression*RegimeType	0.151***	(0.033)
Domestic Movement	0.294***	(0.076)
Media Freedom	0.133	(0.098)
Ln(GDP/capita)	-0.029	(0.046)
Regime Duration	0.004***	(0.001)
Ln(Population)	0.331***	(0.037)
Ethnic Fractionalization	-0.215	(0.227)
Agricultural Land	0.001	(0.002)
Constant	-5.016***	(0.833)
$R^2$	0.111	
F	26.264	
Observations	2113	

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Figure A3: Marginal Effect of Repression Conditional on Regime Type for Model 10

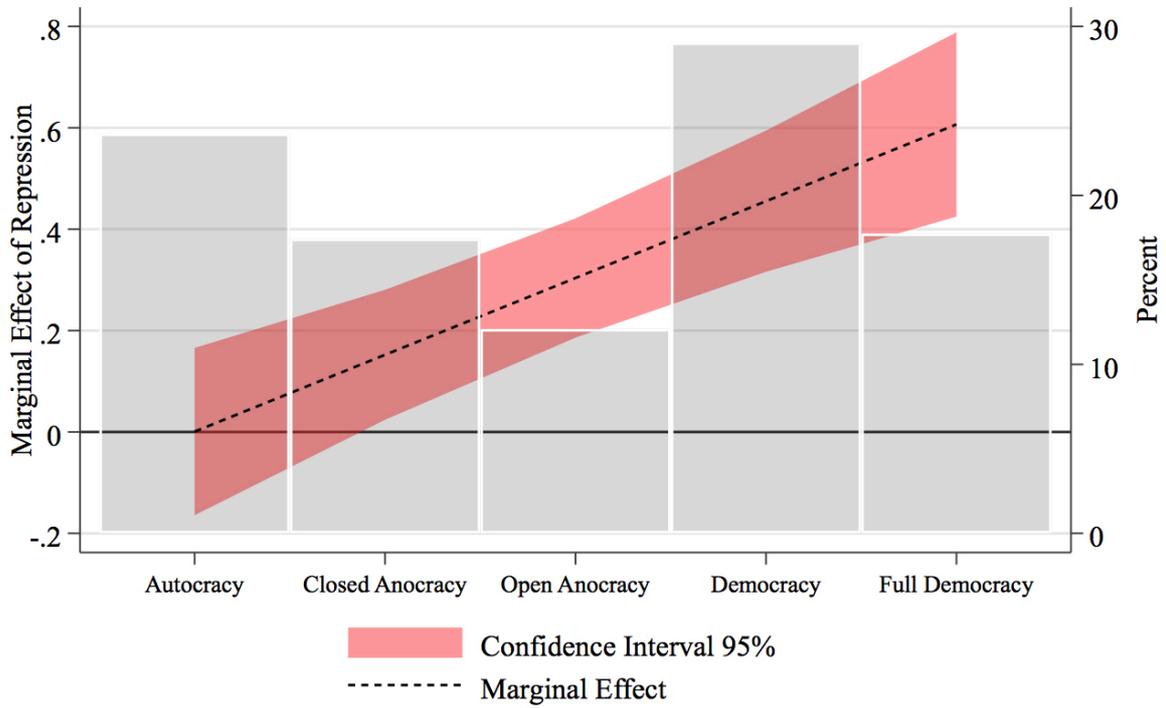


Table A4: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

	Upper Bound CI	Lower Bound CI	T Value
Autocracy	0.166	-0.164	0.009
Closed Anocracy	0.280	0.0240	2.331
Open Anocracy	0.421	0.186	5.072
Democracy	0.594	0.316	6.422
Full Democracy	0.789	0.425	6.549

T-Critical Value is 1.96

Based on Model 10

CI stands for Confidence Interval

## Appendix B

Table B1: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

	Upper Bound CI	Lower Bound CI	T Value
Autocracy	-0.313	-2.369	-2.561
Closed Anocracy	0.416	-1.182	-0.941
Open Anocracy	1.308	-0.158	1.540
Democracy	2.400	0.666	3.470
Full Democracy	3.624	1.358	4.315

T-Critical Value for 95% Confidence is 1.96

Based on Model 1

CI stands for Confidence Interval

Table B2: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

	Upper Bound CI	Lower Bound CI	T Value
Autocracy	-0.181	-0.823	-3.070
Closed Anocracy	0.0811	-0.418	-1.325
Open Anocracy	0.394	-0.0636	1.417
Democracy	0.769	0.228	3.615
Full Democracy	1.186	0.478	4.617

T-Critical Value for 95% Confidence is 1.96

Based on Model 2

CI stands for Confidence Interval

Figure B3: Marginal Effect of Repression Conditional on Regime Type for Model 2

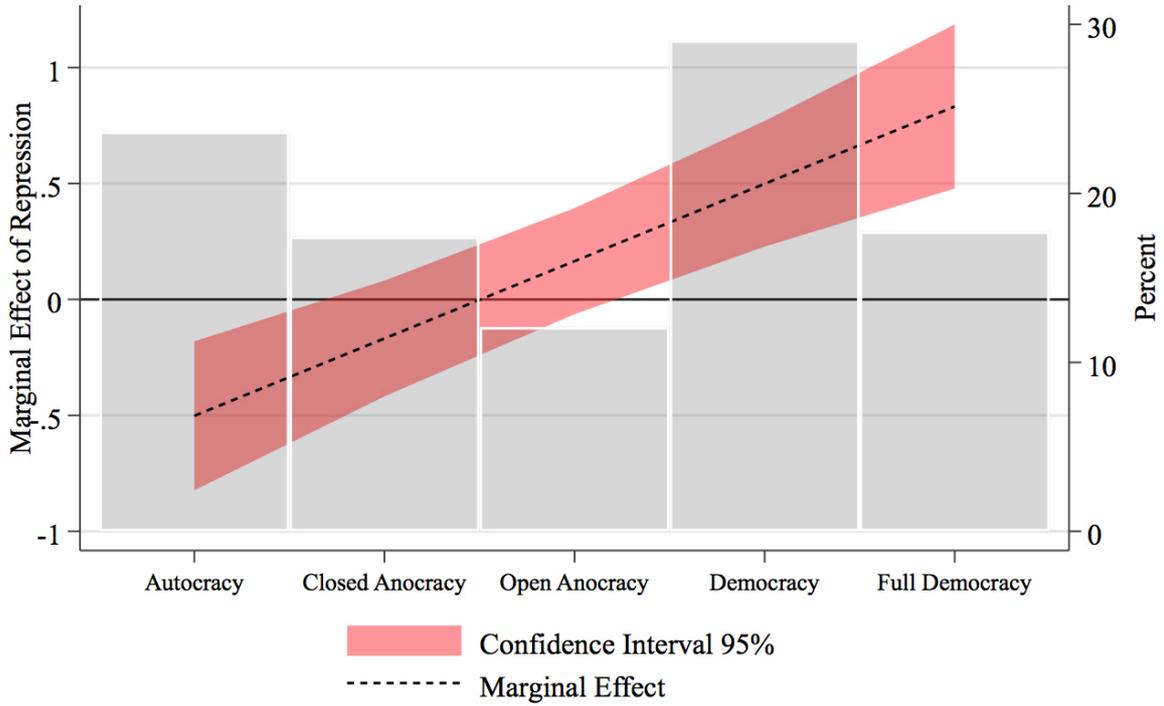


Table B4: Variance Inflation Factor

	Model1-WHIV	Model2-MM
	VIF	VIF
Repression (PTS)	6.59	6.59
Regime Type	8.58	8.58
Repression*RegimeType	6.96	6.96
Domestic Movement	1.47	1.47
Media Freedom	2.46	2.46
Ln(GDP/capita)	2.06	2.06
Regime Duration	1.19	1.19
Ln(Population)	1.36	1.36
Ethnic Fractionalization	1.40	1.40
Agricultural Land	1.16	1.16

Table B5: Multivariate Regression Analysis on Protest with Lagged Repression(PTS)

	Model 11
Lagged Repression(PTS)	-2.281** (0.704)
Regime Type	-2.119*** (0.628)
LaggedRepression*RegimeType	0.928*** (0.209)
Domestic Movement	0.807 (0.496)
Media Freedom	-1.952** (0.639)
Ln(GDP/capita)	3.116*** (0.293)
Regime Duration	-0.013 (0.008)
Ln(Population)	6.047*** (0.239)
Ethnic Fractionalization	-3.986** (1.467)
Agricultural Land	0.056*** (0.015)
Constant	-101.963*** (5.369)
$R^2$	0.389
F	125.1756
df	10
Observations	1973

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table B6: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

	Upper Bound CI	Lower Bound CI	T Value
Free	3.424	1.157	3.966
Partly Free	1.572	0.0467	2.083
Not Free	0.362	-1.706	-1.276

T-Critical Value is 1.96

Based on Model 7 - Freedom House Status

CI stands for Confidence Interval

Table B7: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

	Upper Bound CI	Lower Bound CI	T Value
Closed Autocracy	0.319	-1.766	-1.362
Autocracy	0.875	-0.743	0.160
Ambivalent	1.618	0.0928	2.202
Minimally Democratic	2.576	0.713	3.467
Democratic	3.664	1.204	3.886

T-Critical Value is 1.96

Based on Model 8 - Electoral Democracy Index V-Dem

CI stands for Confidence Interval

Table B8: Two-Tailed 95% CI Around Marginal Effect of Repression on Protest

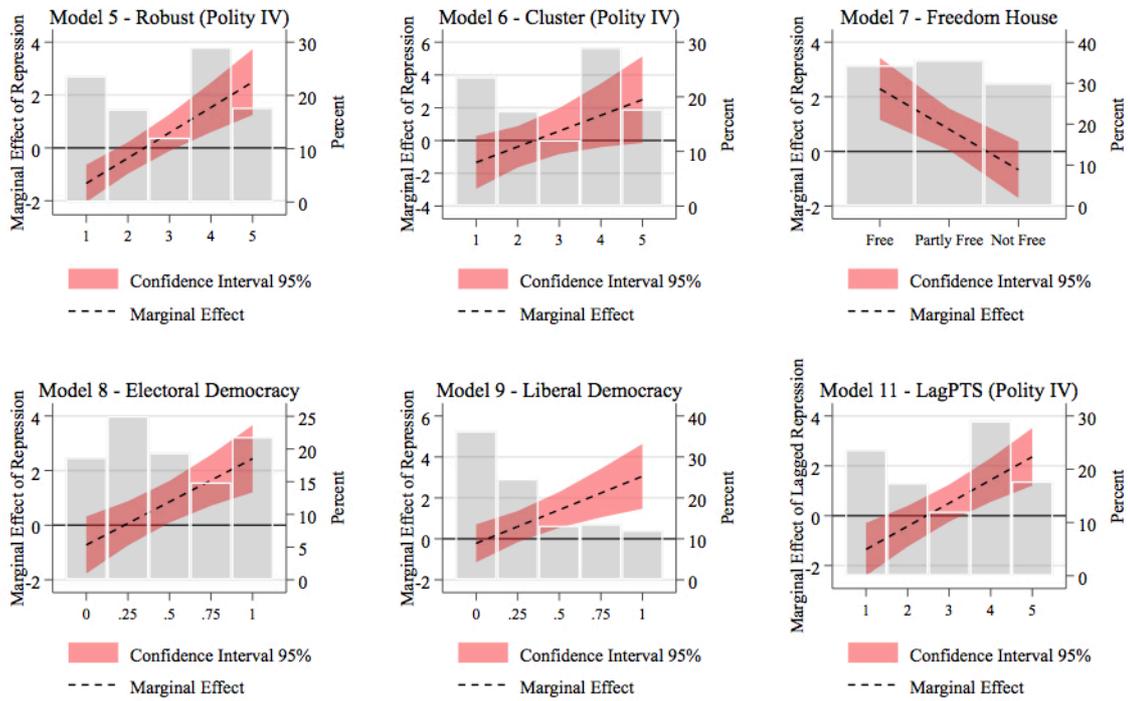
	Upper Bound CI	Lower Bound CI	T Value
Closed Autocracy	0.705	-1.144	-0.466
Autocracy	1.359	-0.162	1.545
Ambivalent	2.288	0.544	3.187
Minimally Democratic	3.419	1.049	3.702
Democratic	4.634	1.469	3.785

T-Critical Value is 1.96

Based on Model 9 - Liberal Democracy Index V-Dem

CI stands for Confidence Interval

Figure B9: Marginal Effect of Repression Conditional on Various Regime Scores



Models 5, 6 & 11, Regime Score Labels: 1 Autocracy, 2 Closed Anocracy, 3 Open Anocracy, 4 Democracy, 5 Full Democracy  
 Models 8 & 9, Regime Score Labels: 0 Closed Autocratic, 0.25 Autocratic, 0.50 Ambivalent, 0.75 Minimally Democratic, 1 Democratic

## Appendix C

Table C1: Variation of Non-Democratic Behaviors BY Freedom House

	FreedomHouse Frequency
Free	413
Partly Free	749
Not Free	588
Total	1750

For observations with a score of above 1 on MediaScore, above 2 on PTS\_s OR below 2 on DomesticMovement  
Based on Model 7

Table C2: Variation of Non-Democratic Behaviors BY Electoral Democracy V-Dem

	Electoral Democracy Frequency
Minimally Democratic	312
Democratic	162
Total	474

For observations categorized as Minimally Democratic and Democratic with a score of above 1 on MediaScore,  
above 2 on PTS\_s OR below 2 on DomesticMovement  
Based on Model 8

Table C3: Variation of Non-Democratic Behaviors BY Liberal Democracy V-Dem

	Liberal Democracy Frequency
Minimally Democratic	196
Democratic	48
Total	244

For observations categorized as Minimally Democratic and Democratic with a score of above 1 on MediaScore,  
above 2 on PTS\_s OR below 2 on DomesticMovement  
Based on Model 9