

# The Geography of Repression and Support for Democracy: Evidence from the Pinochet Dictatorship\*

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We show that exposure to repression under dictatorship increases support for democracy and contributes to regime change when a democratic window of opportunity arises. Studying the military dictatorship of Augusto Pinochet in Chile, we exploit the fact that the predetermined location of military bases predicts local levels of civilian victimization, but is unrelated to historical political preferences. Using two-stage least squares, we show that increased exposure to repression during the dictatorship led to higher voter registration and higher opposition to Pinochet's continuation in power in the 1988 plebiscite that triggered the democratic transition. Complementary survey data confirms that individuals with greater exposure to repression during the military regime continue to have stronger preferences for democracy. However, exposure to repression does not affect election outcomes after democratization.

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# 1 Introduction

A large body of research, dating back to Banfield (1958) and more recently to Putnam et al. (1993), argues that individual beliefs and social norms are as important as political institutions for the correct functioning of democracy (Glaeser et al., 2007; Nannicini et al., 2013; Gorodnichenko and Roland, 2016; Alesina et al., 2018). In the last decade, several theoretical contributions have argued for the fundamental role that the democratic values held by individuals play in the transition to a stable democracy (Persson and Tabellini, 2009; Ticchi et al., 2013; Besley and Persson, 2018). But evidence on the factors that affect both individual preferences for democracy and the importance of these preferences for regime change remains limited. In this paper we focus on the effect of exposure to repression under dictatorship on support for democracy. State repression is one of the most pervasive features of authoritarian regimes (Acemoglu and Robinson, 2006; Svobik, 2012), but its effectiveness in quieting dissent remains largely unknown.<sup>1</sup>

The military dictatorship in Chile provides an ideal setting to explore these issues. During General Augusto Pinochet's 17-year rule (1973-1990), the state murdered more than 3,000 people and tortured over 38,000. Repression was targeted at supporters of the deposed government of Salvador Allende, including political activists, left-wing sympathizers, and members of trade unions. In 1988, a plebiscite was held to determine whether Pinochet should continue in power. The plebiscite was mandated by the country's constitution, drafted by the military government eight years before. It was the first approximately free election to take place in Chile under Pinochet. Fifty five percent of Chileans voted "No," precipitating the end of the dictatorship.

We study the relationship between the acts of repression carried out by the military regime and the behavior of voters in the 1988 plebiscite. We seek to establish whether increased exposure to repression in certain counties had long-lasting success in quieting dissent or whether, on the contrary, repression bolstered support for democracy in the presence of a window of opportunity. For this purpose, we examine whether voter registration and the "No" vote share in the plebiscite differed systematically in counties exposed to different levels of civilian victimization.

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<sup>1</sup> For instance, Davenport (2007, p.17) concludes that "one explanation for state repression is that authorities use it to stay in power, but the literature contains not one systematic investigation of this proposition."

This is not an easy question to answer. As mentioned above, repression in Chile was selective and targeted, making it likely that the observed variation in its intensity across counties is associated with pre-existing differences in political preferences and political participation, as well as in other unobservable characteristics affecting our outcomes of interest. As a result, a simple comparison of plebiscite outcomes in counties with different rates of civilian victimization is likely to yield biased estimates of the effects of repression.

To address this problem, we construct a novel dataset on the location of all military bases built prior to the government of Salvador Allende, the socialist president overthrown by Pinochet in 1973. We argue that the pre-determined location of bases led to a higher intensity of repression in the surrounding areas after the coup, but was unrelated to local political and economic characteristics. To back this claim, we provide evidence that the location of military bases is unrelated to the outcome of presidential, legislative and local elections in the decade before the coup. We also show that counties with varying proximity to military bases are balanced in other dimensions. After the coup, however, proximity to these bases facilitated repression. Our first-stage regressions confirm that the number of victims of the regime, as a share of population in 1970, is systematically larger in counties with a military base and decreases with the distance to the nearest base.

We exploit the plausibly exogenous variation in the exposure to repression generated by the proximity to military bases to construct instrumental variables. We use these instruments to estimate the causal effect of repression on support for democracy in the 1988 plebiscite. Our two-stage least squares (2SLS) estimates indicate that a one-unit increase in the number of victims per 10,000 inhabitants (0.5 standard deviations) led to an 8 percentage-point increase in the number of registered voters for the plebiscite and to a 2.6 percentage-point increase in the share of votes against Pinochet.<sup>2</sup> These effects are large and provide evidence of a positive causal effect of repression on political participation and preferences for democracy in the medium run, at least for counties that experienced higher repression because of their proximity to a military base.

We conduct a large set of placebo and robustness tests and verify that the results are unaffected by changes to the composition of the sample, the measurement of repression or proximity to bases,

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<sup>2</sup> Voter registration is measured as a share of population in 1970, while the “No” vote share has the number of valid votes in the denominator. As a share of 1970 population, the “No” vote is 7 percentage points higher in counties with one more victim per 10,000 inh., indicating that the additional registered voters are almost all voting “No.”

or the inclusion of spatial controls. We also consider potential violations of the exclusion restriction that could compromise our 2SLS strategy. Using a novel data set of local infrastructure projects, we show that the location of military bases is unrelated to the amount of government spending during the dictatorship. More generally, we employ the method proposed by Conley et al. (2012) to show that the direct effect of proximity to military bases on support for democracy would have to be large and positive (above 50% of the reduced-form effect) to make our estimates statistically insignificant.

The results for 1988 are largely replicated in the ensuing presidential election of 1989, which took place with Pinochet still in power, and in the local elections of 1992, the first after Pinochet left office. However, we find no effect of exposure to repression on electoral outcomes in six presidential elections and six separate sub-national elections since 1993. These results indicate that the observed effect of exposure to repression on election outcomes in the 1988-1992 period is not a reflection of changing political preferences in the left-right spectrum in response to politically-targeted violence, but rather an expression of increased support for democracy in the presence of a democratic window of opportunity, independently of political ideology. The null results after 1993 also provide further support to our empirical strategy, as it is difficult to think of unobservable characteristics of counties near military bases that affect electoral outcomes during the democratic window of opportunity between 1988 and 1992, but neither before nor after the dictatorship.

We provide further evidence on the effect of exposure to repression on democratic values using data from more than 10,000 respondents to the *Latinobarómetro* survey in Chile between 1996 and 2015. For this analysis, we again exploit geographical variation in exposure to repression from proximity to military bases in 1970. We also leverage temporal variation in exposure across cohorts. A difference-in-difference design reveals that survey respondents that were alive at the time of the coup in 1973 and that live in counties that had a military base in 1970 express greater support for democracy, as measured by multiple survey questions and an aggregate index.

This paper contributes to a growing literature on the determinants of political values and preferences. Previous work has studied the effects of migration (Spilimbergo, 2009; Barsbai et al., 2017), educational content (Cantoni et al., 2017) and economic conditions (Grosjean and Senik, 2011; Armingeon and Guthmann, 2014; Giuliano and Spilimbergo, 2014). Several studies have

explored the effect of experience with autocracy, but have been unable to separate the specific impact of repression (Alesina and Fuchs-Schündeln, 2007; Neundorf, 2010; Fuchs-Schündeln and Schündeln, 2015; Brum, 2018). A large literature has studied the consequences of exposure to civil conflict or acts of terrorism. The documented effects are heterogeneous and depend on the time horizon and the degree of exposure or threat (Bellows and Miguel, 2009; Blattman, 2009; Hersh, 2013; Jones et al., 2017; Balcells and Torrats-Espinosa, 2018; Condra et al., 2018). Relatedly, a recent meta-analysis of multiple papers on war exposure did not find robust effects on voting or interest in politics (Bauer et al., 2016). The same study concluded that much less is known about repression, which is likely to differentially affect the way in which citizens relate to the state and its institutions.

The literature on repression has grown in recent years, but has relied to a large extent on survey responses. As expected, exposure to repression generates fear and leads to a reduction in reported measures of dissent in the short run (Garcia-Ponce and Pasquale, 2015; Young, 2018). In the long run, survey responses reveal heterogeneous effects of exposure to repression depending again on various characteristics (Balcells, 2012; Bautista, 2014a,b; Wang, 2018). Only a small set of studies have moved beyond survey data and have documented long-run effects of exposure to repression on political participation and election outcomes (Lupu and Peisakhin, 2017; Rozenas et al., 2017; Zhukov and Talibova, 2018). Our setting allows us to bridge these different strands of the literature, as we study the effect of exposure to repression on the outcome of a real, high-stakes plebiscite related to democratization, but also use survey responses to guide our interpretation of the findings as an indication of increased support for democracy.

The paper also contributes to the empirical literature on the causes of democratization by showing that exposure to state repression can contribute to regime change when a window of opportunity arises. Existing work has largely studied the relationship between income and democracy across countries, with mixed findings (e.g. Acemoglu et al., 2008), while within-country studies have tested more nuanced comparative statics of the Acemoglu and Robinson (2001, 2006) model of democratic transitions (Bruckner and Ciccone, 2011; Aidt and Franck, 2015; Dower et al., 2018).

## 2 The Pinochet Dictatorship, Repression, and Democratization

### 2.1 *The organization of repression*

Salvador Allende became the first socialist to be democratically-elected as president in the Americas when he won the 1970 election in Chile. His government was short-lived and he was overthrown on September 11, 1973 by a military coup led by General Augusto Pinochet. A *junta* presided by Pinochet suspended the Constitution and declared itself the supreme executive and legislative body of the country, having as one of its main objectives to “struggle against Marxism and extirpate it to the last consequences” (Constable and Valenzuela, 1991, p.36).

During the first days after the coup, army and police units carried out mass raids in factories, shantytowns, mining camps, and universities. The military moved quickly to arrest or often summarily execute supporters of the deposed Allende government, including members of left-wing political parties and trade unions, as well as other political activists. The number of prisoners quickly mounted, forcing the regime to set up hundreds of improvised detention centers across the country, employing facilities ranging from schools to stadiums. These centers held thousands of prisoners. Most of these prisoners were tortured, many were killed.

Military bases (“regimientos”) were focal points for activities related to repression. A few weeks after the coup, a military unit led by General Sergio Arellano-Stark toured several cities in the span of roughly one month, rounding up and killing almost 100 people along the way. This “Caravan of Death” aimed to set an example of how sympathizers of the Allende government should be treated (Verdugo, 2001). Arellano-Stark and his troops moved in a military helicopter and usually arrived to military bases. Out of the 16 counties where they stopped, 15 were home to a military base when Allende came to power or were neighbors of a county with a base.<sup>3</sup>

In order to better coordinate surveillance and intelligence activities, the National Intelligence Directorate (DINA, according to its Spanish acronym) was created at the end of 1973. In the following years, repression was mainly targeted at the insurgent Revolutionary Left Movement

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<sup>3</sup> These counties were Rancagua, Curicó, Talca, Linares, Concepción, Temuco, Valdivia, Puerto Montt, Cauquenes, La Serena, Copiapó, Antofagasta, Calama, Iquique, Pisagua and Arica. All had a military base except for Puerto Montt (neighbor of Puerto Varas), Copiapó and Pisagua (neighbor of Iquique).

(MIR in Spanish), as well as the Socialist and Communist parties. Detentions were often conducted by men dressed in plain clothes, who would take prisoners without a formal arrest warrant. Secret detention and torture centers spread throughout the country. One of the most well known, Villa Grimaldi, had the “ideal characteristics for its new obscure function, such as its... proximity to the Telecommunication Regiment of the Army” (Corporación Villa Grimaldi, 2018). Detainees who entered these places were tortured and, in many cases, were subjected to forced disappearance.

Increased foreign pressure on human rights abuses led to the dissolution of DINA in 1977 and its replacement by the National Center of Information (CNI in Spanish). The CNI remained in charge of surveillance and repression until the end of the dictatorship, but the intensity of civilian victimization decreased substantially compared to the previous years. Still, the military regime occasionally resorted to repression against students and political activists throughout the 1980s.

According to the Rettig report (“National Commission for Truth and Reconciliation Report”), produced by the first truth commission set up after the return to democracy, 3,216 people were either killed or disappeared by the military government. Fifty-seven percent of these deaths occurred in 1973, when military units were directly responsible. The complementary Valech Report (“National Commission on Political Imprisonment and Torture Report”) produced by a second truth commission, concluded that 38,254 people had been imprisoned for political reasons, 94% of whom had been tortured. The number of people tortured was also concentrated in the first year of the dictatorship (61%), when military units were most involved.

## 2.2 *The 1988 plebiscite*

Pinochet began consolidating power shortly after the coup and by the end of 1974 had persuaded the other members of the military *junta* to name him president. A new constitution, drafted under tight military control in 1980 (Barros, 2002; Cavallo et al., 2011), formally extended his term as president for eight more years. The constitution stipulated that at the end of Pinochet’s term the *junta* would propose a presidential candidate for the following eight-year period, who would have to be ratified through a plebiscite. If this candidate failed to get a majority of votes, an open presidential election would take place. Pinochet was formally announced as the official candidate in August of 1988, little over a month before the date set for the plebiscite, October 5th. Voters

were presented with a straightforward ballot: “Plebiscite for President of the Republic: Augusto Pinochet Ugarte -- YES -- NO.”

The organization of the plebiscite was not without controversy. The voter registry had not been updated since 1973, when the existing one was declared void by the *junta*. In anticipation of the plebiscite, voter registration began in early 1987, but excluded people that in the government’s eyes had engaged in “terrorist activities” or that supported “totalitarian views based on class warfare” (El País, 1987). Radical left-wing parties denounced these restrictions, but registration was otherwise promoted by most political organizations and parties. As a result, 7.5 million people had registered to vote by September 1988, corresponding to more than 90% of the estimated voting population. Still, there was substantial variation in registration across counties, as we discuss below. Voting was mandatory, conditional on registration, and voter turnout reached 98%. The country also lacked a functioning institution in charge of electoral organization. The absence of an institutional framework to guarantee fair elections was solved by allowing international and local supervision of the voting process, which helped limit vote-buying and manipulation of the vote tally (Engel and Venetoulis, 1992; Santa-Cruz, 2005). As a result, the 1988 plebiscite came to be the first approximately free election to take place in Chile since the parliamentary election of March 1973.

Opinion polls initially predicted an easy victory for Pinochet, but as the election approached the outcome became more uncertain and the expected “No” vote share steadily climbed (Cauce, 1988; Méndez et al., 1988). Campaigning was an important factor in the final weeks before the vote. Both sides were allowed to produce daily 15-minute spots that were aired on national television in the month preceding the plebiscite. Those produced by the “No” campaign revealed sensitive information, including previously-censored material related to human rights violations and had a positive effect on the “No” vote share (Boas, 2015; González and Prem, 2018). Another source of uncertainty was related to the possibility that the military regime could call off the election or disregard the results. This worry was aggravated on the day of the election, as there was a substantial delay in the publication of the results, allegedly as a consequence of Pinochet’s initial reluctance to accept the outcome of the vote. The official results were only recognized in the early hours of the following day, after other members of the *junta* expressed their support for the outcome. “No” had obtained 55% of the votes. Chile’s transition to democracy was under way.

Several factors contributed to this turn of events. Pinochet had been able to manipulate the outcome of two previous plebiscites in 1978 and 1980 and had enjoyed comfortable victories (Fuentes, 2013). This may have led to overconfidence in his entourage and to a political miscalculation on his part. Support from the United States, which had been pivotal at the time of the coup, had been winding throughout the 1980s, partly as a result of DINA's criminal activities abroad (Kornbluh, 2013). At the same time, highly-organized opposition forces became increasingly active, as reflected in a series of national strikes starting in 1983. Such events were probably difficult to anticipate at the time the constitution was drafted in 1980. As many commentators have highlighted, though, the political system resulting from the democratic transition was highly satisfactory to the military government (Acemoglu and Robinson, 2006; Londregan, 2007; Albertus and Menaldo, 2018).

Following the plebiscite, Pinochet's term was extended for an extra year and a presidential election was called for December 14, 1989. A large coalition of parties opposed to the dictatorship, known as "Concertación", chose Patricio Aylwin as its candidate, who won with 55% of the votes. Concertación candidates would go on to govern Chile until 2010. Pinochet remained as commander-in-chief of the army for another eight years and, in accordance with his 1980 constitution, held a lifetime seat in congress until 2002 when he had to resign to face judicial prosecution for human right violations and misappropriation of public funds.

### **3 Data Construction**

To answer our research question, we mostly rely on information about the victims of the dictatorship, the location and construction date of military bases, and electoral outcomes from 1964 to 2018. In this section we present the main data sources, define the most important variables and discuss some summary statistics. More detailed information can be found in online appendix A.

Data on victims of the dictatorship comes from the final report produced by the National Commission for Truth and Reconciliation. This commission, headed by former minister and ambassador Raúl Rettig, was created by President Aylwin in 1991 and its goal was to clarify and document the human rights violations committed by the Pinochet regime. The report, popularly

known as the “Rettig report,” provides detailed information on 3,216 victims who were disappeared (1,093) or executed (2,123) between 1973 and 1990, including the county in which they were detained or executed. Using this information, we define our main measure of exposure to repression, the civilian victimization rate, as the total number of documented victims (killed or disappeared) between 1973 and 1990, per 10,000 inhabitants in the 1970 census. We interpret this variable as a proxy for the overall intensity of the acts of repression carried out by the dictatorship in a county. Ideally, this number should also include the number of people who were tortured, but that information is currently classified. Reassuringly, we do observe a positive correlation between the number of victims and the number of documented centers of torture.

To connect the geography of repression with the presence of the military, we constructed a dataset with all military bases that were active by the time that Salvador Allende became president in 1970. For this purpose, we digitized historical records kept at Military Libraries and Historical Museums (e.g. González Salinas, 1987). We complemented this information with reports prepared by the army in response to our Freedom-of-Information requests. For each unit, we recorded the county in which it was located in 1970 and its exact date of deployment. The latter piece of information allows us to ensure that we only exploit variation resulting from the *predetermined* geographic distribution of military bases at the time of Allende’s election, and not from the potentially endogenous placement of military units during Allende’s government or in the dictatorship. After restricting attention to those operating in 1970, our final data includes 52 military bases located in 34 counties. The main variables we use are a binary indicator that takes the value of one if a county had at least one military base in 1970 and the log of distance to the nearest base in a different county.

We use administrative electoral data from the National Electoral Service, some of which we digitized for this study. Regarding the 1988 plebiscite, we use two county-level variables as outcomes: the share of people who registered to vote and the vote share for the “No” option (“Yes” being the only other alternative). The former constitutes novel data which we digitized from archival documents kept at the Electoral Service, while the latter is publicly available. Registration was voluntary and we take the registration rate per county to reveal residents’ willingness to participate

in the plebiscite.<sup>4</sup> We define the voter registration rate as the number of people that registered to vote in the plebiscite divided by the county's population in the census of 1970. This is the same population count we use to construct the civilian victimization rate. The census of 1970 was the last population census before the coup. Voting was mandatory, conditional on registration, so turnout was almost universal at 97.5%. For each county we also observe the percentage of votes in favor of Pinochet's extended presidency ("Yes") and the percentage against this option ("No"). We use the "No" vote share as the second dependent variable. Data for other elections in the period 1964-2017 comes from records kept at the National Electoral Service, some of which we digitized.

After dropping counties with missing data on population or elections, as well as 13 outliers in the repression measure, we are left with 276 counties.<sup>5</sup> Table 1 provides summary statistics. There is substantial variation in repression across counties. The *country* as a whole experienced a repression rate of 2.3 victims per 10,000 inhabitants, but the *county* most affected had as many as 12 victims per 10,000 inhabitants.<sup>6</sup> Military bases were present in 12% of the counties, which were home to 30% of the population in 1970. The average county was 35 km away from the nearest military base in 1970, while the average person was 22 km away. According to our data, aggregate registration for the plebiscite amounted to 71.16% of the *total* population in 1970. Still, there was substantial variation in registration across counties, with some having registration rates as low as 21% and others having rates above 100%.<sup>7</sup> According to the official records, the "No" option's aggregate vote share was 55.98%, which is slightly larger than the vote share we observe in our sample of 54.9%. Variation in support for "No" was also large across counties, with the vote share for this option being as low as 3% in some places and as high as 77% in others.

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<sup>4</sup> The only other elections between 1973 and 1988 were the plebiscites of 1978 and 1980, which took place without an electoral registry. Furthermore, the county-level data with electoral results is allegedly missing, and the validity of the elections has been seriously questioned (Fuentes, 2013).

<sup>5</sup> The outliers are mostly small counties that housed detention centers or that experienced large massacres. As part of our robustness checks, we verify that our estimates are qualitatively similar if we use the full sample. Table A11 shows the results.

<sup>6</sup> To put these numbers in perspective, consider that a homicide rate above 2 per 10,000 inh. is classified as high by the United Nations. Furthermore, the top two most violent countries in the world in 2012 experienced 9 and 5 homicides per 10,000 inhabitants respectively (UNODC, 2013).

<sup>7</sup> Registration rates above 100% are to be expected as a result of population growth between 1970 and 1988, among other factors. As part of our robustness checks, we verify that the results are unaffected if we censor the registration rate at 100%.

Complementing the summary statistics, the maps in Figure 1 show the geographic distribution of dictatorship victims and military units across the country. In panel (a), we observe that repression is not concentrated in any particular region. The map in panel (b) marks with a red star those counties with at least one military base. Military bases were spread throughout the country, with relatively more presence in the central and northern regions. The map also uses a darker color to show increased proximity to military bases, according to the logarithm of the distance to the closest one.

## 4 Empirical strategy

This section describes the econometric strategy we employ to estimate the causal effect of exposure to repression on voters' support for democracy in the 1988 plebiscite. We first motivate our research design and provide theoretical justification for a county-level relationship between exposure to repression and our outcomes of interest. We then present our baseline specification and discuss the challenges to interpreting ordinary least squares estimates as capturing a causal relationship. The section ends by presenting our instrumental variables strategy.

### 4.1 Motivation

We aim to establish whether differential exposure to repression across counties in Chile had a causal effect on local measures of political participation and support for democracy in the 1988 plebiscite. A local relationship between exposure to repression and political outcomes may result from informational frictions, if people living closer to the location of events are relatively better informed about them. We have good reasons to believe that the Chilean context fits this description. All media channels were censored from the day of the coup and the regime went to great lengths to cover up its actions. In 1975, DINA operatives planted mutilated and burnt corpses in several locations in Argentina, identified them as alleged victims of forced disappearance, and claimed they had died as a result of internal struggles among extremist groups (Kornbluh, 2013, p.330). Pro-government newspaper *La Segunda* went as far as to claim that “There are no such disappeared” in February 1977. Even in the run-up to the plebiscite, content on repression was not

allowed to be broadcast during the “No” campaign’s allotted television slot (La Tercera, 1988).

Such efforts are likely to have misled people about the excesses of the regime and may have contributed to increased support for Pinochet in the plebiscite. There is ample evidence from other settings that news coverage affects the salience of issues for voters, as well as political beliefs and behaviors (Enikolopov et al., 2011; Mastrococco and Minale, 2018). However, the government was probably more successful at keeping people ill-informed about repression in areas farther away from the events. In counties with higher rates of civilian victimization, residents had greater access to information through informal sources. They may have directly observed an arrest or known a victim. They could have also observed groups of relatives queuing around military bases and police stations, seeking information about the detained or disappeared, as would often happen.

The informational advantage held by people in close proximity to victims was plausibly complemented by the heightened effect of direct exposure to violence on beliefs, emotions and behavior. Even if people in different locations are equally well-informed, it seems likely that knowing about abuses occurring near them, perhaps even affecting others they know, has a stronger psychological effect than knowing about similar events in a more distant location. The importance of proximity in the processing of traumatic events has also been documented in other settings (Schlenger et al., 2002; Lopes et al., 2015). The behavior of the military government in Chile, ranging from arbitrary detentions to summary executions, and including outright denial of victimization and more than a thousand instances of forced disappearance, is likely to have had an especially heavy toll on the families, friends, neighbors and colleagues of the victims.

A different question is how exposure to repression under dictatorship may shape the behavior of voters after the return to democracy. As already mentioned, repression in Chile was highly targeted at supporters of the previous government. It is not obvious whether the selective violence perpetrated by the Pinochet regime was effective in the longer run at changing people’s political preferences or their willingness to disclose them.<sup>8</sup> In this regard, it is significant that most of the leading figures in Chilean politics, including all presidents since 1989, can be classified in terms of their relationship to the dictatorship.<sup>9</sup> It is fair to say that the Pinochet dictatorship has remained

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<sup>8</sup> Survey evidence shows both mechanisms at play in the case of direct victims and their children (Bautista, 2014a,b).

<sup>9</sup> President E. Frei Ruiz-Tagle (1994-2000) is the son of President E. Frei Montalva (1964-1970), a prominent oppo-

a dominant reference in Chilean politics long after the return to democracy, one that may still be affecting voters' choices through the legacy of repression.

#### 4.2 *Baseline equation*

The baseline regression equation we use throughout the analysis has the following form:

$$Y_{c,p} = \beta \text{Victims}_c + \tau X_c + \lambda_p + \varepsilon_{c,p} \quad (1)$$

where  $Y_{c,p}$  is an electoral outcome in county  $c$ , located in province  $p$ , in an election held in 1988 or after. Our measure of repression and explanatory variable of interest is the civilian victimization rate,  $\text{Victims}_c$ , defined in the previous section. The main coefficient of interest is  $\beta$ , which measures the relationship between a one-unit increase in the civilian victimization rate and the corresponding electoral outcome.

Equation (1) also includes a vector of predetermined control variables,  $X_c$ . We include in this vector variables that were fixed by the time Salvador Allende took office in 1970 and that we expect to be strong predictors of electoral outcomes at the county level in 1988 and afterwards. Specifically, we include the vote shares of the top two candidates in the 1970 presidential election, the socialist Allende and the conservative Jorge Alessandri, as proxies for local political preferences before the dictatorship. These controls are highly relevant because political preferences may have affected the targeting of violence during the dictatorship and may have also persisted after the return to democracy (Valenzuela and Scully, 1997). We also control for the geographic location of counties by including two spatial variables, the logarithm of the distance from a county's geographic centroid to Santiago, capital of Chile, and the logarithm of the distance to the capital of the region where the county is located. Regional capitals are the most relevant administrative units after the country's capital. Later we show that the results are robust to the inclusion of other spatial controls. The last variable in the vector  $X_c$  is population in 1970, which we record directly from the population census.

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sition figure in the early 1980s. President R. Lagos (2000-2006) was also a major opposition figure and one of the leaders of the pro-democracy movement in the 1980s. President M. Bachelet (2006-2010) was detained and tortured in 1975. President S. Piñera (2010-2014 and 2018-) is the younger brother of a former minister of Pinochet.

In addition to the control variables, equation (1) also includes a full set of province fixed effects  $\lambda_p$ .<sup>10</sup> The last variable in equation (1) is  $\epsilon_{c,p}$ , a robust error term with a mean of zero. The small number of regions (13) and provinces (25) in the country prevents us from geographically-clustering the standard errors in our preferred specification (Angrist and Pischke, 2009). However, we show that the results are unaffected if we allow the error term to be correlated within provinces and implement the appropriate small-cluster correction, following Cameron et al. (2008). All our regressions are weighted by population in 1970 to ensure that we give equal importance to the actions of all voters, no matter the size of the county in which they reside. As a result, our estimated parameters can be interpreted as representing empirical relationships in the population and not as cross-county relations.

There are two important threats to interpreting OLS estimates of  $\beta$  as capturing the causal effect of exposure to repression on our outcomes of interest. First, even though we are controlling for strong predictors of these outcomes, the OLS estimates could still be affected by omitted variables correlated with the geography of repression. For instance, hard-to-measure levels of social capital may have affected both the intensity of repression and voter behavior in 1988 and beyond. Second, there is likely to be (classical or non-classical) measurement error in the number of dictatorship victims at the county level. For example, counties that benefited more from policies implemented by the military dictatorship, may be both less likely to report abuses and more likely to have voted for Pinochet in 1988.

We deal with these concerns in several ways. To begin with, we use variation in the OLS coefficient estimates and in the regression R-squared as we incorporate the control variables to gauge the importance of potential omitted variables, following Altonji et al. (2005) and Oster (2018). More importantly, we implement a two-stage least squares strategy exploiting the plausibly exogenous location of military bases when Allende came to power. In the next section, we present the details of this empirical strategy.

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<sup>10</sup>At the time of the coup, the country was divided into 25 provinces. An alternative classification using regions had been used for planning purposes since the early 1960s. In 1975, the military regime formally established 13 regions as the first level of sub-national government. Our results are unaffected if we use the more recent and less conservative region fixed effects instead.

### 4.3 *Two-stage least squares*

To overcome endogeneity concerns, we use two-stage least squares estimation (2SLS). In order to generate instrumental variables, we exploit the plausibly exogenous geographic distribution of military bases in 1970. In the remainder of this section, we provide some intuition for our choice of instruments. We then present our first-stage specifications and provide evidence in support of the instruments' exogeneity. We further discuss the exclusion restriction in section 5.5.

Underlying our instrumental variables strategy is the idea that the location of military units up to 1970 responded to reasons other than the goal of controlling and repressing the civilian population. Chile had a long-standing tradition of military subordination to civilian rule and had been under military control for only 13 months in more than 140 years of independence (Constable and Valenzuela, 1991). The historical record indicates that many of the oldest infantry regiments were created in the early nineteenth century with the purpose of defending the country from a possible invasion from Spain (González Salinas, 1987, p. 19). Creation of new units and relocation of existing ones throughout the 19th and 20th centuries responded to international conflicts, such as the War of the Pacific (1879-1883) against Peru and Bolivia, and to technological changes in weaponry, transportation and telecommunications. While it is true that the Allende government faced strong opposition even before coming to power, there is no evidence that the military high command engaged in political interference or coup plotting up to 1970. Even the CIA acknowledged at the time that "there was no positive assurance of success [of a coup] because of the apolitical history of the military in Chile" (Kornbluh, 2013, p.9).

The second idea underlying our choice of instruments is that proximity to military bases was an important factor affecting the intensity of repression after the exogenous shock provided by the coup. As pointed out in section 2, military units perpetrated most of the acts of violence against civilians during the early days of the Pinochet regime. Accounts of human rights abuses during the dictatorship, such as the Rettig report, systematically link various forms of repression to the military "regimientos." These sources also indicate that prisoners often transited through military bases on their way to centers of detention, torture and execution. In this regard, we hypothesize that a larger distance to these bases likely increased the cost of patrolling and apprehension, weakened informant networks, and created a protective buffer for the civilian population.

As mentioned above, we employ two measures of proximity to military bases in 1970, a binary indicator and the log distance to the nearest base in a different county. We use these variables to estimate the following two versions of the first-stage equation:

$$\text{Victims}_c = \gamma_1 \mathbb{1}(\text{Military base})_c + \tau X_c + \lambda_p + \varepsilon_{c,p} \quad (2)$$

$$\text{Victims}_c = \gamma_1 \mathbb{1}(\text{Military base})_c + \gamma_2 \ln(\text{Distance to military base})_c + \tau X_c + \lambda_p + \varepsilon_{c,p} \quad (3)$$

where  $\mathbb{1}(\text{Military Base})_c$  is the first instrument, an indicator that takes the value of one if there is at least one military base in county  $c$  in 1970. Equation (3) adds a second instrument to the first stage,  $\ln(\text{Distance to military base})_c$ , which measures exposure to bases in other counties and is defined as the log distance to the nearest base in a different county. We verify the robustness of the results to other measures of proximity to military bases below. The remaining variables are defined as in equation (1).

The coefficients of interest in equations (2) and (3) are  $\gamma_1$  and  $\gamma_2$ , which capture the relationship between the spatial distribution of military units and exposure to repression at the hands of the dictatorship. In order for the excluded instruments to be relevant, we need  $\gamma_1 \gg 0$  and  $\gamma_2 \ll 0$ . The former inequality implies that counties with a military base experienced substantially larger rates of civilian victimization than those without one, while the latter implies that counties more isolated from the military experienced significantly lower rates of victimization than those closer by. The first-stage regressions allow us to test these relevance conditions.

We must also assume that that the two instruments are excluded from equation (1), in order to interpret  $\hat{\beta}_{2SLS}$  as the causal effect of repression. This exclusion restriction is satisfied if proximity to military bases only affects our outcomes of interest through its effect on repression. The exclusion restriction constitutes our identification assumption and it is essentially untestable. Our main concern in this regard is that military bases may have been endogenously placed in counties with characteristics affecting the behavior of voters. We partially address this concern by only considering bases that were already in place when Salvador Allende came to power in 1970, shutting down the potentially endogenous placement of military units after that year. Below, we show the robustness of our results to an even more conservative approach excluding bases built after 1925,

last year of a long period of oligarchic presidents, or even after 1900.

Table 2 provides further evidence of the plausible exogeneity of the location of military bases. The table shows results of univariate regressions of important political and economic characteristics on our two measures of proximity to military bases. We focus on the estimates including province fixed effects in columns 3 and 5, as all our regressions below include them. Results indicate that counties with differing exposure to the military were similar in 1973, except for their proximity to Santiago and to the corresponding regional capital, which we control for in all regressions below. Counties supported Salvador Allende’s UP party similarly in presidential, legislative and local elections in the decade before the coup. This is important because support for Allende is likely to be correlated with patterns of victimization during the dictatorship as well as with voters’ behavior after 1988. These counties were also similar in the number of houses per capita in 1970, a variable that is arguably related to income levels. They also had similar levels of land inequality, and experienced the agrarian reform with the same intensity up to 1973. Population density in 1960 and 1970 is also similar across the different sets of counties, alleviating concerns related to social capital and the possibility of collective action.

## **5 Results: Voters’ behavior in the 1988 plebiscite**

This section presents OLS and two-stage least squares (2SLS) estimates of the effect of exposure to repression during the Pinochet regime on two outcomes related to the 1988 plebiscite: voter registration and support for the “No” option. We also present a battery of robustness exercises.

### *5.1 OLS estimates*

Table 3 presents estimates of four different specifications of equation (1), all including province fixed effects. The dependent variable in Panel A is the voter registration rate, while in panel B it is the vote share for the “No” option. The results show that there is a positive, robust, and statistically significant correlation between the number of victims of repression per 10,000 inhabitants and both voter registration and votes against Pinochet in 1988. Column 1 only includes province fixed effects, while the remaining columns sequentially include additional controls. We observe that our

coefficients of interest are robust to the inclusion of strong predictors of the outcomes we study. The results from our preferred specification in column 4 indicate that a one-unit increase in the civilian victimization rate is associated with a three percentage-point (pp.) increase in the rate of voter registration and with a 0.9 pp. increase in the vote share for “No.” These increases correspond to 4.2% and 1.6% changes relative to the respective sample means. Panels (a) and (b) in Figure 2 provide visual analogues to the regression estimates from column 4. These scatter plots show a strong, positive correlation between exposure to repression and support for democratization.

The coefficients for the controls, as well as the R-squared, indicate that these variables are strong predictors of our outcomes. The predictive power of the model almost triples in the case of voter registration and almost doubles in the case of the “No” vote share when we include all controls. However, their introduction has little effect on the magnitude of our coefficients of interest and helps to increase the precision of our estimates. Following Altonji et al. (2005) and Oster (2018), we use this information to conduct a “coefficient stability” analysis to establish whether our estimates are robust to potential omitted variables that are correlated with the included controls. At the bottom of the table, we present our implementation of Oster’s proposed estimator of the bias-adjusted treatment effect.<sup>11</sup> Reassuringly, the results do not differ substantially from our baseline estimates. Nevertheless, there remain various identification concerns that prevent us from interpreting this correlation as capturing the causal effect of repression on voters’ behavior. To overcome these threats, we implement next a two-stage least squares (2SLS) strategy.

## 5.2 *Two-stage least squares estimates*

Columns 1 and 2 in Table 4 present estimates of equations (2) and (3). Column 1 shows a positive and statistically significant relation between presence of military bases and repression during the dictatorship. The point estimate indicates that counties with a military base had on average a 1.8-point higher civilian victimization rate than those that did not. This is a large increase in repression. It corresponds to slightly less than a one standard-deviation change, or to an increase of 80% over the sample average (see Table 1). Similarly, column 2 shows that counties relatively distant

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<sup>11</sup>A key input in this calculation is  $R_{\max}$ , the hypothetical  $R^2$  from a regression of the outcome on the treatment and both the observed and unobserved control variables. In our analysis, we set  $R_{\max}$  at its most conservative value of 1.

from military bases experienced significantly less repression. The point estimate for the second instrument indicates that a 10% increase in the distance to the closest base leads to a *decrease* in our measure of repression of 0.06 units, which is equivalent to a 2.5% decrease from the sample mean. Panel (c) in Figure 2 plots this relationship using the specification with full controls.

At the bottom of columns 1 and 2 we present the corresponding first-stage F-statistics, which allow us to test the relevance of the excluded instruments. The Kleibergen-Paap F-statistic, which is robust to non-i.i.d errors, takes a value of 16.5 for the case of one instrument and of 11.1 when we add the second instrument. These values indicate a strong first-stage relationship in both cases. We also present the F-statistic developed by Montiel-Olea and Pflueger (2013), which is also robust and for which critical values are available. In this case, the values of the test statistic for one and two instruments, at 28.8 and 24.1 respectively, are always above the critical values for less than 10% bias at a 5% significance level. We think that the two instruments capture complementary aspects about the geography of repression and consider both throughout the analysis.<sup>12</sup>

Columns 3-6 in Table 4 present estimates of the reduced-form relationship between our measures of proximity to military bases and the outcomes in the 1988 plebiscite. Given the assumed exogeneity of the instruments, these coefficients can be interpreted as the causal effects of proximity to these bases. We find that counties with a military base had significantly more people who registered to vote in the plebiscite and that the registration rate decreased with distance to the nearest base (columns 3-4). The estimates indicate that counties with bases had on average a 13-19 pp. higher voter registration rate than those without and that a 10% increase in the distance to the nearest base led to a 0.8 pp. decrease in voter registration. In a similar way, counties geographically more exposed to the military also voted significantly more for democracy (columns 5-6). In this case, we observe that counties with bases had a 4.7-5.6 pp. higher vote share for “No” and that a 10% increase in the distance to the nearest base decreases the “No” vote share by 0.12 pp. We return to these estimates below in order to check how small violations of the exclusion restriction

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<sup>12</sup>Our measure of repression is based on the number of documented deaths. These numbers only capture some of the manifestations of repression in Chile (i.e. the number of victims of torture was an order of magnitude larger than the number of those who died), but data constraints prevent us from examining other forms of repression. However, Table A1 shows that the presence of a military base has a strong positive correlation with the presence and number of centers of torture in a county, suggesting positive spatial correlation between different forms of violence. The location of these centers is not related to the distance to the nearest base, which is consistent with military units wanting to avoid costly travel time between official bases and these unofficial detention centers.

affect our 2SLS estimates of  $\beta$  in equation (1).

Before turning to our 2SLS estimates for the 1988 plebiscite, we replicate the previous reduced-form analysis for elections in the decade before the coup. For this purpose, we look at vote shares for the two top candidates in the presidential elections of 1964 and 1970, as well as the performance of Salvador Allende’s UP coalition in the local elections of 1971 and the legislative election of 1973, which took place only months before the coup. The intuition for this exercise is that in the absence of repression (i.e. before the coup) the location of the military bases should not explain electoral outcomes. Panel A in Table 5 shows the reduced-form results for the case of one instrument, while panel B presents the corresponding 2SLS estimates. Consistent with the evidence in Table 2, we observe in all columns that neither the presence of military bases (panel A), nor the resulting greater exposure to repression (panel B), are associated with differential vote shares for the right- or left-wing candidates in these elections.

Table 6 presents our 2SLS estimates of the effect of repression on voter registration and “No” vote share in the 1988 plebiscite. If our instrumental variables assumptions are satisfied, then these coefficients capture the causal effect of repression on voters’ behavior in the plebiscite. In the presence of heterogeneous effects of repression across individuals, the 2SLS estimates capture the local average treatment effect (LATE) of repression on the political behavior of those individuals, the compliers, that were more exposed to repression because of their geographic proximity to military bases.<sup>13</sup>

The results in Table 6 show that repression had a large and statistically significant effect on voter registration and support for democracy in the 1988 referendum. In counties where the civilian victimization rate was one unit higher, we observe an increase in voter registration of 7.6-8.9 percentage points, depending on the choice of instruments, as well as a 2.6-2.7 percentage-point increase in the “No” vote share. These effects are large and correspond to increases of roughly 0.3 standard deviations in both cases. Equivalently, they represent respective increases of 11% and 5% over the corresponding sample averages (see Table 1). The estimates are quite precise and are

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<sup>13</sup>The LATE interpretation of our 2SLS estimates also requires a monotonicity assumption that we believe is likely satisfied, as there is no reason to think that being farther away from a military base increases exposure to repression, all else equal. Table A2 shows that the validity of our discrete instrument is not refuted by the tests developed by Huber and Mellace (2015) and Kitagawa (2015). Appendix B provides a characterization of the complier counties.

hardly affected if we allow the error term to be correlated within provinces using the wild cluster bootstrap (p-value in brackets).<sup>14</sup>

The 2SLS estimates in Table 6 are more than twice as large as the corresponding OLS estimates in Table 3. This difference can arise for several reasons. First, classical measurement error in the civilian victimization rate can lead to attenuation bias in OLS. Such measurement error can be the result of victims being wrongly assigned to counties, for instance. It can also arise because of data limitations with regards to other forms of repression, such as torture, or because of selective reporting. A second reason for the discrepancy between OLS and 2SLS is potential downward bias of the former due to omitted variables. For example, lower stocks of unobservable social capital in certain counties may have facilitated the dictatorship's ability to carry out acts of repression as well as hindered political participation and opposition to Pinochet at the time of the plebiscite. A third reason has to do with the complier counties experiencing a more indiscriminate and brutal type of violence than the average county exposed to repression, which could lead to a greater responsiveness. This seems likely, as our characterization of compliers in Appendix B and Table A27 indicate that the violence experienced by these counties was disproportionately concentrated in 1973, when repression was more indiscriminate.

### 5.3 *Robustness checks*

In this section, we summarize the battery of robustness tests we perform, leaving all relevant tables and figures for the online appendix. We check the robustness of our results for the 1988 plebiscite along five margins: the specification, the sample of counties, the measures of proximity to the military, the measure of repression, and the measurement of the outcomes.

Regarding the specification, we verify that the first-stage, reduced-form and 2SLS coefficients are similar if we use different combinations of controls. Following the sequence in Table 3, we consider four versions of equations (1)-(3) in which we progressively include covariates. Tables A3-A6 show that the estimates are of similar magnitude and statistical significance for different combinations of controls. The results are similarly unaffected if we employ a machine-learning

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<sup>14</sup>Additionally, the Hansen  $J$ -statistics cannot reject that the over-identifying restrictions are valid (but see Angrist and Pischke, 2009; Deaton, 2010, on the limitations of these tests).

algorithm to determine the optimal combination of controls (Belloni et al., 2014) (Table A7). The results are also robust to the inclusion of flexible spatial controls. Table A8 replicates the 2SLS analysis when we add polynomials of latitude and longitude to our main specification (columns 1-4), as well as different measures of the spatial centrality of a county. For the latter, we use (i) the average distance from a county's population-weighted centroid to all other counties (columns 5-8), and (ii) the Moran eigenvectors with positive eigenvalues, as proposed by Dray et al. (2006) and applied by Rozenas et al. (2017) and Zhukov and Talibova (2018) (columns 9-12). Lastly, in Table A9 we check that the results are not an artifact of the population weights we employ.

We further show that our results are not driven by particular groups of counties, specific geographic regions or outliers. Figure A1 shows that the results are unaffected if we drop randomly-chosen groups of twenty counties from the estimation. The coefficients are also similar if we drop all counties from any of the 13 regions in the country, including the metropolitan region of Santiago, home to 34% of the country's population in 1970 (Figure A2). The same is true if we remove from the sample any of the 25 provinces (Figure A3). Similarly, Table A10 shows that the results are unaffected and the strength of our instruments actually increases if we remove the 13 regional capitals. This is important as all of the capitals were home to a military base and they are likely to be more urbanized, populated and developed than other counties. Finally, we show that our results are qualitatively similar if we use the full sample, including the 13 outliers in our measure of repression (Table A11).

As mentioned above, we think that the location of military bases is more likely to be uncorrelated with relevant political and economic conditions at the time of the coup for those bases that were built many years, and even decades, before it took place. To ensure that our results are not biased by the potentially-endogenous location of bases built closer to the time of the coup, in Table A12 we replicate the analysis excluding all bases built after 1925. The results remain unchanged. In Table A13 we follow an even more conservative approach and exclude all bases built after 1900. The results are quite similar to those with the full sample, even though the instruments are expectedly weaker. Additionally, we also examine the sensitivity of our results to different ways of measuring proximity to military bases. Our first-stage results are similar if we calculate a county's distance-weighted exposure to all bases in the country, instead of the minimum distance to a base

(columns 1-3 in Table A14). They are also unaffected if we use distance to the closest base as our only instrument (columns 4-6). If we complement our set of military bases, corresponding to army “regimientos”, with air force bases and military academies, the results remain unchanged and the instruments get stronger (Table A15).

Our baseline measure of repression, the civilian victimization rate, is based on the county of detention or execution of the victims. For a subset of the victims, we have been able to establish the county of residence or work. We replicate the analysis using the corresponding county-level measures of civilian victimization and find consistent results (Table A16). In Table A17 we also replicate the analysis after recalculating the civilian victimization rates using only victims from the first year after the coup, before DINA became an independent agency and became responsible for most repression-related activities. All of our results go through.

The last set of robustness checks concerns the way we measure the outcomes. In Table A19, we examine the sensitivity of the results to the normalization of the number of registered voters by population in 1970. Columns 1 and 2 show that the results are unaffected if we do not winsorize the voter registration rate. Columns 3 and 4 similarly show the robustness of the results if we cap the voter registration rate at 100%. One difference between our measures of voter registration and “No” vote share is that the former is normalized by population in 1970, while the latter is normalized by the number of valid votes. In Table A20 we show that the results for this outcome are unchanged if we homogenize the denominator for both outcomes and normalize the number of “No” votes by 1970 population. More importantly, these results indicate that the vast majority of additional registered voters caused by repression voted “No.”

#### 5.4 *Placebo tests*

Panels (a) and (b) in Figure A6 show the distributions of coefficients for the first-stage regression with one instrument (equation 2) that result when we randomly assign military bases among counties. This permutation test provides us with a distribution-free estimate of the probability that our first-stage relationship arises by chance. In panel (a) we allow the placebo bases to be allocated to any county, while in panel (b) we restrict the assignment to counties within the same province as those actually holding bases. As expected the distributions are centered at zero. More impor-

tantly, we find that our estimated first-stage coefficient is above the 99th percentile of the resulting distributions in both cases.

Another placebo test for our first stage consists of examining whether proximity to facilities other than military bases predicts the intensity of repression. This exercise aims to distinguish between the influence of military bases of repression and the influence of characteristics that make a location suitable for such a facility. For this purpose, we analyze whether counties with other types of strategic infrastructure, such as ports and airports, also had higher civilian victimization rates. We also look at counties having official land entry points into the country. The results in Table A23 indicate that our first-stage is robust to the inclusion of measures of presence or proximity to ports, airports or entry points. Furthermore, these additional variables are not significantly related to the intensity of repression.

### *5.5 Potential violations of the exclusion restriction*

Besides the relevance and validity conditions, our 2SLS estimates of the effects of repression also rely on an exclusion restriction stating that proximity to military bases only affected our outcomes of interest through increased exposure to repression. In this regard, we worry that a military dictatorship like Pinochet's may have made extensive use of the network of military facilities in the country for matters related to public administration. If the presence of the state was more strongly felt in counties nearer to military bases, this may have affected the behavior of voters in the 1988 plebiscite even in the absence of repression. For instance, the state could have invested more in places with military bases, causing people to vote increasingly in favor of Pinochet's continuation in office, which would bias our 2SLS estimates downwards. But bases could have also revealed undesirable characteristics of the military regime through actions unrelated to repression, such as favoritism in procurement, leading voters to reject Pinochet's continuation and biasing our estimates upwards. Military units may have also directly influenced voter registration in areas near to their bases, positively or negatively, although this seems unlikely given that there was considerable monitoring (Engel and Venetoulis, 1992; Santa-Cruz, 2005). Yet another possibility is that the presence of the bases was directly intimidating, given information from other sources about the various forms of repression taking place. What seems clear is that the sign of the bias resulting

from violations of the exclusion restriction is not obvious ex-ante.

To address the possibility of differential public spending in counties closer to military bases, we use a newly-digitized dataset on local infrastructure projects implemented by the Ministry of Housing and Urban Planning during the dictatorship. Using this data we construct a measure of aggregate per-capita state spending on urban projects per county.<sup>15</sup> In addition, we disaggregate this measure and separately look at what we consider to be highly “visible” projects, i.e. construction in public spaces and housing, and other less “visible” projects, i.e. sanitary projects and indoor equipment. This distinction is important and could be related to patterns of vote-buying (Marx, 2017). We then re-estimate equation (3) using these measures of public spending as dependent variables. Table A24 presents the results. We find that the aggregate and disaggregate measures of public spending during the dictatorship are empirically unrelated to any of our measures of proximity to military bases. The estimated coefficients are statistically indistinguishable from zero in all cases, indicating that public spending was not disproportionately concentrated in counties closer to military units.

A different and more agnostic approach involves acknowledging that the exclusion restriction may be *partially* violated and trying to gauge the quantitative importance of any such violation. Following Conley et al. (2012), we allow the presence of military bases to directly affect our outcomes of interest by including a coefficient  $\gamma \neq 0$  in equation (1). This exercise makes it possible for us to calculate how important alternative explanations would have to be to make our estimates statistically insignificant. Here we rely on the reduced-form estimates reported in columns 3 and 5 of Table 4, following Nunn and Wantchekon (2011). Results are presented in Figure A7 in the appendix and show that, to make our estimates insignificant, the direct effect of military bases on registration and the “No” vote share would have to be *positive* and quite large, equivalent to 46% and 68% of the reduced form coefficients respectively. These findings provide further evidence against alternative explanations based on preferential access to government services and are also inconsistent with increased intimidation and restrictions on voters in the areas near military bases.

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<sup>15</sup>Appendix A provides further information on data construction.

## 6 Results: Voters' behavior after the 1988 plebiscite

In this section, we examine whether there is a relationship between exposure to repression and electoral outcomes in the 30 years after the plebiscite. We proceed in chronological order and end with a discussion about how we interpret these results. In all of these cases we estimate equation (1) using a candidate or party's vote share in a specific election as dependent variable and using proximity to military bases or the instrumented civilian victimization rate as explanatory variables (i.e. reduced form and 2SLS). We do not study voter registration or turnout for elections after 1988 because registration remained high and stable in later years and voting was compulsory until 2012.

The 1989 presidential election was the consequence of the outcome of the plebiscite. It was the first election held after the plebiscite and the last one with Pinochet still in power. We use as outcome variables the share of votes received by Patricio Aylwin, the candidate put forth by the "Concertación" coalition of pro-democracy parties, and the vote share for Hernan Büchi, Pinochet's former Minister of Finance. The omitted category in this case corresponds to Francisco Errázuriz, a moderate. The election was won by Aylwin with 55.2% of the votes, while Büchi was the runner-up with 29.4% and Errázuriz came in third with 15.4%. Table 7 shows that the civilian victimization rate is positively associated with the Aylwin vote share and it is negatively correlated with the Büchi vote share. Our 2SLS estimates indicate that one more victim per 10,000 inhabitants led to a 1.3-1.5 percentage-point higher vote share for Aylwin, depending on the specification, and to a reduction of 1.7-2.0 percentage points in the vote share for Büchi (columns 7-10).

Six presidential elections have taken place in Chile after 1989. For these elections, we examine the vote share of the "Concertación" coalition candidate, winner in four out of six contests. We also study support for candidates to the right and to the left of this coalition. Tables A25 and A26 show the way we have classified candidates, parties and coalitions in national and local elections. The panels in Figure 3 present 2SLS estimates and 95% confidence intervals for each faction in each presidential election, using presence of military bases as the excluded instrument (estimates with two instruments available in the appendix). Overall, we find close to zero effects of exposure to repression during the Pinochet dictatorship on political preferences in democracy. The vertical line in 2012 denotes the introduction of automatic registration and voluntary voting. We do observe

a shift to the left in counties with greater exposure to repression after this year, but the estimates are noisy and remain statistically insignificant.

Figure 4 replicates the 2SLS analysis for the seven local elections that have taken place after democratization. We study vote shares in mayoral elections and classify candidates in an analogous way to the presidential elections. The only difference is that the small number of far left parties competing in these elections forces us to group them with all other minor parties. In the case of local elections, we do observe that counties with greater exposure to repression during the dictatorship showed stronger support for “Concertación” and left-wing candidates in 1992, the first election of any kind after Pinochet left office, but fail to find any sign of differential political alignment in the six elections since, up to 2016.

An important difference between the 1989 presidential election and the ones that followed, is that the former took place under dictatorship, with a candidate directly linked to Pinochet, and with significant uncertainty about the political future. In the words of Angell and Pollack (1990), “The [1989] elections were in many ways a replay of the plebiscite” (p. 2). Hence, we interpret the behavior of voters in 1989 as a confirmation of the preferences for democracy that they had stated in 1988. A similar argument can be made about the 1992 local elections, which were the first elections of any kind to be held without Pinochet in power. After 1992, it is plausible that the consolidation of the democratic transition allowed other matters to gain salience in the political debate and that the “Concertación” coalition became less associated with the pro-democracy movement and more with the political issues of the day. It is also likely that efforts at accountability and reconciliation, such as the release of the Rettig and Valech reports, as well as the construction of the Museum of Memory and Human Rights in Santiago, allowed people to start feeling that the human rights violations that took place were recognized by Chilean society as a whole.

In sum, even though Pinochet remains a dominant reference in Chilean politics up to this day, and despite the fact that most of the prominent political figures in the country are positively or negatively associated with the dictatorship, we fail to find evidence of a robust long-run relationship between exposure to repression and electoral outcomes. Taken together, the evidence indicates that people of differing political inclinations joined forces in response to the repression and increasingly opposed the dictatorship during the democratic window of opportunity between 1988 and 1992,

but that this did not systematically affect their political alignment after the return to democracy.

## 7 Results: Support for democracy after 1988

The previous results indicate that increased exposure to repression in counties located closer to military bases led to increased support for democracy when a window of opportunity opened up around 1988. We now turn to survey data from the post-democratization period to examine whether exposure to repression had long-lasting effects on support for democracy or political preferences. For this purpose, we use data from several waves of the “Latinobarómetro” survey between 1996 and 2015. Taken together, these surveys contain information about the political attitudes and preferences of more than 10,000 Chileans living in almost 170 counties.

As a source of geographic variation in exposure to repression we use the indicator for presence of military bases in 1970. Since the surveys contain information for people born as late as 1997, we allow the effect of proximity to bases to vary between cohorts that were alive at the time of the coup and those born in later years. Our baseline specification is of the form:

$$Y_{i,c,r,t} = \delta_1 \mathbb{1}(\text{Military base})_c + \delta_2 \mathbb{1}(\text{Military base})_c \times \mathbb{1}(\text{Alive in 1973})_i + \tau_1 X_i + \tau_2 X_c + \phi_r + \phi_t + \varepsilon_{i,c,r,t} \quad (4)$$

where  $Y_{i,c,r,t}$  is a measure of support for democracy by person  $i$  in county  $c$  from region  $r$  based on an answer to a question in the Latinobarómetro survey from year  $t$ . As above,  $\mathbb{1}(\text{Military base})_c$  is an indicator variable for the presence of a military base in county  $c$  in 1970.  $\mathbb{1}(\text{Alive in 1973})_i$  is an indicator variable for people born in 1973 or earlier.  $X_i$  is a vector of individual control variables, including gender and the indicator people born in 1973 or earlier.  $X_c$  is the set of baseline county controls: Allende and Alessandri vote shares in 1970, distance to Santiago and regional capital, and population in 1970.  $\phi_r$  and  $\phi_t$  are region and survey year fixed effects, respectively. The error term  $\varepsilon_{i,c,r,t}$  is clustered at the county level.

The coefficient of interest is  $\delta_2$ , which captures the potentially differential effect of presence of bases for the cohorts that were alive at the time of the coup in 1973.  $\delta_1$  is interesting as a measure

of persistence, but  $\delta_2$  is more directly related to our previous results, as it captures the attitudes of the individuals that were exposed to repression after the coup and that were eligible to vote in 1988. Exploiting the fact that we have within-county variation in exposure to repression across cohorts, we also use a more stringent specification including county fixed effects,  $\phi_c$ . These fixed effects absorb the indicator for military bases and the baseline controls, which are all county-specific.

The Latinobarómetro survey contains several questions gauging respondents' attitudes towards democracy. We construct binary measures of support for democracy, based on four different questions, and show separate estimates for each measure. We then aggregate them into a standardized index, following Kling et al. (2007) and show results for the "family of outcomes." A separate question asks respondents to state their political ideology in a scale from 0 to 10, where lower values correspond to more left-wing views and higher values to more right-wing preferences. We use the answer to this question to construct various outcomes on political preferences.

Table 8 shows the results on support for democracy. The outcomes in columns 1-8 are binary variables that take the value of one when respondents express greater support for democracy. Columns 9 and 10 show results for the aggregate index for the family of outcomes. For each outcome, the odd-numbered column shows estimates with region fixed effects and control variables at the county level, while the even-numbered columns show estimates from the specification with county fixed effects. For all outcomes we observe a weakly negative effect of living in a county with military bases in 1970. More importantly, for all outcomes we observe a larger, positive and precise differential effect for the cohorts that were alive at the time of the coup. For example, the share of survey respondents that highly agrees with the claim that democracy is the best form of government (columns 1-2) increases 19% relative to the sample mean of 0.29 among the cohorts exposed to repression in the counties with military bases. The inclusion of county fixed effects has little impact on the results. When we study the aggregate index for the family of outcomes (columns 9-10), we observe substantially higher support for democracy among people that were alive at the time of the coup and that live in cities with military bases in 1970.

We verify the robustness of these results in various ways. Table A21 shows replications of the analysis in which we shift the age cut-off for exposure to repression. The results are robust to only classifying as exposed cohorts that were at least 18 years old (Panel A) or 10 years old (Panel B)

in 1973. Focusing on the aggregate index (columns 9-10), we observe that the coefficient for the interaction term is largest with the age 10 cut-off, followed by the baseline estimate and then the age 18 cut-off. These results indicate that exposure to repression after the coup affected people that were 10-18 years old at the time similarly to adults, but that it had a much smaller effect on people that were younger than that. As a placebo check, we observe that the interaction effects become smaller and statistically insignificant when we classify as exposed cohorts born as late as 1983. Taken together the evidence from these robustness tests indicates that people's age in 1973 is a major factor determining the effect of proximity to military bases on support for democracy and that the effect goes in the expected direction, with older cohorts that had greater exposure to repression showing larger effects. In Table A22, we further verify that the results for the family of outcomes are not driven by any particular question. For this purpose, we replicate the analysis excluding one of the four question at a time.

Table 9 shows the results on political preferences. The outcome in columns 1 and 2 is the continuous variable measuring political ideology. We observe that people living in cities with military bases espouse more left-wing views, without any differential effect for the cohorts alive in 1973. The effect of military bases is precisely estimated, but its magnitude is small at 6% of the sample mean. When studying this continuous outcome, we must exclude respondent that claimed not having a precise ideological alignment. We can include them when we analyze discrete outcomes in columns 3-10. We find that presence of bases in 1970 is associated with a higher share of respondents not stating a political ideology (columns 3-4) as well as with a higher share of responses in the extreme left (answers between 0 and 2). Again, we do not find any differential effect in the cohorts that were alive at the time of the coup.

## **8 Conclusion**

We study support for democracy in Chile and how it was affected by exposure to repression during the Pinochet dictatorship. We find that repression led to increased participation and support for democratization in the 1988 plebiscite. People with increased exposure to repression at the time of the military coup in 1973 express greater support for democracy in surveys in later years. These

findings go in the opposite direction of what is presumed to be the immediate effect of repression, which is the fear-induced generation of political acquiescence. In a world in which large-scale forms of repression have become the exception, and in which authoritarian regimes increasingly engage in electoral politics (Levitsky and Way, 2010), our results indicate that repression can only go so far in ensuring political survival. This fact can help explain the rise of “informational autocrats” in recent times, who have become more reliant on the manipulation of information, rather than on violence, to remain in power (Guriev and Treisman, 2018).

Our findings for the 1988 plebiscite largely replicate for the 1989 presidential election and the 1992 local elections, in which we observe increased support for candidates from the pro-democracy “Concertación” coalition in counties with more exposure to repression. These were, respectively, the last election to take place with Pinochet in power and the first one after he left office. However, our study of more than a dozen national and subnational elections over a 25-year period after the return to democracy fails to find evidence of a legacy of repression on electoral outcomes. This finding is ever more surprising given the salience of Pinochet and the dictatorship in Chilean politics up to this day and stands in contrast with the previous literature (e.g. Rozenas et al., 2017). One likely explanation is that previous studies have focused on forms of repression driven by ethnic or nationalistic cleavages, which are likely to have more long-lasting consequences.

Taken together, our findings indicate that exposure to repression under dictatorship has a causal effect on preferences for democracy, but does not necessarily shape party affiliations after democratization. Chile’s experience was not unique. It was one of many countries to experience dictatorship and state repression against political opponents as part of the larger geo-political game being played during the cold war. It was also one of many countries to experience democratization at the end of the XX century. Hence, we have reason to believe that our findings are likely to resonate in several young democracies located in various parts of the world.

## References

- Abadie, A., Angrist, J., and Imbens, G. (2002). Instrumental Variables Estimates of the Effect of Subsidized Training on the Quantiles of Trainee Earnings. *Econometrica*, 70(1):91–117.
- Acemoglu, D., Johnson, S., Robinson, J. A., and Yared, P. (2008). Income and Democracy. *American Economic Review*, 98(3):808–42.
- Acemoglu, D. and Robinson, J. A. (2001). A Theory of Political Transitions. *American Economic Review*, 91(4):938–963.
- Acemoglu, D. and Robinson, J. A. (2006). *Economic Origins of Dictatorship and Democracy*. Cambridge University Press.
- Aidt, T. S. and Franck, R. (2015). Democratization Under the Threat of Revolution: Evidence From the Great Reform Act of 1832. *Econometrica*, 83(2):505–547.
- Albertus, M. and Menaldo, V. (2018). *Authoritarianism and the Elite Origins of Democracy*. Cambridge University Press.
- Alesina, A. and Fuchs-Schündeln, N. (2007). Goodbye Lenin (or Not?): The Effect of Communism on People’s Preferences. *American Economic Review*, 97(4):1507–1528.
- Alesina, A., Giuliano, P., and Reich, B. (2018). Nation-Building and Education. Working Paper.
- Altonji, J. G., Elder, T. E., and Taber, C. R. (2005). Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools. *Journal of Political Economy*, 113(1):151–184.
- Angell, A. and Pollack, B. (1990). The Chilean Elections of 1989 and the Politics of the Transition to Democracy. *Bulletin of Latin American Research*, 9(1):1–23.
- Angrist, J. and Pischke, J.-S. (2009). *Mostly Harmless Econometrics*. Princeton University Press.
- Armingeon, K. and Guthmann, K. (2014). Democracy in Crisis? The Declining Support for National Democracy in European Countries, 2007/2011. *European Journal of Political Research*, 53(3):423–442.
- Balcells, L. (2012). The Consequences of Victimization on Political Identities: Evidence from Spain. *Politics & Society*, 40(3):311–347.
- Balcells, L. and Torrats-Espinosa, G. (2018). Using a Natural Experiment to Estimate the Electoral Consequences of Terrorist Attacks. *Proceedings of the National Academy of Sciences*.
- Banfield, E. (1958). *The Moral Basis of a Backward Society*. Simon and Schuster, Free Press.
- Barros, R. (2002). *Constitutionalism and Dictatorship: Pinochet, the Junta and the 1980 Constitution*. Cambridge studies in the theory of democracy. New York: Cambridge University Press.
- Barsbai, T., Rapoport, H., Steinmayr, A., and Trebesch, C. (2017). The Effect of Labor Migration on the Diffusion of Democracy: Evidence from a Former Soviet Republic. *American Economic Journal: Applied Economics*, 9(3):36–69.
- Bauer, M., Blattman, C., Chytilov, J., Henrich, J., Miguel, E., and Mitts, T. (2016). Can War Foster Cooperation? *Journal of Economic Perspectives*, 30(3):249–74.
- Bautista, M. A. (2014a). Political Effects of State Repression: The Chilean Case. Working Paper.
- Bautista, M. A. (2014b). The Sins of the Fathers: Intergenerational Effects of State Repression. Working Paper.
- Belloni, A., Chernozhukov, V., and Hansen, C. (2014). High-Dimensional Methods and Inference on Structural and Treatment Effects. *Journal of Economic Perspectives*, 28(2):29–50.
- Bellows, J. and Miguel, E. (2009). War and Local Collective Action in Sierra Leone. *Journal of*

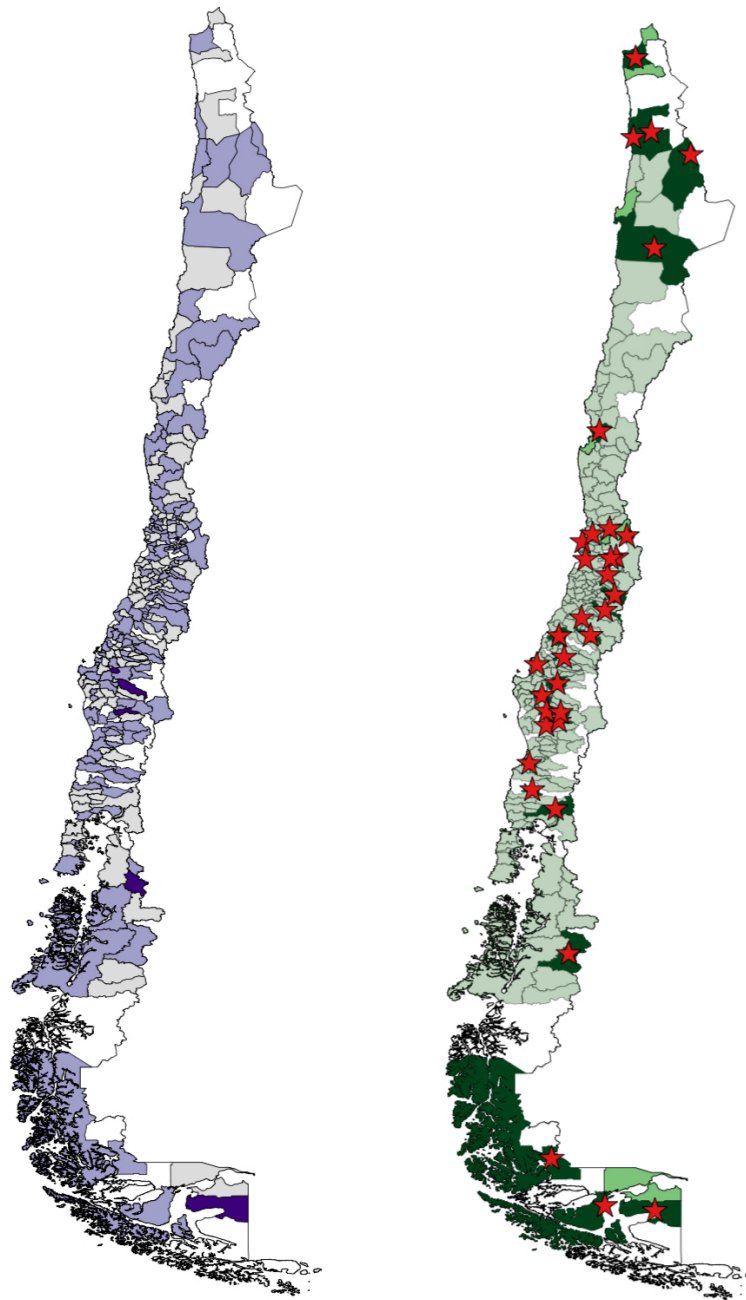
- Public Economics*, 93(11):1144 – 1157.
- Besley, T. and Persson, T. (2018). Democratic Values and Institutions. Forthcoming in *American Economic Review: Insights*.
- Blattman, C. (2009). From Violence to Voting: War and Political Participation in Uganda. *American Political Science Review*, 103(2):231-247.
- Boas, T. C. (2015). Voting for Democracy: Campaign Effects in Chile's Democratic Transition. *Latin American Politics and Society*, 57(2):67–90.
- Bruckner, M. and Ciccone, A. (2011). Rain and the Democratic Window of Opportunity. *Econometrica*, 79(3):923–947.
- Brum, M. (2018). Do Dictatorships Affect People's Long Term Beliefs and Preferences? An Empirical Assessment of the Latin American Case. *Working Paper*.
- Cameron, A. C., Gelbach, J. B., and Miller, D. L. (2008). Bootstrap-based improvements for inference with clustered errors. *Review of Economics and Statistics*, 90(3):414–427.
- Cantoni, D., Chen, Y., Yang, D. Y., Yuchtman, N., and Zhang, Y. J. (2017). Curriculum and Ideology. *Journal of Political Economy*, 125(2):338–392.
- Cauce (1988). Mito, temores y encuestas. *Cauce Magazine*.
- Cavallo, A., Salazar, M., and Sepúlveda, O. (2011). *La Historia Oculta del Régimen Militar: Memoria de una Época 1973–1988*. Uqbar editores.
- Condra, L. N., Long, J. D., Shaver, A. C., and Wright, A. L. (2018). The Logic of Insurgent Electoral Violence. *American Economic Review*, 108(11):3199–3231.
- Conley, T., Hansen, C., and Rossi, P. (2012). Plausibly Exogenous. *Review of Economics and Statistics*, 94(1):260–272.
- Constable, P. and Valenzuela, A. (1991). *A Nation of Enemies: Chile Under Pinochet*. W.W. Norton & Co, New York.
- Corporación Villa Grimaldi (2018). Website of Corporación Parque por la Paz Villa Grimaldi: Historia - Cuartel Terranova. <http://villagrimaldi.cl/historia/cuartel-terranova/>. [Accessed on 09/10/2018].
- Cuesta, J. I., Díaz, J., Gallego, F. A., González, F., and Marshall, G. (2017). La reforma agraria Chilena: Hechos estilizados a la luz de una nueva base de datos. *Estudios Públicos*, 146:7–48.
- Davenport, C. (2007). State Repression and Political Order. *Annual Review of Political Science*, 10(1):1–23.
- Deaton, A. (2010). Instruments, randomization, and learning about development. *Journal of Economic Literature*, 48(2):424–255.
- Dower, Paul Castañeda Finkel, E., Gehlbach, S., and Nafziger, S. (2018). Collective Action and Representation in Autocracies: Evidence from Russia's Great Reforms. *American Political Science Review*, 112(1):125-147.
- Dray, S., Legendre, P., and Peres-Neto, P. R. (2006). Spatial Modelling: A Comprehensive Framework for Principal Coordinate Analysis of Neighbour Matrices (PCNM). *Ecological Modelling*, 196(3-4):483–493.
- El País (1987). Los chilenos, por primera vez desde el golpe de Pinochet, pueden inscribirse para votar. February 26, 1987.
- Engel, E. and Venetoulis, A. (1992). The Chilean plebiscite: projections without historic data. *Journal of the American Statistical Association*, 87(420):933–941.
- Enikolopov, R., Petrova, M., and Zhuravskaya, E. (2011). Media and Political Persuasion: Evidence from Russia. *American Economic Review*, 101(7):3253–85.

- Fuchs-Schündeln, N. and Schündeln, M. (2015). On the Endogeneity of Political Preferences: Evidence from Individual Experience with Democracy. *Science*, 347(6226):1145–1148.
- Fuentes, C. (2013). *El Fraude*. Santiago: Hueders.
- Garcia-Ponce, O. and Pasquale, B. (2015). How Political Repression Shapes Attitudes Toward the State: Evidence from Zimbabwe. Working Paper.
- Giuliano, P. and Spilimbergo, A. (2014). Growing Up in a Recession. *Review of Economic Studies*, 81(2):787–817.
- Glaeser, E. L., Ponzetto, G. A. M., and Shleifer, A. (2007). Why Does Democracy Need Education? *Journal of Economic Growth*, 12(2):77–99.
- González, F. and Prem, M. (2018). Can Television Bring Down a Dictator? Evidence from Chile’s ‘No’ Campaign. *Journal of Comparative Economics*, 46(1):349–361.
- González, F., Prem, M., and Muñoz, P. (2018). Lost in Transition? The Persistence of Dictatorship Mayors. Working Paper.
- González Salinas, T. C. E. (1987). *Reseñas Históricas de las Unidades e Institutos del Ejército de Chile*. Estado Mayor General del Ejército de Chile. Biblioteca Militar. Santiago: Talleres Gráficos del Instituto Geográfico Militar.
- Gorodnichenko, Y. and Roland, G. (2016). Culture, Institutions and Democratization. NBER Working Paper 21117.
- Grosjean, P. and Senik, C. (2011). Democracy, Market Liberalization, and Political Preferences. *Review of Economics and Statistics*, 93(1):365–381.
- Guriev, S. and Treisman, D. (2018). Informational Autocrats. Working Paper.
- Hersh, E. D. (2013). Long-term Effect of September 11 on the Political Behavior of Victims’ Families and Neighbors. *Proceedings of the National Academy of Sciences*, 110(52).
- Huber, M. and Mellace, G. (2015). Testing Instrument Validity for LATE Identification Based on Inequality Moment Constraints. *Review of Economics and Statistics*, 97(2):398–411.
- Jones, D. B., Troesken, W., and Walsh, R. (2017). Political Participation in a Violent Society: The Impact of Lynching on Voter Turnout in the Post-Reconstruction South. *Journal of Development Economics*, 129:29 – 46.
- Kitagawa, T. (2015). A Test for Instrument Validity. *Econometrica*, 83(5):2043–2063.
- Kling, J. R., Liebman, J. B., and Katz, L. F. (2007). Experimental Analysis of Neighborhood Effects. *Econometrica*, 75(1):83–119.
- Kornbluh, P. (2013). *The Pinochet File: A declassified dossier on atrocity and accountability*. The New Press, New York, NY.
- La Tercera (1988). Los desconocidos detalles del captulo censurado de la franja del No. September 14, 1988.
- Levitsky, S. and Way, L. A. (2010). *Competitive Authoritarianism: Hybrid Regimes After the Cold War*. Cambridge University Press, New York, NY.
- Londregan, J. B. (2007). *Legislative Institutions and Ideology in Chile*. New York: Cambridge University Press.
- Lopes, C. S., Moraes, C. L., Junger, W. L., Werneck, G. L., de Leon, A. C. P., and Faerstein, E. (2015). Direct and Indirect Exposure to Violence and Psychological Distress among Civil Servants in Rio de Janeiro, Brazil: A Prospective Cohort Study. *BMC Psychiatry*, 15(109).
- Lupu, N. and Peisakhin, L. (2017). The Legacy of Political Violence across Generations. *American Journal of Political Science*, 61(4):836–851.
- Marx, B. (2017). Elections as Incentives: Project Completion and Visibility in African Politics.

*Working Paper.*

- Mastorocco, N. and Minale, L. (2018). News Media and Crime Perceptions: Evidence from a Natural Experiment. *Journal of Public Economics*, 165:230 – 255.
- Méndez, R., Godoy, O., Barros, E., and Fontaine, A. (1988). ¿Por qué ganó el no? *Centro de Estudios Públicos*.
- Montiel-Olea, J. L. and Pflueger, C. (2013). A Robust Test for Weak Instruments. *Journal of Business & Economic Statistics*, 31(3):358–369.
- Nannicini, T., Stella, A., Tabellini, G., and Troiano, U. (2013). Social Capital and Political Accountability. *American Economic Journal: Economic Policy*, 5(2):222–50.
- Neundorf, A. (2010). Democracy in Transition: A Micro Perspective on System Change in Post-Socialist Societies. *Journal of Politics*, 72(4):1096–1108.
- Nunn, N. and Wantchekon, L. (2011). The slave trade and the origins of mistrust in Africa. *American Economic Review*, 101(7):3221–3252.
- Orellana, P. (2015). *La Represión en Chile: 1973-1989*. Editorial Senda.
- Oster, E. (2018). Unobservable Selection and Coefficient Stability. *Forthcoming in Journal of Business & Economic Statistics*.
- Persson, T. and Tabellini, G. (2009). Democratic Capital: The Nexus of Political and Economic Change. *American Economic Journal: Macroeconomics*, 1(2):88–126.
- Putnam, R. D., Leonardi, R., and Nonetti, R. Y. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Rozenas, A., Schutte, S., and Zhukov, Y. (2017). The Political Legacy of Violence: The Long-Term Impact of Stalins Repression in Ukraine. *Journal of Politics*, 79(4):1147–1161.
- Santa-Cruz, A. (2005). *International Election Monitoring, Sovereignty, and the Western Hemisphere: The Emergence of an International Norm*. New York: Routledge.
- Schlenger, W. E., Caddell, J. M., Ebert, L., Jordan, B. K., Rourke, K. M., Wilson, D., Thalji, L., Dennis, J. M., Fairbank, J. A., and Kulka, R. A. (2002). Psychological Reactions to Terrorist Attacks: Findings from the National Study of Americans' Reactions to September 11. *Journal of the American Medical Association*, 288(5):581–588.
- Spilimbergo, A. (2009). Democracy and Foreign Education. *American Economic Review*, 99(1):528–43.
- Svolik, M. (2012). *The Politics of Authoritarian Rule*. Cambridge University Press.
- Ticchi, D., Verdier, T., and Vindigni, A. (2013). Democracy, Dictatorship and the Cultural Transmission of Political Values. IZA Discussion Paper 7441.
- UNODC (2013). *Global Study on Homicide: Trends, Context, Data*. UNODC.
- Valenzuela, J. S. and Scully, T. R. (1997). Electoral Choices and the Party System in Chile: Continuities and Changes at the Recovery of Democracy. *Comparative Politics*, 29(4):511–27.
- Verdugo, P. (2001). *Chile, Pinochet, and the Caravan of Death*. Boulder: Lynne Rienner.
- Wang, Y. (2018). For Whom the Bell Tolls: The Political Legacy of China's Cultural Revolution. *Working Paper*.
- Young, L. (2018). The Psychology of State Repression: Fear and Dissent Decisions in Zimbabwe. *Working Paper*.
- Zhukov, Y. M. and Talibova, R. (2018). Stalins Terror and the Long-term Political Effects of Mass Repression. *Journal of Peace Research*, 55(2):267–283.

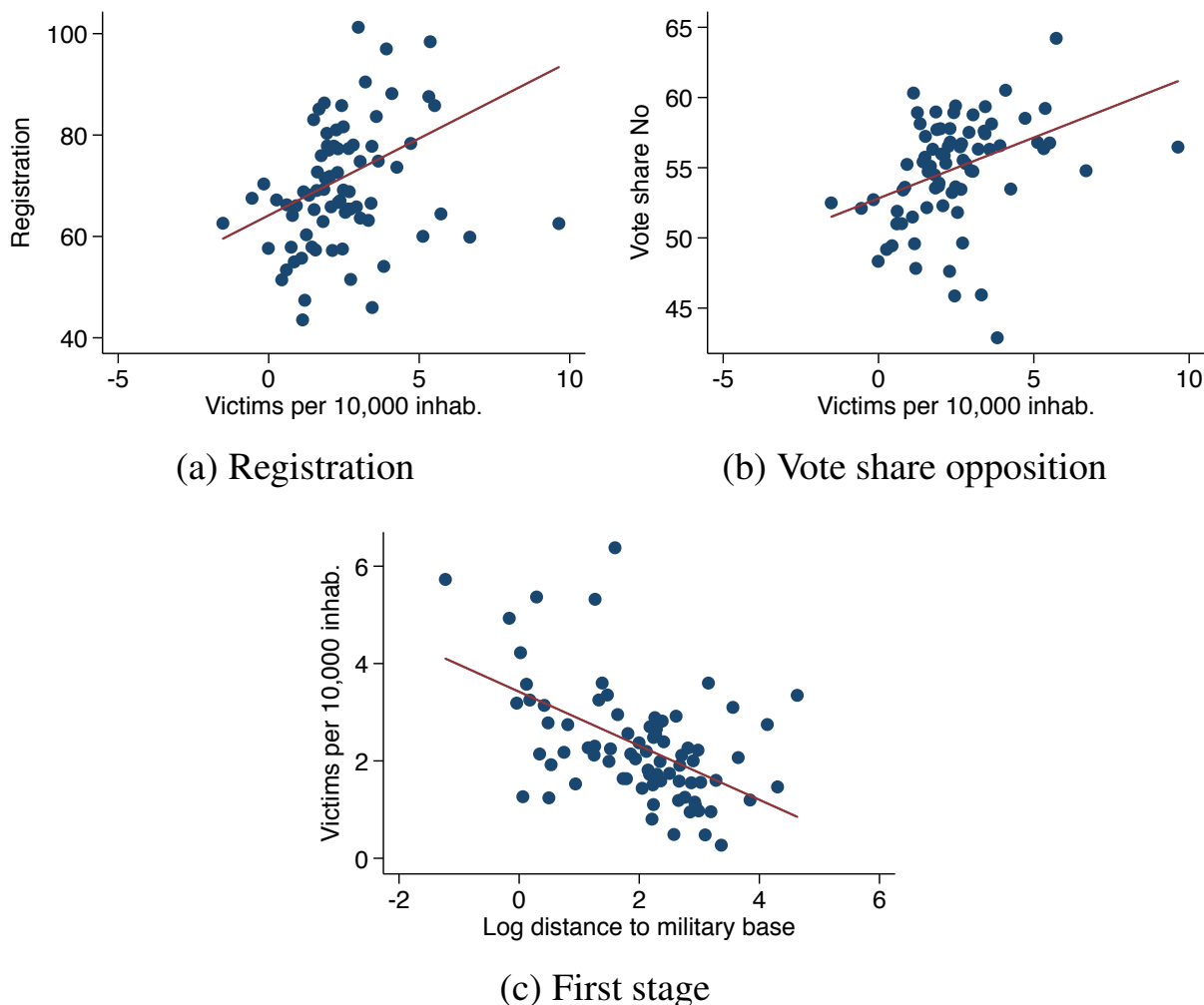
**Figure 1:** Spatial variation in repression and exposure to military bases



(a) Victims per 10,000 inhab.      (b) Military bases in 1970

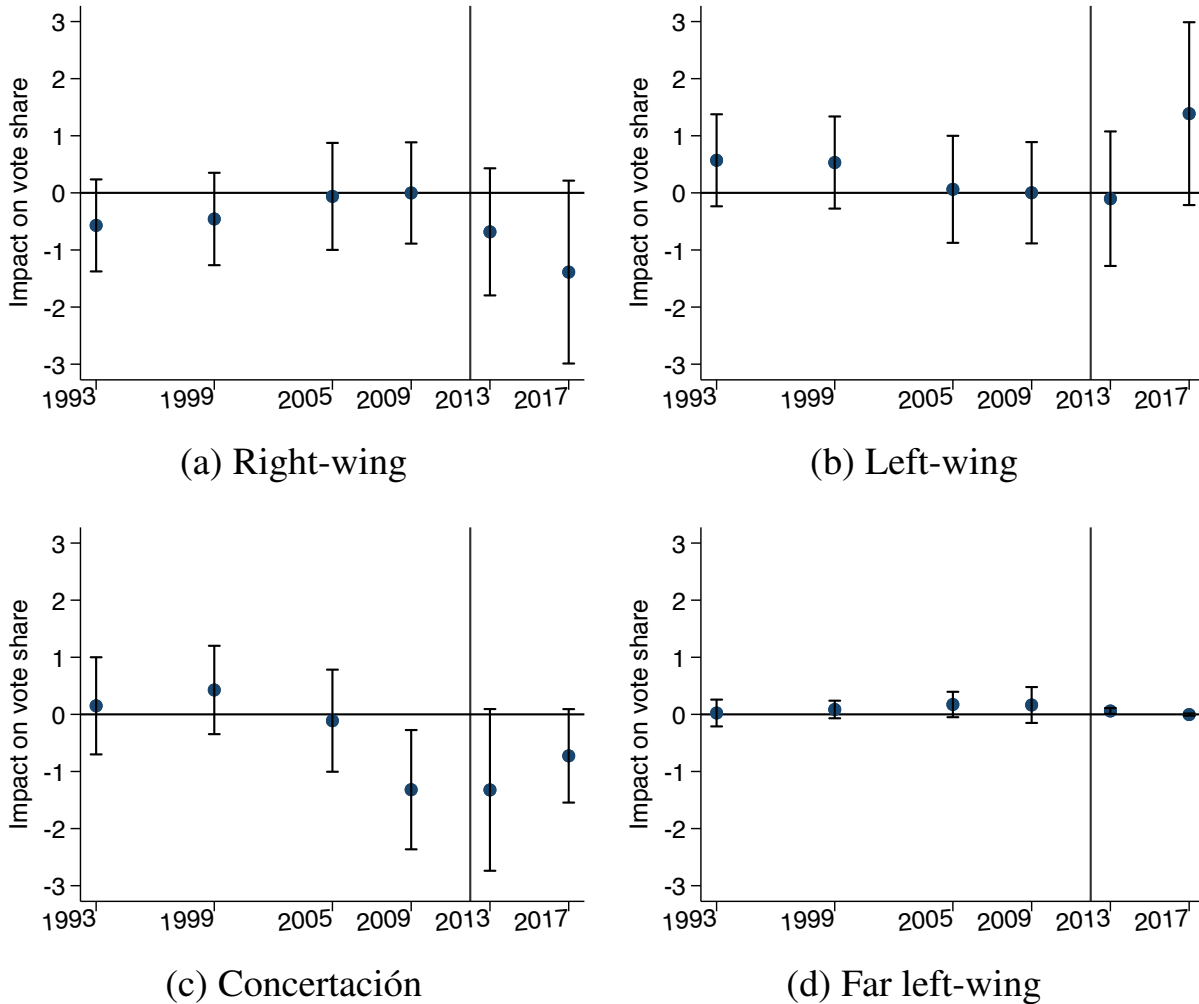
Notes: Panel (a) uses darker color in counties with more victims per 10,000 inhabitants, gray for counties without victims, and white for counties not included in the final sample. Panel (b) uses darker color for counties more exposed to military bases operating in 1970 and white for counties not included in the final samples. In the latter panel we also include red stars that denote the presence of at least one military base in the county.

**Figure 2:** Repression and democratization



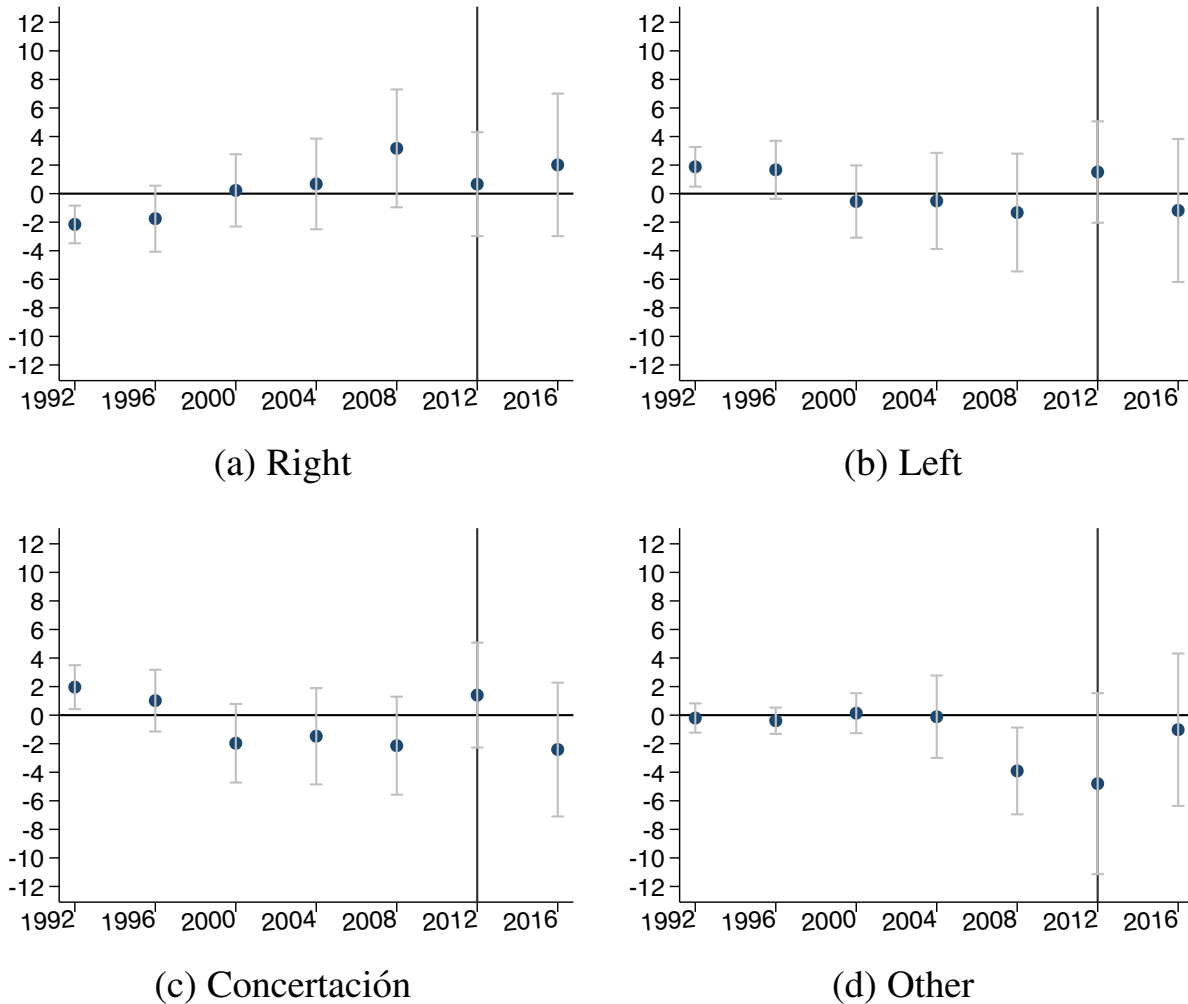
Notes: Panels (a) and (b) present the linear fit between electoral outcomes in the 1988 plebiscite and the number of victims per 10,000 inhabitants using the cross-section of 276 counties and controlling for vote shares in 1970, distances to Santiago and the corresponding regional capital, population in 1970, and province fixed effects. For coefficient estimates see column 4 in Table 3. Panel (c) presents the linear fit between victims per 10,000 inhab. and the logarithm of the distance to the closest military base, one of our instruments in the first-stage, controlling for the same variables that in the two previous panels. For coefficient estimates see column 2 in Table 4.

**Figure 3:** Presidential elections after the Pinochet dictatorship



Notes: Each panel presents six coefficients estimated using a two-stage least squares procedure and our main regression specification, equation (1), where the instrument is the indicator variable for counties with military bases in 1970. The circles represent the point estimate and the vertical lines the 95% confidence interval. We estimate each coefficient using data from one of the six presidential elections after democratization: 1993, 1999, 2005, 2009, 2013, and 2017. Panel (a) uses the vote share for right-wing candidates as dependent variable, panel (b) uses the vote share for left-wing candidates, panel (c) uses the vote share of candidates from the coalition called *Concertación* – coalition of five of the six presidents of Chile after the transition to democracy – and panel (d) uses the vote share for candidates to the left of *Concertación*. The vertical line in 2012 denotes the introduction of automatic registration and voluntary voting.

**Figure 4:** Local elections after the Pinochet dictatorship



Notes: Each panel presents six coefficients estimated using a two-stage least squares procedure and our main regression specification, equation (1), where the instrument is the indicator variable for counties with military bases in 1970. The circles represent the point estimate and the vertical lines the 95% confidence interval. We estimate each coefficient using data from one of the seven local elections after democratization: 1992, 1996, 2000, 2004, 2008, 2012 and 2016. Panel (a) uses the vote share for right-wing mayoral candidates as dependent variable, panel (b) uses the vote share for left-wing candidates, panel (c) uses the vote share of candidates from the coalition called *Concertación* – coalition of five of the six presidents of Chile after the transition to democracy – and panel (d) uses the vote share for all other candidates. The vertical line in 2012 denotes the introduction of automatic registration and voluntary voting.

**Table 1: Descriptive statistics**

	Unweighted	Weighted		Min	Max
	Mean	Mean	St. Dev		
<b>Main variables</b>	(1)	(2)	(3)	(4)	(5)
Victims per 10,000 inhabitants	1.38	2.31	2.01	0.00	11.89
Indicator military base	0.12	0.30	0.46	0.00	1.00
ln Distance to military base	3.55	3.10	1.19	0.88	8.18
Vote share NO in 1988	48.44	54.82	9.49	3.26	76.77
Registration in 1988	72.50	71.16	25.20	20.61	146.19
<b>Control variables</b>					
Vote share Alessandri in 1970	34.86	34.09	8.79	7.80	67.86
Vote share Allende in 1970	35.04	37.17	10.84	4.17	76.78
ln Distance to Santiago	5.52	4.72	1.92	0.94	8.23
ln Distance to regional capital	3.87	2.80	1.65	0.00	8.21
Population in 1970	29,010	–	–	339	321,250

Notes: Descriptive statistics for 276 counties in Chile. The “main variables” are the dependent variables, the endogenous variable, and the instruments in the two-stage least squares framework. The “control variables” are those used as controls in our main specification, i.e. equation (1). The statistics in columns (2) and (3) are weighted by county population in 1970, except for “Population in 1970.” We construct electoral outcomes from administrative data kept at Chile’s Electoral Service. The number of victims by county comes from the Rettig report. Population in 1970 comes from the housing census. All distances are calculated from a county’s centroid.

**Table 2:** Pre-existing differences in counties with varying exposure to the military

	Avg without military base (1)	Indicator military base		ln Distance to military base	
		Without Province FE (2)	With Province FE (3)	Without Province FE (4)	With Province FE (5)
Vote share Salvador Allende in 1964	40.23 ( 11.15)	-0.90 ( 1.64)	-2.50 ( 1.68)	0.75* ( 0.41)	0.80 ( 0.49)
Vote share Eduardo Frei in 1964	54.82 ( 11.37)	0.13 ( 1.72)	2.22 ( 1.65)	-1.33*** ( 0.42)	-0.88* ( 0.46)
Vote share Salvador Allende in 1970	37.07 ( 12.21)	0.31 ( 1.84)	0.25 ( 1.86)	0.22 ( 0.48)	-0.09 ( 0.57)
Vote share Jorge Alessandri in 1970	34.11 ( 9.81)	-0.07 ( 1.67)	0.74 ( 1.43)	-0.27 ( 0.38)	-0.28 ( 0.40)
Vote share UP municipal election 1971	50.71 ( 12.85)	0.61 ( 2.19)	0.55 ( 2.20)	0.17 ( 0.53)	-0.03 ( 0.62)
UP mayor 1971	0.38 ( 0.49)	-0.15 ( 0.10)	-0.14 ( 0.10)	0.05** ( 0.02)	0.04 ( 0.03)
Vote share UP legislative election 1973	44.81 ( 11.87)	-1.52 ( 1.68)	-1.50 ( 1.90)	0.89** ( 0.41)	0.58 ( 0.55)
ln Distance to Santiago	4.30 ( 1.98)	1.39*** ( 0.42)	0.18* ( 0.11)	0.19* ( 0.11)	0.04 ( 0.03)
ln Distance to regional capital	3.04 ( 1.30)	-0.78 ( 0.51)	-1.32*** ( 0.37)	0.48*** ( 0.12)	0.53*** ( 0.09)
Indicator landlocked	0.72 ( 0.45)	-0.16 ( 0.12)	-0.03 ( 0.08)	-0.01 ( 0.03)	0.01 ( 0.02)
Houses per capita in 1970	0.20 ( 0.04)	0.00 ( 0.00)	-0.00 ( 0.00)	-0.00 ( 0.00)	0.00 ( 0.00)
Land inequality in 1965	0.84 ( 0.15)	0.03 ( 0.03)	0.04** ( 0.02)	-0.00 ( 0.01)	-0.00 ( 0.01)
Agrarian reform until 1973	0.21 ( 0.25)	-0.02 ( 0.05)	-0.02 ( 0.03)	0.02 ( 0.01)	0.02*** ( 0.01)
Trade liberalization	-0.20 ( 0.18)	0.02 ( 0.06)	0.03 ( 0.03)	-0.00 ( 0.02)	-0.01 ( 0.01)
Population density 1960	1431.41 ( 2659.18)	-1174.32** ( 517.96)	-364.50 ( 341.04)	-235.46* ( 120.28)	-152.45 ( 96.88)
Population density 1970	2723.20 ( 4715.53)	-2408.34** ( 955.76)	-877.05 ( 622.61)	-417.81** ( 212.13)	-247.33 ( 153.77)

Notes: Column 1 provides the average and standard deviation (in parenthesis) for each variable for counties without military bases. Column 2 shows point estimates and standard errors of a univariate regression of each variable on the dummy for presence of military bases in 1970. Column 3 adds province fixed effects. Columns 4 and 5 replicate the analysis for the continuous measure of log distance to the nearest base. All vote shares are measured as percentages, from 0 to 100. All regressions are weighted by population in 1970. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 3: Repression and the 1988 plebiscite: OLS estimates***Dependent variables: electoral outcomes at the 1988 plebiscite*

	(1)	(2)	(3)	(4)
<b>A. Registration</b>				
Victims per 10,000 inhab.	2.70*	2.61**	3.31***	3.03***
	(1.46)	(1.24)	(1.11)	(0.92)
Vote share Alessandri in 1970		0.64	1.10**	1.03**
		(0.54)	(0.52)	(0.44)
Vote share Allende in 1970		-0.18	0.27	0.39
		(0.41)	(0.36)	(0.39)
In Distance to Santiago			23.65***	11.28***
			(4.75)	(3.20)
In Distance to regional capital			-0.70	-6.10***
			(1.37)	(1.33)
Population in 1970				-19.81***
				(3.43)
<b>B. Vote share NO</b>				
Victims per 10,000 inhab.	1.14**	1.14***	0.84***	0.87***
	(0.47)	(0.24)	(0.19)	(0.18)
Vote share Alessandri in 1970		-0.21*	-0.22**	-0.21**
		(0.12)	(0.11)	(0.10)
Vote share Allende in 1970		0.44***	0.46***	0.44***
		(0.08)	(0.07)	(0.07)
In Distance to Santiago			0.52	1.72
			(1.28)	(1.15)
In Distance to regional capital			-1.46***	-0.94***
			(0.23)	(0.28)
Population in 1970				1.92**
				(0.76)
Counties	276	276	276	276
Province fixed effects	x	x	x	x
R-squared (Panel A)	0.208	0.263	0.442	0.581
R-squared (Panel B)	0.432	0.721	0.755	0.764
Coefficient stability estimate (Panel A)				3.41
Coefficient stability estimate (Panel B)				0.67

Notes: This table presents estimates using electoral outcomes in the 1988 plebiscite as dependent variables and as right-hand side variables the number of victims during the dictatorship and different combinations of control variables (equation 1). All regressions include 25 province fixed effects and are weighted by county-level population in 1970. The coefficient stability in the last two rows correspond to a bounding exercise that accounts for the effect of unobservable variables that are correlated with the included controls, following the method proposed by Oster (2018). Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 4: Proximity to military bases: First stage and reduced form**

	<i>Victims per 10,000 inhab.</i> (first-stage)		<i>Registration</i> (reduced form)		<i>Vote share NO</i> (reduced form)	
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Excluded instruments</b>						
Indicator military base	1.76*** (0.43)	2.17*** (0.46)	13.38*** (4.73)	19.11*** (3.74)	4.68*** (0.87)	5.56*** (0.91)
ln Distance to military base		-0.57*** (0.21)		-7.90*** (2.87)		-1.22** (0.48)
<b>Controls</b>						
Vote share Alessandri in 1970	0.02 (0.04)	0.01 (0.04)	0.95** (0.48)	0.89** (0.42)	-0.25** (0.11)	-0.26** (0.10)
Vote share Allende in 1970	0.02 (0.03)	0.01 (0.02)	0.32 (0.40)	0.22 (0.37)	0.41*** (0.07)	0.40*** (0.07)
ln Distance to Santiago	-0.96*** (0.37)	-0.65* (0.34)	5.09 (3.99)	9.42** (4.12)	-0.39 (1.11)	0.28 (1.15)
ln Distance to regional capital	-0.16 (0.14)	-0.14 (0.15)	-5.70*** (1.34)	-5.33*** (1.40)	-0.73** (0.28)	-0.67** (0.28)
Population in 1970	-0.47 (0.34)	-0.54* (0.32)	-22.71*** (4.21)	-23.63*** (3.77)	0.94 (0.86)	0.80 (0.82)
Counties	276	276	276	276	276	276
Province fixed effects	x	x	x	x	x	x
R-squared	0.498	0.520	0.578	0.606	0.771	0.776
Kleibergen-Paap <i>F</i> -statistic	16.53	11.06				
Montiel Olea-Pflueger <i>F</i> -statistic	28.81	24.08				

Notes: Each column in this table presents estimates of our two versions of the first-stage (columns 1 and 2, i.e. equations 2 and 3), and the corresponding reduced forms (columns 3-6, i.e. equation 1 using the instruments instead of victims in the right-hand side). The bottom of the table shows the Kleibergen-Paap and Montiel Olea-Pflueger *F*-statistics for the strength of the first-stage relationship. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 5: Placebo test using elections before the coup***The dependent variable is a vote share for a candidate (or party) in an election.*

	Presidential Elections				Local Election	Legislative Election
	1964		1970		1971	1973
	Frei	Allende	Alessandri	Allende	Popular Unity	
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Reduced form</b>						
Indicator military base	0.53 (1.62)	-0.93 (1.58)	0.47 (1.62)	1.54 (1.81)	1.48 (2.42)	0.03 (1.90)
ln Distance to Santiago	0.37 (2.58)	-0.25 (2.57)	-0.97 (2.76)	-1.13 (2.72)	-0.30 (3.77)	-0.55 (3.11)
ln Distance to regional capital	-1.63*** (0.59)	1.77*** (0.59)	-1.16** (0.57)	1.70*** (0.63)	1.54* (0.83)	1.54** (0.70)
Population in 1970	-1.01 (1.96)	1.58 (1.98)	-2.18 (2.20)	2.32 (2.03)	2.34 (2.93)	1.21 (2.45)
<b>Panel B: 2SLS</b>						
Victims per 10,000 inhab.	0.30 (0.88)	-0.52 (0.87)	0.26 (0.86)	0.86 (0.95)	0.83 (1.26)	0.02 (1.00)
ln Distance to Santiago	0.67 (2.31)	-0.77 (2.31)	-0.71 (2.35)	-0.27 (2.57)	0.52 (3.49)	-0.54 (2.79)
ln Distance to regional capital	-1.58*** (0.56)	1.68*** (0.56)	-1.12** (0.52)	1.83*** (0.61)	1.67** (0.79)	1.55** (0.66)
Population in 1970	-0.86 (1.68)	1.32 (1.68)	-2.06 (1.87)	2.72 (1.95)	2.73 (2.67)	1.21 (2.17)
Observations	267	267	276	276	276	276
Province fixed effects	x	x	x	x	x	x
R-squared (A)	0.459	0.373	0.374	0.402	0.295	0.302
R-squared (B)	0.455	0.366	0.372	0.393	0.293	0.302
Kleibergen-Paap <i>F</i> -statistic (B)	16.8	16.8	18.2	18.2	18.2	18.2
Montiel Olea-Pflueger <i>F</i> -statistic (B)	29.3	29.3	31.0	31.0	31.0	31.0

Notes: Panel A presents reduced-form estimates of the relationship between military bases and electoral outcomes before the dictatorship. Panel B presents the corresponding 2SLS estimates of the same outcomes on victims per 10,000 inhabitants. First-stage *F*-statistic We use the same controls as in our baseline specification except that we exclude vote shares in previous elections (results are similar if we include them). The change in electoral counties in between the elections of 1964 and 1970 explains the difference in the number of observations for columns 1 and 2. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 6:** Regression and the 1988 plebiscite: 2SLS estimates*Dependent variables: electoral outcomes at the 1988 plebiscite*

	Registration		Vote share NO	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	7.60*** (2.62) [0.07]	8.94*** (2.33) [0.03]	2.66*** (0.72) [0.00]	2.55*** (0.67) [0.01]
<b>Controls</b>				
Vote share Alessandri in 1970	0.82** (0.41)	0.76* (0.45)	-0.29** (0.12)	-0.29** (0.12)
Vote share Allende in 1970	0.19 (0.35)	0.14 (0.38)	0.37*** (0.09)	0.37*** (0.08)
ln Distance to Santiago	12.41*** (3.29)	12.74*** (3.43)	2.17* (1.31)	2.14* (1.30)
ln Distance to regional capital	-4.47*** (1.34)	-3.99*** (1.51)	-0.30 (0.42)	-0.33 (0.40)
Population in 1970	-19.13*** (2.94)	-18.93*** (3.05)	2.19** (0.88)	2.17** (0.86)
Counties	276	276	276	276
Province fixed effects	x	x	x	x
Instrumental variables	1	2	1	2
Kleibergen-Paap <i>F</i> -statistic	16.53	11.06	16.53	11.06
Montiel Olea-Pflueger <i>F</i> -statistic	28.81	24.08	28.81	24.08
Hansen <i>J</i> -statistic p-value		0.28		0.63

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3, as well as the geographic distance to the closest military base in columns 2 and 4. The bottom of the table shows the Kleibergen-Paap and Montiel Olea-Pflueger *F*-statistics for the strength of the first-stage relationship, as well as the p-values from the Hansen *J*-statistic over-identification test. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 7: Repression and the 1989 presidential elections**

	OLS		Reduced form				2SLS			
	Aylwin	Büchi	Aylwin		Büchi		Aylwin		Büchi	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Victims per 10,000 inhab.	0.35** (0.17)	-0.54*** (0.19)					1.52*** (0.56)	1.25*** (0.46)	-2.04*** (0.60)	-1.67*** (0.52)
Indicator military base			2.76*** (0.81)	2.73*** (0.86)	-3.70*** (0.78)	-3.65*** (0.89)				
ln Distance to military base				-0.18 (1.79)		0.30 (1.61)				
<b>Controls</b>										
Vote share Alessandri in 1970	-0.39*** (0.11)	0.55*** (0.15)	-0.43*** (0.10)	-0.43*** (0.10)	0.60*** (0.14)	0.60*** (0.15)	-0.47*** (0.10)	-0.45*** (0.10)	0.66*** (0.14)	0.63*** (0.14)
Vote share Allende in 1970	0.33*** (0.07)	-0.16* (0.08)	0.30*** (0.07)	0.30*** (0.07)	-0.11 (0.08)	-0.11 (0.08)	0.29*** (0.07)	0.30*** (0.07)	-0.10 (0.09)	-0.11 (0.08)
ln Distance to regional capital	1.15 (1.21)	-2.41** (1.03)	0.20 (1.16)	0.15 (0.97)	-1.13 (1.07)	-1.05 (0.95)	1.35 (1.39)	1.30 (1.30)	-2.67** (1.30)	-2.61** (1.19)
ln Distance to Santiago	-0.51* (0.26)	0.20 (0.24)	-0.42 (0.26)	-0.42 (0.26)	0.09 (0.22)	0.09 (0.22)	-0.30 (0.32)	-0.35 (0.30)	-0.08 (0.34)	-0.01 (0.31)
Population in 1970	-0.59 (0.72)	-0.80 (0.67)	-1.10 (0.76)	-1.10 (0.76)	-0.11 (0.70)	-0.12 (0.71)	-0.64 (0.76)	-0.63 (0.73)	-0.73 (0.80)	-0.74 (0.74)
Counties	276	276	276	276	276	276	276	276	276	276
R-squared	0.716	0.690	0.726	0.726	0.706	0.706				
Province fixed effects	x	x	x	x	x	x	x	x	x	x
Instrumental variables							1	2	1	2
Kleibergen-Paap <i>F</i> -statistic							18.66	12.34	18.66	12.34
Montiel Olea - Pflueger <i>F</i> -statistic							28.81	24.08	28.81	24.08
Hansen <i>J</i> -statistic p-value								0.54		0.54

Notes: This table presents OLS estimates, reduced forms, and two-stage estimates using our main specification (equation 1) but with electoral outcomes in the 1989 presidential election as dependent variables. Hernan Büchi was the presidential candidate of the coalition of political parties that supported the Pinochet regime, and Patricio Aylwin was the presidential candidate of the opposition coalition, runner-up and winner of the election respectively. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 8:** Exposure to repression and expressed support for democracy

	Democracy is the best form of government		Satisfied with functioning of democracy		Democracy is preferable to other forms of government		Would never support military government		Family of outcomes	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Indicator military base x Indicator alive 1973	0.056** [0.023]	0.051** [0.023]	0.033* [0.020]	0.036* [0.020]	0.002 [0.017]	0.003 [0.017]	0.045 [0.029]	0.030 [0.028]	0.075*** [0.025]	0.066*** [0.024]
Indicator military base	-0.044 [0.039]		-0.037 [0.027]		-0.019 [0.022]		-0.013 [0.031]		-0.061* [0.034]	
Indicator alive 1973	-0.023 [0.019]	-0.020 [0.020]	-0.034* [0.019]	-0.035* [0.019]	0.012 [0.016]	0.010 [0.016]	-0.034 [0.026]	-0.027 [0.025]	-0.044** [0.022]	-0.040* [0.021]
Observations	11,073	11,073	17,362	17,362	17,299	17,299	4,818	4,818		
R-squared	0.044	0.090	0.040	0.062	0.027	0.050	0.032	0.093		
Region FE	x		x		x		x		x	
Controls	x		x		x		x		x	
Year FE	x	x	x	x	x	x	x	x	x	x
County FE		x		x		x		x		x
Mean DV	0.293	0.293	0.604	0.604	0.591	0.591	0.771	0.771		
SD DV	0.455	0.455	0.489	0.489	0.492	0.492	0.420	0.420		

Notes: Binary dependent variable in columns 1-8, equals one for greater support for democracy. See Appendix A for details on construction of variables. In columns 9-10, we calculate the aggregate effect for the family of outcomes, following Kling et al. (2007). Indicator alive 1973 equals 1 if respondent's birth year is less than or equal to 1973. All regressions include survey year fixed effects and control for gender. Odd-numbered columns also include region fixed effects and baseline controls. Even-numbered columns include county fixed effects instead. Robust standard errors clustered at the county level in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 9: Exposure to repression and expressed political ideology**

	Political ideology index (0-10)		Non-aligned indicator		Political center indicator (3-7)		Political left indicator (0-2)		Political right indicator (8-10)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Indicator military base x Indicator alive 1973	-0.042 [0.092]	-0.008 [0.093]	0.018 [0.017]	0.003 [0.016]	-0.028 [0.020]	-0.016 [0.020]	0.010 [0.010]	0.010 [0.011]	-0.000 [0.012]	0.003 [0.012]
Indicator military base	-0.300*** [0.101]		0.021 [0.024]		-0.012 [0.022]		0.023** [0.011]		-0.032*** [0.012]	
Indicator alive 1973	0.173** [0.076]	0.130* [0.076]	-0.053*** [0.016]	-0.039*** [0.015]	0.045** [0.019]	0.035* [0.018]	-0.010 [0.009]	-0.009 [0.009]	0.017 [0.011]	0.013 [0.011]
Observations	13,404	13,401	17,025	17,025	17,025	17,025	17,025	17,025	17,025	17,025
R-squared	0.024	0.040	0.037	0.067	0.033	0.049	0.013	0.024	0.016	0.031
Region FE	x		x		x		x		x	
Controls	x		x		x		x		x	
Year FE	x	x	x	x	x	x	x	x	x	x
County FE		x		x		x		x		x
Mean DV	4.914	4.914	0.213	0.213	0.579	0.579	0.101	0.101	0.107	0.107
SD DV	2.258	2.258	0.409	0.409	0.494	0.494	0.302	0.302	0.309	0.309

Notes: Continuous dependent variable in columns 1 and 2, with larger values indicating more right-wing views. Binary dependent variable in columns 2-10. Respondents expressing no political inclination are excluded in columns 1-2. See Appendix A for details on construction of variables. See Appendix A for details on construction of variables. Indicator alive 1973 equals 1 if respondent's birth year is less than or equal to 1973. All regressions include survey year fixed effects and control for gender. Odd-numbered columns also include region fixed effects and baseline controls. Even-numbered columns include county fixed effects instead. Robust standard errors clustered at the county level in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

# Appendix (for online publication)

## Appendix A Further information about the data

### A.1 *Victims*

As mentioned in the main text, we mostly rely on information about victims of the dictatorship from the Rettig report. This report was digitized by the Museum of Memory and Human Rights, an institution that draws attention to human rights violations committed in Chile during the dictatorship. From the resulting dataset, we observe each victim’s full name, the county of detention or execution, the exact date of detention or execution, political affiliation (if any), age, and occupation. We have complemented this information by manually reconstructing the county of residence and work for the victims. We also add 66 cases of surviving victims who were tortured and for whom similar information is available at judicial records kept by the same museum. However, we must exclude victims for which the county of detention/execution is unknown and victims who were assassinated abroad, which reduces the total number to 3,150 (98% of total). We also exclude from the analysis those counties lacking 1970 population data – leaving us with 289 (85% of the 340 with plebiscite data). We drop four further counties because they lack results for the 1970 presidential election, as well as 13 outliers in terms of victims per 10,000 inhabitants. Our final sample contains full information for 276 counties. Figure A8 provides more details about this attrition.

### A.2 *Military bases*

Our measures of proximity to military bases are calculated using the location of army regiments (“regimientos”). These regiments have various functions: infantry, armored cavalry, artillery, engineering, communications, transportation and logistics. We also have information about air force bases and military academies, which we use for robustness checks. Our measure of distance is calculated as the logarithm of the distance from a county’s centroid to that of the centroid of the nearest county with a base, ignoring one’s own bases. These are straight-line “as-the-crow-flies” distances.

### A.3 *Electoral outcomes*

We define the voter registration rate as the number of people that registered to vote in the plebiscite divided by population in 1970. This normalization can give rise to registration rates above 100% because of internal migration or population growth, or because people registered in counties different from where they lived. In any case, counties with more registered voters than population are

small and have little weight in our estimations. We winsorize the voter registration rate at the 98th percentile. As part of our robustness checks, we show that the results are unaffected by this choice.

Regarding the “No” vote share, we divide the number of votes for this option by the number of valid votes, excluding null and blank votes. Results are unaffected if we use the total number of votes cast as denominator. The correlation between both measures is 0.999.

Our sample delivers similar aggregate election outcomes to the real aggregates including all counties, suggesting little sample selection from the counties we drop. For example, in our data 37.17% of people voted for Salvador Allende and 34.09% for Jorge Alessandri in the 1970 elections, compared to 36.63% and 35.29% respectively in the full aggregate.

#### *A.4 Latinobarómetro*

We construct four separate binary measures of support for democracy based on four different questions in the Latinobarómetro survey. Not all questions are asked in all years of the survey. The first indicator equals one if the respondent highly agrees with the statement: “Despite its problems, democracy is the best form of government” [Question P16ST.A in 2011]. The second indicator equals one if the respondent expresses being satisfied or highly satisfied with the functioning of democracy in the country [Question P14ST.A in 2011]. The third indicator equals one if the respondent claims that “Democracy is preferable to any other form of government” [Question P13ST in 2011]. The other options for this question are “Under some circumstances, an authoritarian government may be preferable” and “For people like me, there is no difference between democracy and non-democracy.” The fourth indicator equals one if the respondent claims that he or she “would never support a military government” [Question P18ST in 2011]. The alternative answer here is “If things are difficult, I would support a military government instead of a democratic one.” We calculate the aggregate effect for the family of outcomes, following Kling et al. (2007). For this purpose, we use the “avg\_effect” Stata command written by Christopher Robert.

We construct variables measuring political preferences using answers to a question asking respondent’s political ideology in a scale from 0 to 10, in which lower values correspond to increasingly left-wing views and respondents may also indicate that they do not have political leanings [Question P76ST in 2011].

#### *A.5 Other sources*

Our analysis also uses information from the 1965 agricultural census. We use county-level measures of land inequality from the census to characterize the mostly rural society of the time. We also use data measuring the percentage of agricultural land expropriated during the implementation of the agrarian reform, which was one of the most important national policies of the 1960s and 1970s. The source for both of these pieces of data is Cuesta et al. (2017).

The 1970 population and housing census provides us with population counts. We use this census, instead of the more recent one from 1982, as population may have endogenously responded to repression by then. For instance, estimates of the number of people in exile due to the dictatorship

range from 130,000 to 200,000, corresponding to 1.5-2.3% of the total population in 1970 (Orellana, 2015). Similarly, the 1992 census may reflect population movements triggered by the return to democracy. We also use the 1970 census to construct county-level measures of wealth based on the number of houses per capita, which is arguably related to the level of income in the locality.

Finally, we use newly digitized data on local infrastructure projects funded by the military regime between 1979 and 1990. Examples of these projects include the construction of roads, houses, and sewers, among others (see González et al. 2018 for details). This data comes from annual reports prepared by the Ministry of Housing and Urban Planning, which was in charge of approximately five percent of the annual budget. The data include approximately 8,000 projects throughout Chile. We convert these projects into monetary units, which provides a measure of the amount of financial resources the Pinochet regime spent in each county.

## Appendix B Characterization of the complier counties

In any instrumental variables design, the sub-population induced to take (or not to take) the treatment because of the variation in the instrument is referred to as the set of “compliers.” In our case, the compliers are the counties that were exposed to different amounts of repression because of their proximity to (or distance from) military bases. Following the technique proposed by Abadie et al. (2002), we can characterize this set of counties. This exercise allows us to evaluate the external validity of our estimates and also provides insights about the variation we are exploiting.

To facilitate the interpretation, we focus on a binary treatment and a binary instrument. Regarding repression, we use a dummy equal to one if the number of victims per 10,000 inhabitants in the county is in the top quartile of the distribution. The average number of victims per 10,000 inhabitants in the top quartile is 4.3. As part of our robustness checks, Table A18 presents two-stage estimates using this specification. We refer to these counties as experiencing “high” repression. Regarding military bases, we focus on the indicator for presence. We define as “treated compliers” those counties with bases and high repression, while counties without bases and without high repression are called “untreated compliers.” We then estimate the following regression:

$$Y_{i,t} = \mu R_{i,t \in [1973, 1988]} + \tau X_{i,t \leq 1970} + \lambda_p + \varepsilon_{ip} \quad (5)$$

where  $Y_{i,t}$  is a variable we use to characterize compliers and  $R_{i,t \in [1973, 1988]}$  is the indicator for high repression. The parameter  $\mu$  measures the average characteristic among treated compliers. We can replace  $R_{i,t \in [1973, 1988]}$  by  $1 - R_{i,t \in [1973, 1988]}$  to characterize untreated compliers.

Panel A in Table A27 speaks to the external validity of our estimates. Columns 1-3 show that the average characteristics of complier counties are similar to those of the average county, with the exception that compliers voted relatively more for the left-wing candidate in 1970. Thus, our instrumental variables estimates capture the effect of repression on counties with similar wealth and inequality than the average county but with different political preferences. Moreover, the comparison between columns 1 and 2 confirms the *internal* validity of our econometric design because treated and untreated complier counties were similar before 1973.

Panel B studies county characteristics after 1973. The difference between treated and untreated compliers is equivalent to the local average treatment effect. Reassuringly, the “Plebiscite” sub-panel shows that the estimate we obtained when using the “high” repression indicator is similar to what we obtained using the continuous treatment (see Table A18 for details). Moreover, the “Repression year” sub-panel suggests that our first stage is stronger in counties that experienced violence at the beginning of the dictatorship. This result is consistent with historical details provided in section 2.1, where we document how the repressive apparatus changed after 1974, with DINA becoming mostly responsible. Finally, the “Profession” and “Age categories” sub-panels show that victims in complier counties were more likely to have been middle-age laborers or farmers affiliated to a political party.

## Appendix C Additional Figures and Tables

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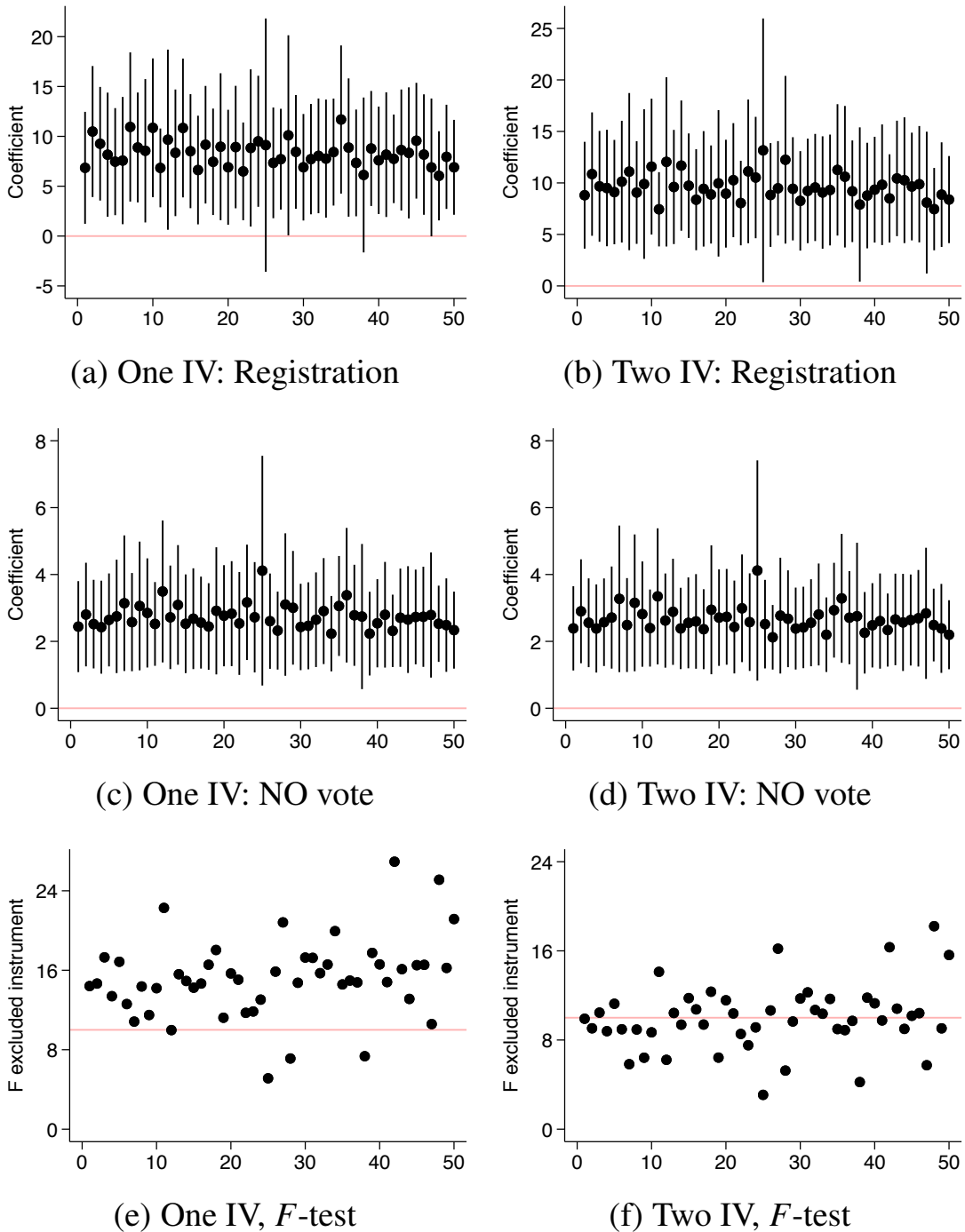
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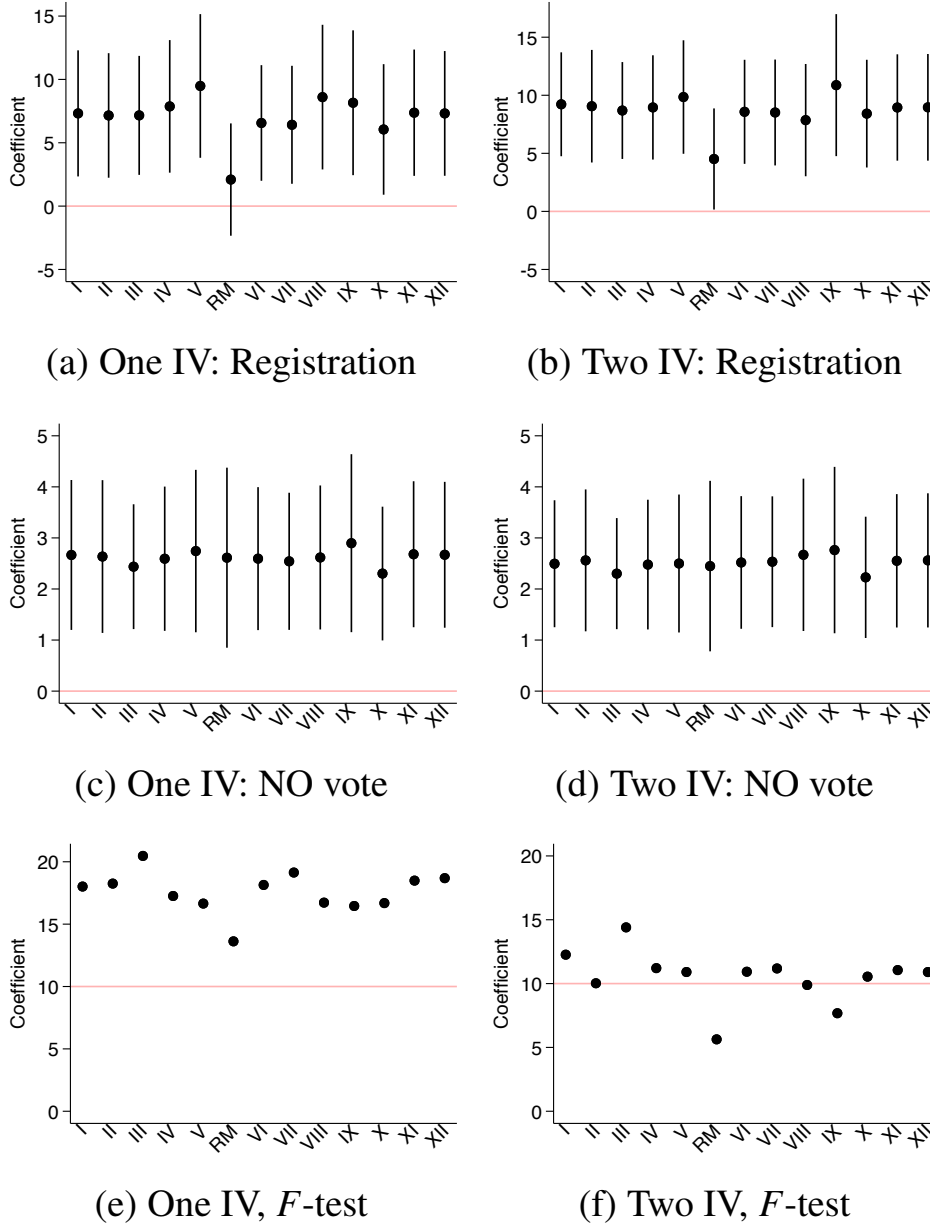
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**Figure A1: Robustness of results to excluding sets of counties**



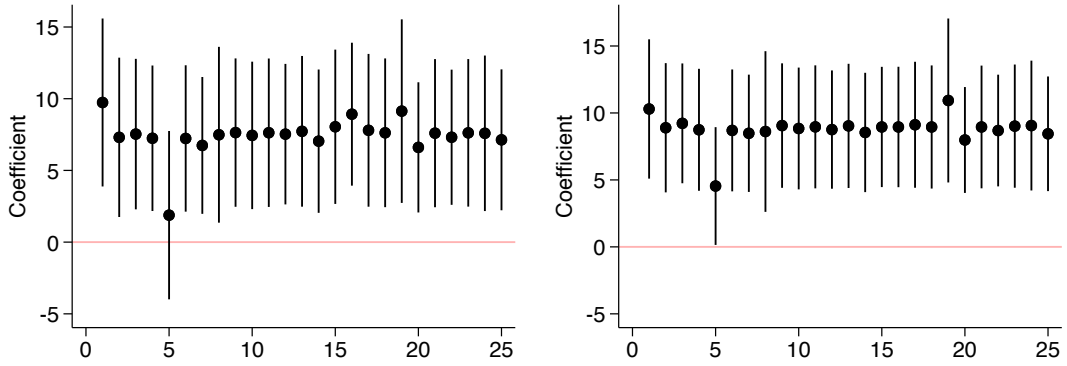
Notes: The y-axis represents the value of the two-stage least squares coefficient associated to victims per 10,000 inhabitants in panels (a), (b), (c), and (d), and the  $F$ -test for the excluded instrument(s) in panels (e) and (f). The  $x$ -axis corresponds to 50 different samples of counties, where we exclude 20 randomly chosen counties each time.

**Figure A2: Robustness of results to excluding regions**

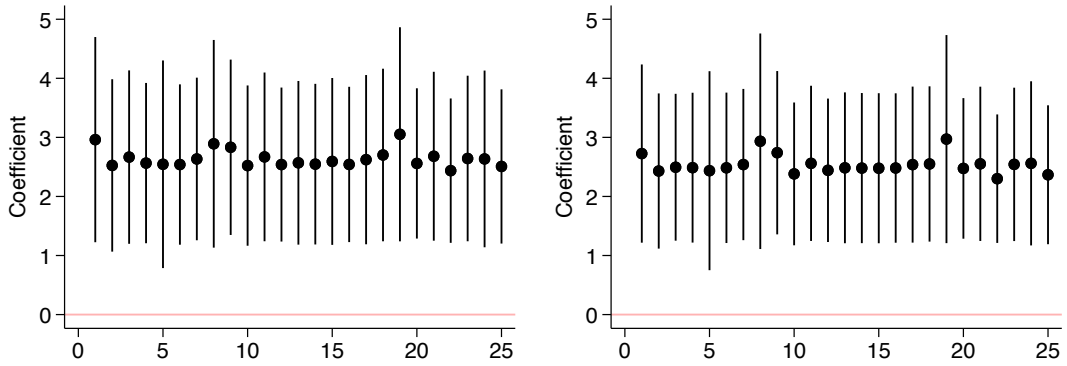


Notes: The y-axis represents the value of the two-stage least squares coefficient associated to victims per 10,000 inhabitants in panels (a), (b), (c), and (d), and the  $F$ -test for the excluded instrument(s) in panels (e) and (f). The  $x$ -axis corresponds to 13 different samples of counties, where we exclude all counties from a region – the largest administrative unit – each time. Regions are identified by roman numbers (I,II,..., XII) with the exception of the Metropolitan Region (RM) where Santiago is located.

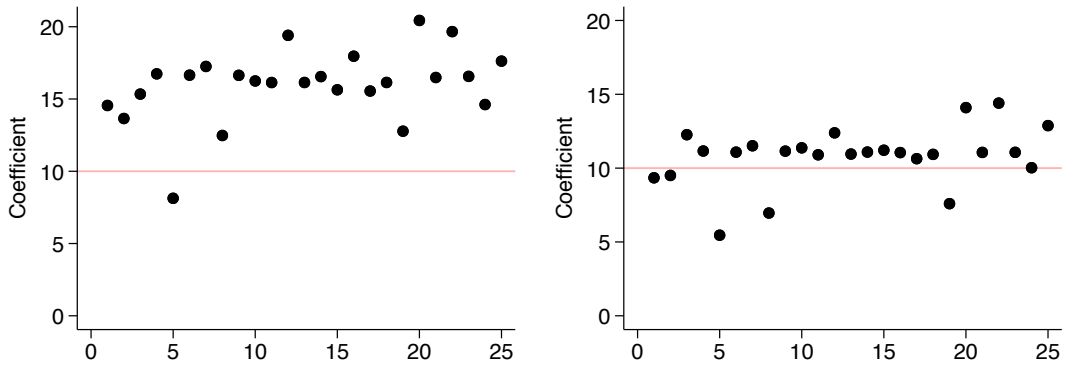
**Figure A3: Robustness of results to excluding provinces**



(a) One instrument: Registration (b) Two instruments: Registration



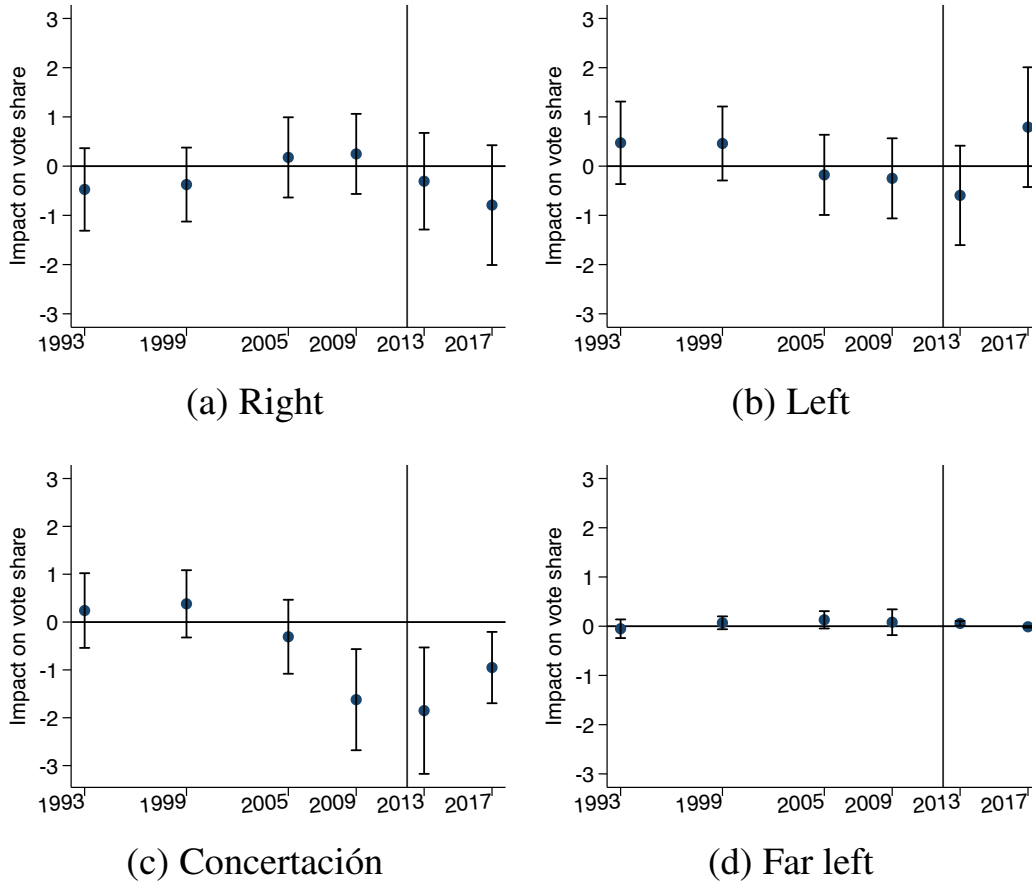
(c) One instrument: vote NO (d) Two instruments: vote NO



(e) One instrument,  $F$ -test (f) Two instruments,  $F$ -test

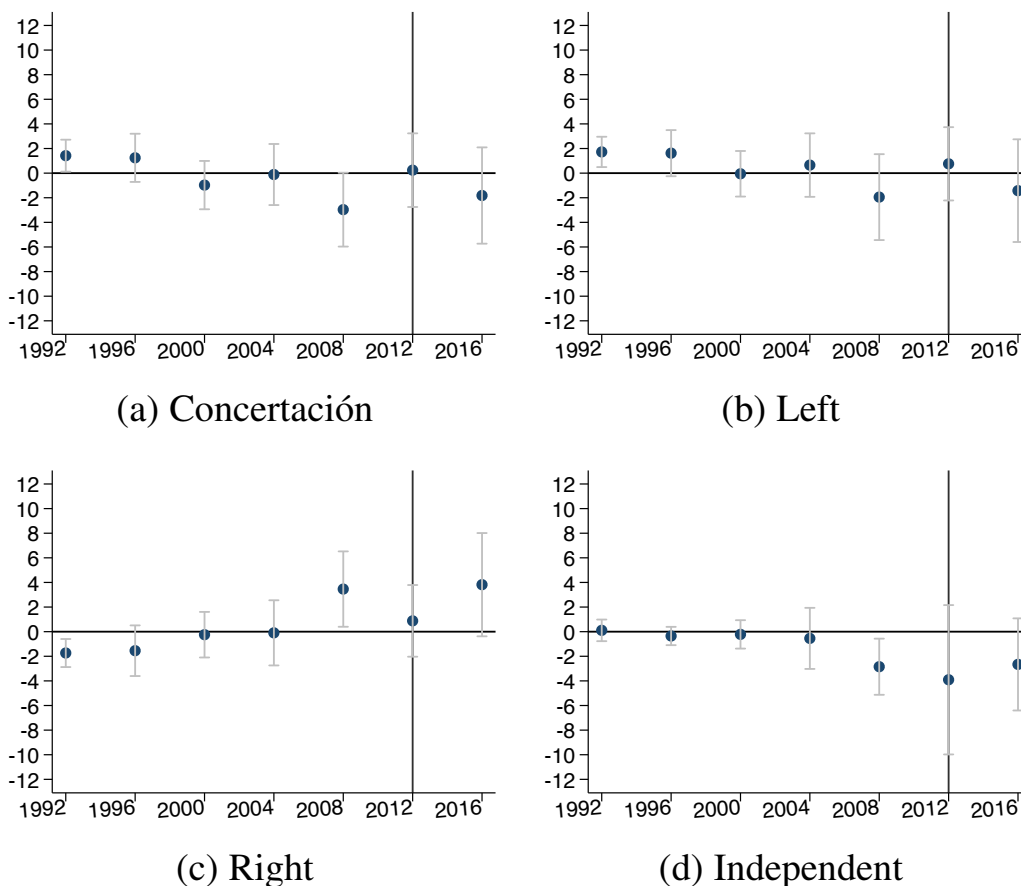
Notes: The y-axis represents the value of the two-stage least squares coefficient associated to victims per 10,000 inhabitants in panels (a), (b), (c), and (d), and the  $F$ -test for the excluded instrument(s) in panels (e) and (f). The  $x$ -axis corresponds to 25 different samples of counties, where we exclude all counties from a province – the second largest administrative unit – each time. Provinces are identified by numbers 1, . . . , 25.

**Figure A4:** Presidential elections after the Pinochet dictatorship: two instruments



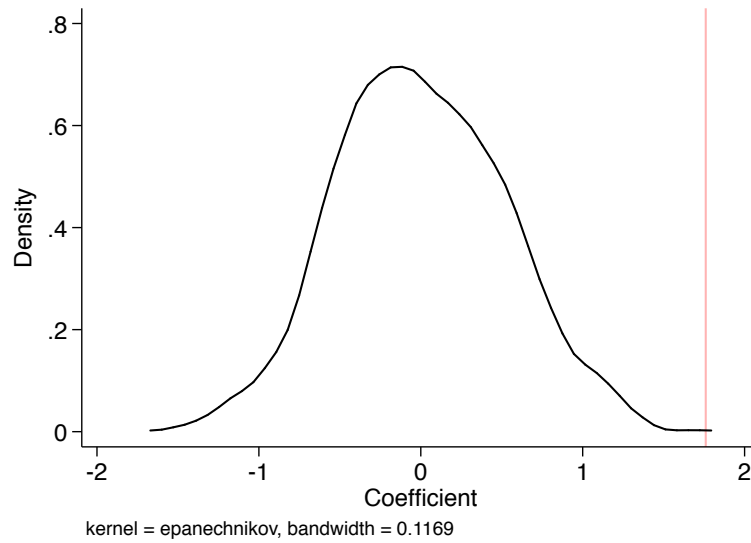
Notes: Each panel presents six coefficients estimated using a two-stage least squares procedure and our main regression specification, equation (1), where the instruments are the dummy for presence of military bases and the  $\ln$  distance to the nearest base in 1970. The circles represent the point estimate and the vertical lines the 95% confidence interval. We estimate each coefficient using data from one of the six presidential elections after democratization: 1993, 1999, 2005, 2009, 2013, and 2017. Panel (a) uses the vote share for right-wing candidates as dependent variable, panel (b) uses the vote share for left-wing candidates, panel (c) uses the vote share of candidates from the coalition called *Concertación* – coalition of five of the six presidents of Chile after the transition to democracy – and panel (d) uses the vote share for candidates to the left of *Concertación*. The vertical line in 2012 denotes the introduction of automatic registration and voluntary voting.

**Figure A5:** Local elections after the Pinochet dictatorship: two instruments

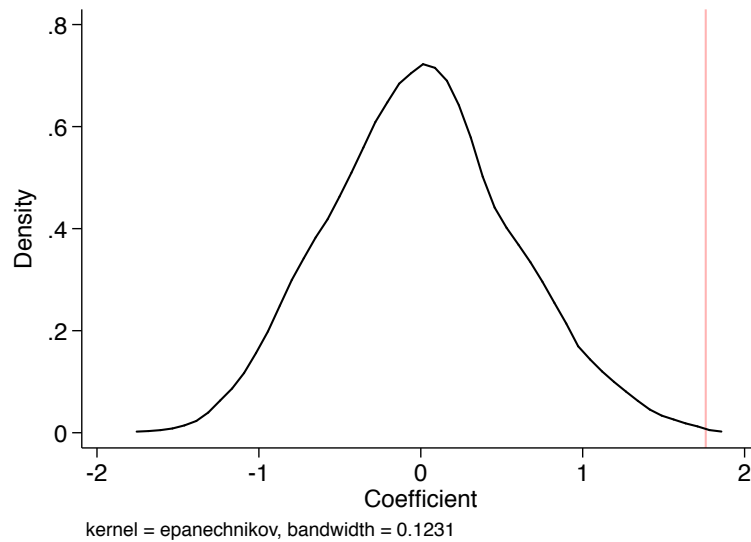


Notes: Each panel presents six coefficients estimated using a two-stage least squares procedure and our main regression specification, equation (1), where the instruments are the dummy for presence of military bases and the  $\ln$  distance to the nearest base in 1970. The circles represent the point estimate and the vertical lines the 95% confidence interval. We estimate each coefficient using data from one of the seven local elections after democratization: 1992, 1996, 2000, 2004, 2008, 2012 and 2016. Panel (a) uses the vote share for right-wing mayoral candidates as dependent variable, panel (b) uses the vote share for left-wing candidates, panel (c) uses the vote share of candidates from the coalition called *Concertación* – coalition of five of the six presidents of Chile after the transition to democracy – and panel (d) uses the vote share for all other candidates. The vertical line in 2012 denotes the introduction of automatic registration and voluntary voting.

**Figure A6: Random treatment assignment (Placebo)**



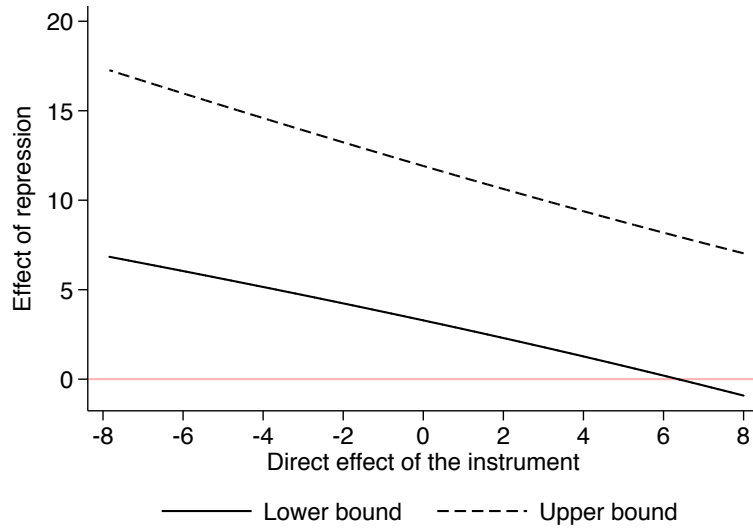
(a) Countrywide



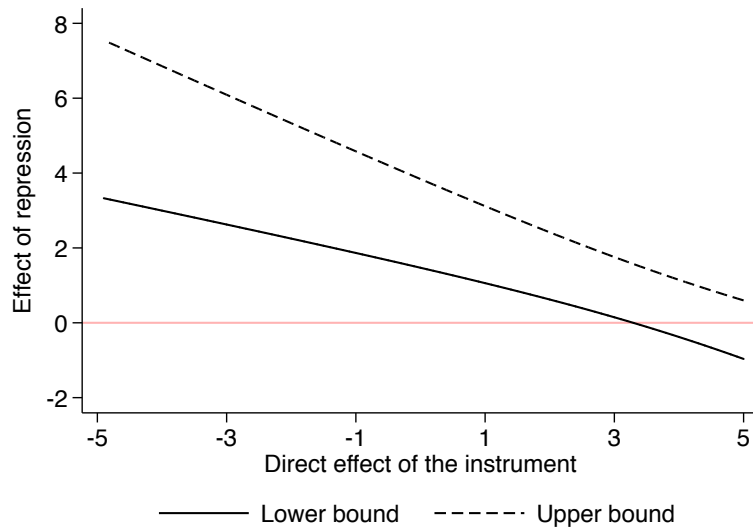
(b) Within-province

Notes: This figure presents the distribution of point estimates from a series of first stage regressions in which the instrument is randomly assigned across counties. Panel (a) randomly assigns the 34 treated units among all counties in the country, while panel (b) randomly assigns the treatment within provinces, based on the actual number of treated counties in that province. We perform each set of randomizations 1,000 times. The red line shows the point estimate from the first stage presented in column 1 of table 4.

**Figure A7: Relaxing the exogeneity assumption**



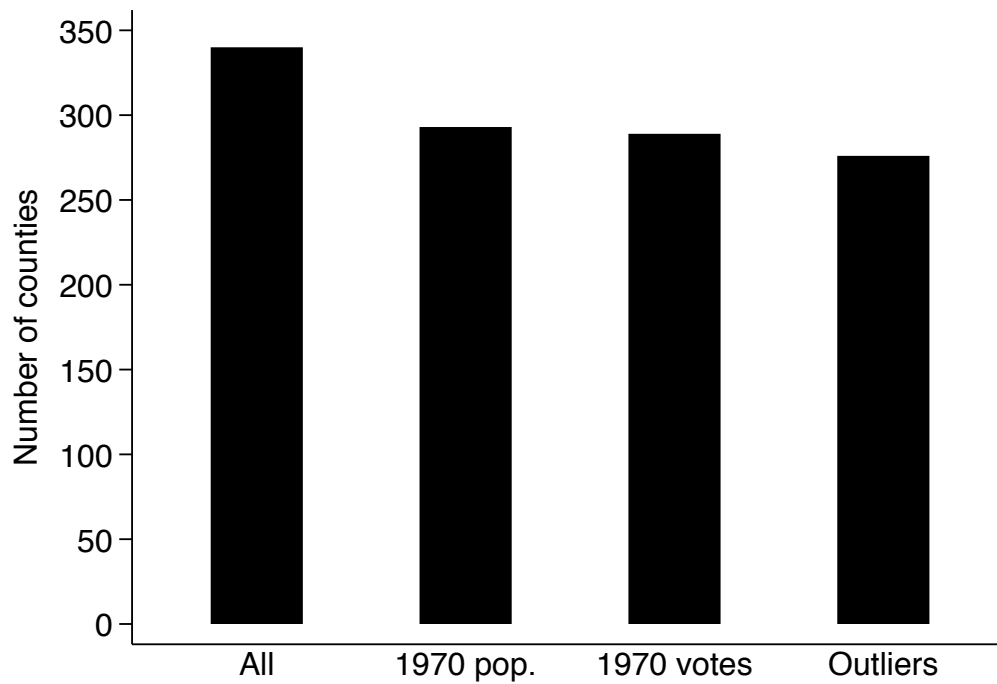
(a) Registration



(b) Vote share NO

Notes: These figures present results from a bounding exercise in which we allow military bases to affect outcomes directly. The  $x$ -axis measures (theoretical) direct effects of military bases on registration (Panel A) and the NO vote share (Panel B). The  $y$ -axis measures the corresponding effect of repression. Overall, we find that to make the effect of repression non-different from zero we need the direct effect of bases to be 6.2 and 3.2 in panels A and B, equivalent to 46% (6.2/13.4) and 68% (3.2/4.7) of the reduced form effect. See Conley et al (2012) for details.

**Figure A8:** Characterization of sample attrition



Notes: This table describes the attrition process in our sample. The universe of potential counties in our data is 340 counties, i.e. those with vote shares data in the 1988 plebiscite (“All”). The sample decreases to 293 counties because of missing population data in the 1970 census (“1970 pop.”). Then the sample decreases to 289 because of missing 1970 vote shares (“1970 votes”). Finally, the sample decreases to 276 counties after deleting 5% of counties we considered to be outliers in terms of victims per 10,000 inhab. (“Outliers”).

**Table A1: Military bases and torture centers***Dependent variable is the number of torture centers*

	Number of torture centers		Presence of torture center		Torture centers per 10,000 inhab.	
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator military base	4.91*** (0.86)	4.94*** (0.84)	0.06* (0.03)	0.09** (0.04)	0.24*** (0.09)	0.23** (0.10)
ln Distance to military base		-0.05 (0.56)		-0.04 (0.03)		0.01 (0.04)
Observations	276	276	276	276	276	276
Baseline controls	x	x	x	x	x	x
Province fixed effects	x	x	x	x	x	x
R-squared	0.834	0.834	0.119	0.128	0.565	0.565
Avg. dependent variable	2.48	2.48	0.84	0.84	1.14	1.14

Notes: This table presents the empirical relationship between military bases and the number of torture centers, where people were murdered, tortured, and kept as political prisoners. We interpret these results as military bases increasing *overall* repression, not just murders. Baseline controls include vote shares for Alessandri and Allende in 1970, the logarithm of distances to Santiago and the corresponding regional capital, and population in 1970. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A2:** Validity tests for military presence instrument

	Huber and Mellace (2015)	Kitagawa (2015)
Registration	0.70	0.44
Vote share NO	0.57	0.62

Notes: This table presents the p-values for validity tests based on Huber and Mellace (2015) and Kitagawa (2015). We use a discrete version of our endogenous variable, corresponding to a civilian victimization rate above the 75th percentile, to be able to apply the tests. The null hypothesis in both tests is that the main assumptions behind LATE estimation (unconfoundness, mean exclusion restriction, and monotonicity) hold in the data. For Kitagawa (2015), we use a trimming constant of 0.07, which is the range suggested by the author that reaches higher power. Note that not rejecting the null does not imply that no potential violations could still be in place, even asymptotically. Thus this test should be seen as necessary condition more than a sufficient condition for the instrument validity.

**Table A3: Robustness of first-stage to different combinations of controls**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Dependent variable is dictatorship victims per 10,000 inhab.</i>								
<b>Instruments</b>								
Indicator military base	1.59*** (0.31)	1.55*** (0.32)	1.60*** (0.42)	1.76*** (0.43)	2.04*** (0.30)	2.01*** (0.32)	1.95*** (0.45)	2.17*** (0.46)
ln Distance to military base					-0.65*** (0.17)	-0.64*** (0.17)	-0.52*** (0.19)	-0.57*** (0.21)
<b>Controls</b>								
Vote share Alessandri in 1970		0.04 (0.05)	0.02 (0.04)	0.02 (0.04)	0.02 (0.04)	0.02 (0.04)	0.02 (0.04)	0.01 (0.04)
Vote share Allende in 1970		0.03 (0.03)	0.02 (0.03)	0.02 (0.03)	0.01 (0.02)	0.01 (0.02)	0.01 (0.03)	0.01 (0.02)
ln Distance to Santiago			-0.62*** (0.26)	-0.96*** (0.37)			-0.29 (0.26)	-0.65* (0.34)
ln Distance to regional capital			-0.06 (0.12)	-0.16 (0.14)			-0.03 (0.13)	-0.14 (0.15)
Population in 1970				-0.47 (0.34)				-0.54* (0.32)
Observations	276	276	276	276	276	276	276	276
R-squared	0.457	0.460	0.486	0.498	0.500	0.501	0.505	0.520
Province fixed effects	x	x	x	x	x	x	x	x
F-test excluded instruments	25.64	23.03	14.36	16.53	22.75	19.96	9.335	11.06

Notes: This table checks the robustness of our two versions of the first-stage when we control for different sets of control variables. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A4: Robustness of reduced form (registration) to different combinations of controls**

*Dependent variable is electoral outcome in the 1988 plebiscite*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Instruments</b>								
Indicator military base	11.37** (5.09)	10.93* (5.58)	5.39 (4.80)	13.38*** (4.73)	8.67* (5.14)	8.60 (5.50)	9.41** (4.50)	19.11*** (3.74)
In Distance to military base					3.88 (4.06)	3.25 (3.71)	-5.88** (2.72)	-7.90*** (2.87)
<b>Controls</b>								
Vote share Alessandri in 1970		0.64 (0.61)	1.17* (0.61)	0.95** (0.48)	0.72 (0.62)	0.72 (0.62)	1.13* (0.60)	0.89** (0.42)
Vote share Allende in 1970		-0.17 (0.43)	0.32 (0.38)	0.32 (0.40)	-0.08 (0.42)	-0.08 (0.42)	0.25 (0.36)	0.22 (0.37)
In Distance to Santiago			21.56*** (4.56)	5.09 (3.99)			25.28*** (4.75)	9.42** (4.12)
In Distance to regional capital			-0.89 (1.24)	-5.70*** (1.34)			-0.47 (1.30)	-5.33*** (1.40)
Population in 1970				-22.71*** (4.21)			(1.30)	-23.63*** (3.77)
Observations	276	276	276	276	276	276	276	276
R-squared	0.212	0.266	0.406	0.578	0.221	0.273	0.422	0.606
Province fixed effects	x	x	x	x	x	x	x	x

Notes: This table checks the robustness of the reduced forms when we control for different sets of control variables. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A5: Robustness of reduced form (“NO”) to different combinations of controls**

*Dependent variable is electoral outcome in the 1988 plebiscite*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Instruments</b>								
Indicator military base	5.94*** (1.29)	6.00*** (0.87)	5.01*** (0.88)	4.64*** (0.88)	7.84*** (1.26)	7.37*** (0.91)	5.89*** (0.90)	5.56*** (0.91)
In Distance to military base					-2.74*** (0.69)	-1.90*** (0.52)	-1.29*** (0.50)	-1.22*** (0.48)
<b>Controls</b>								
Vote share Alessandri in 1970		-0.22* (0.12)	-0.26** (0.11)	-0.25** (0.11)		-0.27** (0.11)	-0.26** (0.10)	-0.26** (0.10)
Vote share Allende in 1970		0.43*** (0.08)	0.41*** (0.07)	0.41*** (0.07)		0.38*** (0.07)	0.39*** (0.07)	0.40*** (0.07)
In Distance to Santiago			-1.07 (1.20)	-0.34 (1.39)			-0.26 (1.28)	0.28 (1.15)
In Distance to regional capital			-0.92*** (0.25)	-0.73** (0.28)			-0.83*** (0.24)	-0.67** (0.28)
Population in 1970				0.95 (0.85)				0.80 (0.82)
Observations	276	276	276	276	276	276	276	276
R-squared	0.458	0.748	0.769	0.772	0.492	0.764	0.774	0.776
Province fixed effects	x	x	x	x	x	x	x	x

Notes: This table checks the robustness of the reduced forms when we control for different sets of control variables. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A6: Robustness of 2SLS results to different combinations of controls***Dependent variable is electoral outcome in the 1988 plebiscite*

<b>Registration</b>	One instrument			Two instruments				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Victims per 10,000 inhab.	7.169** (3.019)	7.051** (3.308)	3.377 (2.611)	7.600*** (2.623)	3.253 (2.368)	3.433 (2.369)	5.011** (2.084)	8.940*** (2.335)
<b>Vote share NO</b>								
Victims per 10,000 inhab.	3.747*** (0.862)	3.871*** (0.893)	3.138*** (0.920)	2.655*** (0.720)	3.882*** (0.686)	3.595*** (0.698)	3.004*** (0.824)	2.552*** (0.665)
Observations	276	276	276	276	276	276	276	276
Votes shares in 1970		x	x	x		x	x	x
Distances			x	x			x	x
Population in 1970				x				x
Province fixed effects	x	x	x	x	x	x	x	x
Kleibergen-Paap <i>F</i> -statistic	25.64	23.03	14.36	16.53	22.75	19.96	9.335	11.06

Notes: This table checks the robustness of the two-stage estimates when we control for different sets of control variables. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A7:** Robustness of results to use of LASSO for selecting controls*Dependent variables: electoral outcomes at the 1988 plebiscite*

	Registration		Vote share NO	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	7.29*** (2.62)	8.76*** (2.32)	2.70*** (0.73)	2.57*** (0.67)
Observations	276	276	276	276
Province fixed effects	x	x	x	x
ML Controls	x	x	x	x
Instrumental variables	1	2	1	2
<i>F</i> - stat excl. instruments	16.55	11.13	16.55	11.13

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3 and also the geographic distance to the closest military base in columns 2 and 4. The bottom of the table also presents the strength of the first-stage, measured by the *F*-stat of excluded instruments. All regressions are weighted by county population in 1970. We select controls using LASSO as proposed by Belloni et al (2014). Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A8: Robustness of results to inclusion of spatial controls**

*Dependent variables: electoral outcomes at the 1988 plebiscite*

Controls:	Lat/Lon polynomials				Spatial centrality				Moran Eigenvectors			
	Registration	Vote share	NO		Registration	Vote share	NO		Registration	Vote share	NO	
Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Victims per 10,000 inhab.	7.93*** (2.78)	9.33*** (2.36)	2.88*** (0.80)	2.72*** (0.71)	7.31*** (2.48)	8.61*** (2.16)	2.46*** (0.64)	2.34*** (0.58)	7.31*** (2.48)	8.94*** (2.33)	2.66*** (0.72)	2.55*** (0.67)
<b>Additional spatial controls</b>												
Longitude	-27.76 (27.23)	-33.85 (28.74)	-22.48** (9.36)	-21.80** (9.28)								
Latitude	-18.36 (15.96)	-21.10 (16.92)	-6.25 (5.09)	-5.94 (4.78)								
Longitude squared	-0.17 (0.16)	-0.20 (0.17)	-0.13** (0.05)	-0.13** (0.05)								
Latitude squared	-0.22 (0.24)	-0.24 (0.26)	-0.09 (0.08)	-0.09 (0.08)								
Log avg. distance to all other counties					-33.91 (22.23)	-38.17 (23.39)	-22.60* (12.38)	-22.18* (12.13)				
Observations	276	276	276	276	276	276	276	276	276	276	276	276
Eigenvectors with eigenvalues > 0									x	x	x	x
Baseline controls	x	x	x	x	x	x	x	x	x	x	x	x
Province fixed effects	x	x	x	x	x	x	x	x	x	x	x	x
F-test excluded instruments	14.78	10.59	14.78	10.59	18.20	13.04	18.20	13.04	18.20	11.06	16.53	11.06

Notes: This table checks the robustness of results to the inclusion of spatial variables that capture a potential effect of the geographic location of counties. Columns 1-4 include second degree polynomials of latitude and longitude, columns 5-8 include the logarithm of the average distance to all other counties, and columns 9-12 include Moran eigenvectors with positive eigenvalues as controls. Odd columns use one instrument and even columns use two instruments. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A9:** Robustness of results to exclusion of population weights*Dependent variables: electoral outcomes at the 1988 plebiscite*

	Registration		Vote share NO	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	10.69*** (3.83)	10.79*** (3.88)	3.59*** (1.23)	3.61*** (1.25)
<b>Controls</b>				
Vote share Jorge Alessandri in 1970	0.67* (0.40)	0.67* (0.40)	-0.31** (0.13)	-0.31** (0.13)
Vote share Salvador Allende in 1970	0.34 (0.33)	0.34 (0.33)	0.36*** (0.09)	0.36*** (0.09)
In Distance to Santiago	5.37* (2.98)	5.38* (3.00)	1.16 (1.12)	1.16 (1.13)
In Distance to regional capital	-4.48** (2.12)	-4.46** (2.13)	-0.06 (0.69)	-0.05 (0.69)
Population in 1970	-20.03*** (4.49)	-20.08*** (4.51)	3.34** (1.41)	3.34** (1.42)
Observations	276	276	276	276
Province fixed effects	x	x	x	x
<i>F</i> -stat excl. instruments	10.60	6.184	10.60	6.184

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3 and also the geographic distance to the closest military base in columns 2 and 4. The bottom of the table also presents the strength of the first-stage, measured by the *F*-stat of excluded instruments. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A10: Robustness of results to exclusion of regional capitals**

	OLS				Reduced forms				Two-stage estimates			
	Registr.	NO	Registr.	NO	Registr.	NO	Registr.	NO	Registr.	NO	Registr.	NO
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
Victims per 10,000 inhab.	3.07*** (0.99)	0.87*** (0.19)	20.36*** (4.28)	21.71*** (4.01)	5.41*** (1.02)	5.64*** (1.01)	8.88*** (2.53)	9.00*** (2.33)	2.36*** (0.64)	2.29*** (0.59)		
Indicator military base				-6.03** (2.59)		-1.03 (0.67)						
In Distance to military base												
<b>Controls</b>												
Vote share Alessandri in 1970	1.08*** (0.38)	-0.22** (0.11)	0.84** (0.39)	0.88** (0.38)	-0.28*** (0.11)	-0.28** (0.11)	0.91** (0.39)	0.90** (0.39)	-0.27** (0.11)	-0.26** (0.11)		
Vote share Allende in 1970	0.30 (0.37)	0.44*** (0.07)	0.06 (0.36)	0.07 (0.35)	0.38*** (0.07)	0.38*** (0.07)	0.15 (0.35)	0.14 (0.35)	0.40*** (0.08)	0.40*** (0.08)		
In Distance to Santiago	15.62*** (3.82)	1.40 (1.21)	10.81** (4.34)	11.65*** (4.12)	0.10 (1.14)	0.24 (1.15)	17.79*** (4.13)	17.84*** (4.12)	1.96 (1.33)	1.93 (1.33)		
In Distance to regional capital	-10.22*** (2.71)	-0.50 (0.82)	-13.44*** (3.04)	-9.89*** (3.17)	-1.38* (0.80)	-0.77 (0.84)	-7.81*** (2.95)	-7.76*** (2.90)	0.12 (0.88)	0.09 (0.86)		
Population in 1970	-19.33*** (3.83)	1.97** (0.88)	-22.99*** (4.19)	-23.57*** (4.04)	0.98 (0.96)	0.88 (0.94)	-17.72*** (3.47)	-17.68*** (3.47)	2.38** (0.96)	2.36** (0.93)		
Observations	264	264	264	264	264	264	264	264	264	264		
R-squared	0.567	0.758	0.592	0.602	0.767	0.769						
Region fixed effects	x	x	x	x	x	x	x	x	x	x		
Kleibergen-Paap <i>F</i> -statistic							21.65	12.86	21.65	12.86		

Notes: This table checks the robustness of results to the exclusion of regional capitals from the estimating sample. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A11: Robustness of results to inclusion of outliers***Dependent variables: electoral outcomes at the 1988 plebiscite*

	Registration		Vote share NO	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	7.15*** (2.16)	5.91*** (1.93)	1.50** (0.68)	1.16** (0.59)
<b>Controls</b>				
Vote share Alessandri	0.96* (0.53)	1.00** (0.47)	-0.19 (0.13)	-0.18 (0.12)
Vote share Allende	0.51 (0.44)	0.48 (0.41)	0.55*** (0.10)	0.54*** (0.09)
Ln distance to regional capital	13.99*** (4.71)	12.57*** (4.24)	3.65*** (1.36)	3.26*** (1.19)
Ln distance to capital	-6.01*** (1.37)	-5.96*** (1.27)	-1.44*** (0.38)	-1.43*** (0.34)
Population in 1970	-22.98*** (3.93)	-21.56*** (3.81)	-0.38 (0.99)	0.01 (0.85)
Observations	289	289	289	289
Province fixed effects	x	x	x	x
<i>F</i> -stat excl. instruments	10.49	5.472	10.49	5.472

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3 and also the geographic distance to the closest military base in columns 2 and 4. The bottom of the table also presents the strength of the first-stage, measured by the *F*-stat of excluded instruments. All regressions are weighted by county population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A12: Robustness of results to use of military bases built pre-1925**

	First-stage		Reduced forms			Two-stage estimates							
	Registration	NO	Registration	(3)	(4)	(5)	(6)	Registration	(7)	(8)	(9)	NO	(10)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Victims per 10,000 inhab.													
Indicator military presence	1.61*** (0.41)	2.10*** (0.43)	12.33** (5.50)	18.62*** (4.38)	5.11*** (0.89)	6.36*** (0.82)	7.65** (3.21)	9.41*** (2.49)	3.17*** (0.73)	2.96*** (0.67)			
Log distance to military base		-0.69*** (0.20)		-8.84*** (2.56)		-1.75*** (0.44)							
<b>Controls</b>													
Vote share Jorge Alessandri in 1970	0.02 (0.04)	0.01 (0.04)	0.98** (0.47)	0.84** (0.42)	-0.25** (0.11)	-0.28*** (0.10)	0.82** (0.41)	0.73 (0.46)	-0.32** (0.13)	-0.31** (0.12)			
Vote share Salvador Allende in 1970	0.02 (0.03)	0.01 (0.02)	0.36 (0.40)	0.21 (0.37)	0.41*** (0.07)	0.38*** (0.07)	0.19 (0.35)	0.12 (0.38)	0.35*** (0.09)	0.35*** (0.09)			
Log distance to Santiago	-0.85** (0.37)	-0.40 (0.33)	5.91 (4.10)	11.76*** (4.36)	-0.41 (1.12)	0.75 (1.12)	12.42*** (3.32)	12.86*** (3.49)	2.29* (1.39)	2.24* (1.35)			
Log distance to regional capital	-0.25* (0.13)	-0.29** (0.13)	-6.34*** (1.32)	-6.87*** (1.24)	-0.90*** (0.27)	-1.00*** (0.27)	-4.45*** (1.36)	-3.82** (1.49)	-0.11 (0.46)	-0.19 (0.42)			
Population in 1970	-0.52 (0.35)	-0.69** (0.33)	-23.07*** (4.44)	-25.37*** (3.83)	0.63 (0.89)	0.17 (0.80)	-19.12*** (2.90)	-18.86*** (3.06)	2.27** (0.99)	2.23** (0.93)			
Observations	276	276	276	276	276	276	276	276	276	276			276
R-squared	0.478	0.510	0.571	0.605	0.773	0.783							
Province fixed effects	x	x	x	x	x	x	x	x	x	x	x	x	x
Kleibergen-Paap <i>F</i> statistic							15.59	11.88	15.59	11.88	15.59	11.88	11.88

Notes: This table presents OLS estimates, reduced forms, and two-stage estimates using our main specification (equation 1). For these estimations we only use military bases constructed before 1925. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A13: Robustness of results to use of military bases built pre-1900**

	First-stage			Reduced forms			Two-stage estimates			
	Registration	NO		Registration	NO		Registration	NO		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Victims per 10,000 inhab.										
Indicator military base	1.24** (0.56)	1.94*** (0.62)	11.27* (6.43)	21.17*** (4.77)	3.81*** (1.13)	5.51*** (1.15)	9.09* (4.94)	11.64*** (3.84)	3.07** (1.24)	2.75*** (0.99)
ln Distance to military base		-0.70*** (0.24)		-9.92*** (2.44)		-1.70*** (0.50)				
<b>Controls</b>										
Vote share Alessandri	0.04 (0.04)	0.04 (0.04)	1.12** (0.49)	1.04** (0.43)	-0.19* (0.11)	-0.20* (0.11)	0.75 (0.46)	0.63 (0.53)	-0.31** (0.14)	-0.30** (0.12)
Vote share Allende	0.04 (0.03)	0.03 (0.03)	0.49 (0.42)	0.40 (0.38)	0.47*** (0.07)	0.46*** (0.07)	0.13 (0.40)	0.02 (0.44)	0.35*** (0.10)	0.36*** (0.09)
ln Distance to Santiago	-0.54 (0.38)	-0.06 (0.36)	7.85** (3.75)	14.71*** (3.73)	0.60 (1.16)	1.78 (1.23)	12.78*** (3.53)	13.41*** (3.89)	2.27 (1.42)	2.19 (1.35)
ln Distance to regional capital	-0.30** (0.14)	-0.34** (0.14)	-6.63*** (1.34)	-7.22*** (1.25)	-1.06*** (0.32)	-1.16*** (0.31)	-3.93** (1.74)	-3.02 (1.87)	-0.15 (0.55)	-0.26 (0.45)
Population in 1970	-0.42 (0.36)	-0.64* (0.36)	-22.72*** (4.55)	-25.84*** (3.96)	0.96 (0.88)	0.43 (0.86)	-18.91*** (2.94)	-18.53*** (3.32)	2.25** (0.95)	2.20** (0.88)
Observations	276	276	276	276	276	276	276	276	276	276
R-squared	0.444	0.474	0.563	0.602	0.757	0.765				
Province fixed effects	x	x	x	x	x	x	x	x	x	x
Kleibergen-Paap <i>F</i> -statistic							4.935	5.450	4.935	5.450

Notes: This table presents OLS estimates, reduced forms, and two-stage estimates using our main specification (equation 1). For these estimations we only use military bases constructed during the 19th century. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A14: Robustness of results to different measures of exposure to military**

	Victims per 10,000 inhab.	Registration	Vote share NO	Victims per 10,000 inhab.	Registration	Vote share NO
	(1)	(2)	(3)	(4)	(5)	(6)
Victims per 10,000 inhab.		7.82*** (2.14)	2.07*** (0.54)		8.66*** (2.53)	3.03*** (0.79)
Indicator military base	2.05*** (0.44)					
Exposure to military bases	1.68** (0.71)					
Log distance to military bases				-0.55*** (0.14)		
<b>Controls</b>						
Vote share Alessandri in 1970	0.00 (0.04)	0.81* (0.43)	-0.27** (0.11)	0.02 (0.04)	0.77* (0.44)	-0.31** (0.13)
Vote share Allende in 1970	0.01 (0.02)	0.18 (0.36)	0.39*** (0.08)	0.02 (0.03)	0.15 (0.38)	0.35*** (0.10)
In Distance to Santiago	-0.62* (0.36)	12.46*** (3.29)	2.02* (1.17)	-0.68** (0.33)	12.67*** (3.39)	2.26 (1.38)
In Distance to regional capital	-0.14 (0.15)	-4.39*** (1.41)	-0.51 (0.37)	-0.13 (0.15)	-4.09*** (1.43)	-0.16 (0.46)
Population in 1970	-0.54 (0.33)	-19.10*** (3.00)	2.10*** (0.81)	-0.55* (0.33)	-18.97*** (3.01)	2.24** (0.95)
Observations	276	276	276	276	276	276
R-squared	0.520			0.500		
Province fixed effects	x	x	x	x	x	x
Kleibergen-Paap <i>F</i> -statistic	10.65	10.65	10.65	15.91	15.91	15.91

Notes: This table checks the robustness of results when we use different functional forms for the geographic exposure to military bases. In this specification we use the inverse-distance weighted average to bases in other counties. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A15: Robustness of results to inclusion of Air Force bases***Dependent variables: electoral outcomes at the 1988 plebiscite*

	Registration		Vote share NO	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	7.27*** (2.44)	8.25*** (2.02)	2.52*** (0.65)	2.34*** (0.62)
<b>Controls</b>				
Vote share Jorge Alessandri in 1970	0.83** (0.41)	0.79* (0.44)	-0.29** (0.12)	-0.28** (0.11)
Vote share Salvador Allende in 1970	0.21 (0.35)	0.17 (0.37)	0.37*** (0.08)	0.38*** (0.08)
In Distance to Santiago	12.33*** (3.24)	12.57*** (3.32)	2.13* (1.28)	2.09 (1.27)
In Distance to regional capital	-4.58*** (1.32)	-4.24*** (1.43)	-0.35 (0.40)	-0.41 (0.37)
Population in 1970	-19.18*** (2.95)	-19.03*** (3.01)	2.17** (0.86)	2.14*** (0.82)
Observations	276	276	276	276
Province fixed effects	x	x	x	x
<i>F</i> -stat excl. instruments	19.54	16.89	19.54	16.89

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3 and also the geographic distance to the closest military base in columns 2 and 4. The bottom of the table also presents the strength of the first-stage, measured by the *F*-stat of excluded instruments. All regressions are weighted by county population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A16:** Robustness of results to victim assignment by county of residence or work

	OLS		2SLS			
	Registration	NO	Registration	Registration	“NO” vote share	“NO” vote share
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: residence county</b>						
Victims per 10,000 inhab.	1.96* (1.08)	0.93*** (0.23)	10.39** (4.40)	12.18*** (3.73)	3.63*** (1.03)	3.46*** (0.97)
R-squared	0.559	0.764				
F- stat excl. instruments			12.69	7.551	12.69	7.551
<b>Panel B: work county</b>						
Victims per 10,000 inhab.	2.70** (1.12)	0.85*** (0.25)	13.63** (5.75)	15.91*** (5.04)	4.76*** (1.58)	4.49*** (1.42)
R-squared	0.562	0.755				
F- stat excl. instruments			10.58	6.375	10.58	6.375
Observations	276	276	276	276	276	276
Province fixed effects	x	x	x	x	x	x
Baseline controls	x	x	x	x	x	x

Notes: This table presents OLS and 2SLS estimates using our main specification (equation 1). In panel A, we assign victims to counties depending on their county of residence, while in panel B we replicate the analysis using the county where they worked. Place of residence is missing for 17.1% of victims, while place fo work is missing for 41.7%. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A17: Robustness of results to exclusion of victims after creation of DINA**

	OLS				First-stage				Reduced forms				Two-stage estimates			
	Registration		NO		Registration		NO		Registration		NO		Registration		NO	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)				
Victims per 10,000 inhab.	2.29** (1.05)	0.86*** (0.22)														
Indicator military base			1.27*** (0.40)	1.60*** (0.44)	13.38*** (4.73)	19.11*** (3.74)	4.68*** (0.87)	5.56*** (0.91)	10.54** (4.21)	12.22*** (3.76)	3.68*** (1.26)	3.43*** (1.09)				
In Distance to military base				-0.46** (0.18)		-7.90*** (2.87)		-1.22** (0.48)								
<b>Controls</b>																
Vote share Alessandri	1.21** (0.47)	-0.15 (0.11)	-0.04 (0.02)	-0.04* (0.02)	0.95** (0.48)	0.89** (0.42)	-0.25** (0.11)	-0.26** (0.10)	1.34*** (0.45)	1.36*** (0.45)	-0.11 (0.11)	-0.12 (0.11)				
Vote share Allende	0.50 (0.40)	0.47*** (0.07)	-0.01 (0.02)	-0.02 (0.02)	0.32 (0.40)	0.22 (0.37)	0.41*** (0.07)	0.40*** (0.07)	0.43 (0.37)	0.42 (0.38)	0.45*** (0.09)	0.45*** (0.08)				
In Distance to Santiago	9.66*** (3.40)	1.18 (1.14)	-0.14 (0.20)	0.12 (0.20)	5.09 (3.99)	9.42** (4.12)	-0.39 (1.11)	0.28 (1.15)	6.52* (3.59)	5.88 (3.61)	0.11 (1.16)	0.21 (1.12)				
In Distance to regional capital	-6.81*** (1.43)	-1.10*** (0.29)	-0.02 (0.11)	-0.00 (0.12)	-5.70*** (1.34)	-5.33*** (1.40)	-0.73** (0.28)	-0.67** (0.28)	-5.44*** (1.45)	-5.16*** (1.61)	-0.64 (0.42)	-0.68* (0.39)				
Population in 1970	-20.24*** (3.83)	1.80** (0.79)	-0.24 (0.21)	-0.30 (0.19)	-22.71*** (4.21)	-23.63*** (3.77)	0.94 (0.86)	0.80 (0.82)	-20.16*** (3.59)	-20.15*** (3.68)	1.83** (0.85)	1.83** (0.83)				
Observations	276	276	276	276	276	276	276	276	276	276	276	276				
R-squared	0.560	0.757	0.420	0.445	0.578	0.606	0.771	0.776								
Province fixed effects	x	x	x	x	x	x	x	x	x	x	x	x				
Kleibergen-Paap <i>F</i> -statistic									9.920	6.864	9.920	6.864				

Notes: This table presents OLS estimates, reduced forms, and two-stage estimates using our main specification (equation 1). However, the civilian victimization rate is calculated using only victims from before the creation of the dictatorship's secret police, DINA, in May, 1974. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A18:** Robustness of results to use of discrete measure of repression

	First stage	Two-stage estimates	
	High number of victims	Registration	Vote NO
	(1)	(2)	(3)
Indicator military base	0.35*** (0.09)		
Indicator high victims per 10,000 inhab.		37.87** (15.84)	13.23*** (3.90)
<b>Controls</b>			
Vote share Alessandri in 1970	-0.00 (0.01)	0.98* (0.52)	-0.23 (0.16)
Vote share Allende in 1970	0.00 (0.01)	0.28 (0.42)	0.40*** (0.10)
ln Distance to regional capital	-0.12 (0.08)	9.77** (4.39)	1.24 (1.28)
ln Distance to capital	-0.05 (0.04)	-3.81** (1.69)	-0.07 (0.49)
Population in 1970	-0.02 (0.09)	-21.84*** (4.27)	1.24 (1.21)
Observations	276	276	276
Province FE	Yes	Yes	Yes
Kleibergen-Paap <i>F</i> -statistic	14.08	14.08	14.08

Notes: This table presents an alternative specification of our main estimation equation. We use an indicator for the endogenous variable (“High number of victims”) and the indicator for the presence of a military base as the instrument. We do this to facilitate the interpretation of the characteristics of compliers. “High number of victims” is an indicator that takes the value one if the share of victims is in the top quartile of the empirical distribution. The average number of victims per 10,000 inhabitants in the top quartile is 4.3. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A19: Robustness of results to use of other measures of voter registration***Dependent variables: electoral outcomes at the 1988 plebiscite*

	No winsorization		Winsorizing at 1	
	(1)	(2)	(3)	(4)
Victims per 10,000 inhab.	8.15*** (2.90)	9.54*** (2.64)	6.79*** (2.21)	7.92*** (1.88)
<b>Controls</b>				
Vote share Jorge Alessandri in 1970	0.89* (0.47)	0.83 (0.51)	0.67* (0.40)	0.62 (0.43)
Vote share Salvador Allende in 1970	0.23 (0.39)	0.17 (0.42)	0.09 (0.33)	0.04 (0.35)
ln Distance to Santiago	9.82** (4.99)	10.16** (5.10)	13.98*** (3.03)	14.26*** (3.17)
ln Distance to regional capital	-5.59*** (1.97)	-5.09** (2.07)	-3.46*** (1.18)	-3.06** (1.32)
Population in 1970	-24.11*** (6.69)	-23.90*** (6.71)	-15.15*** (2.50)	-14.98*** (2.62)
Observations	276	276	276	276
Province FE	Yes	Yes	Yes	Yes
Weighted	Yes	Yes	Yes	Yes
Province fixed effects	x	x	x	x
<i>F</i> -stat excl. instruments	16.53	11.06	16.53	11.06

Notes: This table presents two-stage least squares estimates of equation (1) using our two versions of the first stage, i.e. equations (2) and (3). The instruments are an indicator for military base in 1970 in columns 1 and 3 and also the geographic distance to the closest military base in columns 2 and 4. The bottom of the table also presents the strength of the first-stage, measured by the *F*-stat of excluded instruments. All regressions are weighted by county population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A20:** Robustness of results to normalization of NO vote share by 1970 population

	OLS	Reduced forms		Two-stage estimates	
	(1)	(2)	(3)	(4)	(5)
Victims per 10,000 inhab.	2.65*** (0.87)			6.85*** (2.07)	7.23*** (1.89)
Indicator military base		12.06*** (3.19)	15.60*** (2.80)		
ln Distance to military base			-4.88** (1.91)		
<b>Controls</b>					
Vote share Alessandri	0.40 (0.29)	0.32 (0.31)	0.28 (0.28)	0.20 (0.34)	0.19 (0.35)
Vote share Allende	0.45* (0.24)	0.39 (0.25)	0.32 (0.23)	0.27 (0.25)	0.26 (0.26)
ln Distance to Santiago	6.38* (3.44)	0.82 (4.12)	3.49 (4.05)	7.42** (3.65)	7.51** (3.69)
ln Distance to regional capital	-4.87*** (1.27)	-4.47*** (1.38)	-4.24*** (1.38)	-3.36** (1.38)	-3.23** (1.39)
Population in 1970	-12.73*** (4.86)	-15.33*** (5.38)	-15.90*** (5.30)	-12.10*** (4.54)	-12.05*** (4.55)
Observations	276	276	276	276	276
R-squared	0.413	0.411	0.431		
Province fixed effects	x	x	x	x	x
Kleibergen-Paap <i>F</i> -statistic				16.53	11.06

Notes: This table presents OLS estimates, reduced forms, and two-stage estimates using our main specification (equation 1). The dependent variable is the number of votes for the “No” option divided by county population in 1970. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A21: Exposure to repression and expressed support for democracy (Other age-cutoffs)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Democracy is the best form of government		Satisfied with functioning of democracy		Democracy is preferable to other forms of government		Would never support military government		Family of outcomes	
<b>A. Age 18+ in 1973</b>										
Indicator military base x Indicator age 18+ 1973	0.058*** (0.019)	0.058*** (0.020)	0.009 (0.020)	0.006 (0.020)	-0.001 (0.020)	0.003 (0.020)	0.026 (0.027)	0.013 (0.027)	0.052** (0.024)	0.045* (0.025)
Indicator military base	-0.026 (0.036)	-0.017 (0.025)	-0.017 (0.025)	-0.017 (0.021)	-0.017 (0.021)	-0.017 (0.021)	0.008 (0.028)	0.008 (0.028)	-0.027 (0.032)	-0.029 (0.023)
Indicator age 18+ 1973	-0.014 (0.017)	-0.014 (0.017)	-0.032 (0.019)	-0.028 (0.019)	0.013 (0.018)	0.008 (0.018)	-0.025 (0.023)	-0.018 (0.023)	-0.032 (0.022)	-0.029 (0.023)
<b>B. Age 10+ in 1973</b>										
Indicator military base x Indicator age 10+ 1973	0.053** (0.022)	0.052** (0.022)	-0.006 (0.017)	-0.008 (0.018)	0.007 (0.018)	0.012 (0.018)	0.070*** (0.025)	0.064*** (0.024)	0.072*** (0.024)	0.069*** (0.023)
Indicator military base	-0.032 (0.036)	-0.011 (0.028)	-0.011 (0.028)	-0.021 (0.022)	-0.021 (0.022)	-0.021 (0.022)	-0.015 (0.028)	-0.015 (0.028)	-0.043 (0.030)	-0.043 (0.030)
Indicator age 10+ 1973	-0.016 (0.018)	-0.016 (0.018)	-0.005 (0.016)	-0.001 (0.016)	0.005 (0.016)	-0.002 (0.016)	-0.051*** (0.020)	-0.052*** (0.020)	-0.039** (0.018)	-0.041** (0.018)
<b>C. Alive in 1983</b>										
Indicator military base x Indicator alive 1983	0.040 (0.033)	0.035 (0.033)	0.010 (0.038)	0.009 (0.038)	-0.016 (0.035)	-0.007 (0.035)	0.054 (0.041)	0.053 (0.040)	0.050 (0.037)	0.052 (0.037)
Indicator military base	-0.042 (0.048)	-0.023 (0.046)	-0.023 (0.046)	-0.003 (0.038)	-0.003 (0.038)	-0.003 (0.038)	-0.030 (0.041)	-0.030 (0.041)	-0.053 (0.042)	-0.053 (0.042)
Indicator alive 1983	-0.016 (0.030)	-0.014 (0.029)	-0.017 (0.025)	-0.012 (0.026)	0.001 (0.025)	-0.008 (0.025)	-0.038 (0.033)	-0.044 (0.032)	-0.039 (0.032)	-0.044 (0.031)
Observations	11,073	11,073	17,362	17,362	17,299	17,299	4,818	4,818		
R-squared	0.044	0.090	0.040	0.062	0.027	0.050	0.032	0.093		
Region FE	x		x		x		x		x	
Controls	x		x		x		x		x	
Year FE	x		x		x		x		x	
County FE		x		x		x		x		x
Mean DV	0.293	0.293	0.604	0.604	0.591	0.591	0.771	0.771		
SD DV	0.455	0.455	0.489	0.489	0.492	0.492	0.420	0.420		

Notes: Outcomes identical to Table 8. See notes for details. In panel (A), age cut-off for exposure to repression is set at age 18 or more in 1973. In panel (B), the cut-off is set at age 10 or more in 1973. In panel (C), the cut-off is set at age 0 or more in 1983. All regressions include survey year fixed effects and control for gender. Odd-numbered columns also include region fixed effects and baseline controls. Even-numbered columns include county fixed effects instead. Robust standard errors clustered at the county level in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A22:** Exposure to repression and expressed support for democracy (dropping questions)

	Dependent variable: Family of outcomes (minus one question)							
	Excluding Democracy is the best form of government		Excluding Satisfied with functioning of democracy		Excluding Democracy is preferable to other forms of government		Excluding Would never support military government	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indicator military base x Indicator alive 1973	0.060** (0.026)	0.051** (0.025)	0.078** (0.035)	0.063* (0.034)	0.099*** (0.031)	0.086*** (0.030)	0.065*** (0.022)	0.064*** (0.022)
Indicator military base	-0.048* (0.029)		-0.056 (0.053)		-0.068* (0.037)		-0.070** (0.033)	
Indicator alive 1973	-0.043* (0.023)	-0.039* (0.022)	-0.036 (0.032)	-0.030 (0.032)	-0.067** (0.026)	-0.060** (0.026)	-0.032* (0.018)	-0.032* (0.018)
Region FE	x		x		x		x	
Controls	x		x		x		x	
Year FE	x	x	x	x	x	x	x	x
County FE		x		x		x		x

Notes: Outcome is a standardized weighted average for a family of three outcomes, following Kling et al. (2007). In each pair of columns we exclude the question in the header, relative to columns 9 and 10 of Table 8. See notes of that table for details about questions. All regressions include survey year fixed effects and control for gender. Odd-numbered columns also include region fixed effects and baseline controls. Even-numbered columns include county fixed effects instead. Robust standard errors clustered at the county level in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A23: Placebo test using types of facilities***The dependent variable is victims per 10,000 inhab.*

	Ports		Airports		Entry points	
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator military base	1.28*** (0.40)	1.61*** (0.43)	1.05** (0.45)	1.26** (0.49)	1.28*** (0.40)	1.51*** (0.46)
ln Distance to military base		-0.50** (0.20)		-0.43** (0.17)		-0.42** (0.18)
Indicator other facility	0.06 (0.31)	-0.19 (0.30)	0.64 (0.47)	0.70 (0.43)	-0.30 (0.37)	-0.16 (0.38)
ln Distance to other facility		0.11 (0.18)		-0.27 (0.19)		-0.29 (0.21)
R-squared	0.420	0.447	0.429	0.465	0.422	0.453
Observations	276	276	276	276	276	276
Province FE	x	x	x	x	x	x
Controls	x	x	x	x	x	x

Notes: This table replicates our first-stage analysis, examining whether proximity to facilities other than military bases helps explain the civilian victimization rate. Presence of ports (columns 1-2) and airports (columns 3-4) is measured before 1970. Columns 5-6 consider an indicator for counties with international points of entry to Chile, according to the 2010 Hiking Guide (“Guía Caminera”) published by the Military Institute of Geography. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A24: Military bases and state presence***Amount of money per capita spent in local projects*

	Total		Visible projects		Other projects	
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator military base	0.06 (0.06)	0.06 (0.08)	0.04 (0.06)	0.04 (0.07)	0.01 (0.02)	0.02 (0.02)
ln Distance to military base		-0.00 (0.05)		0.01 (0.05)		-0.01 (0.01)
<b>Controls</b>						
Vote share Alessandri in 1970	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)
Vote share Allende in 1970	0.01* (0.01)	0.01* (0.01)	0.01** (0.01)	0.01* (0.01)	-0.00 (0.00)	-0.00 (0.00)
ln Distance to Santiago	0.02 (0.10)	0.02 (0.12)	0.02 (0.09)	0.01 (0.11)	0.00 (0.02)	0.01 (0.02)
ln Distance to regional capital	-0.01 (0.03)	-0.01 (0.03)	-0.03 (0.03)	-0.03 (0.03)	0.01** (0.01)	0.01** (0.01)
Population in 1970	0.02 (0.10)	0.02 (0.10)	-0.01 (0.09)	-0.01 (0.09)	0.03** (0.01)	0.03** (0.01)
Counties	276	276	276	276	276	276
R-squared	0.46	0.48	0.42	0.45	0.60	0.60
Avg. dependent variable	0.44	0.44	0.39	0.39	0.05	0.05
Province fixed effects	x	x	x	x	x	x

Notes: This table presents estimates of a regression using state spending in urban projects in the period 1979-1989 as dependent variable and our instruments as right-hand side variables. We interpret this regression as a test of the relationship between exposure to military bases and state presence during the dictatorship. The bottom of the table presents the average of the dependent variable to help interpret the magnitude of coefficients. All regressions are weighted by county-level population in 1970. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A25: Ideological classification of candidates in presidential elections 1993 – 2017**

Coalition	1993	1999	2005	2009	2013	2017
RIGHT	A. Alessandri J. Piñera	J. Lavín	S. Piñera J. Lavín	S. Piñera	E. Matthei	S. Piñera J.A. Kast
LEFT	E. Frei M. Max Neef E. Pizarro C. Reitze	R. Lagos G. Marín T. Hirsch	M. Bachelet T. Hirsch	E. Frei J. Arrate M. Enríquez	M. Bachelet M. Enríquez M. Claude A. Sfeir R. Miranda	M. Enríquez A. Guillier C. Goic B. Sánchez A. Navarro E. Artés
CONCERTACIÓN	E. Frei	R. Lagos	M. Bachelet	E. Frei	M. Bachelet	A. Guillier C. Goic
FAR-LEFT	E. Pizarro	G. Marín	T. Hirsch	J. Arrate	R. Miranda	E. Artés

Notes: Own construction based on official data from the Electoral Service.

**Table A26: Ideological classification of coalitions in local elections 1992 – 2016**

	1992	1996	2000	2004	2008	2012	2016
RIGHT	Participación y Prog. U. Centro Centro	Unión por Chile Prog. Centro Centro	Alianza Centro Centro	Alianza Centro Centro	Alianza	Alianza	Chile Vamos Amplitud
LEFT	Concertación P. Comunista	Concertación La Izquierda Humanista	Concertación La Izquierda Humanistas y Ecologistas	Concertación Juntos Podemos Hum. y Eco.	Concertación Dem. Juntos Podemos Hum. y Eco. Concertación Prog. Chile Limpio Fza. Norte	Concertación Dem. Chile en Otra El Cambio Por Ti Más Humanos Desarrollo Norte Chile Justo	Concertación Dem. Alt. Democrática Cambios la Historia Nueva Mayoría P. Reg. Magallanes Poder Eco. y Ciud. Marco Cambio Norte Verde
CONCERTACIÓN	Concertación	Concertación	Concertación	Concertación	Concert. Dem. Concert. Prog.	Concertación Dem.	Concertación Dem
FAR-LEFT	P. Comunista	La Izquierda	La Izquierda	Juntos Podemos	Juntos Podemos	Chile Justo	Chile Justo
INDEPENDENT	Independientes	Independientes	Independientes	Nueva Alt. Indep. Independientes	Independientes	Independientes Region. e Indep.	Independientes Reg. e Indep.

Notes: Own construction based on official data from the Electoral Service.

**Table A27: Characterization of compliers**

	Treated Compliers	Untreated Compliers	Full sample
	(1)	(2)	(3)
<b>A. Pre-1973 characteristics:</b>			
Houses per capita in 1970	0.20	0.21	0.20
Land inequality 1965 (Gini)	0.92	0.87	0.85
Agrarian reform intensity	0.09	0.20	0.20
Vote share Allende 1970	0.37	0.34	0.27
Vote share Alessandri 1970	0.00	0.11	0.20
<b>B. Post-1973 characteristics:</b>			
Plebiscite:			
Registration	109.52	71.65	71.16
Vote share “No”	61.74	48.51	54.82
Repression year:			
In 1973	0.55	0.04	0.44
In 1974	0.16	0.15	0.11
≥1975	0.31	0.42	0.33
Profession:			
Laborer	0.39	0.13	0.25
Farmer	0.10	0.02	0.09
Military	0.09	0.00	0.07
Bureaucrat	0.11	0.00	0.07
Student	0.04	0.09	0.10
Affiliated to political party	0.44	0.23	0.39
Age categories:			
∈ [18, 25]	0.33	0.27	0.33
∈ [25, 60]	0.65	0.20	0.50
≥ 60	0.00	0.08	0.02

Notes: This table presents an empirical characterization of the complier counties. Panel A shows that compliers were relatively similar to the average county in the full sample. Panel B describes counties that experienced repression because of the presence of military bases. See Abadie et al. (2002) for details. The treatment in this exercise is an indicator that takes the value one if the share of victims is in the top quartile of the empirical distribution.