Willingness to Protest over Resource Extraction in Latin America

Moises Arce
Tulane University, marce@tulane.edu

Marc S. Polizzi
Murray State University, mpolizzi@murraystate.edu

Bryce Reeder
University of Missouri, reederbw@missouri.edu

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Moises Arce
Tulane University
Department of Political Science
New Orleans, LA 70118
marce@tulane.edu

Marc S. Polizzi
Department of Political Science & Sociology
Murray State University
Murray, KY 42071
mpolizzi@murraystate.edu

Bryce W. Reeder
Department of Political Science
University of Missouri
Columbia, MO 65201
reederbw@missouri.edu

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Abstract: Protests over resource extraction have increased in Latin America in recent years. However, significant variation exists in the region in terms of citizen's willingness to protest against resource extraction. We argue that this variation is based on the interaction of factors at both the individual and state levels. Individual-level characteristics, such as social engagement, influence the likelihood of protest activity. State-level characteristics, such as the quality of governance, also present opportunities for engaged individuals to challenge resource extraction. Following political mediation theory, we argue that collective action strategies are likely to be more productive in some political contexts than in others. Thus socially engaged citizens in high-quality governance environments are more willing to participate in protests over resource extraction vis-a-vis their counterparts in low-quality governance settings. We utilize survey data and state-level governance data across Latin America to determine why some individuals are willing to demonstrate against resource extraction while others are not.

1. Introduction

Latin America has the highest number of resource conflicts in the world (Özkaynak et al., 2015), and countries like Peru, Mexico, and Chile experience the most conflicts (OCMAL, 2017). Latin America is also known to be the world's most dangerous region for environmental activists, including those who contest resource extraction (Global Witness 2014). Existing literature has sought to explore the varied motivations and goals pursued by citizens near the extractive frontier (e.g., Arsel et al., 2016a; Arce, 2014, 2016; Bebbington & Bury, 2013; Conde & Le Billon, 2017; Svampa & Antonelli, 2009). This scholarship shows that protesters seek to defend basic rights, such as water access and quality, the integrity of land and landscapes, and/or the cultural survival of indigenous peoples; other protesters seek a more equitable distribution of the revenues, royalties, or other economic benefits generated from extraction.

Much of the existing literature examines the variation of resource conflicts cross-nationally (Arce & Miller, 2016; Arce et al., 2018; Haslam & Tanimoune, 2015) and sub-nationally (Arce & Hendricks, 2019; Arellano-Yanguas, 2010; Mähler & Pierskalla, 2015; Ponce & McClintock, 2014; Orihuela et al., 2019). Some studies examine the relationship between mineral wealth and conflicts (Arce & Hendricks, 2019; Arellano-Yanguas, 2010). Other studies explore the relationship between geo-referenced extractive areas and conflicts (Haslam & Tanimoune, 2015; Mähler & Pierskalla, 2015). Together, these studies confirm the extraction-conflict nexus. However, while studies have used individual-level surveys to explore protest participation more generally (Moseley, 2015; Boulding, 2014), none have examined why individuals are willing to protest over resource extraction across Latin America.[1] What individual- and state-level factors influence citizens' willingness to protest over extraction?

As several studies document, there are clear power imbalances in the negotiations over resource extraction between host communities and extractive industries. Backed by national governments embracing the "extractive imperative" (Arsel et al., 2016b)[2], extractive industries diffuse the claims of protesters by providing selective material rewards to the leaders of protest organizations (e.g., bribes or employment opportunities) or by spending money on high-profile projects in collaboration with local authorities, mostly municipal mayors (e.g., the beautification of the town's central plaza or the rebuilding of the town's school). The goal is to win the support of the local population and authorities through a series of small concessions. Citizens who are opposed to resource extraction as a development strategy face the daunting challenge of reversing or blocking mining concessions; their resistance efforts entail the sustained social engagement of networks of activists and their organizations. In other cases, protesters are not opposed to extraction, but rather seek to negotiate (or re-negotiate) the terms of extraction. Protesters demand prior consultation rights, make calls for environmental and social impact studies, and petition equitable distribution of resource rents to host communities (Conde, 2016; Conde & Le Billon, 2017).[3]

Moreover, as Boulding (2014) and Moseley (2015) show, individuals do not make political decisions in a vacuum. Rather, the context in which they operate affects their political behavior (similar Barnes & Córdova, 2016). Moseley (2015) has aptly shown that the quality of institutions shapes an individual's decision to attend a protest rally or demonstration. Specifically, socially-engaged citizens in low-quality institutional settings are substantially more likely to protest because they are unable to influence policy via state instituions as these are perceived to be ineffective or unresponsive. In this view, formal institutions operate as a safety valve for citizen complaint and satisfaction, but this safety valve malfunctions when institutional structures become

unresponsive to societal demands, making "street protests" the relief mechanism for built-up societal pressure.

While protests are commonly viewed as a byproduct of ineffective and unresponsive institutions, our paper examines an individual's willingness to protest over resource extraction (not her *actual* participation in a protest rally or demonstration as in Moseley), and advances an alternative interpretation of the impact of institutions on protest likelihood. Building on political mediation theory (Amenta & Young, 1999; Amenta, Caren, Chiarello, & Su, 2010), we argue that the success of collective action is politically mediated as movements are more influential in some institutional contexts as opposed to others. This theory suggests that protests and political outcomes are rarely connected directly. Rather, the impact of protests on outcomes is mostly indirect or mediated by the institutional context in which they occur. These institutions produce a country's policymaking capabilities and policy characteristics, and they range from court decisions to legislative decrees and executive orders. Therefore, we argue that the quality of national policymaking shapes an individual's willingness to participate in protests over resource extraction as this environment often determines the capacity of the state to deliver on protesters' demands. In countries with a high quality of governance, citizens are willing to protest over resource extraction because they perceive the government as possessing the capacity to address their claims. Conversely, in countries with a low quality of governance, socially-engaged citizens view institutions as incapable of addressing long-term policymaking change, and accordingly, are less willing to protest over resource extraction.[4]

We begin this article by providing background information on the significance of resource extraction to developing Latin American economies, including a discussion of how extraction encourages contention. Thereafter, we explain how governance quality mediates the relationship

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between social engagement and the likelihood to protest. We precede the presentation of our research design with two examples from the region. The empirical section of the article draws on cross-national surveys of Latin America (Latinobarómetro, 2015) and state-level data from the Inter-American Development Bank's Governance Quality Index (Franco Chuaire & Scartascini, 2014) to examine the variation in protest likelihood in the region. The conclusion summarizes the contributions of this article and suggests new areas for future research.

2. Resource Extraction as a Development Strategy

Driven by record-high commodity prices, extractive sector investments increased nearly ten-fold between 2000 and 2013, from US$ 86 billion to US$ 735 billion (ECLAC, 2013). In 2014, Latin American received approximately 25 percent of global exploration investment flows and held more than 28 percent of the world's mineral investment portfolio. The region is the world's leading source of minerals and the second most important source of oil (ECLAC, 2013). It produces 15 percent of the world's gold, 45 percent of silver and 40 percent of copper. Peru, Mexico and Chile are the top gold, silver, and copper producers, respectively. In 2013, according to the World Trade Organization (2014), oil and minerals accounted for 40 percent of total Latin American exports, compared to a global average of 22 percent. In the same year, extractive activities' rents represented more than 15 percent of GDP in resource-rich Latin American countries (Walter, 2016).

While resource extraction contributes to regional macroeconomic growth, the "extractive imperative" (Arsel et al., 2016b) as a national development strategy also leads to clashes with host communities over the use of land and water. However, not all mobilizations against resource extraction concern the adverse impact of mining on livelihoods and the environment. Soaring commodity prices yield remarkable profits, and mining-related taxes have become the most

important intergovernmental transfer linked to resource extraction. These transfers encourage a sizeable number of mobilizations over the distribution and use of these resource revenues across multiple tiers of government—local, provincial, regional and national. Challengers also seek improved transparency on resource revenues (Haufler 2014).

Likewise, protesters increasingly challenge private firms directly over the state—especially in localities with large-scale mining firms (Haslam & Tanimoune, 2016; Gustafsson, 2017). Amengual (2018) shows that when local movements are fragmented, multinational mining firms target specific organizations with private goods to placate opposition and protect future access to mining locations. However, the state remains at the epicenter of most extractive conflicts as several campaigns include claims related to environmental degradation, land rights and the protection of livelihoods.

3. Individual and Contextual Factors Shaping Protest Likelihood

Moseley (2015) uses the Latin American Public Opinion Project's (LAPOP) AmericasBarometer surveys to examine the individual- and state-level characteristics, explaining the variation in protest participation across twenty-four countries in Latin America. Substantively, his paper reveals the importance of civic engagement as a main driver of contention. As Moseley (2015) explains:

> [e]gaged citizens are more likely protestors for two reasons. First, they are more likely to have access to the key organizational tools required for communicating and mobilizing. Second, through their active involvement in political and nonpolitical organizations, they have more exposure to the relative strengths and weaknesses of formal institutional structures, which provides them with information about the necessity and/or effectiveness of protest participation. (p. 13)

Moreover, Moseley (2015) shows that institutional quality conditions civic engagement, shaping an individual's decision to mobilize. While low-quality institutions incite protest participation, high-quality institutions, which allow citizens to influence policy via state institutions, suppress it. Institutions thus operate as a safety mechanism for citizen complaint and satisfaction; when institutions are ineffective or unresponsive, protests follow. In Moseley's (2015) words: "[e]ngaged citizens in low-quality institutional environments are almost twice as likely to participate in a protest as their counterparts in high-quality institutional settings" (p. 30-31). Therefore, social engagement and institutional quality interact to explain the variation in protest participation in Latin America.

We agree with Moseley (2015) on the salience of civic engagement as it relates to protest likelihood, but we differ on the effects of institutions. Following political mediation theory (Amenta & Young, 1999; Amenta et al., 2010), we argue that collective action strategies are likely to be more productive in some political contexts than in others. Accordingly, challengers' ability to influence outcomes depends partly on conditions they can control (e.g., their ability to mobilize, forms of organization, and strategies) and partly on the varied political contexts and institutional settings they face.[5] Crucial to this argument, this literature informs us that protests' effects on outcomes are rarely direct. Instead, a broad range of institutions involved in the policymaking process – from the enforcement to the adjudication of the law (e.g., court decisions, legislative decrees and executive orders) – shape the long-term consequences of protests. To be clear, the paper does not examine the outcomes of protests. Rather it suggests that an individual's willingness to protest over resource extraction is shaped by what government institutions may accomplish as a result of her collective action.

Because individuals lack complete information, institutions become a salient source of external data and provide cues to determine citizens' policy stances. These "source cues"—or heuristics—reduce citizens' position-taking costs thereby conditioning their proclivity to participate in politics (Barnes & Córdova, 2016, p. 673; Zaller, 1992; Mondak, 1993).[6] Specifically, Barnes and Córdova (2016) argue that citizens utilize information "on the institutional capacity of government as a whole and . . . on the capacity of the different institutions that make up government to work cooperatively and consistently [to] produce good policy outcomes" (p. 673-674). Consequently, challengers assess collective action strategies based on the government's ability as a whole, and not isolated to the current administration, to deliver social policies affecting citizens' daily lives. If government cannot provide basic services to citizens, then "the government is unlikely to gain sufficient credibility in the eyes of the public to secure high policy support" (Barnes & Córdova, 2016, p. 674), leaving even socially-engaged citizens in such settings with little incentive to mobilize. Conversely, socially-engaged citizens in high-quality governance environments are willing to participate in a protest rally or demonstration because they perceive a higher probability of influencing positive outcomes as compared to in low-quality governance environments.

Our dependent variable also differs from Moseley (2015). Moseley's dependent variable asks respondents if they participated in a street march or public demonstration in the previous twelve months,[7] but does not address likely political action against resource extraction specifically. In Moseley's sample, for instance, Bolivia, Peru, and Argentina were most likely to experience protests, while El Salvador, Panama, and the Dominican Republic were least likely to. By contrast, in our sample, the countries where respondents are more willing to protest over resource extraction were Colombia, Chile, and Costa Rica, while Ecuador, Uruguay, and Venezuela were the least

willing. This comparison goes to show that the countries that experience protest participation at large are different from the countries where citizens are willing to protest over resource extraction.

To summarize, protests over resource extraction may take on a variety of issues, from environmental protection to indigenous self-determination to the distribution of resource revenues, and can last several weeks, months, or even years. Challengers employ myriad strategies to set the extraction agenda, open a direct dialogue with government officials, or adapt existing policies (Silva, Akchurin, & Bebbington, 2018). Such efforts require a stable policymaking environment to achieve these long-term objectives. In our view, a citizen's institutional environment is not a static feature that triggers higher or lower levels of collective action. Rather, a citizen's willingness to protest over resource extraction is shaped by her ability to leverage the strengths of the institutional environment to her advantage. Thus, the willingness to participate in a protest over resource extraction should be higher / lower where the quality of governance environment is strong / weak.

Before going further, an important clarification about the role of institutions is warranted. Eisenger (1973) and Tarrow (1998) argued that we should observe a curvilinear relationship between protests and the openness of political institutions. Open political structures discourage protests by extending conventional means of political participation to redress grievances. Closed political structures also discourage protests because of repression, which altogether disincentivizes protest. But protest is higher in mixed political structures because some access to political institutions exists and the state's capacity to repress is somewhat limited.[8] These arguments focus on the emergence of protest, specifically the mobilization of challengers. Additionally, critics argue that political structure models are often conceptualized too broadly to be tested empirically (Goodwin & Jasper, 1999). In contrast, we focus on how the policymaking capabilities and policy

characteristics of different polities mediate the likelihood to shape positive outcomes. Hence, when we speak about the governance environment, we are thinking about policymaking capabilities and policy characteristics, not formal institutions (i.e., the relative openness of political structures).

4. Protesters and their Governance Environment

To recast our main argument, the governance environment that challengers face shapes their likely participation in politics. A high-quality governance environment emboldens aggrieved groups by highlighting the state's ability to meet these grievances, consequently reinforcing engaged citizens' willingness to participate in collective action. In contrast, a low-quality governance state discourages engaged citizens to participate in politics as they perceive a lower probability of indirectly influencing outcomes vis-à-vis weak policymaking institutions.

Two examples may help illustrate how citizens in extractive areas interact with institutions to achieve their goals. As the literature shows, extractive conflicts are varied and involve different sets of grievances. One illustrative case focuses on a conflict over the distribution of mining's benefits; the other case demonstrates a conflict over basic rights. For our purposes however, the nature of the grievance is less relevant than the interaction that mobilizations have with governmental institutions.

On the one hand, leading copper producer Chile has 37 resource related conflicts, the second highest number of observed conflicts regionally (OCMAL, 2017). The country also possesses high-quality governance environment based on the Inter-American Development Bank's Governance Quality Index (Franco Chuaire & Scartascini, 2014). It has a Governance Quality score of 2.35—among the highest levels in our sample (about 1.962 standard deviations above the mean). A high-quality governance state like Chile is expected to have several resource conflicts (see Figures 1 and 3).

Chile's copper mines are located in the northern region of the country, specifically in the underpopulated areas of the Atacama Desert. When union contracts expire, typically every three to four years, it sets the stage for new negotiations to establish new wages and benefits, and if these talks fail, union workers strike. In February 2017, negotiations were unsuccessful and the 2,500 member-union at Escondida, the world's largest copper mine operated by BHP Billiton, went on strike. Union workers demanded a salary increase of 7 percent and a bonus. Escondida, in turn, offered a third of the bonus demanded by the union with no salary increase. Union workers ended the strike by invoking a rarely used legal provision, Article 369, allowing them to extend their old contract for 18 months, after which both parties must try to reach a new agreement, and companies like Escondida are legally obligated to comply.

The strike lasted 43 days, ending just before major labor law changes, which were widely seen as bolstering organized labor groups. President Michelle Bachelet's center-left government approved the new law in 2016. The new law requires companies to offer the minimum benefits in a previous contract as the negotiating floor. By returning to their old contracts, union workers will enjoy existing benefits and working conditions. But more importantly, they will hold the next round of negotiations under the "upcoming labor law that strengthens their hand."[9] The union told media outlets that the labor law changes "had informed their negotiations."[10]

On the other hand, Ecuador posseses significant oil reserves. The country produces approximately 557,000 barrels of oil per day (OPEC, 2015), with oil rents comprising approximately 13.7 percent of its 2014 GDP (World Bank, 2016).[11] Unlike Chile, Ecuador only has 7 resource conflicts, among the fewest number of conflicts in our sample (sample mean is 12.38) (OCMAL, 2017). Ecuador also has a Governance Quality score of 1.01, far lower than the 1.41 mean value (about .824 standard deviations below the mean) (see Figure 3).

In Ecuador, demands for environmental justice over the negative externalities of oil extraction have been common and aggrieved groups have funneled their claims through the courts. In 1993, for instance, Ecuadorian indigenous people of the Oriente region filed a class action lawsuit in a US federal court against Texaco (Aguinda v. Texaco).[12] The complainants alleged that between 1964 and 1992 Texaco's oil operations polluted the rainforests and rivers in Ecuador, resulting in environmental damage and detrimental health effects for locals. Chevron acquired Texaco in 2001. In 2002, the US federal court dismissed the lawsuit, deciding Ecuador was the appropriate venue for litigating these claims.

In 2011, an Ecuadorian judge charged Texaco/Chevron for extensive environmental and cultural damages. The court ordered Chevron pay $8.6 billion in damages and clean-up costs, with damages increasing to $18 billion if Chevron did not issue a public apology. After several court appeals, Ecuador's Supreme Court upheld the ruling against Texaco/Chevron for environmental damages, but halved damages to $9.51 billion.

The ruling set off a lengthy, complex series of international proceedings, including international arbitration because the ruling violated a US-Ecuador bilateral investment treaty, lawsuits in Canada targeting Chevron assets in this country, and a racketeering lawsuit against the complainant's lawyers and representatives in US federal court because the ruling in Ecuador involved a conspiracy to commit extortion.

In March 2014, US district judge Lewis Kaplan ruled in Chevron's favor, finding that the Ecuadorian community's lawyers fabricated evidence, made bribes, and ghost-wrote court documents. The plaintiffs were therefore barred from collecting the $9.51 billion judgment because the "decision was obtained by corrupt means." In August 2016, a US Court of Appeals agreed with the lower court's ruling. In June 2017, the US Supreme Court declined to hear the

plaintiffs' appeal, meaning that the lower court decision, blocking the enforcement of the Ecuadorian award, stood.

Ecuadorian indigenous groups often rely on international allies to further their claims against oil drilling (Eisenstadt & West, 2017). For example, American activist-lawyer Steven Donziger and California-based Pachamama Foundation led the charge in the $9.51 billion judgment. While these alliances speak to the generally inadequate political representation of indigenous people, they also reveal Ecuador's low-quality governmenance environment. Chevron did not deny the environmental damage in the Ecuadorian rainforest, but when Texaco/Chevron drilled for oil in Ecuador, they were doing so as a partner of PetroEcuador (formerly CEPE), the country's state-run oil company.[13] Indigenous groups "strongly criticized the central government's failure to attend to environmental degradation, but were divided over whether to further explore and drill for oil (Eisenstadt & West, 2017, p. 245). Moreover, when Attorney Donziger was shown evidence contradicting the contamination spread from oil pits, he was unyielding. "This is Ecuador, O.K.," he said. "At the end of the day, there are a thousand people around the courthouse, you will get whatever you want. Sorry, but it's true."[14]

[Insert Figure 1 about here]

To summarize—and following political mediation theory—a protest rally or demonstration seldom decides its final outcome. Instead, movements interact with several institutions, such the federal, provincial, or local governments, to influence positive outcomes. Our two examples demonstrate this logic. The conflicts in Chile and Ecuador surrounded divergent grievances. The Chilean conflict encompassed the distribution of benefits, while the Ecuadorean case was a dispute over basic rights. Nonetheless, protests alone did not determine the either dispute's outcome, and the successful outcome of these events depended on positive interactions with institutions. In

Chile, union workers drew on their governance environment's strengths, including Article 369 and the new labor law, to achieve positive results. In contrast, despite the well-known mobilizing capacity of Ecuador's indigenous peoples, the country's low-quality governance environment diminished their ability to affect change. Indigenous groups tend to rely on third-party actors (e.g., Attorney Donziger) and other international allies (e.g., the Pachamama Foundation) to funnel claims. In all, the governance environment shapes individual decision-making as it provides an information source that help determine the likelihood of achieving positive outcomes. These examples, however, only provide circumstancial evidence to illustrate our argument. To identify general patterns, we turn to the empirical analysis next.

5. Data and Methods

To test our central argument, we use the Latinobarómetro (2015) survey for individual-level variables, and the Inter-American Development Bank's Government Capabilities Index (Franco Chuaire & Scartascini, 2014) for country-level governance quality. The Latinobarómetro is a cross-sectional study employing the survey respondent as its unit of analysis. It includes a randomized sample of 20,250 respondents within 18 Latin American countries.[15] As such, it creates nationally-representative, random, and stratified surveys that reach both urban and rural populations to develop a more robust and representative sampling of the total population, rather than selecting the sample on the dependent variable by only analyzing groups most likely to participate in these protest actions. As a result of this operationalization, our findings can only be generalized to the region in the specified time period. However, given the importance of resource extraction to the economies of several developing countries, it remains an important sample to analyze.[16]

We use the survey question regarding an individual's stated likelihood to protest over resource extraction as our dependent variable (hereafter, *Protest*). Latinobarómetro asks respondents to choose a Likert scale value from 1 (not at all likely) to 10 (very likely) based on their agreement with the statement: *"...how willing would you be to demonstrate and protest about the extraction of natural resources?"* The median response is 6 on the 10-point scale. Figure 2 displays the average response for each country in our sample. Colombia and Ecuador have the highest (7.01) and lowest (4.23) average protest likelihoods, respectively.[17]

[Insert Figure 2 about here]

5.1. Individual-Level Characteristics

At the individual-level, an individual's perceptions of social networks as a tool of political action serves as our key independent variable (hereafter, *Social Engagement)*. As stated above, social networks provide the organizational resources necessary for collective action, as well as the opportunities to join like-minded citizens. For this measure, we use individuals' attitudes of social networks as a viable channel for political participation. Respondents are asked to pick the statement with which they most agree: "Social networks allow you to participate in politics"; "Social networks create the illusion that you are participating in politics"; "Social networks are not suitable for participat[ion] in politics." The recoded variable, *Social Engagement,* is dichotomous, whereby the survey response of "Social networks allow you to participate in politics" is coded 1, and 0 otherwise.[18] The decision to exclude respondents answering "Social networks create the illusion that you are participating" is due to the greater subjectiveness of the statement. While one could interpret the question as implying social networks are a form of low-cost activism without connection to other forms of political action, another individual could interpret social networks as a form of expressing grievances outside of the formal political system.

Social engagement plays a vital role in an individual's likelihood to participate in collective action. Research on non-electoral participation finds that networks provide the organizational resources and opportunities necessary for individuals to engage in collective action (Jenkins, 1983; McCarthy & Zald, 1977). Following resource mobilization literature, engaged citizens have access to participation channels that are unavailable to disconnected citizens. When individuals view social engagement as a useful avenue for political participation, then they are also likely to be politically interested, be politically sophisticated, join activities and organizations, and are likely to participate in collective action.

We also include several controls found to affect mobilization likelihood, such as an individual's civic participation level, the frequency she campaigns for political parties (*Campaign Frequency*), democracy support, presidential approval, interpersonal trust, and personal and national economic perceptions (see Appendix, Table 3). Additionally, we control for demographic characteristics such as gender, age, socioeconomic status, and education years.

Because our dependent variable (*Protest*) measures an individual's willingness to protest over resource extraction, not *actual* participation, we also control for the individual's previous protest activity (*Protest Activity*). We use survey answers based on participation in either an authorized *or* unauthorized march or demonstration (see Appendix, Table 2). By controlling for actual participation, we isolate an individual's willingness to protest over resource extraction.

As environmental attitudes often relate to resource extraction protests (Eisenstadt & West, 2017), we also control for environmental issue salience (hereafter, *Environment)*. The Latinobarómetro (2015) asks respondents to name the most important factors for national development. Respondents choose items such as infrastructure, institutions, social policies, and the environment. We created a dichotomous measure based on respondent answers mentioning the

environment. We expect individuals' protest likelihood to increase if they prioritize the environment when thinking about development.

Finally, we account for a respondent's proximity to and experience with extraction by including a measurement of the sum total number of mining properties within a 30-kilometer radius of a survey respondent (hereafter, *Proximity to extraction*). We utilize information from Infomine (2011), updated by Haslam and Tanimoune (2015), to determine the known universe of firms in the region operating at the advanced exploration stage or above. These data provide the geospatial locations of 783 active properties in 23 countries. We then determine the number of mining properties located close to a survey respondent using a distance of 30 kilometers from a survey area to the closest mining property. We derive the survey area by using the geographic location variable found in Latinobarómetro, which is known as city (or *ciudad*) and refers to the smallest political or administrative division of a state.

5.2. Country-Level Characteristics

For country-level data, we utilize the Government Capabilities Index from the Political Institutions, Government Capabilities, and Public Policy International Dataset created by the Inter-American Development Bank (Franco Chuaire & Scartascini, 2014). This index measures each country's policymaking capabilities among four major institutional bodies: the legislature, political parties, the judiciary, and bureaucracies. Previous studies found that these institutions often determine policymaking's effectiveness (Stein & Tommasi, 2007). This continuous-level measure ranges from 0 to 4, with lower values indicating low-quality policymaking capabilities. It ranges from .77 (Venezuela) to 2.36 (Costa Rica).

We refer to this variable as a country's *Governance Quality*. Its dimensions include public policy stability, adaptability, coordination, efficiency, and public regardedness.[19] It also

incorporates legislative capabilities, judicial independence, political party institutionalization, and civil service quality. Furthermore, the variable follows the logic of "intertemporal cooperation," meaning these data reflect the policymaking environment as an ongoing process of cumulative institutionalization of a government's capabilities rather than a reflection of the incumbent administration (Scartascini & Tommasi, 2014, p. 5-6). It also biases "*cooperation* as opposed to imposition" in the policymaking arena (Scartascini & Tommasi, 2014, p. 5).

Our *Governance Quality* measure is an appropriate operationalization of our central argument. This variable considers overall effectiveness of national institutions in providing day-to-day basic services across a wide range of policy issues, rather than focusing on a single policy dimension. Our hypothesis states that an individual's willingness to protest over resource extraction increases when they perceive the government as having the capacity to respond to their demands. If the state fails to provide basic services, then even highly-engaged citizens will be unwilling to protest over resource extraction as they do not perceive a policymaking environment capable of addressing their grievances. Building on political mediation theory—protests have an indirect or mediated effect on outcomes—the state's policymaking capabilities are crucial in responding to the claims of protesters, and thus the perceived efficacy of protests. Therefore, we expect socially-engaged individuals to utilize their available resources to protest resource extraction when they believe a greater government capacity to deliver good policy outcomes. In contrast, citizens will be unlikely to view protests as an effective means of change when the policymaking environment is weak, regardless of their level of social engagement. Figure 3 shows the variation of this measure for our sample.

[Insert Figure 3 about here]

We also include country-level controls to prevent spuriousness in our correlations, such as the natural log of population size, GDP growth, and GINI coefficients. Population and GDP growth data come from the World Bank (2015) and GINI data come from the Standardized World Income Inequality Database (SWIID) (Solt, 2016).

5.3. Methods

We estimate multilevel models to account for the nested nature of our data (i.e., individual- and country-level characteristics) (Snijders & Bosker, 2012). Our data contain information for individuals i within countries j. Multilevel modeling permit coefficients to vary randomly within the groups (countries j), allowing for the estimation of standard errors while assuming correlation of error terms within these groups. Snijders and Bosker (2012, p. 106) also explain that cross-level interaction terms can be used to test interactions at the individual- and country-levels.[20]

Following this logic, we test three models. The first tests only individual-level characteristics, the second adds country-level characteristics, and the third model tests the interaction between *Social Engagement* (measured at the individual-level) and *Governance Quality* (measured at the country-level). We expect to find a positive correlation between this interactive term and an individual's willingness to protest over resource extraction. Our dependent variable (*Protest*) is ordinal (10-point scale), therefore, we estimate our models using ordered logistic multilevel models with random intercepts.

6. Results

Table 1 presents our empirical results. Model 1 uses only individual-level variables to predict willingness to protest over resource extraction. These results confirm previous protest participation studies (Moseley, 2015). According to our model, socially-engaged individuals, who are civically-minded and campaign frequently, are more likely on average to protest over resource

extraction than less engaged individuals. We also explore the substantive impact of these variables (see Table 2). Based on Model 1, a socially-engaged, civically-minded individual who campaigns frequently has close to a 30 percent likelihood of being very likely to protest (a 10 on the 10-point protest scale), while a person who is at a 0 on each of these variables is only 19.32 percent likely (a difference of about 10 percent).

[Insert Table 1 about here]

[Insert Table 2 about here]

Models 2 and 3 show the results for the multilevel model and the interactive model, respectively. As shown in Model 2, *Governance Quality* has a positive and statistically significant effect on an individual's likelihood to protest over resource extraction. Model 3 shows the results for the interaction (*Social Engagement * Governance Quality*), which is a more direct test of the individual's decision-making calculus over resource extraction. Following Brambor, Clark, and Golder (2006, p. 66), the constitutive terms of the interaction are included in the respective models. The results show a positive and statistically significant relationship between the interaction variable and protest likelihood. These findings are consistent when including individual- and state-level controls.

Several control measures appear to be significant predictors of willingness to protest over resource extraction. *Civic participation*, *Campaign frequency*, and *Education years* are positive and statistically significant across all models, which suggests that civically-minded individuals, who are politically-knowledgeable and well-educated, are more likely to protest than those who are less civically-minded. *Age* is negative and statistically significant. *Protest activity* and *Environment* are both positive and statistically significant predictors of willingness to protest. Predictably, concern over environmental protection positively influences protest likelihood. It is

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also intuitive that previous protest engagement increases protest likelihood. Therefore, even when controlling for *actual* participation in a demonstration, march, or protest, our findings are robust. Finally, *Proximity to extraction* is positive and statistically significant (see Model 4), indicating that an individual is willing to protest over extraction when she is located directly in the vicinity of these activities.

Table 1's results only tell us the direction and significance of key independent variables. Therefore, we also present the predicted means of our interaction variable to determine the substantive impact of our central argument. Figure 4, based on individuals who are very willing to protest extraction (i.e., a "10" on *Protest*), demonstrates that higher governance quality levels increase individual protest likelihood. Moreover, socially-engaged individuals possess a higher likelihood than non-socially-engaged ones. As predicted probabilities, a socially-engaged person is about 10 percent more likely to be a "10" on this scale than a non-socially-engaged individual, when *Governance Quality* is at its highest value (2.36) and all other variables are held constant.

[Insert Figure 4 about here]

Our results speak to existing findings on resource conflicts in Latin America. The expectation is that countries with high *Governance Quality* values are more likely to see extractive conflicts. Figure 1 is a map of known conflicts near extractive sites, using data from Haslam and Tanimoune (2015). For instance, Chile has both a high *Governance Quality* and a high number of extractive conflicts (see Figure 1). Ecuador, on the other hand, has far fewer conflicts and possesses a much lower *Governance Quality* value. Chile and Ecuador are, in fact, at opposite extremes when it comes to the number of resource conflicts and governance quality. We find the same trend in this paper: an individual's willingness to participate in a protest against resource extraction increases in high-quality *Governance Quality* states.

Institutions are not static configurations that incentivize collective action in a given time period. Rather challengers ponder their ability to influence outcomes based on the institutional environment where they live, and this, in turn, affects their willingness to engage in collective action. As shown in Figure 4, a high-quality governance environment reinforces engaged citizens' willingness to protest over resource extraction because institutions are seen as "source cues" of a government's general capacity to deliver good policy outcomes (similar Barnes & Córdova, 2016).

7. Sensitivity Analysis

In addition to Table 1's models, we conducted several robustness tests to ensure the stability of our findings. First, our measure of social networks (*redes sociales*) may be interpreted by some respondents as social media use to obtain and share political information. Despite the generic language of social networks, which can apply to several formal or informal social connections, we nevertheless control for frequency of e-mail and internet usage (hereafter, *Social Media*). The sensitivity analysis results are consistent with our previous findings (see Appendix, Table 4).

Second, while we argue that our main country-level independent variable, *Governance Quality,* is the most robust operationalization of our central argument, we must consider the likelihood that our results are simply a function of this particular measure. Hence, we use the World Bank's *Quality of Governance Indicators* as alternative measures of a country's governance environment. These measures account for the strength of democratic institutions and overall government effectiveness perceptions, and include separate components of *Rule of Law*, *Government Effectiveness*, and *Voice and Accountability*. Following Moseley (2015), we also create an additive index of these three components (hereafter, *Additive)*.[21] Our results are consistent with our previous models when we use either the *Additive* measure of government

capabilities or if we use the constituent terms separately (see Appendix, Table 5). Overall, the stability of our results across different operationalizations of our independent variable and the use of exhaustive controls, demonstrates the robustness of our findings.

8. Conclusion

Existing resource conflict literature mostly dwells on event data from the print media to explore the factors affecting mobilization cross-nationally and sub-nationally. Resource conflict case studies also examine the coalitions and organizations that drive successful campaigns against extractive projects. While these works have made important contributions, none examine individual willingness to protest extraction across Latin America.

Our paper shows that both individual- and state-level factors influence an individual's willingness to challenge resource extraction. Socially engaged individuals are more willing to protest over resource extraction because, through their active participation in networks and organizations, they are more acquainted with the relative strengths and weaknesses of their institutional environment, which altogether provides them with information about the expediency of collective action. Governance quality, in particular, presents opportunities for engaged individuals to challenge resource extraction, albeit in a different way than anticipated by the existing literature.

The conventional wisdom, in fact, frames protests as a byproduct of ineffective and unresponsive institutions. This argument centers on formal institutions (e.g., the relative openness of political structures), and critics have pointed out that political structure offers only a mechanistic understanding of social movements (Goodwin & Jasper, 2003). In contrast, political mediation theory (Amenta & Young, 1999; Amenta et al., 2010) informs us that movements continuously interact with institutions in a dynamic process to influence positive outcomes. Our review of

resource conflicts shows that, while mobilizations may have a short-term impact on outcomes, the long-term consequences of mobilizations involves a continuous interaction with several different institutions. These institutions are linked to a country's policymaking capabilities and policy characteristics, ranging from court decisions to legislative decrees and executive orders. Thus, a strong governance track-record reinforces an engaged citizen's willingness to protest over resource extraction because different governmental institutions are seen as "source cues" of good policy outcomes (similar Barnes & Córdova, 2016). In low-quality governance environments, by contrast, citizens are deprived of this salient source of information, and accordingly, they are less likely to protest over resource extraction.

While our results show that the likelihood of collective action over resource extraction is politically mediated, there are several instances where citizens contest fiercely against mining, even leading to the deaths of protesters (Bond & Kirsch, 2015). Global Witness (2014) records 1,024 deaths of environmental activists between 2002 and 2014 around the world—a period that overlaps with the escalation of extractive conflicts globally. In 2017, almost 60% of the killings registered were from Latin America and Brazil had the highest number of deaths (57 people) (Global Witness 2017). Citizens near extractive areas seek to defend basic rights (e.g., water access, the cultural survival of indigenous peoples) in response to the ecological threats associated with mining. Leaders of social organizations fighting extraction have also faced arrests, police violence, defamation, intimidation, and other forms of repression. Future research should investigate how these forms of repression impact collective action over resource extraction.

Our study on the willingness to participate in protests over resource extraction is limited by the Latinobarómetro surveys' questions. Yet we find congruence between our measure of social engagement and Moseley's indicator of community engagement—an indicator that gauges the

frequency with which citizens participate in local organizations. Both indicators capture the dense organizational networks that are pivotal to sustain mobilizations. The Latinobarómetro surveys also do not allow us to explore the reasons for the challenge. However, building on Eisenstadt and West (2019), future research should explore the environmental attitudes of citizens living near extractive areas, including how the expectation of benefits from extraction may mitigate some of their environmental concerns.

Future research should also explore how extractive industries interact with social and political organizations to avoid conflict and gain access to resources. Amengual (2018) recently showed that extractive industries distribute benefits in inclusive ways when cohesive social organizations are present. Conversely, extractive industries distribute benefits in targeted (or clientelistic) ways when fragmented social organizations are present. Gustafsson (2017) also showed that when host communities are politically weak relative to extractive industries, corporate-community relations are likely to result in demobilization or clientelism. However, when host communities are able to establish a more equitable balance of power, corporate-community relationships tend to produce either confrontation or strategic collaboration. Successful resistance campaigns against resource extraction are proportional to the activists' network cohesion. And, as this paper shows, the likelihood of these campaigns to influence positive outcomes increases when protest movements leverage the strengths of their institutional environment to their advantage.

Figure 1: Location of Mining Conflicts in Latin America
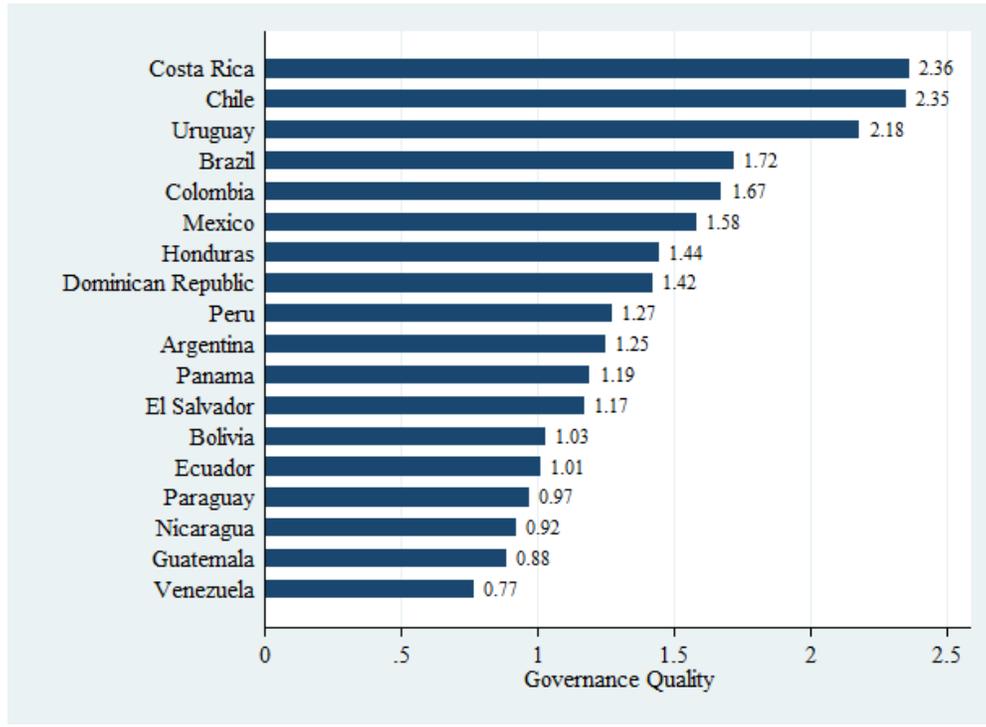

Source: Haslam and Tanimoune (2015).

Figure 2. Mean Likelihood to Protest over Resource Extraction
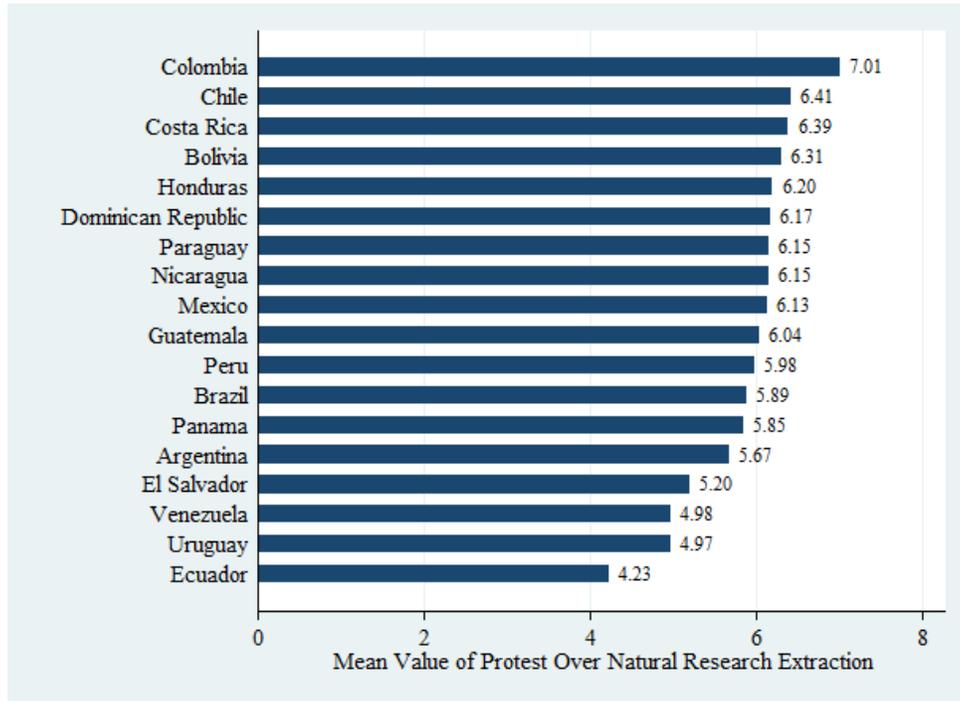
Source: Latinobarómetro (2015).

Figure 3. Mean Value of Governance Quality

Source: Franco Chuaire & Scartascini (2015).

Table 1: Likelihood to Protest over Resource Extraction

	Model 1	Model 2	Model 3	Model 4
	Individual-Level	Governance	Governance Quality * Social Engagement	Proximity
Individual-Level Variables				
Social Engagement	0.251***	0.231***	-0.182	-0.184
	(0.046)	(0.045)	(0.161)	(0.187)
Civic Participation	0.209***	0.218***	0.215***	0.210***
	(0.047)	(0.048)	(0.049)	(0.054)
Campaign Frequency	0.125***	0.125***	0.126***	0.132***
	(0.031)	(0.033)	(0.032)	(0.032)
Gender	-0.009	-0.013	-0.014	-0.005
	(0.030)	(0.032)	(0.033)	(0.033)
Age	-0.012***	-0.013***	-0.013***	-0.013***
	(0.002)	(0.002)	(0.002)	(0.002)
Socioeconomic Status	0.016	0.012	0.012	0.012
	(0.027)	(0.028)	(0.028)	(0.030)
Education Years	0.013**	0.013**	0.013**	0.012**
	(0.005)	(0.005)	(0.005)	(0.006)
Presidential Approval	-0.075	-0.055	-0.054	-0.036
	(0.057)	(0.054)	(0.053)	(0.055)
Interpersonal Trust	-0.006	0.015	0.013	0.030
	(0.070)	(0.069)	(0.070)	(0.069)
Personal Economic Perceptions	0.042	0.029	0.028	0.023
	(0.027)	(0.022)	(0.022)	(0.027)
National Economic Perceptions	-0.043	-0.039	-0.038	-0.042
	(0.028)	(0.028)	(0.028)	(0.030)
Support for Democracy	0.030	0.034	0.034	0.028
	(0.029)	(0.030)	(0.030)	(0.029)
Protest Activity	0.595***	0.603***	0.600***	0.608***
	(0.087)	(0.091)	(0.089)	(0.097)

|				
Environment	0.118*** (0.039)	0.117*** (0.041)	0.120*** (0.040)	0.113*** (0.040)
Proximity to Extraction	--	--	--	0.017*** (0.006)
Country-Level Variables				
Governance Quality * Social Engagement	--	--	0.286** (0.112)	0.278** (0.133)
Governance Quality	--	0.256*** (0.094)	0.184** (0.090)	0.217** (0.086)
GINI	--	0.049*** (0.012)	0.048*** (0.012)	0.053*** (0.013)
Population (ln)	--	0.084* (0.048)	0.084* (0.049)	0.066 (0.046)
GDP Growth	--	0.075** (0.031)	0.077** (0.031)	0.080*** (0.030)
Level 1 N	15,736	15,003	15,003	13,167
Level 2 N	18	17	17	17

***p<0.01, **p<0.05, *p<0.1 (Robust standard errors). Multilevel ordered logistic regression models with random intercepts.

Table 2: Predicted Probabilities of Likelihood to Protest over Resource Extraction by Levels of Civic and Political Engagement

Levels of civic and political engagement[22]	Predicted Probabilities	Confidence Intervals
Low	.1932	[.1607, .2257]
High	.2986	[.2567, .3406]

Figure 4: Predictive Margins of Protesting over Resource Extraction
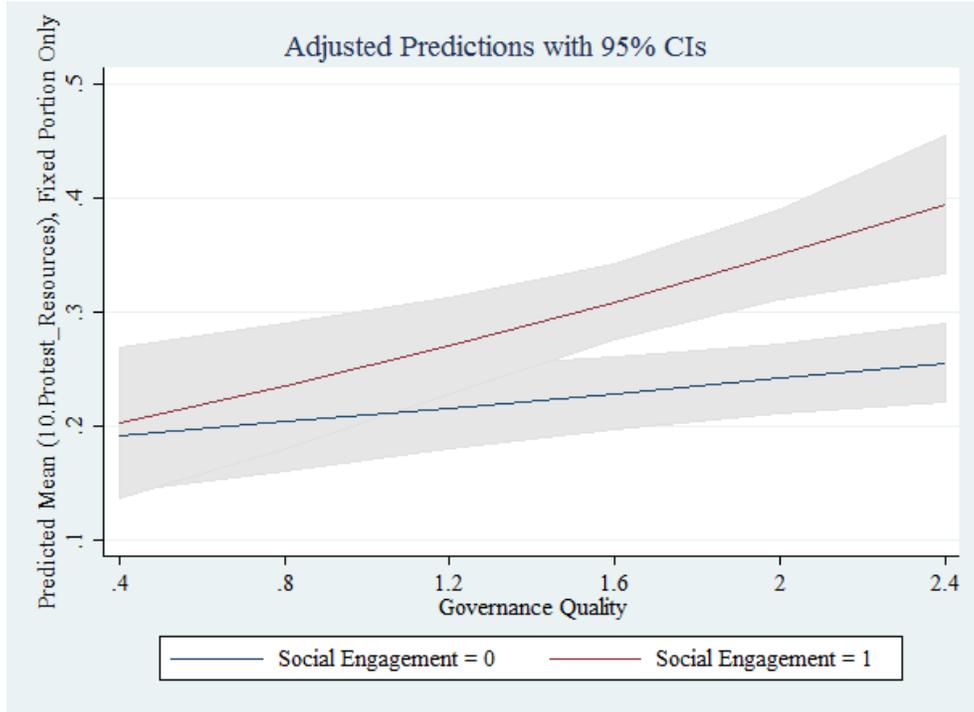
References

Arsel, M., Hogenboom, B. & Pellegrini L. (2016a). The extractive imperative and the boom in environmental conflicts at the end of the progressive cycle in Latin America. *The Extractive Industries and Society, 3*(4), 877-879.

Arsel, M., Hogenboom, B. & Pellegrini L. (2016b). The extractive imperative in Latin America. *The Extractive Industries and Society, 3*(4), 880-887.

Arce, M. (2014). *Resource Extraction and Protest in Peru*. Pittsburgh: University of Pittsburgh Press.

Arce, M. (2016). The political consequences of mobilizations against resource extraction. *Mobilization, 21*(4): 469-483.

Arce, M. & Miller, R. E. (2016). Mineral wealth and protest in Sub-Saharan Africa. *African Studies Review, 59*(3): 83-105.

Arce, M., Miller, R. E., Patane, C. F., & Polizzi, M. S. (2018). Resource wealth, democracy, and mobilization. *Journal of Development Studies, 54*(6): 949-967.

Arce, M., & Hendricks, M. (2019). Resource wealth and political decentralization in Latin America. *Oxford Research Encyclopedia of Politics*. Retrieved 30 Jan. 2020, from https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1661.

Amengual, M. (2018). Buying stability: The distributive outcomes of private politics in the Bolivian mining industry. *World Development, 104,* 31-45.

Amenta, E., & Young, M. P. (1999). Making an impact: Conceptual and methodological implications of the collective goods criterion. In M. Giugni, D. McAdam, & C. Tilly

(Eds.), *How social movements matter* (pp. 22-41). Minneapolis: University of Minnesota

Press.

Amenta, E., Caren, N., Chiarello, E., & Su, Y. (2010). The political consequences of social

movements. *Annual Review of Sociology, 36*, 287-307.

Arellano-Yanguas, J. (2010). *Local politics, conflict and development in Peruvian mining*

regions (Unpublished doctoral dissertation). University of Sussex.

Barnes, T. D. & Córdova, A. (2016). Making space for women: Explaining citizen support for

legislative gender quotas in Latin America. *The Journal of Politics, 78*(3), 670-686.

Bebbington, A., & Bury, J. (2013). *Subterranean struggles: New dynamics of mining, oil, and*

gas in Latin America. Austin: University of Texas Press.

Bond, C. J. & Kirsch, P. (2015). Vulnerable populations affected by mining: Predicting and

preventing outbreaks of physical violence. *The Extractive Industries and Society, 2*(3):

552-561.

Boulding, C. (2014). *NGOs, political protest, and civil society*. New York: Cambridge

University Press.

Brambor, T., Clark, W.R., & Golder, Matt. (2006). Understanding interaction models: Improving

empirical analyses. *Political Analysis*, *14*, 63-82.

Conde, M. (2016). Resistance to mining: A review. *Ecological Economies, 132*, 80-90.

Conde, M., & Le Billon, P. (2017). Why do some communities resist mining projects while

others do not? *The Extractive Industries and Society, 4*, 681-697.

Economic Commission for Latin America and the Caribbean [ECLAC]. (2013). *Foreign direct*

investment in Latin America and the Caribbean. Santiago, Chile: UN ECLAC.

Eisenstadt, T. A., & West, K. J. (2017). Public opinion, vulnerability, and living with extraction

on Ecuador's oil frontier: Where the debate between development and environmentalism

gets personal. *Comparative Politics, 49*(2), 231-251.

Eisenstadt, T. A., & West, K. J. (2019). *Who Speaks for Nature? Indigenous Movements, Public

Opinion, and the Petro-State in Ecuador*. New York, NY: Oxford University Press.

Eisinger, P. (1973). The conditions of protest in American cities. *American Political Science

Review, 1*, 11-28.

Franco Chuaire, M., & Scartascini, C. (2014). *Political institutions, state capabilities, and public

policy: An international dataset, 2013 Update*. Washington, D.C.: Inter-American

Development Bank.

Global Witness. (2014). *Global Witness Annual Report 2014*. London, UK. Retrieved from

https://www.globalwitness.org/en/about-us/annual-reviews/

Global Witness. (2017). *Global Witness Annual Report 2017*. London, UK. Retrieved from

https://www.globalwitness.org/en/about-us/annual-reviews/

Goodwin, J., & Jasper, J. M. (Eds.). (2003). *Rethinking social movements: Structure, meaning,

and emotion*. Lanham, MD: Rowman & Littlefield.

Gustafsson, M. (2017). *Private politics and peasant mobilization: Mining in Peru*. London:

Palgrave MacMillan.

Haslam, P. A., & Tanimoune, N. A. (2015). The determinants of social capital in the Latin

American mining sector: New evidence with quantitative data. *World Development, 78*,

401-419.

Haufler, V. (2010). Disclosure as governance: The extractive industries transparency initiative
and resource management in the developing world. *Global Environmental Politics, 10*(3):
53-73.

Infomine. (2011). Available at: http://www.infomine.com/.

Jenkins, J. C. (1983). Resource mobilization theory and the study of social movements. *Annual
Review of Sociology, 9*, 527-553.

Latinobarómetro. (2015). *Latinobarómetro 2015*. Santiago de Chile: Corporación
Latinobarómetro. Available at http://www.latinobarometro.org/lat.jsp.

Mähler, A., & Pierskalla, J. H. (2015). Indigenous identity, natural resources, and contentious
politics in Bolivia: A disaggregated conflict analysis, 2000-2011. *Comparative Political
Studies, 48*(3), 301-332.

McCarthy, J., & Zald, M. N. (1977). Resource mobilization and social movements: A partial
theory. *American Journal of Sociology, 6*, 1212-1241.

Mondak, J. J. (1993). Public opinion and heuristic processing of social cues. *Political Behavior,
15*(2), 167-192.

Moseley, M. (2015). Contentious engagement: Understanding protest participation in Latin
American democracies. *Journal of Politics in Latin America, 7*(3), 3-48.

Observatorio de Conflictos Mineros de América Latina [OCMAL]. (2017). Conflictos mineros
en América Latina: Extracción, saqueo y agresión. Estado de situación en 2016,
OCMAL. Available at: https://www.ocmal.org/estado-situacion-conflictos-mineros-en-
2016/. Accessed on September 15, 2017.

Orihuela, J. C., Pérez, C. A. & Huaroto, C. 2019. Do fiscal windfalls increase mining conflicts?
Not always. *The Extractive Industries and Society, 6*(2): 313-318.

Özkaynak, B., Rodríguez-Labajos, B., Aydın, C. İ., Yanez, I., & Garibay, C. (2015). Towards environmental justice success in mining conflicts: An empirical investigation. *EJOLT Report*, *14*, 96.

Ponce, A. F., & McClintock, C. (2014). The explosive combination of inefficient local bureaucracies and mining production: Evidence from localized societal protests in Peru. *Latin American Politics and Society, 56*(3), 118-140.

Scartascini, C., & Tomassi, M. (2014). Government capabilities in Latin America: Why they are so Important, what we know about them, and what to do next. Policy Briefing. NO. IDB-PB-210. Washington, D.C.: Inter-American Development Bank.

Silva, E., Akchurin, M., & Bebbington, R. (2018). Policy effects of resistance against mega-projects in Latin America: An introduction. *European Review of Latin American and Caribbean Studies*, *106*, 25-46.

Snijders, T. A. B., & Bosker, R. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Los Angeles: Sage Press.

Solt, F. (2016). The standardized world income inequality database [Data set]. *Social Science Quarterly, 97*(5), 1267-1281. SWIID Version 6.0, July 2017.

Stein, E., & Tommasi, M. (2007). The institutional determinants of state capabilities in Latin America. In F. Bourguignon & B. Pleskovic (Eds.), Annual World Bank Conference on Development Economics Regional: Beyond Transition. Washington, D.C.: World Bank.

Svampa, M., & Antonelli, M. A. (Eds.). (2009). *Minería transnacional, narrativas del desarrollo y resistancias sociales*. Buenos Aires: Editorial Biblos.

Tarrow, S. (1998). *Power in movement: Social movements and contentious politics*. Cambridge: Cambridge University Press.

Walter, M. (2016). *Extractive in Latin America and the Caribbean: The basics*. Inter-American

      Development Bank Technical Note 907. Washington DC: Inter-American Development

      Bank.

World Bank. (2015). *World Bank development indicators 2015* [Data set]. Retrieved from

      http://data.worldbank.org/

World Trade Organization. (2014). International trade statistics: World and regional export

      profiles. Geneva: WTO. Retrieved from

      https://www.wto.org/english/res_e/statis_e/world_region_export_13_e.pdf

Zaller, J. R. (1992). *The nature and origins of mass opinion.* New York: Cambridge University

      Press.

[1] Eisenstadt and West (2017, 2019) is an important exception. Using individual-level survey data, the authors find that individuals in Ecuador express environmental concern when they are objectively vulnerable to environmental damage and when they live in areas in which extraction has occurred or is debated.

[2] Based on this imperative, as Arsel et al. (2016b) explain, "extraction needs to continue and expand regardless of prevailing circumstances, with the state playing a leading role and capturing a large share of the ensuing revenues."

[3] This is particularly common when there is competition between local subsistence agriculture and the incoming extractive industry (Conde, 2016, p. 82).

[4] Our discussion on the quality of governance builds on Barnes and Córdova (2016).

[5] Political mediation theory suggests that the influence of movement collective action is contingent on specific contexts.

[6] The logic behind the quality of institutions translating into public assessments is partly based in the theoretical models of Barnes and Córdova (2016) on support for gender quotas in Latin America.

[7] Moseley's dependent variable comes from Vanderbilt's LAPOP surveys. These surveys can be found at: https://www.vanderbilt.edu/lapop/. Our study uses the Latinobarómetro data based in Santiago, Chile. The Latinobarómeter can be found at: http://www.latinobarometro.org/

[8] We test for this curvilinear effect through a robustness check incorporating quadratic forms of our institutional variable (Governance Quality), but do not find statistically significant results. This indicates a need for further exploration of this relationship in future studies, and the uniqueness of protests around resource extraction as opposed to demonstrations around other issues.

[9] See Felipe Iturrieta, "Escondida workers to end strike as they opt for the old contract," *Reuters* (March 3, 2017).

[10] See "World's biggest copper mine Escondida hit by workers strikes amid labor law reform," *Deutsche Welle* (February 15, 2017).

[11] Unlike Chile, the mineral sector in Ecuador is less important. Mineral rents were 0.1 per cent of the country's GDP in 2014 (World Bank, 2016).

[12] See "Texaco/Chevron lawsuits" (https://business-humanrights.org/en/texacochevron-lawsuits-re-ecuador). Accessed November 11, 2017.

[13] Since 1993, PetroEcuador is the sole owner of this project.

[14] See Clifford Krauss, "Lawyer Who Beat Chevron in Ecuador Faces Trial of His Own," *The New York Times* (July 30, 2013). http://www.nytimes.com/2013/07/31/business/steven-donziger-lawyer-who-beat-chevron-in-ecuador-faces-trial-of-his-own.html

[15] The list of countries is as follows: Brazil (1,250 respondents); Argentina, Bolivia, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela (1,200 respondents each country); Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama (1,000 respondents each country). See Appendix for the descriptive statistics for all variables in our models (Table 1), as well as the coding for these variables (Table 2).

[16] See http://www.latinobarometro.org/lat.jsp for more details on the survey.

[17] The operationalization of the dependent variable measures specifically a citizen's likelihood to protest extractive policies. As it does not aggregate all types of protests, our measure provides a more accurate representation of a citizen's decision-making calculus over resource extraction.

[18] We recognize that our measure of social engagement based on social networks does not capture the complexity of this concept. While our main analysis focuses on this variable, we also

account for other social engagement variables such as civic participation and participation in political campaigns (see Table 1). We view these variables as conceptually similar and use them to capture the complexity of social engagement.

[19] Appendix (Table 4) provides a detailed breakdown of the component parts of this index.

[20] We also find that the total variance accounted for by the variance between countries (Intraclass Correlation Coefficient, or ICC) is statistically significant (at the $p<.001$ level) and equal to 3.48 percent. Previous works by Anderson and Singer (2008) and Barnes and Córdova (2016) show that "in cross-national research the variation between countries depicted by the ICC tends to be relatively small in studies that use survey data, because the number of cases at the individual level is much larger than the number of cases at the country-level" (p. 14).

[21] *Additive* had a Cronbach's alpha reliability produced a value of .955, well about the standard .7 suggested for creating additive indices.

[22] The prediction is for a strong willingness to protest over resource extraction (measured as a "10" on the Latinobarometer survey question). Levels of civic and political engagement are based on the variables *Social Engagement, Civic Participation,* and *Campaign Frequency.* A low level of civic and political engagement is based on a value of "0" for each of these variables, with the remaining variables at their mean. A high level of civic and political engagement is based on a value of "1" for each of these variables, with the remaining variables at their mean.

Appendix. Summary Statistics and Variable Descriptions

Table 1. Summary Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Governance Quality	20,250	1.4055	.4806	.7695	2.3625
Campaign Frequency	19,565	1.3891	.7209	1	4
Civic Participation	20,250	.2071	.4052	0	1
Social Engagement	20,250	.2646	.4411	0	1
Population (ln)	20,250	16.6360	1.1537	15.0485	19.1523
Protest (Resource Extraction)	19,500	5.8643	3.3822	1	10
Sex	20,250	1.5159	.4998	1	2
Age	20,250	40.3696	16.4929	16	98
Socioeconomic Status	19,653	2.3098	.9282	1	5
Education (years)	20,250	9.9063	4.5270	1	17
Presidential Approval	18,768	.5035	.5000	0	1
Interpersonal Trust	19,789	1.1730	.3782	1	2
Personal Economic Perception	20,143	3.1988	.7630	1	5
National Economic Perception	20,097	2.8459	.9162	1	5
Support for Democracy	18,582	2.4537	.7661	1	3
GINI	20,250	43.6168	3.4925	36.92	48.91
Growth (annual)	19,050	2.8267	2.3872	-3.8474	7.0409
Proximity to Extraction	17,850	.3745	1.0828	0	18
Environment	20,250	.4275	.4947	0	1
Protest Activity	20,250	.1186	.3233	0	1
Social Media	18,831	2.2351	1.2711	1	4

Table 2. Latinobarómetro Survey Question Variable Descriptions

Variable	Description
Protest	'On a scale from 1 to 10 where 1 means 'not at all' and 10 'very', how willing would you be to demonstrate and protest about…? • 'Exploitation of natural resources' 10-point scale; higher values = greater likelihood to protest.
Social Engagement	'With which of the following statements do you agree most?' • 'Social networks allow you to participate in politics' • 'Social networks create the illusion that you are participating in politics' • 'Social networks are not suitable for participate [sic] in politics' • Do not know • Did not answer Scores were dichotomized and coded as 1 if "Social networks allow you to participate in politics," 0 otherwise.
Civic Participation	'Which of the following things do you think a person must do in order to be considered a citizen?' (Multiple responses allowed) • 'Vote in elections' • 'Pay taxes' • 'Always obey laws and regulations' • 'Participate in social organizations' • 'Participate in political organizations' • 'Choose products that are environmentally responsible' • 'Help people in (country) who are worse off than yourself' • 'Be willing to service in the military at time of need' • Do not know/did not answer Scores were dichotomized and coded as 1 if "Participate in social organizations" and "Participate in political organizations" was chosen, 0 otherwise.
Personal Economic Perceptions	'In general, how would you describe your present economic situation and that of your family? Would you say it is…?' 1. Very bad

	2. Bad 3. About average 4. Good 5. Very good * These values have been inverted so that higher values indicate a more positive view of the economic situation than lower values. 5-point scale: higher values = more positive view of personal economic situation.
National Economic Perceptions	'In general, how would you describe the country's present economic situation? Would you say it is…?' 1. Very bad 2. Bad 3. About average 4. Good 5. Very good * These values have been inverted so that higher values indicate a more positive view of the economic situation than lower values. 5-point scale: higher values = more positive view of country's economic situation.
Campaign Frequency	'How frequently do you do each of the following things? Very frequently, frequently, almost never or never?' • 'Work for a political party or candidate' Coded as 1 for "Never," 2 for "Almost never," 3 for "Frequently," 4 for "Very frequently."
Interpersonal Trust	'Generally speaking, would you say that you can trust most people, or that you can never be too careful when dealing with others?' Coded as 1 if "One can never be too careful when dealing with others," 2 if "One can trust most people".
Age	'What is your age?' Respondent's age in years.
Gender	'Gender of the interviewee' Coded as 1 if "Male," 2 if "Female."
Presidential Approval	'Do you approve or not the performance of the government led by President (name)?' Coded as 0 if "Disapprove," 1 if "Approve".
Support for Democracy	'With which of the following statements do you agree most?'

	Answers were dichotomized and coded 1 if "Democracy is preferable to any other kind of government," 0 otherwise.
Education (years)	'What level of education do you have?' Without education (1); 1 year (2); 2 years (3); 3 years (4); 4 years (5); 5 years (6); 6 years (7); 7 years (8); 8 years (9); 9 years (10); 10 years (11); 11 years (12); 12 years (13); Incomplete university (14); Completed university (15); High school/academies/Incomplete technical (16); High school/academies/Complete technical (17)
Socioeconomic Status	'People sometimes describe themselves as belonging to a social class. Which social class would you describe yourself as belonging to…?' 1. Low 2. Lower-middle 3. Middle 4. Upper-middle 5. High *This scale has been inversed so that higher values indicate higher socioeconomic status. 5-point scale: higher values = higher socioeconomic status.
Protest Activity	'I am going to read out a variety of political activities that people can undertake and I would like you to tell me, if you have ever done any of them (1), if you would never do any of them (2), or if you would never do any of them (3).' b. Attended an authorized demonstration or protest march c. Attended an unauthorized demonstration, protest march, block traffic *Protest Activity* is coded (1) if answers to (b) and (c) are 1 ("done any of them"), and 0 otherwise.
Environment	'From the following list of topics, tell me which are the most important for the development of your country.' (Multiple responses allowed) Environment Infrastructure

	Institutions Integration to the world Social policies None of the above Do not know Did not answer Coded as 1 if respondent answered that the environment was the most important issue, 0 otherwise.
Social Media	'Have you ever used e-mail or connected to Internet?' Yes, every day Yes, occasionally Yes, rarely No, never Do not know Did not answer Coded as 1 if "Yes, every day" or "Yes, occasionally," 0 otherwise.

Table 3. Description of component variables in *Governance Quality*

Component Variable	Description
Stability	the extent to which policies are stable over time
Adaptability	the extent to which policies are adjusted when they fail or when circumstances change
Coherence and Coordination	the degree to which policies are consistent with related policies, and result from well-coordinated actions among the actors who participate in their design and implementation
Quality of implementation and enforcement	the degree to which policies are implemented and enforced properly after the approval in Congress
Public-regardedness	the degree to which policies pursue the public interest
Efficiency	the extent to which policies reflect an allocation of scarce resources that ensures high returns
Note: Language is borrowed from Scartascini & Tommasi (2014, p. 8).	

Robustness Checks

Table 4: Likelihood to Protest over Resource Extraction Controlling for *Social Media*

	Model 1
Individual-Level Variables	
Social Engagement	-0.174
	(0.167)
Civic Participation	0.213***
	(0.053)
Campaign Frequency	0.118***
	(0.034)
Gender	-0.018
	(0.035)
Age	-0.013***
	(0.002)
Socioeconomic Status	0.011
	(0.031)
Education (years)	0.011*
	(0.006)
Presidential Approval	-0.037
	(0.055)
Interpersonal Trust	-0.004
	(0.074)
Personal Economic Perceptions	0.036
	(0.023)
National Economic Perceptions	-0.052*
	(0.027)
Support for Democracy	0.041
	(0.031)
Environment	0.128***
	(0.043)
Protest Activity	0.587***
	(0.095)
Social Media	0.007
	(0.017)

Country-Level Variables

Governance Quality * Social Engagement	0.271** (0.115)
Governance Quality	0.045*** (0.011)
GINI	0.121** (0.053)
Population (ln)	0.087** (0.035)
GDP Growth	0.045*** (0.011)
Level 1 N	13,829
Level 2 N	16

***p<0.01, **p<0.05, *p<0.1 (Robust standard errors). Multilevel ordered logistic regression models with random intercepts.

Table 5: Multilevel Ordered Logistic Regression: Likelihood to Protest over Resource Extraction with Alternative Operationalization of *Governance Quality*

	Model 1	Model 2	Model 3	Model 4
	Additive * Social Engagement	Rule of Law * Social Engagement	Government Effectiveness * Social Engagement	Voice and Accountability * Social Engagement
Individual-Level Variables				
Social Engagement	0.264*** (0.041)	0.314*** (0.043)	0.282*** (0.039)	0.194*** (0.043)
Civic Participation	0.216*** (0.049)	0.216*** (0.049)	0.216*** (0.049)	0.215*** (0.049)
Campaign Frequency	0.126*** (0.032)	0.125*** (0.032)	0.126*** (0.032)	0.125*** (0.032)
Gender	-0.015 (0.033)	-0.016 (0.033)	-0.015 (0.033)	-0.014 (0.033)
Age	-0.013*** (0.002)	-0.013*** (0.002)	-0.013*** (0.002)	-0.013*** (0.002)
Socioeconomic Status	0.012 (0.028)	0.012 (0.028)	0.012 (0.028)	0.012 (0.028)
Education Years	0.013** (0.005)	0.013** (0.005)	0.013** (0.005)	0.012** (0.005)
Presidential Approval	-0.052 (0.052)	-0.053 (0.052)	-0.052 (0.052)	-0.052 (0.053)
Interpersonal Trust	0.013 (0.070)	0.014 (0.070)	0.013 (0.070)	0.014 (0.070)
Personal Economic Perceptions	0.028 (0.022)	0.029 (0.022)	0.027 (0.023)	0.028 (0.022)
National Economic Perceptions	-0.038 (0.028)	-0.039 (0.028)	-0.037 (0.029)	-0.038 (0.028)
Support for Democracy	0.035 (0.030)	0.035 (0.030)	0.035 (0.030)	0.035 (0.030)
Protest Activity	0.600*** (0.089)	0.600*** (0.090)	0.600*** (0.089)	0.601*** (0.089)
Environment	0.121*** (0.040)	0.119*** (0.040)	0.123*** (0.040)	0.119*** (0.040)
Country-Level Variables				
Additive * Social Engagement	0.089*** (0.026)	--	--	--

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Additive * Social Engagement	--	0.230*** (0.052)	--	--
Additive * Social Engagement	--	--	0.277*** (0.081)	--
Additive * Social Engagement	--	--	--	0.208** (0.102)
Additive	0.033 (0.028)	--	--	--
Rule of Law	--	0.100 (0.070)	--	--
Government Effectiveness	--	--	0.052 (0.078)	--
Voice and Accountability	--	--	--	0.129 (0.099)
GINI	0.056*** (0.014)	0.051*** (0.015)	0.058*** (0.013)	0.060*** (0.013)
Population (ln)	0.080 (0.051)	0.093* (0.055)	0.062 (0.048)	0.085* (0.049)
GDP Growth	0.067** (0.030)	0.072** (0.031)	0.060** (0.029)	0.067** (0.031)
Level 1 N	15,003	15,003	15,003	15,003
Level 2 N	17	17	17	17

***p<0.01, **p<0.05, *p<0.1 (Robust standard errors). Multilevel ordered logistic regression models with random intercepts.