

## **Resource Extraction and Protest Participation in Latin America**

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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. Building on contributions on the political consequences of social movements, we argue that the impact of protest on outcomes is largely indirect or mediated because protesters often interact with institutional contexts to achieve their goals. Hence, 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 do not.

## **Resource Extraction and Protest Participation in Latin America**

Latin America has the highest number of extractive conflicts around the world (Özkaynak et al. 2015), and countries like Peru, Mexico, Chile, Argentina, and Brasil experience the most conflicts (OCMAL 2017). Existing literature has sought to explore the varied motivations and goals pursued by citizens near the extractive frontier (e.g., Arce 2014; Bebbington and Bury 2013; Eisenstadt and West 2017; Spalding 2015; Svampa and Antonelli 2009). This scholarship has shown 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 has examined the variation of extractive conflicts cross-nationally (Arce et al. 2017, Arce and Miller 2016, Haslam and Tanimoune 2015) and sub-nationally (Arellano-Yanguas 2010, Mähler and Pierskalla 2015, Ponce and McClintock 2014). Some studies have examined the relationship between mineral wealth and protests (Arce et al. 2017, Arce and Miller 2016, Arellano-Yanguas 2010). Other studies have explored the relationship between geo-referenced extractive areas and protests (Haslam and Tanimoune 2015, Mähler and Pierskalla 2015). Together these studies have confirmed the extraction-conflict nexus. While studies have used individual-level surveys to explore protest participation more generally (Moseley 2015, Boulding 2014), none have examined why individuals are likely to protest extraction across Latin America.<sup>1</sup> What individual- and state-level factors incite citizens to participate in protests over resource extraction?

As Arce (2014), Li (2015), and others have documented, stopping a mining project from being implemented in the first place is very difficult, as there are clear power imbalances between local communities and extractive industries. Protests require a high level of organization and mobilization of resources. They also require participants devote time outside of their daily routines to sustain mobilizations. Backed by national governments interested in the “re-primarization” of national economies (or extractivism), 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 extractivism 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.

Moreover, as Boulding (2014) and Moseley (2015) have shown, individuals do not make political decisions in a vacuum. Rather the context in which they operate affects their political behavior and participation in politics (similar Barnes and Córdova 2016). Moseley (2015) has aptly shown that the quality of institutions shapes an individual’s decision to attend a protest rally or demonstration. Citizens in low-quality institutional settings, in particular, are substantially more likely to protest because they perceive existing institutions as 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 an offshoot of ineffective and unresponsive institutions, our paper advances an alternative interpretation of the impact of institutions on an individual’s likelihood of protest participation. Building on contributions on the political consequences of social movements (Amenta and Young 1999; Amenta, Caren, Chiarello, and Su 2010), we argue that there is rarely a direct connection between protest movements and outcomes. Rather the impact of protests on outcomes is mostly indirect or mediated because protesters often interact with institutional contexts to achieve their goals. These institutions are linked to a country’s policymaking capabilities and policy characteristics, and range from court decisions to legislative decrees and executive orders. We argue that the quality of governance at the national level shapes an individual’s willingness to participate in protests over resource extraction. In countries with high-quality of governance, citizens are more likely to protest over resource extraction because they perceive the government as possessing greater capacity to address the claims of aggrieved groups opposed to resource extraction. Conversely, in countries with low-quality of governance, citizens are deprived of this salient source of information, and accordingly, they are less likely to protest over resource extraction.<sup>2</sup>

We begin this article by providing background information on the significance of resource extraction to developing economies in Latin America, including a discussion of how resource extraction encourages protest activity. Thereafter, we explain how contextual factors based on the quality of governance environment mediate the relationship between social engagement and protest participation. We precede the presentation of our research design with a couple of

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 (Chuaire and Scartascini 2014) to examine the variation in protest participation in the region. The article concludes by revisiting the political consequences of protest movements against extraction.

### **Extractivism as a Development Strategy**

Driven by record-high commodity prices, global investments in the extractive sector increased nearly ten-fold between 2000 and 2013, from US\$ 86 billion to US\$ 735 billion (ECLAC 2013). In 2014, the Latin American region received approximately 25% of global exploration investment flows and held more than 28% of the world's mineral investment portfolio. The average mineral project investment in the Latin American region in 2012 was US\$730 million, more than twice Asia's average of US\$363 million (Walter 2016).

Resource-rich Latin America is the world's leading source of minerals and the second most important source of oil (ECLAC 2013). The region produces 15% of the world's gold, 45% of silver and 40% of copper. Within the region, Peru, Mexico and Chile are the top producers of gold, silver and copper, respectively. In 2013, according to the World Trade Organization (2014), oil and minerals accounted for 40% of total Latin American exports, compared to a global average of 22%. In the same year, rents from extractive activities represented more than 15% of GDP in resource-rich Latin American countries (Walter 2016).

While resource extraction has contributed to regional macroeconomic growth, the expansion and deepening of extractivism as a national development strategy has also led to clashes with local communities over the use of land and water in some cases, and the

redistribution of resource rents in others. Yet national governments increasingly see extractivism as the mainspring of national development, and it is a key source of government revenue.

Although resource extraction has a long history throughout the developing world, the current wave of protests over resource extraction provides an ideal venue to understand the changing nature of mobilizations as a consequence of extractivism. In particular, these mobilizations help us understand the geographic segmentation of protest as predetermined by the location of extractive areas themselves, as well as the emergence of broad coalitions with diverse sets of new actors.<sup>3</sup>

Under extractivism, technological conditions have reduced the need for unskilled labor, and labor disputes between mining companies and workers have become less visible (Bebbington 2009). Instead, the so-called mega extractive projects (*megaproyectos mineros*) have an increased need for water, energy, land, and landscape. New open-pit and heap-leaching techniques demand far greater access to each of these resources. These technological conditions imply that the actors involved in protests against resource extraction are largely concentrated in the rural and urban populations most affected by extractivism. Furthermore, their claims often include land, water quantity and quality, landscape, and the protection of the environment and their livelihood. Seen in this light, extractivism allows us to understand the new actors and types of coalitions that aggrieved groups have forged in opposition to extraction. These coalitions cut across classes and the urban and rural divide, as well as environmental and nationalistic discourses.

However, not all of the mobilizations against extractivism concern the adverse impact of mining on livelihoods and the environment. Soaring commodity prices have yielded remarkable

profits for extractive industries, and taxes collected from mining have become the most important intergovernmental transfer linked to resource extraction. These intergovernmental transfers have also encouraged a sizeable number of mobilizations over distribution of these funds and use across the different tiers of government—local, provincial, regional and national (Arellano-Yanguas 2010, Ponce and McClintock 2014).

### **Individual and Contextual Factors Shaping Protest Participation**

Using data from the Latin American Public Opinion Project's (LAPOP) AmericasBarometer surveys, Moseley (2015) examines the individual- and state-level characteristics that help to explain the variation in protest participation across twenty-four countries in the Latin American region. Substantially, his paper reveals the importance of civic engagement as one of the main drivers of contentious behavior. As Moseley explains, “[e]ngaged 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” (2015, 13).

However, apart from civic engagement, Moseley (2015) also shows that the quality of institutions shapes an individual's decision to attend a protest rally or demonstration. While low-quality institutions incite protest participation, high-quality institutions suppress it. Institutions thus operate as a safety mechanism for citizen complaint and satisfaction. And, when institutions are ineffective or unresponsive, protests follow. In Moseley's (2015, 30-31) 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” (30-31). Therefore, the combination of civic engagement and the quality of institutions work together to explain the wide variation in protest participation in the Latin American region.

Our paper builds on Moseley’s contributions, but with some key differences. First, his dependent variable comes from a question that asks respondents if they have participated in a street march or public demonstration during the previous twelve months.<sup>4</sup> It does not address political action against resource extraction, and we believe that there are important dissimilarities between protests at large and protests over resource extraction. In Moseley’s (2015) sample, for instance, the countries that were most likely to experience protests at large were Bolivia, Peru, and Argentina, while El Salvador, Panama, and the Dominican Republic were the least likely. By contrast, in our sample, the countries that were most likely to experience protests over resource extraction were Colombia, Chile, and Costa Rica, while Ecuador, Uruguay, and Venezuela were the least likely. The states appearing to be most likely to experience protest at large and protest over resource extraction are, in fact, quite different.

Second, some protest movements against resource extraction represent “all-or-nothing” campaigns with intransigent claims about basic rights (e.g., water access and quality, the integrity of land and landscapes, and/or the cultural survival of indigenous peoples) that are more difficult to accommodate, but, consequently, are more likely to produce organized and sustained challenges against extraction. Protests at large, in contrast, have flexible claims and tend to be a more intermittent activity, which could be more successful when they are carried out less frequently (Kapiszewski 2010, 205).



Third, and finally, following the literature on the political consequences of social movements (Amenta and Young 1999; Amenta, Caren, Chiarello, and Su 2010), we argue that the effects of institutions on protest are also different. This literature informs us that the effects of protest on outcomes are rarely direct. Instead, a broad range of institutions, such as court decisions, legislative decrees and executive orders, are involved in shaping the long-term consequences of protests. Institutions are a salient source of external information, and provide citizens with cues or messages that help determine their stand on a given policy. The “source cues” that citizens draw from institutions conditions their proclivity to participate in politics (similar Barnes and Córdova 2016). For this reason, protest movements weigh in the relative strengths and weaknesses of institutions to achieve their goals. Socially engaged citizens in high-quality governance environments are more willing to participate in a protest rally or demonstration because they perceive a higher probability of influencing positive outcomes as compared to their counterparts in low-quality governance environments.

To summarize, citizens opposed to resource extraction face the daunting challenge of reversing or blocking mining concessions. While citizens may be fighting a specific mining project, they are also challenging the “re-primarization” of national economies as a development strategy.<sup>5</sup> Resistance campaigns against resource extraction thus entail the sustained social engagement of networks of activists and their organizations. The likelihood of these campaigns to influence positive outcomes increases when protest movements leverage the strengths of their institutional environment to their 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) have 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 limits the incentives to protest. But protest is higher in mixed political structures because there is some access to political institutions and protesters are not completely repressed to prevent them from trying what they seek to achieve. These arguments focus on the emergence of protest, and critics have also argued that the concept of political structure offers a mechanistic understanding of social movements (Goodwin and Jasper 2003). Our paper, in contrast, focuses on the consequences of protests, and how the policymaking capabilities and policy characteristics of different polities aid or hinder the likelihood to shape positive outcomes. Hence, when we speak about the governance environment, we are thinking about policymaking capabilities and policy characteristics, not countries' formal institutions (that is, the relative openness of political structures).

### **Protesters and their Governance Environment**

To recast the main argument of our paper, the governance environment where individuals operate is likely to shape their political behavior and participation in politics. A state with high-quality governance environment would be expected to embolden the claims of aggrieved groups, and consequently, reinforce the willingness of engaged citizens to participate in collective action. In contrast, a state with low-quality governance environment would be

expected to discourage engaged citizens to participate in politics as they perceive a lower probability of influencing positive outcomes.

Two examples may help to illustrate how citizens in extractive areas interact with institutions to achieve their goals. The examples focus on courts decisions and the judiciary to show their impact on mobilizations. On the one hand, Chile is a leading country in world copper production, and experiences a lot of mining related conflicts. Chile has 37 conflicts, the second highest number of observed conflicts in the region (OCMAL 2017). The country also has a strong track record of governance quality based on the Inter-American Development Bank's Governance Quality Index (Chuaire and Scartascini 2014), which we describe in the next section. 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 country with high-quality governance like Chile would be expected to have higher levels of extractive conflicts (see Figure 1).

Chile's copper mines are located in the northern region of the country, specifically in the underpopulated areas of the Atacama Desert. Unlike neighboring Peru, which we discussed later, extractive activities in Chile are not in competition with agriculture. 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 vote to stop work.

Because negotiations were unsuccessful, in February 2017, the 2,500 member-union at Escondida, the world's largest copper mine operated by BHP Billiton, went on strike. Union workers were demanding a salary increase of 7 percent as well as a bonus. Escondida, in turn, offered a third of the bonus demanded by the union with no salary increase and cuts in some benefits. Union workers ended the strike by invoking a rarely used legal provision, Article 369,

that allows 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 end of the strike, which lasted 43 days, came just before a change of labor laws, which is widely seen as bolstering organized labor groups. The new labor law was approved in 2016 by the center-left government of President Michelle Bachelet. It took effect in April 2017, and 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.”<sup>6</sup> The union told media outlets that the labor law changes “had informed their negotiations.”<sup>7</sup>

On the other hand, Ecuador possesses significant oil reserves (3% of Latin American oil reserves) (Walter 2016). The country produces approximately 557,000 barrels of oil per day (OPEC 2015), with oil rents comprising approximately 13.7 per cent of its GDP in 2014 (World Bank, 2016).<sup>8</sup> Unlike Chile, the country has only 7 extractive conflicts, among the fewest number of conflicts in our sample (the sample mean is 12.38) (OCMAL 2017). Ecuador has also a Governance Quality score of 1.01, which is far lower than the mean value of 1.41 (about .824 standard deviations below the mean). A country with low-quality governance like Ecuador would be expected to have lower levels of extractive conflicts (see Figure 1).

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).<sup>9</sup> The complaints alleged

that between 1964 and 1992 Texaco's oil operations polluted the rainforests and rivers in Ecuador, resulting in environmental damage and damage to the health of those who live in the region. Texaco was acquired by Chevron in 2001. The lawsuit was dismissed by the US federal court in 2002, indicating that Ecuador was a more appropriate venue for litigating these claims.

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

The ruling set off a length and 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 complaint's lawyers and representatives in a US federal court because the ruling in Ecuador involved a conspiracy to commit extortion.

In March 2014, US district judge Lewis Kaplan ruled in favor of Chevron, and found that the lawyers for the Ecuadorian community had used 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." On August 2016, a US Court of Appeals agreed with the lower court's ruling. On June 2017, the US Supreme Court declined to hear the appeal by the plaintiffs. This meant that the lower court decision blocking the enforcement of the Ecuadorian award stands.

Ecuadorian indigenous groups have often relied on international allies to further their claims against oil drilling (Eisenstadt and West 2017). For example, the \$9.51 billion judgment was led by an American activist-lawyer Steven Donziger and the California-based Pachamama Foundation. While these alliances speak to the inadequate political representation of indigenous people more generally, they also reveal the low-quality governance environment of the country. Chevron does not deny the environmental damage in the Ecuadorian rainforest, but when Texaco/Chevron were drilling for oil in Ecuador, they were doing so as a partner of PetroEcuador (formerly CEPE), the country's state-run oil company.<sup>10</sup> Indigenous groups have "strongly criticized the central government's failure to attend to environmental degradation, but were divided over whether to [permit] further explor[ation] and drill for oil" (Eisenstadt and West, 2017, 66). 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."<sup>11</sup>

[Insert Figure 1 about here]

To summarize, and following the literature on the consequences on the political consequences of movements, a protest rally or demonstration seldom decides the final outcome of a mobilization. Instead movements interact with a broad range of institutions, such as court decisions and the judiciary, to influence positive outcomes. In Chile, union workers drew on the strengths of their governance environment, including Article 369 and the new labor law, to achieve positive results. In contrast, while the mobilizing capacity of indigenous people in Ecuador is comparatively strong and well-known (Van Cott 2008), the country's low-quality

governance environment diminishes their ability to achieve their goals. Indigenous groups tend to rely on third party actors (e.g., Attorney Donziger) and other international allies (e.g., the Pachamama Foundation) to funnel their claims. In all, the governance environment shapes the decision-making of individuals as institutions provide a source of information that help determine the likelihood to achieve positive outcomes.

## **Data and Methods**

To test our theory, we use data from the Latinobarómetro (2015) survey for individual-level variables, and, for country-level governance quality, we use the Inter-American Development Bank's Government Capabilities Index from the Political Institutions, Government Capabilities, and Public Policy International Dataset (Chuaire and Scartascini 2014). This study is cross-sectional, with the unit of analysis being the individual survey respondent and includes 20,250 respondents within 18 Latin American countries.<sup>12</sup>

The Latinobarómetro public opinion survey is conducted annually for over 20,000 respondents across Latin America. The Latinobarómetro creates nationally representative, random, and stratified surveys that reach both urban and rural populations to develop a more robust and representative sampling of the population. These surveys ask a wide range of questions regarding individuals' views towards the government, democracy, perceptions of the economy, socioeconomic status, attitudes towards other countries, and opinions on a range of political and social topics.

Our dependent variable is based on a survey question regarding an individual's stated likelihood to protest over resource extraction (hereafter, *Protest*). Latinobarómetro asks respondents to choose a value on a Likert scale from 1 (not at all likely) to 10 (very likely) based

on the following statement: “...how willing would you be to demonstrate and protest about the extraction of natural resources?” In our sample, the median response to this question is 6 on the 10 point scale.<sup>13</sup> Figure 2 breaks down the average likelihood for each country in our sample. Colombians have the highest average likelihood to protest at 7.01 while Ecuadorians have the lowest declared likelihood at 4.23.

This operationalization has a number of benefits compared to other cross-national studies of protest behavior. First, this survey question measures citizens’ likelihood to protest specifically over a nation’s extractive policies. Existing studies on protest participation will typically aggregate all forms of protest rather than dissecting target policy issues. Second, we are directly measuring individual *attitudes* regarding protests. This provides a more accurate representation of the decision-making calculus of citizens.

[Insert Figure 2 about here]

### ***Individual-Level Characteristics***

At the individual-level, our key independent variable is an individual’s perceptions of social networks as a tool of political action (hereafter, *Social Engagement*). As stated above, social networks provide the organizational resources necessary for sustained mobilizations, as well as the opportunities to join like-minded citizens. More engaged citizens are much more likely to engage in collective action than their less engaged neighbors. For this measure, we use individuals’ attitudes over social networks as a viable channel for political participation. Respondents are asked to pick the statement to which they most agree. Responses include: “Social networks allow you to participate in politics”; “Social networks create the illusion that you are participating in politics”; and “Social networks are not suitable for participat[ion] in politics.”<sup>14</sup>



We then recode the new variable *Social Engagement* as dichotomous, whereby the survey response of “Social networks allow you to participate in politics” is coded 1, and 0 otherwise.

Social engagement plays a vital role in an individual’s likelihood that they will participate in collective action. Research on political protests and other non-electoral forms of participation has widely found that these networks provide the opportunities and the organizational resources necessary for individuals to engage in successful collective action (Jenkins 1983; McCarthy and Zald 1973, 1977). Rooted in the resource mobilization literature, engaged citizens have access to channels of participation that are unavailable to otherwise disconnected protesters. When individuals view social engagement as a useful avenue for political participation, then they are more also likely to be interested in politics, have political sophistication, join activities and organizations that act collectively, and be more likely to participate in collective action than individuals that do not view social networks as legitimate avenues for political participation.

We also include a number of controls found to affect the likelihood of collective action. These include an individual’s level of civic participation, the frequency she campaigns for political parties (*Campaign Frequency*), support for democracy, presidential approval, interpersonal trust, personal economic perceptions, and national economic perceptions (see Appendix A, Table A3). These controls isolate specific factors regarding an individual’s level of political sophistication, perception of the political and economic status quo, and her engagement with others. Additionally, we control for a variety of demographic characteristics of the survey respondent such as gender, age, socioeconomic status, and education level (in years – *Education Years*).

Because our dependent variable (*Protest*) measures an individual’s willingness to participate in protests over resource extraction, not *actual* participation, we include a control for

an individual's previous participation in protest activity (*Protest Activity*). This variable combines survey answers based on previous participation in either an authorized or unauthorized march or demonstration (see Appendix A, Table A3). This measure helps disaggregate willingness to participate from actual participation by controlling for the latter.

Furthermore, because we know that environmental attitudes are often related to protests over natural resource extraction (Eisenstadt and West 2017), we control for the salience of environmental issues (hereafter, *Environment*). The Latinobarómetro (2015) asked respondents to name the factors that are most important for the development of their respective countries. Respondents can mention a number of factors, such as infrastructure, institutions, social policies, and the environment. We create a dichotomous measure based on this question. If a respondent mentions the environment in her answer, she is coded 1, and 0 otherwise. We would expect individuals to be more likely to protest over resource extraction if they prioritize the environment when thinking about development.

### ***Country-Level Characteristics***

For country-level data, we utilize the Inter-American Development Bank's Government Capabilities Index from the Political Institutions, Government Capabilities, and Public Policy International Dataset (Chuaire and Scartascini 2014). This variable measures each country's policymaking capabilities based on four major institutional bodies: the legislature, political parties, judiciary, and bureaucracies. Previous studies have found these institutions to be particularly important in determining the effectiveness of the policymaking environment (Stein and Tommasi 2007). This continuous level measure ranges from 0 to 4, with lower values

indicating lower levels of policymaking capabilities. For our sample, this variable ranges from a low of .77 in Venezuela to a high of 2.36 in Costa Rica.

We refer to this variable as a country's *Governance Quality*. It includes dimensions of public policy stability, adaptability, coordination, efficiency, and public regardedness.<sup>15</sup> It also incorporates government capabilities in the legislature, the level of judicial independence, political party institutionalization, and civil service quality. Furthermore, the variable is constructed around the logic of "intertemporal cooperation," meaning these data reflect the policymaking environment as an ongoing process of cumulative institutionalization rather than a reflection of the incumbent administration (Scartascini and Tommasi 2014, 5-6). It is also built around conceptualizations of democratic institutions, implying inherent bias towards "cooperation as opposed to imposition" in the policymaking arena (Scartascini and Tommasi 2014, 5 emphasis in original).

This operationalization of *Governance Quality* most directly corresponds to our theory. We hypothesize individuals will be more likely to engage in protests against resource extraction when they perceive the government as having greater capacity to respond to their demands. In line with literature on the political consequences of mobilizations, the policymaking capabilities of the state are crucial in responding to the claims of protesters. As such, we would expect individuals to utilize their social networks and available resources to protest over resource extraction when they perceive a greater government capacity to deliver good policy outcomes. This perception serves as a cue to citizens when evaluating a government's credibility. 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 displays the variation in *Governance Quality* for the countries in our sample. Based on this visualization, *Governance Quality* has a great deal of variation in our sample. The average level of governance quality is 1.41 with a standard deviation of .48. Costa Rica has the highest policymaking quality (2.36), and Venezuela has the lowest level of quality (.77).

[Insert Figure 3 about here]

We also include a number of controls at the country-level to prevent spuriousness in our correlations. These include the natural log of population size, GDP growth, and GINI coefficients. Data on population and GDP growth comes from the World Bank (2015) and data on GINI comes from the Standardized World Income Inequality Database (SWIID) (Solt 2016).

### **Methods**

Due to the nature of our theory and the type of data we are utilizing, we estimate multilevel models to account for the nested nature of our data (i.e., individual- and country-level characteristics) (Snijders and Bosker 2012). In other words, our data contains information for individuals  $i$  within countries  $j$ . Multilevel modeling allows for coefficients to vary randomly within the groups (countries  $j$ ), which allows for the estimation of standard errors while assuming correlation of error terms within these groups. Furthermore, Snijders and Bosker (2012, 106) explain that an interaction between variables at the individual-level and the country-level can be tested using cross-level interaction terms.<sup>16</sup>

Following this logic, we test three models. The first is the individual-level only characteristics, the second includes the country-level characteristics to the individual-level variables, 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.

## Results

Table 1 presents the results from our empirical tests. Model 1 tests only the individual-level variables predicting a person's willingness to protest over resource extraction. These results confirm previous studies of protest participation (Moseley 2015). According to our model, individuals that are more socially engaged, are civically minded, and campaign frequently for political candidates or parties are more likely to protest over resource extraction than their less engaged counterparts.

Further, we explore the substantive impact of these variables of interest in predicting protest likelihood (see Table 2). Based on Model 1, a person who is socially engaged, civically-minded, and campaigns frequently has close to a 30% 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% likely. This is a difference of about 10%.

[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. The *Governance Quality* indicator has a positive and statistically significant effect on an individual's likelihood to protest over resource extraction, as shown by Model 2. Model 3

shows the results for the interactive model, whereby *Governance Quality* is interacted with an individual's *Social Engagement*. The interaction between these individual-level attitudes and the institutional environment being used to predict the likelihood to protest is a more direct test of the decision-making calculus utilized in protest participation. The results of this model show a positive and statistically significant relationship between this interaction and the probability of protesting. These findings are consistent with a host of individual- and state-level controls.

In fact, several control measures appear to be significant predictors of willingness to protest over natural resource extraction. *Civic participation*, *Campaign frequency*, and *Education years* are positive and statistically significant across all models. This suggests that civically minded individuals, who are politically knowledgeable and well-educated, are more likely to protest than their less engaged counterparts. *Age* is a significant predictor of willingness to protest, and, as one would suspect, is negatively correlated with our dependent variable. Finally, *Protest activity* and *Environment* are both positive and statistically significant predictors of willingness to protest. Environmental concern is among the most pressing issues regarding extractive industries, so it seems intuitive that someone more concerned with environmental protection would also be more likely to protest extraction. We also find it intuitive that those who previously engaged in protest activities would be more willing to protest. This result also illustrates that even when controlling for *actual* participation in a demonstration, march, or protest, our findings are robust.

Table 1's results can only tell us the direction and significance of key independent variables. Therefore, we also present the predicted means of the interaction between the *Governance Quality* index and *Social Engagement* to determine the substantive impact of our theoretical framework. Figure 4 shows predicted means for this interaction. In this figure, we

are predicting only those individuals who are very willing to protest over resource extraction (coded as a “10” on the Latinobarómetro survey question). This figure demonstrates that higher levels of governance quality increases an individual’s willingness to protest over resource extraction. Moreover, an individual’s level of social engagement positively increases this likelihood to a statistically significant higher level than for an individual who is not socially engaged. In terms of predicted probabilities, a person who is socially engaged is about 10% more likely to be a “10” on this scale than someone who is not socially engaged, while holding *Governance Quality* at its highest value (2.36) and all other variables at their mean value.

[Insert Figure 4 about here]

### **Sensitivity Analysis**

In addition to the models shown in Table 1, we conducted a series of robustness tests to ensure the stability of our findings. First, it is plausible that our measure of social networks (*redes sociales*) may be capturing an individual’s use of social media, including e-mail and internet usage, to obtain and share political information. As such, we include a control for frequency with which an individual utilizes e-mail and the internet (hereafter, *Social Media*). The results are consistent with our previous findings (see Appendix B, Table B1).

Second, while we argue that our main independent variable at the country-level, *Governance Quality*, is the best operationalization of our theory, we must consider the likelihood that our results are a function of this particular measure. As such, we present findings for alternative measures of a country’s governance environment. For this, we utilize the World Bank’s *Quality of Governance Indicators*. These measures account for the strength of important democratic institutions and overall perceptions of government effectiveness. These indicators

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 (*Additive*). Our results are consistent with our previous models when we use either the *Additive* measure of government capabilities or if we disaggregate this variable to its three component parts (see Appendix B, Table B2).

Third, we have also taken into account a respondent's proximity and experience with extraction through measurement of the number of mining properties within a 30 kilometer radius of a survey area (hereafter, *Proximity to Extraction*). We utilize information from Infomine (2011), updated by Haslam and Tanimoune (2015), to determine the known universe of operating firms in Latin America at the advanced exploration stage or above (see Appendix A for more information). 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 (2015). This geographic location is known as city (or *ciudad*) and refers to the smallest political or administrative division of a state as recorded by the Latinobarómetro (2015). As one would expect, the variable *Proximity to Extraction* has a positive and statistically significant effect on an individual's likelihood to protest over resource extraction. This indicates that as the number of mining properties near the respondent increases, the willingness of an individual to participate in protests increases (see Appendix B, Table B3). 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.<sup>17</sup>



## Discussion

Moseley (2015) found institutional quality to have an inverse effect on protest likelihood. According to his findings, individuals are less willing to protest when institutional quality is strong. These institutions play into the strategic decision for activists to participate collectively, as formal political institutions are not functioning as appropriate conduits of grievances (Eisinger 1973; Tilly 1978). Our findings contradict this conclusion, indicating willingness to engage in collective action is partially a function of the issue being protested. As shown in Figure 4, high-quality governance environment will reinforce the willingness of engaged citizens 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 and Córdova 2016).

Our results also speak to existing findings on extractive conflicts in Latin America. The bivariate scatterplot between the level of *Governance Quality* and extractive conflicts from the OCMAL (2017) dataset shows that countries with high-levels of *Governance Quality* also appear to have a high level of extractive conflicts (see Figure 1). Chile and Ecuador are, in fact, at opposite extremes when it comes to the number of extractive conflicts and the index of governance quality. We find the same trend in this paper: an individual’s willingness to participate in a protest against resource extraction increases in states with higher levels of *Governance Quality*.

Mineral-rich Peru is an example of a country with consistent patterns of confrontation over resource extraction.<sup>18</sup> It has 39 extractive conflicts, which is the highest number of observed conflicts in the region (OCMAL 2017). The country’s governance environment also provides

mixed “social cues” about the likelihood to achieve positive outcomes. Peru has a Governance Quality score of 1.27, lower than our sample mean of 1.40.

The country’s extractive development strategy seeks to “have it both ways.” On the one hand, governments have sought to protect the country’s “investment grade” by maintaining an open-door policy toward foreign direct investment and thus secure greater volumes of capital in the natural resource sector. Extractive industries, in tandem, wield enormous political influence. As Arellano-Yanguas (2017, 109) writes, “the largest mining companies have had a direct say in negotiations about the main issues regarding the mining sector in Peru.” On the other hand, governments string along protesters by creating dispute settlements that are weak and generally do not produce politically binding commitments. In 2011, for instance, the government extended consultation rights over some extractive activities, but these proceedings remain mostly informative and do not enable local communities to influence projects in any meaningful sense (Bebbington et al. 2013; Gustafsson 2017, 56). Because governments rely on the extractive sector to guarantee tax revenues, these participatory arrangements seek mostly to postpone mining concessions. Governments’ response to rising extractive conflicts is largely passive, expecting perhaps that protests would die down because of protest fatigue.

## **Conclusion**

Existing literature on extractive conflicts has mostly dwelt on event data from the print media to explore the factors that affect mobilization cross-nationally and sub-nationally. Case studies of extractive conflicts have also examined the coalitions and organizations that drive successful anti-mega projects campaigns. While these works have made important

contributions, none have examined why individuals are likely to protest extraction across Latin America.

Our paper has shown that both individual- and state-level factors influence an individual's willingness to oppose extractivism. 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 governance environment, which altogether provides them with information about the expediency of collective action (similar Moseley 2015). The quality of governance, 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. Strong / weak institutions may incite lower / higher levels of protest. Strong / weak institutions may also spur assimilative (peaceful) / confrontational (violent) protest strategies. These arguments center on formal institutions (e.g., the relative openness of political structures), and critics have pointed out that the concept of political structure offers a mechanistic understanding of social movements (Goodwin and Jasper 2003). In contrast, the literature on the political consequences of movements inform us that movements interact with institutions to influence positive outcomes (Amenta and Young 1999; Amenta, Caren, Chiarello, and Su 2010). Our swift review of extractive conflicts has shown that while mobilizations may have a short-term impact on outcomes, a broad swath of institutions are involved in shaping the long-term consequences of mobilizations. These institutions are linked to a country's policymaking capabilities and policy characteristics, and range from court decisions to legislative

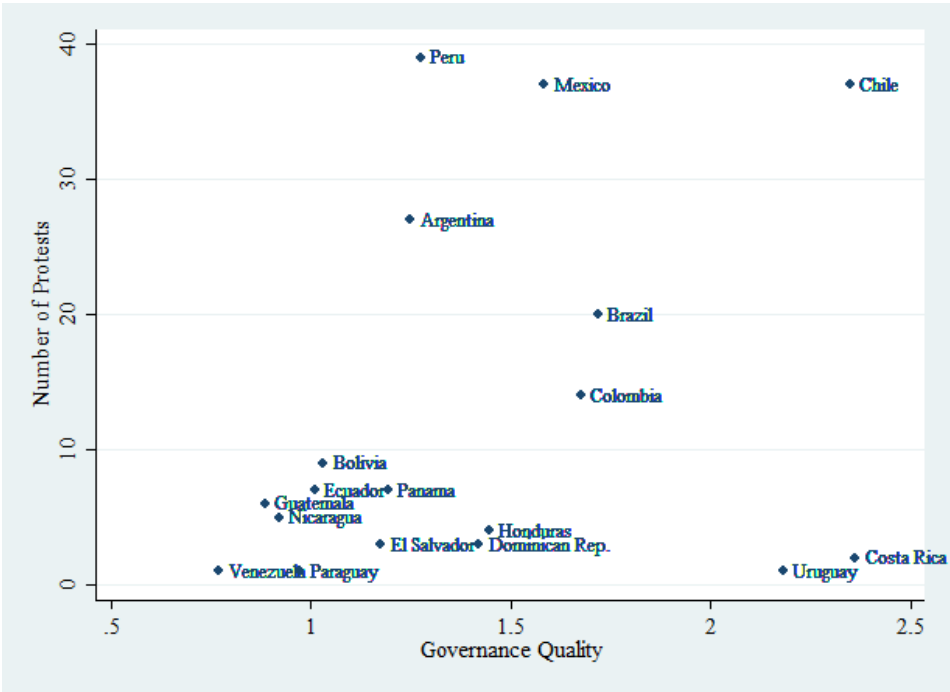
decrees and executive orders. Thus, a track-record of strong governance environment will reinforce the willingness of an engaged citizen to protest over resource extraction because the different institutions that make up government are seen as “source cues” of good policy outcomes (similar Barnes and Córdova 2016). In countries with a low-quality governance environment, in contrast, citizens are deprived of this salient source of information, and accordingly, they are less likely to protest over resource extraction.

Our study on the willingness to participate in protests over resource extraction is limited by the sets of questions that come from the Latinobarómetro surveys. Yet we found 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 effectively measure the dense organizational networks that are pivotal to sustain mobilizations. The Latinobarómetro surveys also do not allow us to explore why individuals are challenging resource extraction. However, building on Eisenstadt and West (2017), 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 the natural resources they require. Amengual (forthcoming) has recently shown that extractive industries are more likely to distribute benefits in inclusive ways when cohesive social organizations are present. Conversely, extractive industries are more likely to distribute benefits in targeted (or clientelistic) ways when fragmented social organizations are present. Gustafsson (2017) has also shown that when local

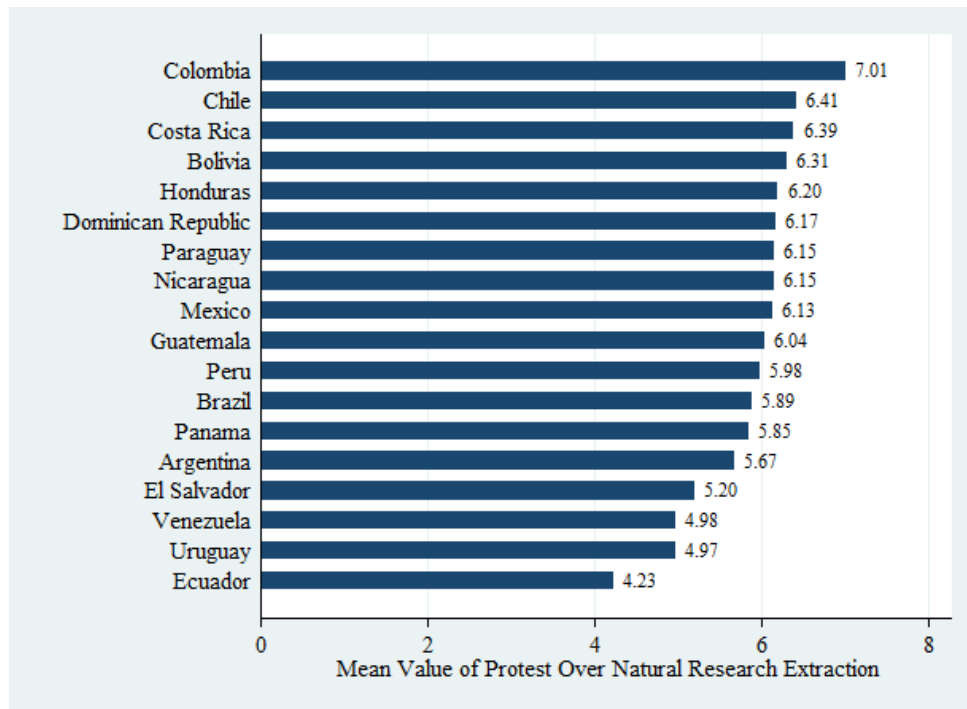
communities are politically weak relative to extractive industries, corporate-community relations are likely to result in demobilization or clientelism. However, when local communities are strong enough to establish a more equal balance of power, corporate-community relationships tend to produce either confrontation or strategic collaboration. Successful resistance campaigns against resource extraction are proportional to the cohesiveness of networks of activists and their organizations. And as this paper has shown, 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: Governance Quality and the Number of Extractive Conflicts by Country



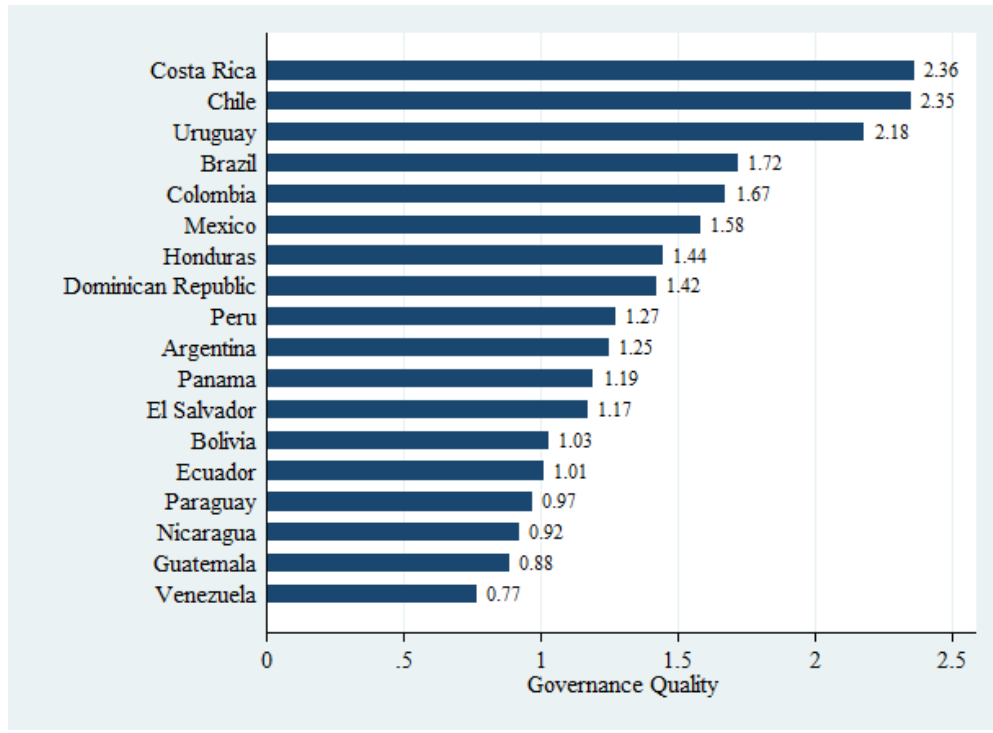
Source: Chuaire and Scartascini (2015) and OCMAL (2017).

Figure 2. Mean Likelihood to Protest over Resource Extraction



Source: Latinobarómetro (2015).

Figure 3. Mean Value of Governance Quality



Source: Chuaire and Scartascini (2015).



Table 1: Likelihood to Protest over Resource Extraction

	<i>Individual-Level Model (1)</i>	<i>Governance Quality Model (2)</i>	<i>Governance Quality * Social Engagement Model (3)</i>
<b>Individual-Level Variables</b>			
<i>Social Engagement</i>	0.251*** (0.046)	0.231*** (0.045)	-0.182 (0.161)
<i>Civic Participation</i>	0.209*** (0.047)	0.218*** (0.048)	0.215*** (0.049)
<i>Campaign Frequency</i>	0.125*** (0.031)	0.125*** (0.033)	0.126*** (0.032)
<i>Gender</i>	-0.009 (0.030)	-0.013 (0.032)	-0.014 (0.033)
<i>Age</i>	-0.012*** (0.002)	-0.013*** (0.002)	-0.013*** (0.002)
<i>Socioeconomic Status</i>	0.016 (0.027)	0.012 (0.028)	0.012 (0.028)
<i>Education Years</i>	0.013** (0.005)	0.013** (0.005)	0.013** (0.005)
<i>Presidential Approval</i>	-0.075 (0.057)	-0.055 (0.054)	-0.054 (0.053)
<i>Interpersonal Trust</i>	-0.006 (0.070)	0.015 (0.069)	0.013 (0.070)
<i>Personal Economic Perceptions</i>	0.042 (0.027)	0.029 (0.022)	0.028 (0.022)
<i>National Economic Perceptions</i>	-0.043 (0.028)	-0.039 (0.028)	-0.038 (0.028)
<i>Support for Democracy</i>	0.030 (0.029)	0.034 (0.030)	0.034 (0.030)
<i>Protest Activity</i>	0.595*** (0.087)	0.603*** (0.091)	0.600*** (0.089)
<i>Environment</i>	0.118*** (0.039)	0.117*** (0.041)	0.120*** (0.040)
<b>Country-Level Variables</b>			
<i>Governance Quality * Social Engagement</i>	--	--	0.286** (0.112)
<i>Governance Quality</i>	--	0.256*** (0.094)	0.184** (0.090)

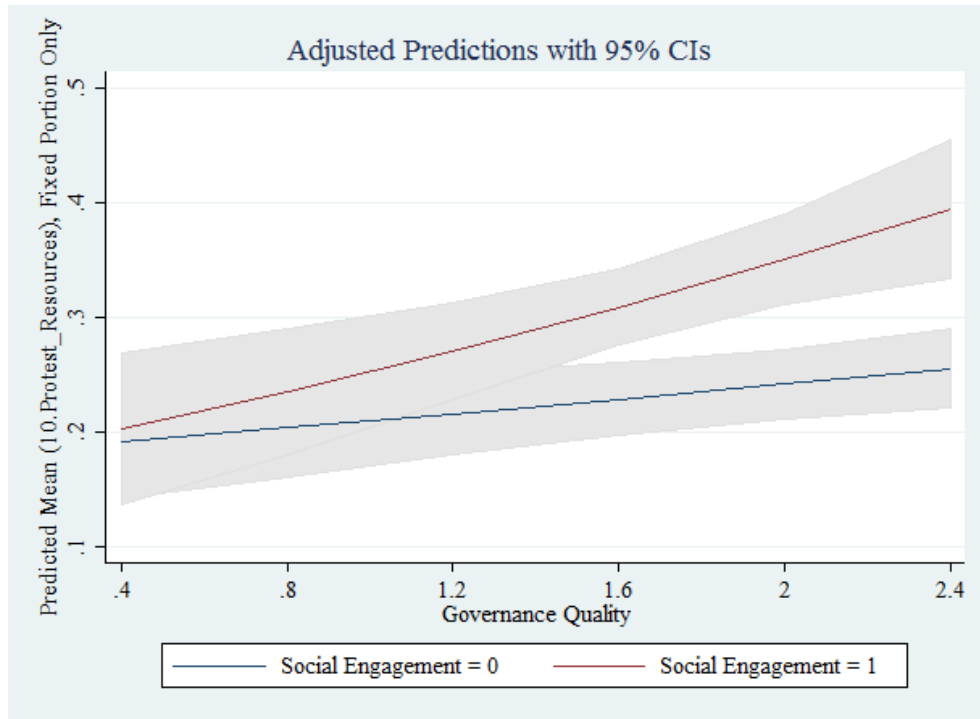
<i>GINI</i>	--	0.049***	0.048***
		(0.012)	(0.012)
<i>Population (ln)</i>	--	0.084*	0.084*
		(0.048)	(0.049)
<i>GDP Growth</i>	--	0.075**	0.077**
		(0.031)	(0.031)
<i>Level 1 N</i>	15,736	15,003	15,003
<i>Level 2 N</i>	18	17	17

\*\*\*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*

<i>Levels of civic and political engagement<sup>19</sup></i>	<i>Predicted Probabilities</i>	<i>Confidence Intervals</i>
<i>Low</i>	.1932	[.1607, .2257]
<i>High</i>	.2986	[.2567, .3406]

Figure 4: Predictive Margins of Protesting over Resource Extraction



## Appendix A. Summary Statistics and Variable Descriptions

Table A1. Respondents per Country

<b>Country</b>	<b>Respondents</b>
Argentina	1,200
Bolivia	1,200
Brazil	1,250
Chile	1,200
Colombia	1,200
Costa Rica	1,000
Dominican Republic	1,000
Ecuador	1,200
El Salvador	1,000
Guatemala	1,000
Honduras	1,000
Mexico	1,200
Nicaragua	1,000
Panama	1,000
Paraguay	1,200
Peru	1,200
Uruguay	1,200
Venezuela	1,200

Table A2. Summary Statistics

<b>Variable</b>	<b>Observations</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
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 A3. 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'
Social Engagement	'With which of the following statements do you agree most?' Scores were dichotomized between those that answered 'Social networks allow you to participate in politics' and those that did not answer this way.
Civic Participation	'Which of the following things do you think a person must do in order to be considered a citizen?' Answers were dichotomized based on those that answered 'Participate in social organizations' and 'Participate in political organizations'.
Personal Economic Perceptions	'In general, how would you describe your present economic situation and that of your family? Would you say it is...?' <ol style="list-style-type: none"> <li>1. Very bad</li> <li>2. Bad</li> <li>3. About average</li> <li>4. Good</li> <li>5. Very good</li> </ol> <p>* These values have been inverted so that higher values indicate a more positive view of the economic situation than lower values.</p>
National Economic Perceptions	'In general, how would you describe the country's present economic situation? Would you say it is...?' <ol style="list-style-type: none"> <li>1. Very bad</li> <li>2. Bad</li> <li>3. About average</li> <li>4. Good</li> <li>5. Very good</li> </ol> <p>* These values have been inverted so that higher values indicate a more positive view of the economic situation than lower values.</p>
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'
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?'
Age	'What is your age?'
Gender	'Gender of the interviewee' Male=1 Female=2
Presidential Approval	'Do you approve or not the performance of the government led by President (name)?'
Support for Democracy	'With which of the following statements do you agree most?' Answers were dichotomized between those that answered 'Democracy is preferable to any other kind of government' and those that answered otherwise.
Education (years)	'What level of education do you have?'
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 inverted so that higher values indicate 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 <i>Protest Activity</i> is coded 1 if answers to (b) and (c) are 1, and 0 otherwise.



<p>Environment</p>	<p>'From the following list of topics, tell me which are the most important for the development of your country.'</p> <ul style="list-style-type: none"> <li>Environment</li> <li>Infrastructure</li> <li>Institutions</li> <li>Integration to the world</li> <li>Social policies</li> <li>None of the above</li> <li>Do not know</li> <li>Did not answer</li> </ul> <p>If respondent answered that the environment, then this variable is coded 1, and 0 otherwise.</p>
<p>Social Media</p>	<p>'Have you ever used e-mail or connected to Internet?'</p> <ul style="list-style-type: none"> <li>Yes, every day</li> <li>Yes, occasionally</li> <li>Yes, rarely</li> <li>No, never</li> <li>Do not know</li> <li>Did not answer</li> </ul> <p>If respondent answered 'Yes, every day' or 'Yes, occasionally', they were coded 1, and 0 otherwise.</p>

Table A4. Description of component variables in *Governance Quality*

<b>Component Variable</b>	<b>Description</b>
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 and Tommasi (2014, 8).	

#### **Description of Proximity to Extraction Variable**

We utilize information from Infomine (2011), updated by Haslam and Tanimoune (2015), to determine the known universe of operating firms in Latin America 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 within a 30 kilometer radius of the survey respondent.

Appendix B. Robustness Checks

Table B1: Likelihood to Protest over Resource Extraction Controlling for *Social Media*

<i>Variable</i>	<i>Model 1</i>
<i>Social Engagement *</i>	0.271**
<i>Governance Quality</i>	(0.115)
<b><u>Individual-Level Variables</u></b>	
<i>Social Engagement</i>	-0.174
	(0.167)
<i>Civic Participation</i>	0.213***
	(0.053)
<i>Campaign Frequency</i>	0.118***
	(0.034)
<i>Gender</i>	-0.018
	(0.035)
<i>Age</i>	-0.013***
	(0.002)
<i>Socioeconomic Status</i>	0.011
	(0.031)
<i>Education (years)</i>	0.011*
	(0.006)
<i>Presidential Approval</i>	-0.037
	(0.055)
<i>Interpersonal Trust</i>	-0.004
	(0.074)
<i>Personal Economic Perceptions</i>	0.036
	(0.023)
<i>National Economic Perceptions</i>	-0.052*
	(0.027)
<i>Support for Democracy</i>	0.041
	(0.031)
<i>Environment</i>	0.128***
	(0.043)
<i>Protest Activity</i>	0.587***
	(0.095)
<i>Social Media</i>	0.007
	(0.017)
<b><u>Country-Level Variables</u></b>	
<i>Governance Quality</i>	0.045***
	(0.011)
<i>GINI</i>	0.121**
	(0.053)
<i>Population (log)</i>	0.087**

	(0.035)
<i>GDP Growth</i>	0.045***
	(0.011)
<i>Level 1 N</i>	13,829
<i>Level 2 N</i>	16

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

Table B2: Multilevel Ordered Logistic Regression: Likelihood to Protest over Resource Extraction with Alternative Operationalization of *Governance Quality*

<i>Variable</i>	<i>Model 1: Additive * Social Engagement</i>	<i>Model 2: Rule of Law * Social Engagement</i>	<i>Model 3: Government Effectiveness * Social Engagement</i>	<i>Model 4: Voice and Accountability * Social Engagement</i>
<i>Additive * Social Engagement</i>	0.089*** (0.026)			
<i>Rule of Law * Social Engagement</i>		0.230*** (0.052)		
<i>Government Effectiveness * Social Engagement</i>			0.277*** (0.081)	
<i>Voice * Social Engagement</i>				0.208** (0.102)
<b><u>Individual-Level Variables</u></b>				
<i>Social Engagement</i>	0.264*** (0.041)	0.314*** (0.043)	0.282*** (0.039)	0.194*** (0.043)
<i>Campaign Frequency</i>	0.126*** (0.032)	0.125*** (0.032)	0.126*** (0.032)	0.125*** (0.032)
<i>Civic Participation</i>	0.216*** (0.049)	0.216*** (0.049)	0.216*** (0.049)	0.215*** (0.049)
<i>Gender</i>	-0.015 (0.033)	-0.016 (0.033)	-0.015 (0.033)	-0.014 (0.033)
<i>Age</i>	-0.013*** (0.002)	-0.013*** (0.002)	-0.013*** (0.002)	-0.013*** (0.002)
<i>Socioeconomic Status</i>	0.012 (0.028)	0.012 (0.028)	0.012 (0.028)	0.012 (0.028)
<i>Education (years)</i>	0.013** (0.005)	0.013** (0.005)	0.013** (0.005)	0.012** (0.005)
<i>Presidential Approval</i>	-0.052 (0.052)	-0.053 (0.052)	-0.052 (0.052)	-0.052 (0.053)
<i>Interpersonal Trust</i>	0.013 (0.070)	0.014 (0.070)	0.013 (0.070)	0.014 (0.070)
<i>Personal Economic Perceptions</i>	0.028 (0.022)	0.029 (0.022)	0.027 (0.023)	0.028 (0.022)
<i>National Economic Perceptions</i>	-0.038 (0.028)	-0.039 (0.028)	-0.037 (0.029)	-0.038 (0.028)
<i>Support for Democracy</i>	0.035 (0.030)	0.035 (0.030)	0.035 (0.030)	0.035 (0.030)

<i>Protest Activity</i>	0.600*** (0.089)	0.600*** (0.090)	0.600*** (0.089)	0.601*** (0.089)
<i>Environment</i>	0.121*** (0.040)	0.119*** (0.040)	0.123*** (0.040)	0.119*** (0.040)
<b><u>Country-Level Variables</u></b>				
<i>Additive</i>	0.033 (0.028)			
<i>Rule of Law</i>		0.100 (0.070)		
<i>Government Effectiveness</i>			0.052 (0.078)	
<i>Voice and Accountability</i>				0.129 (0.099)
<i>GINI</i>	0.056*** (0.014)	0.051*** (0.015)	0.058*** (0.013)	0.060*** (0.013)
<i>Population (log)</i>	0.080 (0.051)	0.093* (0.055)	0.062 (0.048)	0.085* (0.049)
<i>GDP Growth</i>	0.067** (0.030)	0.072** (0.031)	0.060** (0.029)	0.067** (0.031)
<i>Level 1 N</i>	15,003	15,003	15,003	15,003
<i>Level 2 N</i>	17	17	17	17

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  (standard errors). Multilevel ordered logit models with random intercepts.

Table B3: Likelihood to Protest over Resource Extraction Controlling for Proximity to Extraction

<i>Variable</i>	<i>Model 1</i>
<i>Social Engagement *</i>	0.278**
<i>Governance Quality</i>	(0.133)
<b><i>Individual-Level Variables</i></b>	
<i>Social Engagement</i>	-0.184 (0.187)
<i>Civic Participation</i>	0.210*** (0.054)
<i>Campaign Frequency</i>	0.132*** (0.032)
<i>Gender</i>	-0.005 (0.033)
<i>Age</i>	-0.013*** (0.002)
<i>Socioeconomic Status</i>	0.012 (0.030)
<i>Education (years)</i>	0.012** (0.006)
<i>Presidential Approval</i>	-0.036 (0.055)
<i>Interpersonal Trust</i>	0.030 (0.069)
<i>Personal Economic Perceptions</i>	0.023 (0.027)
<i>National Economic Perceptions</i>	-0.042 (0.030)
<i>Support for Democracy</i>	0.028 (0.029)
<i>Environment</i>	0.113*** (0.040)
<i>Protest Activity</i>	0.608*** (0.097)
<i>Proximity to Extraction</i>	0.017*** (0.006)
<b><i>Country-Level Variables</i></b>	
<i>Governance Quality</i>	0.217** (0.086)
<i>GINI</i>	0.053*** (0.013)
<i>Population (log)</i>	0.066 (0.046)
<i>GDP Growth</i>	0.080***

	(0.030)
Level 1 N	13,167
Level 2 N	17

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



## References

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## Endnotes

<sup>1</sup> Eisenstadt and West (2017) 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 where extraction has occurred or is debated.

<sup>2</sup> Our discussion on the quality of governance builds on Barnes and Córdova (2016).

<sup>3</sup> This section draws on Arce (2014).

<sup>4</sup> 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 Latinobarómetro can be found at:

<http://www.latinobarometro.org/>

<sup>5</sup> As Slack (2009, 117) pointed out, foreign-owned natural resource extraction is the “face of neoliberalism” in many Latin American countries.

<sup>6</sup> See Felipe Iturrieta, “Escondida workers to end strike as they opt for the old contract,” *Reuters* (March 3, 2017).

<sup>7</sup> See “World's biggest copper mine Escondida hit by workers strikes amid labor law reform,” *Deutsche Welle* (February 15, 2017).

<sup>8</sup> 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).

<sup>9</sup> See “Texaco/Chevron lawsuits” (<https://business-humanrights.org/en/texacochevron-lawsuits-re-ecuador>). Accessed November 11, 2017.

<sup>10</sup> Since 1993, PetroEcuador is the sole owner of this project.

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<sup>11</sup> 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>

<sup>12</sup> See Appendix A for the list of the countries in this analysis (Table A1), the descriptive statistics for all variables in our models (Table A2), as well as the coding for these variables (Table A3).

<sup>13</sup> In Spanish, the wording of the question was: En una escala de 1 a 10, donde 1 significa “nada” y 10 “mucho” ¿Cuán dispuesto estaría usted de salir a marchar y protestar por la explotación de recursos naturales? All translations were made by the authors.

<sup>14</sup> The Spanish wording was: ¿Cuál de las siguientes frases está más cerca de su manera de pensar? Las redes sociales permiten que uno participe en política (1); Las redes sociales crean la ilusión que uno está participando en política (2); Las redes sociales no sirven para participar en política (3).

<sup>15</sup> Appendix A (Table A4) provides a detailed breakdown of the component parts of this index.

<sup>16</sup> 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” (Barnes and Córdova 2016, 14).



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<sup>17</sup> Additionally, our results are consistent if we utilize *Civic Participation* as the component of the interaction variable with *Governance Quality* rather than *Social Engagement*.

<sup>18</sup> Of the world's reserves, Peru is endowed with approximately 14% of silver, 7% of copper, and 5% of gold (Walter 2016).

<sup>19</sup> 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 rest of the 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 rest of the variables at their mean.