

# Tough Love: The Complementarity of Repression and Co-optation in Autocrats' Restive Regions

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## Abstract

Under what conditions can repression, generally assumed to induce social obedience through violence, consolidate authoritarian power in a non-violent way? I propose a novel theory of the effects of repression, accounting for regional heterogeneity of state capacity in authoritarian countries. I maintain that authoritarian leaders need to compete with regional governance structures of opposition to establish authority and therefore face dogged resistance to their co-optation policies. Repression in such “restive” regions has downstream effects that complement autocrats’ co-optation policies by increasing state’s extractive and informational capacities. To test my theoretical predictions, I exploit the attempted coup in July 2016 in Turkey, a unique event that led to the replacement of pro-Kurdish mayors with government trustees in Turkey’s restive regions. Adopting regression discontinuity designs and two-way-fixed-effects models, I demonstrate evidence supporting my theory. This paper provides an alternative view as to when repression can generate favorable outcomes for authoritarian survival.

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## Introduction

In 2016, a large faction within military attempted but failed to depose the sitting President Erdogan of Turkey. Rather than weakening the incumbent regime, the coup attempt provided President Erdogan with a unique opportunity to institutionalize authoritarian governance. Subsequently, he started to rule the country by decree and proceeded to enact a new presidential system in 2018, whereby the activities of opposition parties and civil society organizations have been increasingly limited by strict laws and regulations. Reflecting this new authoritarian mindset, the Ministry of Interior replaced the pro-Kurdish People's Democratic Party (the HDP) mayors with government trustees and then arrested about 55 percent of HDP activists based on the accusations that they support terrorist activities (T24, 2020; Habertürk, 2017). In the aftermath of such repressive moves, the Turkish government has targeted these municipalities with considerable state investments, amounting to 7,5 billion TL<sup>1</sup> (Türkiye Cumhuriyeti İç İşleri Bakanlığı, 2020). More importantly, repression seems to have brought a pay-off for President Erdogan's party: His Justice and Development Party (the AKP) won the subsequent 2019 municipal elections in most of the repressed municipalities (Tepe and Alemdaroğlu, 2021).

The significant increases in AKP's vote share in the municipalities where HDP mayors and activists were repressed presents a seemingly paradoxical puzzle for the literature on authoritarian politics: under what conditions can repression, generally assumed to induce social obedience through violence, consolidate authoritarian power in a non-violent way? Relatedly, when does the antithetical combination of repression and co-optation lead to the strengthening of authoritarian support? More broadly, what are the mechanisms through which repression complements co-optation, a peaceful means of nurturing authoritarian support? Given that the literature on authoritarian politics overlook structural changes after repression (Hassan, Mattingly and Nugent, 2022), we have limited understanding on the im-

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<sup>1</sup>Around 1 billion USD as of 2020.

plications of the sequential compatibility between repression and cooptation and thus on the counterintuitive fact that the repression of opposition parties might actually provide various opportunities for the leaders to co-opt local communities.

Therein lies the motivation of this research. Drawing from the literatures on authoritarian politics, state capacity, and ethnic politics, I lay out a novel theory delineating the conditions under which repression engenders structural changes that facilitate the assertion of state authority in autocrats' restive regions, ethnic geographies with low state capacity. These regions are distinct in that they contain local governance structures juxtaposed against states' own institutions as often observed in tribes, chiefdoms or clan-based societies (Migdal, 1988). The social characteristics of these regions present myriad obstacles to effective implementation of state policies through strong opposition movements and parallel patronage networks, compelling autocrats to repress. I maintain that if repression in these contexts remove the power of such local governance structures, it will increase state's extractive and informational capacities. In the end, repression will ensure much-needed political control to improve the enforcement of state policies, thus complementing autocrats' co-optation policies.

To test my theoretical predictions, I examine Turkey's restive Kurdish regions and a specific type of "legal" repression: the replacement of HDP mayors with government trustees after the coup attempt in 2016. These regions have been historically characterized by tribal relations and corporatism (Bruinessen, 1992), thus generally being less legible to the state (Belge, 2016).<sup>2</sup> Kurdish movements have suffered from forms of state repression, including legal and non-legal repression (Watts, 2010). The judiciary occasionally removed pro-Kurdish mayors from their posts, but such removals were typically symbolic: new elections were conducted in city councils, and the subsequent mayors were overwhelmingly elected from the pro-Kurdish parties (Tutkal, 2021). However, after the coup attempt, President Erdogan introduced a new decree (KHK-674/38 md.) in August 2016 that changed the Municipal

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<sup>2</sup>Legibility can be defined as "the depth and breadth of the state's knowledge about its citizens and their activities" (Lee and Zhang, 2017)

Law and enabled the Ministry of Interior to remove public officials under investigations of terrorism activities without necessarily being convicted of a crime. Subsequently, nearly all HDP mayors were replaced with government trustees.

For the purposes of "social engineering", the government trustees cooperated with the central government institutions and provided insights into the political preferences of local populations. Notably, the interviews with these trustees revealed that after removing the HDP mayors, the government sought to detect social factors that lead to the radicalization of individuals - especially the youth - that would threaten the stability of the central government. The trustees initiated various programs for the youth population and heavily invested in pro-government civil society organizations. They further blocked the financial and logistic support provided by HDP municipalities for the Kurdish movements (Alptekin and İlhan, 2018). I maintain that such interventions from the government trustees will generate downstream effects that improve state capacity in these regions.

I provide three sets of evidence supporting my theory. First, adopting a regression discontinuity design, I demonstrate that repression on HDP mayors resulted in significant loss of mobilization and financial power for the HDP, making it easier for autocrats to co-opt local communities. The results indicate a marked decrease in the number of protest events following repression, with a 116 percent reduction in mean protest levels. Moreover, the autocrat's patronage networks have benefited from repression, with firms previously connected to government patronage now receiving municipal procurement contracts, while firms associated with municipal patronage are being punished and denied access to government procurement contracts. Also, the municipal contracts become more likely to be canceled after repression, whereas the government contracts remained unaffected.

Second, I examine administrative data on local taxes and demonstrate that the amount of tax collected by municipalities, a proxy for state's extractive capacities, increases after repression. To examine state's informational capacities, I introduce a new legibility variable that measures the distortions in new-birth entries. State institutions tend to record birth

dates as January 1st when parents do not have necessary documentation of their child's birth date or register their child in to the system late. I use this as a measure to track increase in state legibility, on the assumption that decreases in the number of January 1 birth dates indicates an increase in legibility. The results indicated that the legibility is significantly improved: the distortions in new-birth entries decreased in the repressed municipalities when compared with other municipalities. To complement this analysis, I maintain that if the government started to receive better quality information from municipalities, it will be less likely to use the other means of monitoring and controlling the municipal accounts, such as the audits carried out by the Court of Accounts (*Sayıştay*). I find that the repressed municipalities become less likely to be audited by the Court of Accounts, and even if they are audited, these audits were less intense compared to other municipalities. Overall, these results suggest that state' extractive and informational capacities considerably improved after repression.

The last part of my analysis investigates whether the replacement of HDP mayors with government trustees improved the enforcement of autocrats' cooptation policies. I find that the youth in the repressed municipalities become more likely to find jobs through governmental channels. Also, the net schooling rates for secondary education that became mandatory in 2012 increased in Kurdish regions. Overall, my results indicate that repression was clearly followed by efficacious state action and the sort of local "pay-off" associated with co-optation.

This research significantly contributes to the literature by demonstrating that repression might have a different role in autocrats' restive regions: it creates structural conditions for co-optation; becomes the precursor for greater state penetration and capacity; and improves the enforcement of state policies. Previous studies tend to assume that repression induces social obedience by generating threats to individuals' physical well-being and increasing the cost of opposing states' policies without accounting for the second-order consequences of repression on state capacity and subsequent co-optation (Hassan, Mattingly and Nugent, 2022). They also draw a picture of a passive autocrat in the aftermath of repression, being unresponsive to

the grievances from the repressed populations (Ritter and Conrad, 2016; Aytaç, Schiumerini and Stokes, 2017). This research invites scholars to more seriously consider repression in a multi-stage setting where autocrats continue to infiltrate local communities even after repressing them.

## **Theory: The Complementarity of Repression and Co-optation in Restive Regions**

To build a set of hypotheses on how repression might initiate structural changes and generate conditions for greater co-optation, I will draw on the literatures on authoritarian politics, state capacity and ethnic politics. Before delineating my expectations, however, a conceptual clarification is in order. Following Davenport (2007), I define repression as the "full repertoire of state activities" (p.3) that involve both physical and legal sanctions on individuals or organizations deemed as threatening for political order. This definition better captures the universe of cases in contemporary authoritarian regimes, where autocrats increasingly rely on political sanctions through legal means, instead of physical sanctions. While this paper focuses on a particular type of "legal" repression – the removal of mayors from opposition parties – I also discuss how other types of repression, such as the mass detention of individuals, can improve the enforcement of co-optation policies in conclusion. Moreover, I focus on autocrats attempts of co-opting local communities and examine the ways in which autocrats provide benefits for citizens to buy-off their political support.

The literature on authoritarian politics often suggested that repression can enhance political control by increasing the costs of mobilizing against the state (Hassan, Mattingly and Nugent, 2022). Based on this perspective, various studies examined whether repression effectively reduces social mobilization. One line of research argued that repression can actually increase protest and societal backlash (Galtung, 1969; Ritter and Conrad, 2016), while others maintained that repression can prevent subsequent oppositional mobilization (Aytaç, Schiumerini and Stokes, 2017; Carey, 2009; Pierskalla, 2010; Asal and Brown, 2020). The ef-

fectiveness of repression, however, may depend on its nature: indiscriminate repression that targets local communities or opposition groups without distinguishing them based on specific qualities might lead to either higher or lower levels of mobilization, depending on political opportunity structures. If individuals believe that the threat of retribution decreases, they are more likely to demonstrate their opposition to perpetrators. However, if they believe that perpetrators would increase the intensity of repression in response to dissent, they are less likely to mobilize (Rozenas and Zhukov, 2019). On the other hand, targeted repression that punishes specific individuals was found to be more effective in inducing political control (Blaydes, 2018; Lichbach, 1987; Rozenas, 2020; Xu, 2021). However, the existing literature often tends to overlook repression in a sequential framework and the downstream effects of repression on local communities.

Therein lies my theoretical intervention, informed by the literature on ethnic politics and state capacity. I start from the basic premise that the effective implementation of co-optation policies requires a certain degree of state capacity and political control.

State capacity is ultimately linked to the successful centralization and accumulation of state power over society. Michael Mann's seminal work on state power, which defined it as the combination of its despotic and infrastructural powers<sup>3</sup>, reminds us that the effectiveness of state policies, including autocrats' co-optation attempts, and the extent to which individuals comply with state rules and regulations, may be highly dependent on state capacity (1984). In cases where autocrats aim to co-opt local communities but do not acquire sufficient capacity to enforce their policies, repression will provide much-needed political control to implement their policies, especially in their "restive" regions.

### **Autocrats' Restive Regions: Ethnic "Enclaves" of Low State Penetration**

I define the regions where autocrats have difficulty in broadcasting their power over society and thus have lower capacity as their "restive" regions. The restiveness of these regions

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<sup>3</sup>Mann (1984) defines infrastructural power as "the capacity of the state actually to penetrate civil society, and to implement logistically political decisions throughout the realm" (p. 5)

is inherited from political leaders' failed attempts of centralization during nation-building processes (Lipset and Rokkan, 1967). Thus, these regions are characterized by stable and clear social attributes, such as ethnicity or sectarian affiliations. In extreme cases, these regions harbor territorial cleavages and provide important human capital for insurgency movements.

My theoretical insights on restive regions are informed by a substantial body of literature on ethnic geography. This literature investigated how the variation in regional ethnic composition can help explain differences in regional governance (Hassan, 2017; Baldwin, 2014; Kuipers, 2022, political behavior (Posner, 2004), distribution of public goods (Bates, 1983; Posner, 2005, and sources of indoctrination (Bozcağa and Cansunar, 2021). In that sense, restive regions can be regarded as ethnic "enclaves" in authoritarian contexts that have alternative governance structures and/or strong oppositional movements. Due to the power structures in these regions, autocrats are more likely to face obstacles in their attempts to co-opt local communities, having difficulties to project their power.

Mann's persuasive reminder and studies following his insights warned against the assumption that authoritarian states can uniformly assert their power over local communities (Soifer, 2008) In fact, developing states face persistent resistance from local communities against their attempts to dominate and competed "with other organizations over who has the right and ability to make the rules" (Migdal, 1988). If regimes lack repressive capacities in early state consolidation, the existing local power structures will remain intact, and the cooperation between autocrats and these power structures will lead to the emergence of corporatism. A large body of work discussed how corporatist relations have come to define the nature of governance in the developing world (Migdal, 1988; Ayubi, 1995). Restive regions in that sense can be considered as ethnic geographies where political control is highly contingent on corporatist relations between state and local leaders. Most authoritarian countries, in fact, have such restive regions where state capacity is lower and autocrats incorporate forms of repression and co-optation, such as Kurdish regions in Turkey, the Dhofar in Oman, Xinjiang



in China, or Chechnya in Russia, to ensure political control.

## **Repression, State Capacity and Co-optation in Autocrats' Restive Regions: Hypotheses**

Repression, in the context of restive regions, can improve autocrats' penetration into local communities and complement cooptation policies only if autocrats successfully target the mobilization and financial powers of opposition organizations. For instance, Christopher Sullivan's study on the Gutemalan National Police observed these dynamics and highlighted that repression can induce social compliance to the extent that the organizational capacities of opposition movements are targeted (2016). Thus, I propose to analyze the following hypotheses as the first observable requirements for my theory:

**Hypothesis Ia – Mobilization powers of opposition groups:** Repression will decrease the social mobilization in restive regions.

**Hypothesis Ib – Financial powers of opposition groups:** Repression will shift the patronage networks in favor of autocrat.

The conceptualization of state capacity put forth by Hanson and Sigman (2021) is particularly useful in understanding how repression in autocrats' restive regions can increase state capacity. According to their framework, state capacity consists of three dimensions of state activity: a) the ability of states to collect information and revenue from local communities (extractive capacities), b) the ability to command a military or security force to use force to implement policies if necessary (coercive capacities), and c) the deployment of an effective bureaucracy to administer policies (administrative capacities). Furthermore, their analysis demonstrated that these three aspects of state capacity are interdependent and mutually reinforcing. In that sense, repression in restive regions, to the extent that it can destroy the powers of local leaders, can be seen as an exogenous attempt by autocrats to increase states' coercive and administrative capacities, which can, in turn, have spillover effects on autocrats' extractive capacities.

It should be noted that in Hanson and Sigman's framework, states can improve their extractive capacities by both implementing more effective taxation measures and receiving better information from society. The former aspect of extractive capacities is based on the influential work of Scott (1998), who argued that a scientific approach to governance is inherently embedded within political control, leading political leaders to develop centralized bureaucracies and uniform measures to increase legibility. Indeed, Lee and Zhang (2017) demonstrated that legibility is a crucial component of state's extractive capacities, explaining significant variation in tax revenues and public goods provision across states.

However, local governance structures in restive regions can distort the information that autocrats receive from local communities. As a result, it can be expected that communities in these regions will be less legible to autocrats. I argue that when autocrats can overcome the logistical and social obstacles created by opposition powers in their restive regions, they will also be able to receive better quality information about social activities from local communities, thereby improving their informational capacities. Thus, I propose to study the following hypotheses:

**Hypothesis IIa - State's Extractive Capacity:** Repression will increase autocrats' extractive capacities in restive regions.

**Hypothesis IIb - State's Informational Capacity:** Repression will render societies in restive regions more legible.

Restive regions might harbor social grievances historically formed by repressive state policies including forced assimilation. Therefore, we should ask: Who would be targeted by autocrats' cooptation attempts in the aftermath of repression? For instance, Beissinger, Jamal and Mazur (2015) maintained that disparate welfare regimes in Tunisia and Egypt caused different demographic groups to participate in the protests during the Arab Uprisings: while the middle class overwhelmingly took to the streets in Egypt, the youth populations were active in the protests in Tunisia.

It is possible that autocrats would target the groups with high probability of collective action (Gohdes, 2020; Gunitsky, 2015), as states policies are more likely to fail in co-opting among these groups. Even though Beissinger, Jamal and Mazur (2015) demonstrated that different historical contexts might condition economic or demographic groups to mobilize, other scholars have asserted that the youth have had an active role in protests and anti-regime movements (Lipset, 1967; Huntington, 1993). This observation is also compatible with the Turkish case as the youth constitutes the backbone of Kurdish movement (Bozarslan, 2008). Thus, I argue that the co-optation measures taken by autocrats in the aftermath of repression might be particularly concentrated on the youth to buy off their political support. Against this background, my theory suggests the following prediction:

**Hypothesis III - Youth Cooptation:** Repression increases co-optation of the youth population in restive regions.

## The Turkish Context

A state's repertoire of repression is vast, and autocrats might use a variety of tools to repress. To test my theoretical predictions, I examined a specific form of legal repression – mass purges of municipality mayors from opposition parties. Even though most studies tend to focus on purges of military officials, autocrats' ruling elites or state bureaucrats (Goldring and Matthews, 2021; Sudduth, 2021), I am interested in the removal of pro-Kurdish People's Democratic Party (the HDP) mayors with government trustees in Turkey's restive regions after the coup attempt in 2016.

The removal of the HDP mayors prompted a crackdown on the party's organizational capacities. More than 16,000 HDP activists were arrested, which represents around *55 percent* of the party's membership (T24, 2020). While previous governments have also repressed Kurdish activists, the Kurdish political movement had managed to maintain its organizational capacities, which allowed Kurdish political parties to mobilize local communities against the state. However, the crackdown that followed the coup attempt in Turkey was one of the

most severe the Kurdish political movement has experienced under the rule of the AKP, significantly reducing the HDP's human capital and crippling its organizational power.

For the sake of clarity, it is important to outline the structure of local governance in Turkey. Various non-partisan and partisan agencies play a role in the local governance of administrative units in Turkey, which are made up of city and district municipalities.<sup>4</sup> Non-partisan units in local governance consist of central state agencies whose officials are appointed by the central government. City municipalities are overseen by city governors (*vali*), further divided into district municipalities under the jurisdiction of district governors (*kaymakam*). These state officials ensure the implementation of law and regulations and perform instructions given by the Ministry of Interior. On the other hand, city or district municipalities – whose mayors are elected every five years – are responsible for providing and running public services, such as water and sewerage management, and transportation. Even though city and district municipalities elect their mayors through local elections, Turkey's dual governance (*vali* vs city municipality mayors and *kaymakam* vs district municipality mayors) at the local level is highly hierarchical, representative of strong centralization tendencies embedded in Turkish nation-building process. Governors have full jurisdiction over the management of municipalities to ensure that the law is properly implemented according to the Constitution. The ousting of the HDP mayors have led city or district governors to take over the municipality mayorships as the government trustees.

The emergence of Kurdish movements predates Turkey's recent democratic backsliding. These movements tend to cluster around Southeastern Anatolia; a region historically populated by Kurdish communities. The top-down modernization principle embedded in Turkey's state-building strategies led political leaders to adopt an aggressive strategy on any movement that demands ethnic recognition and territorial autonomy. As a result, the Kurdish regions have suffered from repressive and assimilative policies in the early period of the

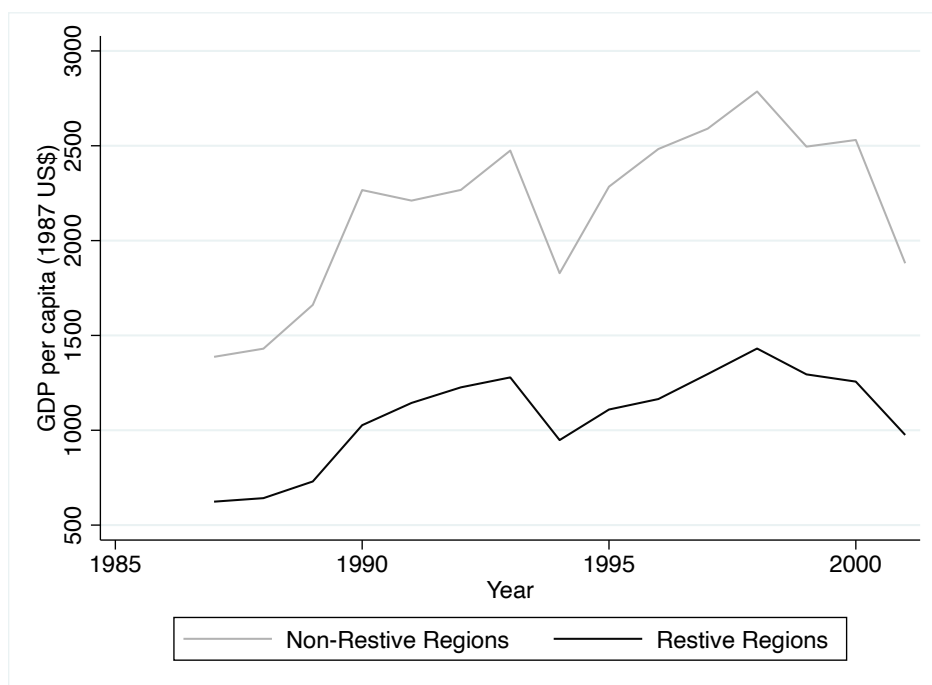
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<sup>4</sup>There are also town municipalities (*belde belediyesi*). These municipalities correspond to administrative units located between village and districts in the local governance. Considering their small population size and lack of available data on these municipalities, I focused my analysis on district and city municipalities. The Ministry of Interior also removed 22 out of 25 HDP town mayors from their posts.

Republic.

The public unrest among the Kurdish population was perceived to be a problem of low human development and modernization. Yet, various policies failed to decrease the discrepancy in economic development between Kurdish and other regions even until early 2000s as demonstrated in Figure 1. The political characteristics of the public unrest were integrated into the policy agenda only after various Kurdish movements – including the Kurdistan’s Workers Party (the PKK) that has conducted a low-profile war against Turkey since 1984 – generated territorial pressures on the central government. Arguably, such movements have rendered these regions less legible, leading the government to adopt informal methods, such as tribal relations and electoral support for pro-Kurdish parties, to make its counter-insurgency efforts more efficient (Belge, 2016; Belge and Sinanoğlu, 2021).

**Figure 1:** GDP Per Capita – Non-Restive vs Restive Regions of Turkey



Note: Restive regions include Diyarbakir, Van, Mardin, Hakkari, Batman, Agri, Sirnak, Siirt, Tunceli, Bitlis. Source: Turkish Statistical Institute.

The political parties that rely on the grassroots of the Kurdish movements have systematically been excluded from politics. The state has tried to hide the issues around the Kurdish identity from public attention through repression and polarization. Starting with the Peo-

ple's Labor Party in 1990, Turkish judiciary has banned seven pro-Kurdish political parties based on the accusations of constituting threats to the national unity, misuse of office and/or violating the law that bans the use of Kurdish language in public space (Watts, 2010). Yet, such judicial actions could not curb the social support for these parties. The parties simply re-formed under different banners, and simultaneously moderated their discourse in order to reduce judicial pressures (Celep, 2018).

Kurdish mayors have constituted the backbone of the formalized and institutionalized Kurdish movements and taken crucial roles in the mobilization of Kurdish populations. Various prominent Kurdish politicians served as local mayors, such as Mehdi Zana (mayor of Diyarbakir), Osman Baydemir (mayor of Diyarbakir), Ahmet Turk (mayor of Mardin), Gulden Kisanak (mayor of Diyarbakir) and Sirri Sakik (mayor of Agri) among others. They generated ties with local communities and formed alternative discourses against state's information campaign that legitimizes its counter-insurgency measures by motivating insecurity in the region. Moreover, Kurdish mayors presented alternative forms of governance and heavily invested in symbolic politics that promotes multiculturalism and Kurdish identity (Watts, 2010). For instance, tens of thousands gather during Nowrouz celebrations organized by the HDP municipalities every year, quickly becoming the scenes of mass mobilization and witnessing violent clashes between security forces and protesters. Also, overseeing considerable municipal resources, Kurdish mayors established their own patronage networks. Thus, they have been under close scrutiny of judiciary, and the first to be repressed.

The Justice and Development Party (the AKP) came to power in 2002 with a pro-Western stance, at which point the PKK retreated from its attacks. The AKP's approach towards the Kurdish issue was oriented along the axis of religion to emphasize the shared history between Kurdish and Turkish populations. Even though the AKP initiated negotiations with the PKK, three rounds of peace talks between the AKP and the PKK could not produce definitive solutions over the Kurdish issue. Nevertheless, the AKP made some progress: it put the Kurdish question in its official party program and introduced a series of reforms to

extend political rights for the Kurdish population, including liberalizing the use of Kurdish language in public space and making it harder for judiciary to disband political parties. In the meantime, the HDP mediated the negotiations and played an essential role in sustaining the communication between the state and the PKK. However, it was marginalized after the collapse of the peace talks and increasingly associated with the PKK due to its close links with the organization.

During the growing tensions in the region, the HDP mayors declared autonomous self-rule within their municipalities in late 2015 and demanded a "democratic" solution to the Kurdish problem. Following the state's crackdown on the HDP municipalities, the PKK instigated a widespread urban warfare in the Southeastern districts and cities. The state responded fiercely and introduced months-long curfews during which serious human rights violations occurred. According to International Crisis Group, the public unrest between December 2015 and March 2016 resulted in 1482 total fatalities, 75 percent of which happened in the urban settings (International Crisis Group, 2019). Indeed, the HDP mayors allegedly helping the PKK were removed from their posts, followed by elections conducted in the local councils. However, the elections changed little because the new mayors almost inevitably had the same party affiliation as the removed mayors (Tutkal, 2021).<sup>5</sup>

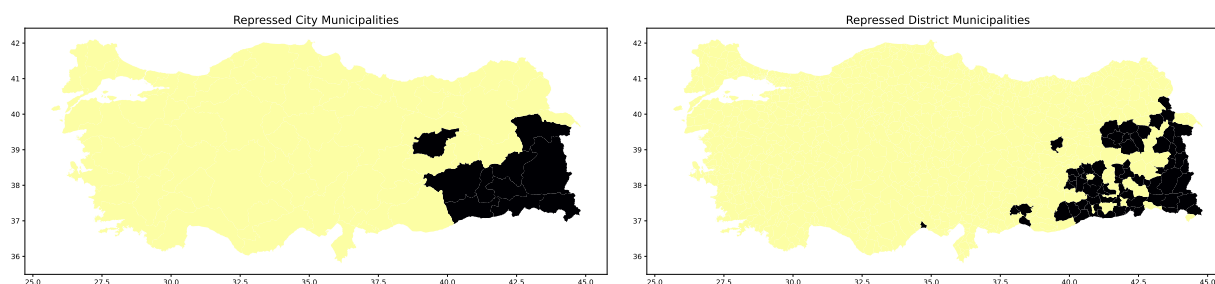
The coup attempt in July 2016 was the turning point for the AKP's authoritarian trajectory: even though the AKP blamed the Gulenists (the Islamist movement once partnered with the AKP), pro-Kurdish and leftist organizations suffered from the wave of repression following the coup attempt. Thousands of state employees were removed from their posts, and a state of emergency was declared that allowed President Erdogan to run the country with decree laws. Even though the state of emergency was introduced for three months, it was consistently extended until the new presidential system institutionalizing this new form of governance was enacted in 2018.

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<sup>5</sup>Not all local councils could conduct new elections because the coup attempt disrupted the election processes in some municipalities, and the Ministry of Interior started to appoint government trustees as deputy mayors.

Among many decrees, President Erdogan introduced a decree (KHK-674/38 md.) in August 2016 that changed the law on municipality and enabled the Ministry of Interior to remove public officials under investigations of terrorism activities. This decree constituted the pretext for the permanent removal of the HDP mayors and leading the government trustees to be appointed as deputy mayors. Thus, this law remarked a fundamental change in the nature of repression on pro-Kurdish municipalities. Within six months after the decree became effective (in September 2016), nearly all HDP mayors (73 out of all 78 district and city municipalities) were replaced with government trustees. Figure 2 depicts the repressed city and district municipalities.

**Figure 2:** Repressed Municipalities - City and District Municipalities



How did the replacement of HDP mayors with government trustees facilitate subsequent co-optation and increase state capacity? Two mechanisms involving negative and positive interventions stand out. Negative interventions refer to the measures that government trustees took to prevent the use of municipal resources for the benefit of organizations with ties to the Kurdish movement. For example, the government asserted that municipal resources, such as vehicles and buses, were used to provide logistical support for PKK attacks Artuklu Kaymakamligi, 2016. The trustees eliminated such links between the HDP and the PKK. Moreover, they cracked down on pro-Kurdish civil society organizations accused of promoting terrorist propaganda, and prevented companies that had done business with the HDP from accessing municipal procurement contracts (Alptekin and İlhan, 2018). These policies inevitably severed ties between local communities and the Kurdish movement and weakened



the HDP's patronage network (Tepe and Alemdaroğlu, 2021). Also, the trustees replaced most municipal employees, claiming that they had been recruited with the approval of the PKK. Instead, individuals from the local population who could pass a detailed security check were hired for municipal positions.

Positive interventions, on the other hand, refer to the measures that the trustees took to promote the state's ideology and patronage network. Interviews with the trustees revealed that by removing HDP mayors, the government aimed to improve its ties with local communities and analyze the social factors that lead individuals to participate in terrorist activities (Alptekin and İlhan, 2018). The youth were a particular target in this effort to prevent radicalization and participation in terrorist groups. To this end, the government trustees worked with institutions such as the Turkish Employment Agency (ISKUR) to provide vocational courses for young people that could lead to employment through government channels (Alptekin and İlhan, 2018). Notably, the trustees also prioritized investments in infrastructure and city management. For instance, President Erdogan defended the removal of HDP mayors by pointing both to the HDP's connections with the PKK and to the lack of service delivery in these municipalities. He stated that the government "will continue to appoint trustees to these places where production is stopped, the money given by the government is sent to Kandil<sup>6</sup>, and there is no public service" (Ensonhaber, 2021). In fact, Ministry of Interior documents indicated that the total amount of investments made by the trustees in the repressed municipalities reached 7.5 billion TL, around 1 billion USD as of 2020 (Türkiye Cumhuriyeti İç İşleri Bakanlığı, 2020).

The 2019 Municipal Elections saw a significant improvement in the AKP's voting share in the repressed municipalities, while the HDP's electoral support decreased. The HDP lost 3 out of their 8 city municipalities and 27 out of their 67 district municipalities. Recent reports from public opinion researchers suggest that the changes in voting behavior in the repressed municipalities may be related to low turnout rates, although the AKP won the elections in

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<sup>6</sup>Kandil is a district in northern Iraq where the PKK's main bases are located.

**Table 1:** Changes in Voting Shares between 2014 and 2019 Municipal Elections

	2014 Elections			2019 Elections			Change		
	% HDP	% AKP	% Turnout	% HDP	% AKP	% Turnout	% HDP	% AKP	% Turnout
Şırnak	59.5	29.3	88.7	35	61.7	86.2	-24.5	32.4	- 2.5
Bitlis	44.1	40.4	84	33	43.8	80	-11.1	3.4	- 4.0
Ağrı	51	45.1	77.4	37.1	55.6	75.7	-13.9	10.5	- 1.7

Note: This table displays the change in AKP’s and HDP’s voting share and the turnout levels in three repressed city municipalities whose mayorship shifted from the HDP to the AKP in the 2019 Municipal Elections.

various municipalities with similar turnout rates between the 2014 and 2019 elections. Table 1 shows the vote shares of the AKP and the HDP, as well as the turnout rates for the three repressed city municipalities whose mayorship shifted from the HDP to the AKP in the 2019 elections. Despite some moderate decreases in the turnout rate between the 2014 and 2019 elections, Table 1 shows significant voting shifts in favor of the AKP.

## Data and Outcomes of Interest

To test my theoretical predictions, I combined various data sources and used the full sample of 81 cities in Turkey. For some variables, I could observe more granular geographical units and conducted my analyses at the district level. Since there were redistricting reforms in 2013, I matched new district municipalities with old district municipalities (955 in total). On a conceptual note, my unit of analysis is either city or district municipalities, suggesting that my theoretical expectations about restive regions correspond to the realities of city or district municipalities for my analysis.

**Protest Events:** I maintained that the removal of HDP mayors and subsequent repression on HDP activists will decrease mobilizational powers of the party. To test this, I examined whether social mobilization against state decreased in the aftermath of repression by using the daily entries of protest events from Armed Conflict Location & Event Data Project (ACLED). I calculated the number of daily protest events and restricted my attention to the repressed city municipalities. I also dropped events conducted by the Turkish military, the police, or the government.

**Patronage Networks:** To test the prediction that the patronage networks will shift in the repressed municipalities in favor of the autocrat, I created a dataset on the procurement contracts published by Turkey's Centralized E-Procurement System. This system presents the whole universe of contracts on public procurement organized by state agencies, including both municipalities and governmental agencies.<sup>7</sup> These agencies can organize contracts to buy supply and services, or tender public works. I collected all contracts conducted in the repressed city municipalities in 2016 and 2017 (in total of 22835 finalized and 2872 canceled contracts).

I anticipate that following the removal of HDP mayors, firms within the government's patronage network will likely receive more procurement contracts from municipalities, while firms associated with municipal patronage networks will be penalized and prevented from obtaining contracts from government agencies. To test this anticipation, I assume that the firms receiving contracts from municipalities or government agencies are linked to their respective patronage networks. Based on this assumption, I have defined a new variable called "patronage diffusion," which measures the extent to which municipal and government patronage networks overlap. The variable takes the value of 1 when a firm receives contracts from both municipal and government sources for the first time, indicating that the firm has established connections between the two patronage networks. Conversely, the variable remains 0 when a firm is connected to only one of the networks, receiving contracts solely from either municipal or government agencies.

I expect to observe a positive impact of the removal of HDP mayors on the rate of patronage diffusion into municipal contracts, implying that firms with close ties to government agencies are now receiving more municipal contracts. On the other hand, if firms within the municipal patronage network were punished after the repression, we should see a negative impact of the repression on the rate of patronage diffusion into government contracts. I have also generated a variable to capture the total number of contract cancellations within a day. I anticipate

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<sup>7</sup>Government agencies include ministries, provincial special administrations, and governorship etc.

that municipal contracts will be more likely to be canceled following the repression. As a placebo test, I will also analyze government contracts, and I expect to observe no impact.

**State’s Extractive and Informational Capacities:** To measure how state’ extractive capacity changed after repression, I used the log-transformed amount of taxes collected at the city municipality level, obtained from Ministry of Treasury and Finance.

To test state’s informational capacity, I introduced a new measure of legibility, which is the density of January-born individuals relative to the total number of newborns in a particular city. This measure is similar to the Myers Score proposed by Lee and Zhang (2017) as it utilizes the potential age distortions by state officials as an indication of the level of legibility in a region. However, my measure offers improved granularity by assessing legibility levels across smaller temporal and geographical units. In Turkey, the practice of registering a child’s birth as January 1st is common in areas where parents lack necessary documentation, such as when a mother gives birth outside a hospital setting. This practice distorts the distribution of births and inflates the density of January-born individuals, even though we would expect a uniform distribution. Although this practice has been a concern in past censuses in Kurdish regions, the quality of birth registries has improved with the introduction of online government services (Cumhuriyet, 2012).

The prevalence of this practice is evident in recent policy changes related to military service payment in Turkey. In 2018, the government introduced a policy allowing individuals to pay to fulfill their mandatory military service. Although the policy initially applied to those born on or before December 31, 1993, officials later extended the birth date threshold to January 1, 1994, to avoid unfair treatment of those born earlier but registered in the system as born on January 1st (Görünüm, 2018). The Appendix Section 13 provides further details on this measure and includes simulations to clarify the interpretation of observed differences between repressed and non-repressed municipalities. I expect that legibility will increase following repression, resulting in *lower* levels of age distortions.

The removal of HDP mayors may result in an increase in the legibility of the municipality

administration, as it could reveal administrative accounts and employment decisions that were previously concealed by the HDP mayors' patronage networks. To investigate whether such an increase in legibility at the administrative level occurs, I utilized audit reports published by the Court of Accounts, which is responsible for auditing and overseeing public accounts to ensure compliance with the Constitution. Prior to the coup attempt, nearly all city municipalities were being audited, with only 2.4 percent of them not audited by the Court of Accounts between 2012 and 2015. Therefore, I examined the audit reports at the district level.

I created an indicator to determine if a municipality had been audited by the Court of Accounts. Theoretically, I expect that repression would reduce the monitoring costs of municipalities for state agents, as the central government's mandates would already be implemented. Thus, I anticipated that auditors from the Court would be less likely to audit repressed municipalities. Alternatively, even if a municipality were audited, the intensity of the process might be lower for repressed municipalities. To proxy the audit process's intensity, I utilized the number of pages in the report and calculated  $\log(\text{Page} + 1)$ . As not all district municipalities underwent an audit, I added one to avoid missing data.

**Co-optation:** To examine whether autocrats concentrate state resources on co-optation, I obtained data on job placements performed by the Turkish Employment Agency (ISKUR), the government agency through which individuals can find jobs. I generated a variable measuring the share of the youth, those aged between 15-29, within all job placements. I expect that youth become more likely to be placed in a job through governmental channels in the repressed municipalities. Second, I examined net schooling rates for secondary education.<sup>8</sup> In 2012, Turkey made secondary education mandatory for all citizens. Thus, how the net schooling rates change after repression could well provide insights as to the changes in the enforcement of co-optation policies.<sup>9</sup> As this policy was first introduced in 2012, my analysis

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<sup>8</sup>Net schooling rate is defined as the density of students in the theoretical age group within a given level of education vis-a-vis total population in that age group.

<sup>9</sup>Even though I focused on net schooling rates for secondary education, the results are similar for primary education. However, since net schooling rate for primary education is high (about 98 percent), the impact

begins then. I expect that net schooling rates will increase subsequent to the removal of HDP mayors. Table 2 displays all variables; the concepts that these variables measure; the periods that my dataset cover; and the main estimation methods that I applied.

**Table 2:** Variables

Variable	Geographical Level	Years Covered	Estimation Method
<i>Concept: Social Mobilization</i>			
Number of Protest Events	NA	2016-2017	RDD
<i>Concept: Patronage Networks</i>			
Patronage Diffusion	NA	2016-2017	RDD
Cancelled Contracts	NA	2016-2017	RDD
<i>Concept: Extractive and Informational Capacities</i>			
Legibility (Age Distortions)	City	2009-2020	Diff-in-Diff
Log (Tax)	City	2008-2020	Diff-in-Diff
Likelihood of Being Audited	District	2012-2020	Diff-in-Diff
No of Pages in Audit Reports	District	2012-2020	Diff-in-Diff
<i>Concept: Co-optation</i>			
Job Placements(Youth)	City	2008-2020	Diff-in-Diff
Net Schooling Rate	City	2013-2020	Diff-in-Diff

Note: RDD denotes Regression Discontinuity Design.

## Analysis: Opposition’s Mobilization and Financial Powers

### Estimation

To examine the changes in social mobilization and patronage networks in the repressed municipalities, I adopted a regression discontinuity design with the number of days to and from the removal of HDP mayors as the running variable. Following the recent improvements in the literature, I used the non-parametric estimator proposed by Cattaneo, Idrobo and Titiunik (2019).<sup>10</sup>

of repression is marginal, yet statistically significant.

<sup>10</sup>I estimated the impact of the removals on patronage networks by taking the difference in the outcomes of interest within a time-bandwidth that minimizes the asymptotic mean squared error (the MSE). Scholars demonstrated that the MSE bandwidth can optimize the statistical trade-off, that is, the increase in the statistical noise in the estimates as restricting the sample around the cutoff point. Moreover, I used triangular kernel that assigns higher weights to the time periods close to the day of the removal of HDP mayors and fitted linear functions on both sides of the cutoff point. I clustered the standard errors in time to account for serial correlations and presented the bias corrected coefficients with robust confidence intervals and p-values.

## Results: Social Mobilization and Patronage Networks

Figure 3 displays the RD plots with data-driven bins presenting sample averages for protest events and municipal contracts. The left panel exhibits that the repression is associated with a decrease in the protest events, suggesting that the removal of HDP mayors decreased social mobilization against the state. In the middle and right panels, we see a positive impact of repression, suggesting that the removal of HDP mayors increased the rate of patronage diffusion from government to municipal procurement contracts, as well as, cancellations of municipal procurement contracts.

**Figure 3:** Protest Events and Patronage Networks (Municipality Contracts)

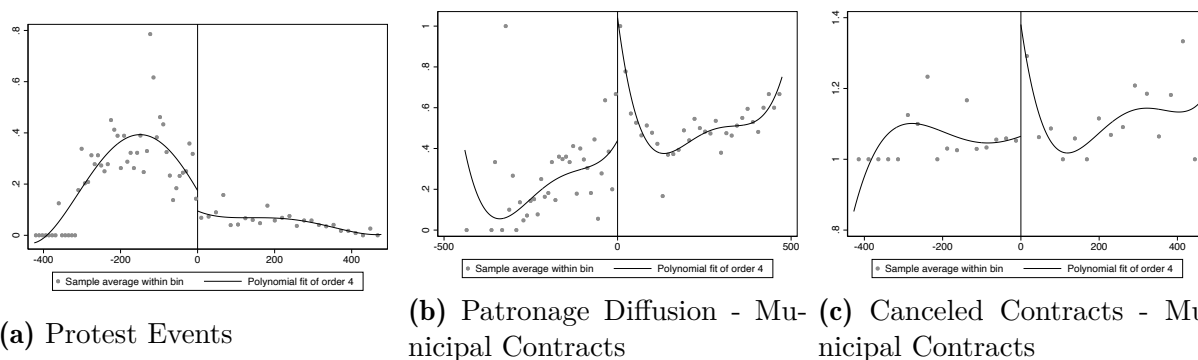


Table 3 quantifies these impacts and shows that social mobilization considerably decreased by about 116 percent of the average level of protest events in the repressed municipalities. Moreover, the patronage networks changed: the firms within government’s patronage networks become more likely to receive municipal contracts after repression. About 45 percent of municipal contracts were given to the firms that used to receive contracts only from government agencies after repression, which is also sizeable when compared to the average levels of patronage diffusion into municipality contracts (37 percent). In comparison the firms that receive contracts from municipalities were punished and deprived of an access to governmental contracts: they become 3.8 percent less likely to receive government contracts. Table 3 further displays that the contracts inherited from the HDP mayors are significantly more likely to be canceled after repression (28 percent increase of the average value of contract

cancellations). Such tendencies are not observable for government contracts, suggesting that repression changed the patronage network embedded in municipal contracts, whereas governments' existing patronage remained intact. Overall, these results reveal that the replacement of HDP mayors decreased the party's social and financial powers, which will inevitably eliminate the obstacles posed by the HDP against the enforcement of policies.

**Table 3:** RDD-Results - Opposition's Social and Financial Powers

Outcome:	Protest Events	Patronage Diffusion		Cancelled Contracts	
		Municipality Contracts	Government Contracts	Municipality Contracts	Government Contracts
Repression	-0.189	0.452	-0.038	0.299	0.077
Robust p-value	0.000	0.034	0.034	0.022	0.407
CI 95%	[-0.291,-0.086]	[0.035,0.869]	[-0.073,-0.003]	[0.044,0.553]	[-0.105,0.258]
Observations	6881	1681	19036	707	1797
Bandwidth obs.	3022	357	7507	477	783
Mean	0.163	0.370	0.058	1.086	1.236
Effect Mean(%)	-116	122	-66	28	6
Bandwidth	172.181	115.617	140.656	237.888	160.776

RDD results are computed by Stata 17's *rdrobust* package developed by Cattaneo et al. (2019), weighted by a triangular kernel. 95% robust confidence intervals and p-values are clustered at the time to repression. Bandwidth represents MSE-optimal bandwidth.

## Analysis: State Capacity, Legibility and Co-optation

### Estimation

Various scholars accurately maintained that repression cannot be assumed as exogenously distributed across localities because various endogenous factors, such as the strength of opposition or local economic conditions, might inform autocrats' decision to repress. I exploit the quasi-random timing of the coup attempt in 2016 and the autocratization in the aftermath that has changed the *nature* of repression. Even though HDP mayors were occasionally replaced before the coup attempt, these replacements were mostly symbolic in that the government was not taking an active role in wiping out oppositions' influence within districts as discussed in the previous section (Tutkal, 2021). Moreover, the level of repression of the HDP was already intense before the coup attempt: the government fiercely responded to the



proxy war escalated by the PKK in the HDP municipalities. After the coup attempt and the previously discussed decree, the nature of repression has dramatically changed, and the removal of HDP mayors has become institutionalized within the new authoritarian logic in Turkey.

To investigate how the replacement of HDP mayors with government trustees changed legibility and the enforcement of cooptation policies, I adopted a two-way-fixed-effects (TWFE) model in the following form:

$$Y_{it} = \alpha_1 + \delta_1 D_{it} + \theta X_{it} + \gamma_i + \delta_t + \epsilon_{it} \quad (1)$$

where  $i$  is city or district municipality, and  $t$  is year.  $\gamma_i$  and  $\delta_t$  are region- and year-fixed effects, respectively.  $Y_{it}$  is the outcome of interest.  $D_{it}$  is an indicator variable, being 1 if a HDP mayor is replaced by a government trustees and 0 otherwise in year  $t$ . I also included standard demographic controls,  $X_{it}$ : the share of youth population, the distribution of educational attainments, log population and the share of males. I am interested in estimating  $\delta_1$ .

This strategy measures the deviations in the outcomes of interest due to a shock, the removal of HDP mayors in this case. Its main assumption is the parallel trends between treated and control units – repressed and non-repressed municipalities. That is, if the repression had not happened, the trends within treatment and control units, as well as their difference, would have been preserved. I assumed that the repression of HDP municipalities occurred at once, given that nearly all HDP municipalities are removed from their posts within seven months (September 2016-March 2017). Thus, I took 2017 as the first treatment period.

Restive regions with their distinct historical characteristics might raise concerns about whether the parallel trends assumption would hold in TWFE estimations. It is true that restive regions might follow differential trends compared to other regions. Yet, I believe that parallel trends assumption could hold for some variables because I constructed the outcomes

of interest in a way that tend to be independent from local conditions. For instance, the rate of job placements among the youth could account for differential trends across regions because it takes into account the extent to which local employment agencies concentrate their resources on the youth population, controlling for possible differences in institutional capacities across municipalities. Yet, parallel trends assumption does not hold for some variables, such as age distortions. In Appendix Section 2, I discuss these points further and adopted various ways, such as synthetic difference in difference and lagged models, to account for the violation in the parallel trends assumption.

### **Results: State's Extractive and Informational Capacities**

The first columns in the Table 4 present the baseline results, followed by the results with standard demographic controls in the second columns. The lower left panel in Table 4 indicates that repression significantly increased the amount of local taxes collected by state, suggesting that the removal of HDP mayors increased state capacity. Since the outcome is log-transformed, I also present inverse log transformed effects  $((exp(\delta) - 1) * 100)$ . The results suggest that repression increased local taxes by about 13 percent.

The upper left panel in Table 4 indicates that the removal of HDP mayors decreased age distortions (8 percent decrease in the mean level). Note that lower levels age distortions in censuses hints that legibility increased in the aftermath of repression. In the Appendix Section 13, I run simulations to give a better meaning on the coefficients. These simulations suggest that small changes in the true rate of legibility might inflate the value of monthly birth records. Such accelerating impact embedded within this proxy makes statistically significant but lower coefficients more credible in representing the true value of legibility like the one presented in Table 4 ( $\delta = 0.007$ ). Notably, this impact suggests that about 4230 newborns have become legible to the state after repression, which is sizable considering that the PKK conducts its activities in Turkey with only 500 partisans Anadolu Ajansi, 2020. Even if a small percentage of these "non-legible" new-borns would participate in the PKK in a counterfactual world, the Turkish state could severely damage the PKK's human capital

by preventing these individuals from joining the organization.

On the other hand, the upper right panel of Table 4 maintains that a district municipality is about 28-31 percent less likely to be audited by the Court of Accounts after the removal of HDP mayors even though these estimates are not within the conventional significant levels. However, even if the repressed municipalities are audited, they experience less intense auditing processes: the average number of pages in audit reports is about 13-17 percent lower in these municipalities. These results suggest that the removal of HDP mayors decreased the cost of monitoring these municipalities and thus rendered them more legible. Overall, Table 4 demonstrates that repression in autocrats' restive regions might have particularly different role in maintaining political control: it increases state's extractive and informational capacities.

Even though the parallel trends hold for the variables concerning the audit processes, it is violated for the legibility measure. The violation in the parallel trends assumption is likely to stem from various policies enacted in the early period of the AKP. The government enacted various policies to increase the access to state services. For instance, the online platform for government services and activities, e-Devlet, was introduced in 2009 and considerably increased the access to state resources in the restive regions. In this website individuals can access to many state services, including the application for birth registers. The introduction of these technologies is likely to generate differential trends in legibility between the restive and the other regions.

To further assess the violations in the parallel trend assumption, I adopted a dynamic TWFE model demonstrating how the impact of repression changes across years. The left panel of the Figure 4 exhibits that the difference between repressed and other municipalities considerably decreased between 2009-2012, reflective of the ease of access to state services.<sup>11</sup> Moreover, the differential trend within this period violated the parallel trend assumption as the right panel of Figure 4 shows. Yet, the parallel trend assumption holds for the five

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<sup>11</sup>Note that higher values in this measure indicates lower levels of state legibility.

**Table 4:** TWFE Results - State's Extractive and Informational Capacities

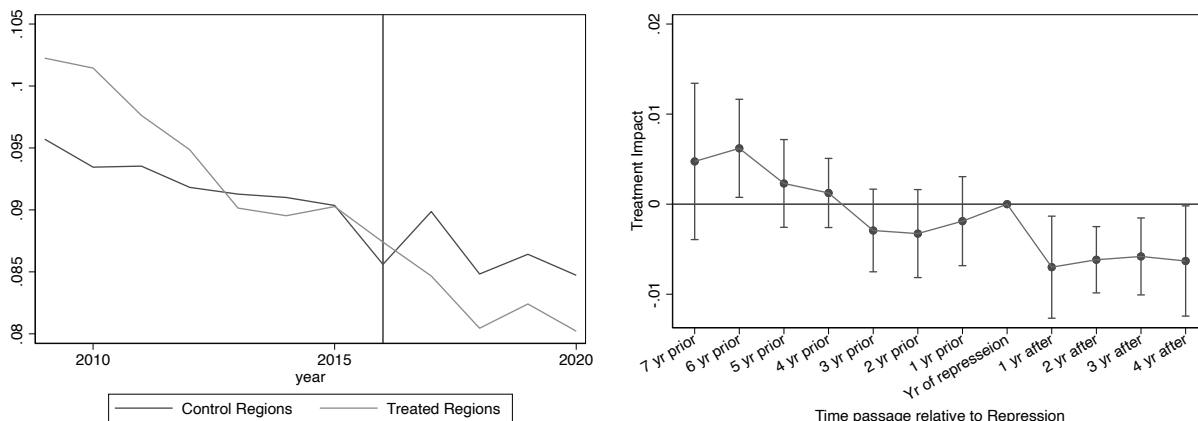
Outcome:	Age Distortions		Audited	
	(I)	(II)	(I)	(II)
Repression	-.007	-.007	-.038	-.035
SE	.001	.001	.02	.021
P-Value	<.001	<.001	.058	.101
CI 95%	[-.009, -.005]	[-.01, -.005]	[-.078, .001]	[-.076, .007]
Mean	0.090	0.090	0.124	0.124
Mean Impact	8	8	31	28
Control	X	✓	X	✓
Ptrend test	<.001	<.001	.406	.106
N	972	972	8595	8595
Number of Clusters	81	81	955	955
Outcome:	Log(Tax)		Log(Page + 1)	
	(I)	(II)	(I)	(II)
Repression	.125	.106	-.182	-.145
SE	.055	.06	.063	.07
P-Value	.026	.081	.004	.037
CI 95%	[.015, .235]	[-.013, .225]	[-.306, -.059]	[-.282, -.009]
Log-Transformed Effect	13	11	-17	-13
Control	X	✓	X	✓
Ptrend test	.263	.224	.666	.229
N	1053	1053	8595	8595
Number of Clusters	81	81	955	955

Note: TWFE estimates are computed by Stata 17's *didregress* package. 95% robust confidence intervals are clustered at the city level for city-level outcomes and at the district level for district level outcomes. Pre-trend is not available for *lpage* variable at the district level because the Court of Account did not audit all districts, thus distorting the nature of panel data.

years before repression. Even though this finding is assuring, I adopted three methods to account for the violation in the parallel trends assumption. First, I adopted lagged models in Table A7 to account for the time-variant confounders. The lagged model estimations provide similar results ( $\delta = -0.002$ , 95%CI=  $[-0.004, -0.001]$ ). Second, I adopted synthetic difference in difference estimations developed by Arkhangelsky et al. (2021), assigning differential weights to control regions that makes the outcomes of the control regions more similar to the outcomes of the treatment regions. The results in Table A10 are similar ( $\delta = -0.004$ , 95%CI=  $[-0.006, -0.001]$ ). Lastly, following Stephens and Yang (2014), I relaxed the parallel trends assumption and let trends vary across Kurdish regions. Table A12 in the Appendix displays that the results are comparable with those in Table 4. ( $\delta = -0.003$ , 95%CI

=  $[-0.006, -0.00001]$ , Ptrend test p-value: .124). These results suggest that the violation in the parallel trends assumption might not constitute a threat to the analysis presented in Table 4.

**Figure 4:** Parallel Trends Violation in Age Distortions



(a) Trends

(b) Dynamic Diff-in-Diff

## Results: Cooptation

I adopted two measures to examine whether autocrats' co-optation policies are more effectively implemented in the aftermath of repression: the share of youth finding jobs through governmental channels and the net schooling rates for secondary education. The left panel in Table 5 presents that following the removal of HDP mayors, youth have become more likely to find jobs through governmental agencies (about a 10 percent mean-level increase), suggesting that the government initiated policies to alleviate the economic problems among the youth after repression. Moreover, the right panel demonstrated that the enforcement of the mandatory secondary education was improved, and a greater share of youth started to receive state-imposed education (about 2-4 percent mean-level change). Overall, these results provide evidence that state resources are concentrated on the youth population in the repressed municipalities and that repression can complement autocrats' co-optation policies.

**Table 5:** Diff-in-Diff Results - Cooptation

Outcome:	Youth Co-optation			
	Job Placement (Youth)		Net Schooling Rate	
	(I)	(II)	(I)	(II)
Repression	.05	.06	.031	.016
SE	.024	.02	.009	.009
P-Value	.037	.004	.001	.082
CI 95%	[.003, .097]	[.019, .1]	[.013, .05]	[-.002, .034]
Mean	0.509	0.509	0.830	0.830
Mean Impact	10	12	4	2
Control	X	✓	X	✓
Ptrend test	.289	.388	.173	.112
N	1053	1053	648	648
Number of Clusters	81	81	81	81

Note: TWFE estimates are computed by Stata 17's *didregress* package. 95% robust confidence intervals are clustered at the city level for city-level outcomes and at the district level for district level outcomes.

## Robustness Checks

**Social Mobilization and Patronage Networks:** The discrete nature of the running variable, the number of days to and from repression, generates mass points in the dataset, which might bias the results by extrapolating from these points. If that is the case, the density of observations on the running variable must be sorted disproportionately. In Figure A3 in the Appendix, I demonstrated that there is no sorting problem. Second, I presented in Figure A4 that the results are robust to different levels of bandwidths. Third, I maintained in Table A2 that there is a continuity across variables unrelated to the removal of HDP mayors. Fourth, I adopted different levels of polynomial approximations and presented that the results are robust to such estimation strategies in Table A4. Given that triangular kernels assign higher weights to the observations close to the cutoff point, it is possible that the results are mainly driven by the contracts close to the day of repression. Thus, I dropped the observations around the cutoff and asserted that the results are not driven by the observations closer to the cutoff point in Table A4.

It must be clear that there is a positive time trend embedded in the patronage diffusion variable: once a firm is connected to both municipal and government patronage networks,

it remains as such and receives the value 1 anytime it receives contract. To account for this time trend, I estimated the coefficients across pseudo-cutoff points. As exhibited in Figure A5, the results are statistically significant only in the true cutoff point. Also, I control for this time trend by re-estimating the coefficients with 30-day-period fixed effects. Table A6 exhibits that the effects become stronger under this estimation strategy for patronage diffusion into municipality contracts, whereas they remain negative for patronage diffusion into government contracts despite not being statistically significant.

**State Capacity and Co-optation:** The TWFE models relies on a different set of assumptions, which must be investigated separately. If the treatment is randomly assigned across the regions, the TWFE results would be more credible. Even though the research design I laid out exploits the quasi-random timing of the coup attempt instead of the decision to repress, I applied various tests to examine the robustness of the results. First, I adopted lagged variable models to account for the time-variant confounders. Angrist and Pischke (2008) argued that if the data generating process is misspecified by either TWFE or lagged models, the estimates can represent the upper and lower bounds of the correct causal estimates, respectively. The results in Table A7 and Table A8, despite being lower in magnitude, are compatible with the results in the main text.

Callaway and Sant’Anna (2021) proved that heterogeneous treatment effects with multiple time periods might induce bias in TWFE estimations, proposing a semi-parametric estimator to account for the heterogeneous treatment effects by providing a transparent dynamic difference in difference setting (Roth et al., 2022). Table A9 in Appendix displays that the results are compatible with the main analysis. Also, Figure A6 presented dynamic difference in difference results with Callway and Sant’Anna’s estimator and demonstrate that parallel trends assumption holds for variables related to audit processes and youth cooptation. Lastly, I adopted the previously-discussed synthetic difference-in-difference (the SDiD) method to account for possible violations in the parallel trends across treatment and control regions (Arkhangelsky et al., 2021). Table A10 hints that the results presented in the main

text is robust to the SDiD estimator.

## Conclusion

Even though citizens might withdraw their support for authoritarian leaders in the event of repression (Guriev and Treisman, 2020), some autocrats still repress communities, taking the risk of estranging their citizens. More interestingly, autocrats who can afford to buy off citizens' support might occasionally resort to repressive policies, raising a puzzle as to the motivations behind such measures. Thus, examining how repression evolves in such contexts can considerably expand our understanding of the role of repression in authoritarian survival.

The theory laid out in this paper might be a start, suggesting that repression will have a different role in autocrats' restive regions where they have difficulty in both reaching out to local communities and implementing their co-optative policies. In these cases, repression will initiate structural changes that facilitate greater co-optation. The empirical evidence demonstrated that the removal of HDP mayors in Turkey decreased the social and financial powers of the HDP; eliminated the obstacles against states' greater penetration into society; and increased state capacity and legibility. In return, such policies precipitated cooptation, especially among the youth.

Under which conditions can we apply the insights laid out in this paper to other authoritarian contexts? Two conditions stand out as crucial. First, to co-opt the repressed communities, autocrats should rely on a sufficient resource base. Under fiscal shocks, for example, it is possible that autocrats choose to repress, rather than to co-opt, to ensure political control in restive regions (Blaydes, 2018). Second, the 'restiveness' of the local communities is crucial because the historically-constructed realities of these regions could lead to the emergence of strong oppositional movements against the state. In such contexts, the conflictual relations between states and restive regions would provide venues for opposition parties to mobilize societies against state policies, thus rendering autocrats' cooptation policies unsuccessful and compelling them to repress first.



The repression of Muslim minorities in Xianjiang by China exhibits similar patterns to the Turkish case. Even though China introduced a series of policies seeking to bring development in Xianjiang, these policies have failed (Peng and Callais, 2021). By placing Muslim minorities into re-education camps, the central government started to more effectively monitor restive communities and make sure that its subsequent policies are implemented. Similarly, Sultan Qaboos of Oman introduced political reforms and state investment in the Dhofar region, after violently repressing the separatist rebellion in 1975. Even the struggle in Chechnya might be examined with the help of the insights laid out in this paper. After the installment of the pro-Russia government, forms of repression and co-optation was incorporated in Chechnya to induce political control. Chechnya has become one of the most repressive regimes in the world, while receiving considerable state resources from the central government in Russia.

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# 1 Summary Statistics

**Table A1:** Summary Statistics

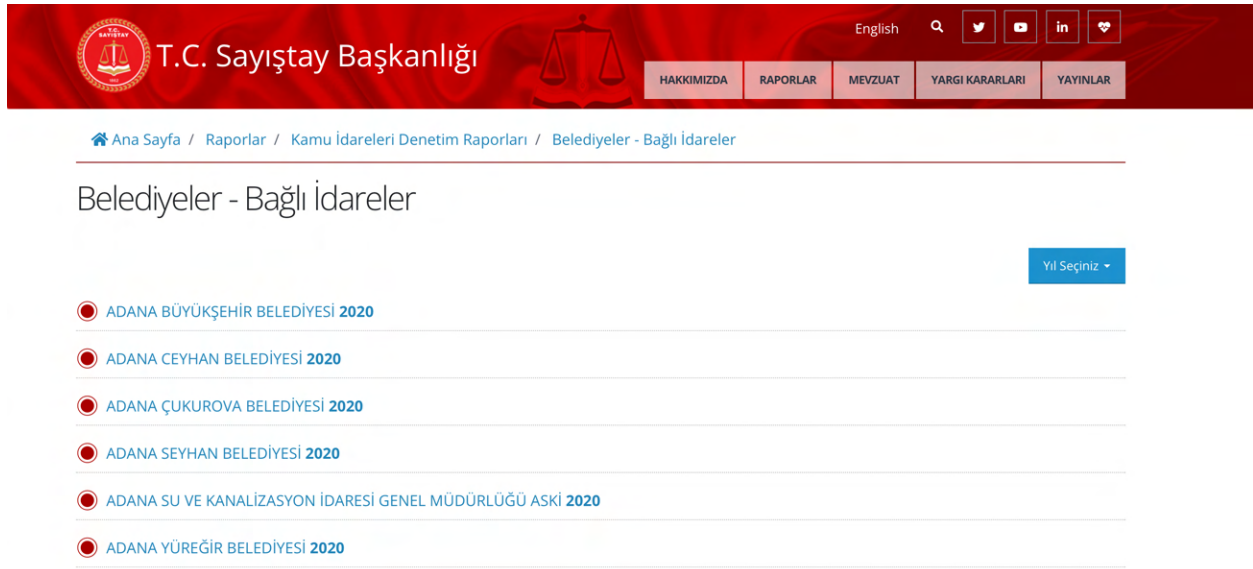
	Mean	SD	Min	Max	N
<i>City-Level Outcomes</i>					
Age Distortions	.09	.008	.062	.132	972
Log(Tax)	10.373	1.468	5.673	15.643	1053
Job Placement (Youth)	.509	.082	.216	.81	1053
Youth Population	.493	.092	.355	.759	1053
Above University	.115	.044	.019	.291	1053
High School	.209	.041	.088	.314	1053
Population (log)	13.276	.965	11.217	17.251	1053
Share of males	.504	.011	.488	.58	1053
<i>District-Level Outcomes</i>					
Audited	.124	.329	0	1	8595
Log(Page+1)	.451	1.222	0	5.389	8595
Youth Population	.453	.11	.16	.79	12415
Above University	.09	.06	.007	.529	12415
High School	.176	.062	.034	.547	12415
Population (log)	10.405	1.299	7.319	13.772	12415
Share of males	.503	.017	.441	.747	12415
<i>Patronage: Contracting Bids</i>					
Patronage Diffusion	.083	.276	0	1	20717
Relative Time to Repression	43.538	212.829	-463	474	20717
<i>Patronage: Cancelled Bids</i>					
Cancelled Bids	1.194	.57	1	10	2504
Relative Time to Repression	52.72	215.002	-455	460	2504

## 2 Further Discussions on Dataset and Estimations

### Dataset:

Throughout my analysis, I incorporated several datasets, including government documents and administrative records. In this section, I will provide an overview of the datasets used and describe the methods employed. To examine the impact of repression on legibility in restive regions, I referred to the audit reports issued by the Court of Accounts. I acquired all the audit reports from the Court of Accounts' website<sup>12</sup>. This site permits users to download audit reports based on their location and year of publication. A screenshot of the Court of Accounts' website is depicted in Figure A1.

**Figure A1:** The Court of Accounts Website



To gather data on patronage in my analysis, I utilized the entries of all contracting bids listed in Turkey's Centralized E-Procurement System, known as the EKAP. A screenshot of the EKAP's website is presented in Figure A2. Each procurement contract offers comprehensive information, such as the project name, the contracting institution, and the contract type (service, construction, goods, and consulting), as well as the highest and lowest bids and estimated project cost. For projects with multiple bidding firms, I identified them as

<sup>12</sup><https://www.sayistay.gov.tr/reports/category/31-belediyeler—bagli-idareler>

having multiple bidders if the highest bid was not the same as the lowest bid. I categorized municipal contracts and other government contracts based on the classifications provided in these entries.

**Figure A2:** EKAP Website

The screenshot shows the EKAP website interface. At the top, there is a search bar with filters for location (Diyarbakir), start date (01.06.2017), end date (30.06.2017), and scope (4734 Kapsamında). The main content area displays a list of tenders. The first tender is highlighted in red and has the following details:

<b>2017/253253</b>	<b>Taşınmalı İlköğretim Kapsamında Engelli Öğrenci Taşınması İş'i</b>	KOCAKÖY İLÇE MİLLİ EĞİTİM MÜDÜRLÜĞÜ- MİLLİ EĞİTİM BAKANLIĞI BAKAN YARDIMCILIKLARI																				
Hizmet - Açık																						
Sonuç İlanı Yayınlanmıştır	DIYARBAKIR - 30.06.2017 15:00																					
<table border="1"> <tr> <td><b>İhale Kayıt No</b></td> <td>2017/253253</td> </tr> <tr> <td><b>İhale Adı</b></td> <td>Taşınmalı İlköğretim Kapsamında Engelli Öğrenci Taşınması İş'i</td> </tr> <tr> <td><b>İhale Türü - Usulü</b></td> <td>Hizmet - Açık</td> </tr> <tr> <td><b>Kısmi Teklif</b></td> <td>Verilemez</td> </tr> <tr> <td><b>İhale Branş Kodları (OKAS)</b></td> <td>60140000</td> </tr> <tr> <td><b>İhale Onay Tarihi</b></td> <td>23.05.2017</td> </tr> <tr> <td><b>İlanın Şekli</b></td> <td>İhale İlanı</td> </tr> <tr> <td><b>İşin Yapılacağı Yer</b></td> <td>Diyarbakır İli-Kocaköy İlçesindeki 1 Taşıma Merkezi ilkokul</td> </tr> <tr> <td><b>İhale Yeri - Tarihi - Saati</b></td> <td>Kaya Mahallesi Hükümet Konağı Kat:2 Kocaköy - Diyarbakır - 30.06.2017 15:00</td> </tr> <tr> <td><b>İhale Durumu</b></td> <td>Sonuç İlanı Yayınlanmıştır</td> </tr> </table>			<b>İhale Kayıt No</b>	2017/253253	<b>İhale Adı</b>	Taşınmalı İlköğretim Kapsamında Engelli Öğrenci Taşınması İş'i	<b>İhale Türü - Usulü</b>	Hizmet - Açık	<b>Kısmi Teklif</b>	Verilemez	<b>İhale Branş Kodları (OKAS)</b>	60140000	<b>İhale Onay Tarihi</b>	23.05.2017	<b>İlanın Şekli</b>	İhale İlanı	<b>İşin Yapılacağı Yer</b>	Diyarbakır İli-Kocaköy İlçesindeki 1 Taşıma Merkezi ilkokul	<b>İhale Yeri - Tarihi - Saati</b>	Kaya Mahallesi Hükümet Konağı Kat:2 Kocaköy - Diyarbakır - 30.06.2017 15:00	<b>İhale Durumu</b>	Sonuç İlanı Yayınlanmıştır
<b>İhale Kayıt No</b>	2017/253253																					
<b>İhale Adı</b>	Taşınmalı İlköğretim Kapsamında Engelli Öğrenci Taşınması İş'i																					
<b>İhale Türü - Usulü</b>	Hizmet - Açık																					
<b>Kısmi Teklif</b>	Verilemez																					
<b>İhale Branş Kodları (OKAS)</b>	60140000																					
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<b>İhale Yeri - Tarihi - Saati</b>	Kaya Mahallesi Hükümet Konağı Kat:2 Kocaköy - Diyarbakır - 30.06.2017 15:00																					
<b>İhale Durumu</b>	Sonuç İlanı Yayınlanmıştır																					

The second tender is:

<b>2017/291712</b>	<b>SELAHADDİN EYYÜBİ DEVLET HASTANESİ EK BİNASI (ESKİ TROPİKAL SİTMA EĞİTİM VE ARAŞTIRMA MERKEZİ) 1 KAT TADILAT YAPIMI İŞİ</b>	KAMU HASTANE BİRLİĞİ SAĞLIK BAKANLIĞI TÜRKİYE KAMU HASTANELERİ KURUMU
Yapım - Açık		
İhale İptal Edilmiş	DIYARBAKIR - 30.06.2017 14:30	

The third tender is:

<b>2017/323447</b>	<b>24 Kalem İnşaat Malzemesi Alımı</b>	BİSMİL BELEDİYESİ KÜLTÜR VE SOSYAL İŞLER MÜDÜRLÜĞÜ
Mal - Pazarlık		
Sonuç İlanı Yayınlanmıştır	DIYARBAKIR - 30.06.2017 14:00	

**Estimation:** The bulk of my analysis utilizes TWFE models, which exploit regional variations in repression before and after the coup attempt to explore the effects of repression on the outcomes of interest. Its key assumption is the parallel trends between the treated and control groups, implying that the trends within the treatment and control groups, as well as the difference between them, would have remained constant if repression had not occurred. This approach measures the impact of repression by assessing the deviations in the outcomes of interest resulting from a shock, such as repression. Since almost all HDP municipalities were removed from their posts within seven months (September 2016-March 2017), I assumed that the repression of HDP municipalities occurred simultaneously and did not utilize staggered models. This assumption is justifiable, and I considered the post-2016 period as the first treatment period.

I have contended that the parallel trends assumption between the repressed and control

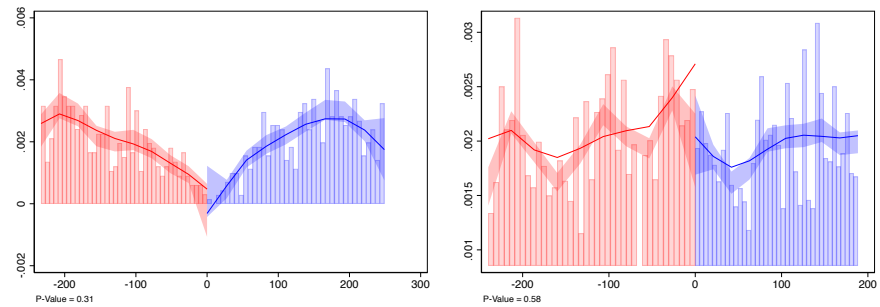
regions is plausible for two reasons. First, Turkey boasts a relatively high enforcement capacity across all its regions. Second, I have constructed the outcomes of interest in a manner that is unaffected by local conditions. For example, consider the variables that measure audit decisions in restive regions. The Court of Accounts is based in the capital and conducts inspections based on financial documents provided by municipalities. Even though auditors may visit municipalities, the decision to conduct an audit is made in the capital. Hence, it is reasonable to assume that these audits are independent of the state's capacity within restive regions. Similarly, while the legibility measure may depend on state capacity within municipalities, registering newborns is one of the most fundamental tasks of the state, and it is the parents' responsibility to register their newborns. This may be beneficial for this study as I aim to examine how repression alters social compliance. As a result, we can expect that the level of registries and their differences would be comparable across treatment and control regions.

The cooptation measures I employed are sensitive to trends across restive and non-restive regions. The share of youth among the total number of job placements can accommodate different trends within job placements across restive and non-restive regions. One concern regarding the trend for the share of youth in job placements is the possibility that after the repression, restive regions may have experienced an influx of businesses requiring youth labor, making it easier for the Employment Agency to find jobs for the youth population. However, there is no indication of such businesses entering restive regions following the repression. Another concern is that the youth may be more likely to be unemployed in the aftermath of repression, in which case, it would be natural to expect the youth to be more likely to find jobs through the Employment Agency. Nonetheless, I demonstrate in the subsequent pages that if anything, youth unemployment has declined after the repression, though this outcome may reflect higher levels of job placements among the youth population. Nevertheless, this finding implies that higher levels of youth unemployment are not a concern for the analysis.

The parallel trends assumption also assumes that the trends across regions would have remained parallel if the treatment (repression in this case) had not occurred. However, the timing of events such as the quasi-random timing of the coup attempt and the subsequent democratic backsliding in Turkey means that the nature of repression is highly contingent on these events. Therefore, it may not be reasonable to assume that the trends would have remained parallel across regions had these events not occurred.

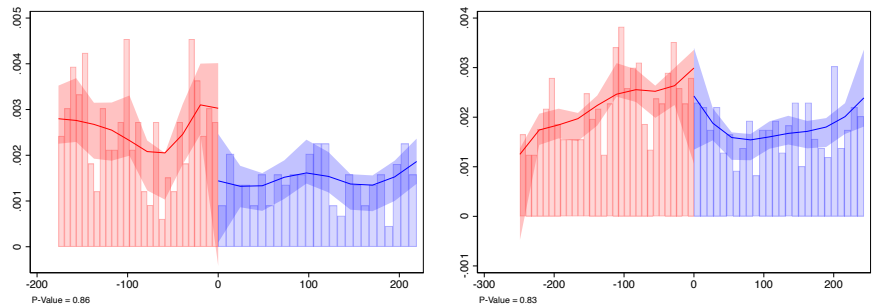
### 3 RDD - Density

Figure A3: RDD - Density Tests



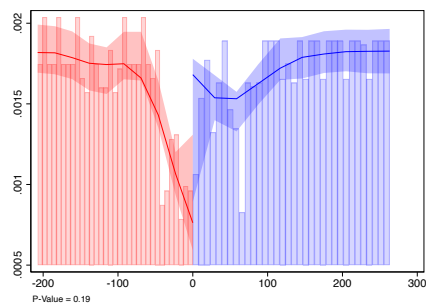
(a) Patronage Diffusion - Municipal contracts

(b) Patronage Diffusion - Government Contracts



(c) Canceled Contracts - Municipal contracts

(d) Canceled Contracts - Government Contracts



(e) Protest

## 4 RDD - Covariate Balance

**Table A2:** Covariate Balance

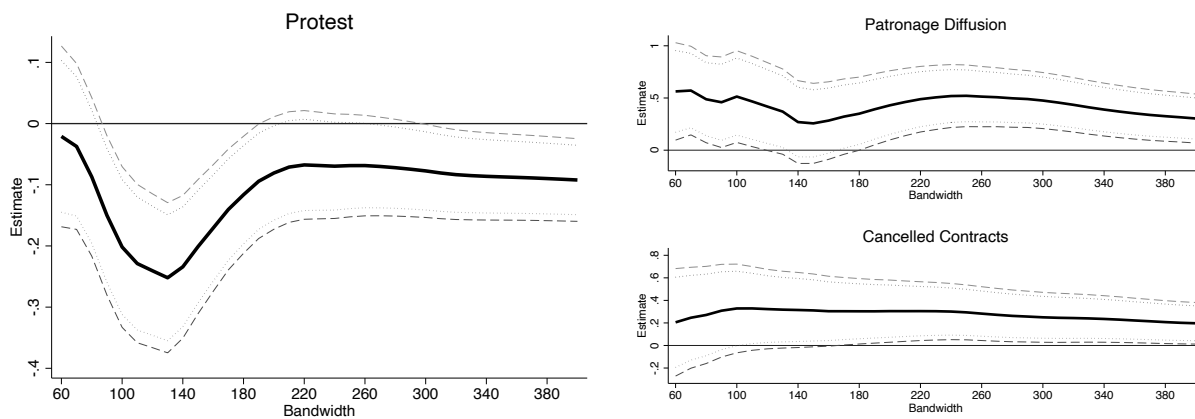
	Mean (1)	Std. Dev. (2)	Repression (3)	CI 95% (4)	Obs. (5)	Band. Obs. (6)	Bandwidth (7)	p-value (8)
<i>Firm Dataset</i>								
Temperature	14.421	10.832	-10.885	[-42.802,25.916]	1615	54	50.75	0.630
Wind Speed	11.117	4.321	5.102	[-2.357,14.608]	1615	88	62.18	0.157
Humidity	56.635	20.031	-2.899	[-55.658,39.125]	1615	57	51.74	0.732
Felt Temperature	13.403	11.351	-11.071	[-43.397,25.924]	1615	54	50.33	0.621
Air Pressure	1015.191	6.187	1.671	[-12.426,12.909]	1615	88	63.81	0.970
<i>Cancelled Contracts</i>								
Temperature	15.618	10.966	-7.071	[-18.613,8.723]	644	96	75.92	0.478
Wind Speed	11.143	4.270	1.477	[-3.254,5.548]	641	127	94.06	0.610
Humidity	54.637	20.283	15.664	[-8.947,34.037]	644	119	87.64	0.253
Felt Temperature	14.615	11.395	-7.150	[-19.100,9.582]	644	96	73.78	0.515
Air Pressure	1014.751	6.222	5.955	[-0.123,11.336]	644	139	97.49	0.055
<i>Protest Dataset</i>								
Temperature	13.718	11.024	-1.415	[-2.325,0.686]	6849	694	49.75	0.286
Wind Speed	10.687	4.045	0.929	[-0.111,2.302]	6837	1338	87.23	0.075
Humidity	59.206	20.151	4.784	[-0.884,7.207]	6849	605	44.01	0.126
Felt Temperature	12.690	11.560	-1.103	[-2.001,1.084]	6849	677	48.01	0.560
Air Pressure	1015.158	6.374	1.247	[-0.981,2.644]	6849	983	67.22	0.368

RDD results are computed by Stata 17's *rdrobust* package developed by Cattaneo et al. (2019), weighted by a triangular kernel. 95% robust confidence intervals and p-values are clustered at the time to refilempion. Bandwidth represents MSE-optimal bandwidth.

## 5 RDD - Different Bandwidths

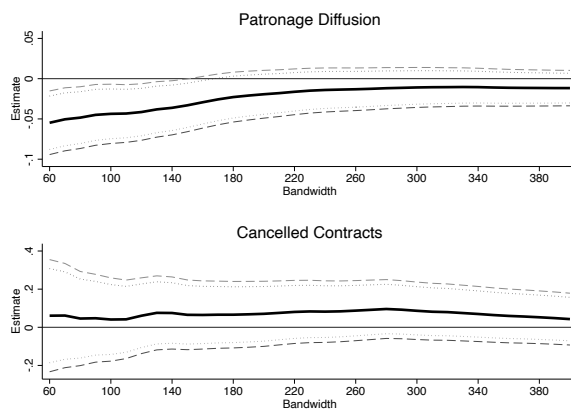
For the main analysis, I utilized the bandwidth level that minimized the asymptotic mean squared error (MSE). However, to verify the stability of the results at varying bandwidth levels, I conducted additional analyses where I incrementally adjusted the bandwidth and estimated the coefficients. The results demonstrated the robustness of the findings across different bandwidth levels. Figure A4 presents these results.

**Figure A4:** RD Results-Differential Bandwidths



(a) Protest Events

(b) Municipal contracts



(c) Government Contracts



## 6 RDD - Different polynomials

For the main analysis, I employed local linear approximations. In this section, I provide results using constant and quadratic polynomials. Table A3 demonstrates that the findings are consistent when using different types of polynomials.

**Table A3:** RDD-Results - Patronage Networks

Outcome	Protest Events		Patronage Diffusion		Cancelled Contracts	
	Municipality Bids		Municipality Bids			
Repression	-0.179	-0.167	0.400	0.471	0.288	0.303
Robust p-value	0.000	0.025	0.011	0.070	0.028	0.072
CI 95%	[-0.269,-0.090]	[-0.313,-0.021]	[0.092,0.708]	[-0.039,0.980]	[0.030,0.546]	[-0.027,0.633]
Observations	6881	6881	1681	1681	707	707
Bandwidth obs.	1768	2351	262	643	255	468
Mean	0.163	0.163	0.370	0.370	1.086	1.086
Effect Mean(%)	-109.82	-102.45	108.11	127.30	26.52	27.90
Bandwidth	46.75	95.98	35.91	109.67	44.65	188.06
Polynomial order	0	2	0	2	0	2

RDD results are computed by Stata 17's *rdrobust* package developed by Cattaneo et al. (2019), weighted by a triangular kernel. 95% robust confidence intervals and p-values are clustered at the time to repression. Bandwidth represents MSE-optimal bandwidth.

## 7 RDD - Donut Hole Analysis

One potential concern with the RD design is that the observed outcomes may be influenced by observations close to the cutoff point, given that the triangular kernel assigns greater weight to these observations. To address this concern, I excluded observations within two or four days before and after the repression period (using the intervals  $[-2,2]$  and  $[-6,6]$ , respectively), and re-estimated the results. Table A4 shows that the main findings from the original analysis are supported by this robustness check.

**Table A4:** RDD-Results - Donuthole Analysis

Outcome:	Municipality Bids					
	Protest		Patronage Diffusion		Cancelled Contracts	
	$ time  > 2$	$ time  > 6$	$ time  > 2$	$ time  > 6$	$ time  > 2$	$ time  > 6$
Repression	-0.276	-0.352	0.516	0.593	0.299	0.365
Robust p-value	0.000	0.000	0.015	0.032	0.036	0.017
CI 95%	[-0.397,-0.155]	[-0.500,-0.204]	[0.102,0.930]	[0.051,1.135]	[0.020,0.578]	[0.064,0.666]
Observations	6856	6811	1680	1678	700	694
Bandwidth obs.	2857	2772	369	377	451	425
Mean	0.163	0.163	0.370	0.370	1.086	1.086
Effect Mean(%)	-169	-216	139	161	28	34
Bandwidth	165.993	163.915	118.014	122.964	229.864	217.913

Note: RDD results are computed by Stata 17's *rdrobust* package developed by Cattaneo et al. (2019), weighted by a triangular kernel. 95% robust confidence intervals and p-values are clustered at the time to repression. Bandwidth represents MSE-optimal bandwidth.

## 8 Time-Trends within Patronage Network Measure

The main analysis utilized a measure called "patronage diffusion," which takes a value of 1 when a firm receives both government and municipal contracts, and a value of 0 when the firm receives either government or municipal contracts alone. The purpose of this measure is to assess the level of connectedness between the municipal and government patronage networks by counting the number of times a firm is connected to both networks.

**Table A5:** Patronage Network Measure

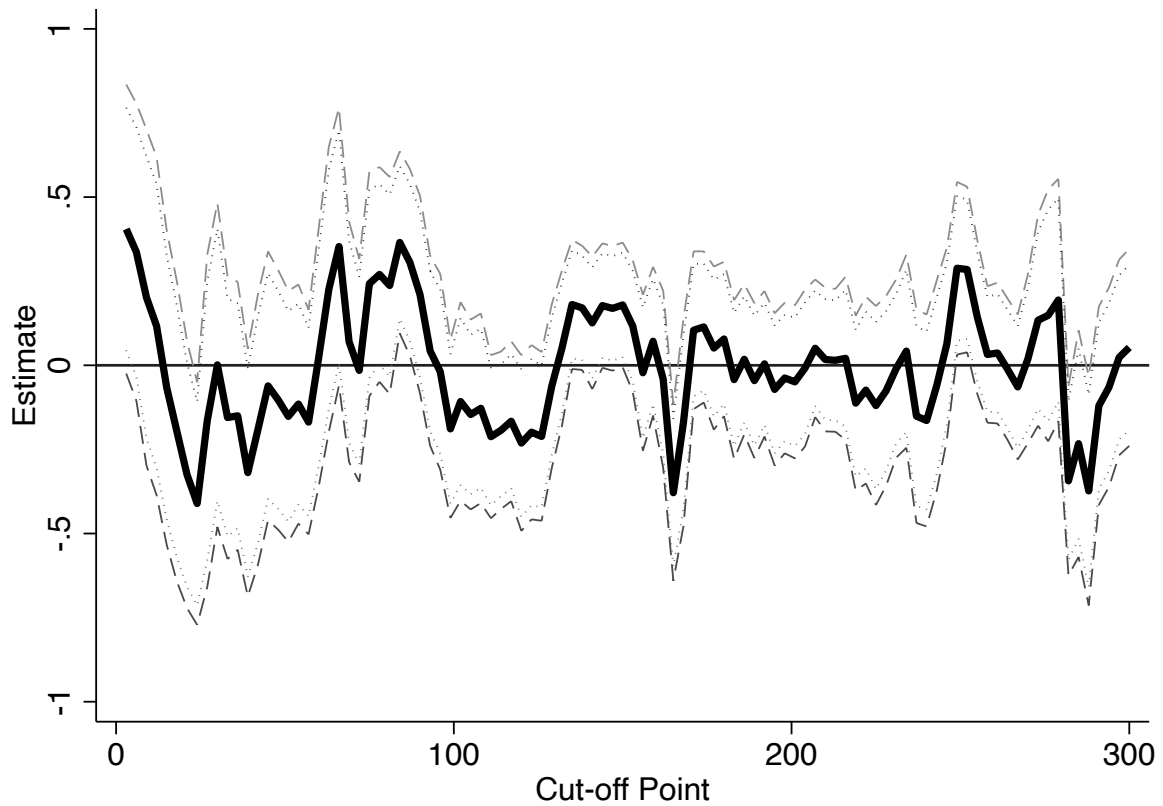
contractor_id	time	municipality	firm_connection
462	-361	0	0
462	-14	0	0
462	392	1	1
579	-288	0	0
579	48	1	1
579	262	1	1
667	-233	1	0
667	-19	0	1
667	57	0	1
667	85	0	1
667	224	0	1
667	313	1	1
667	327	0	1
667	363	0	1

Table A5 displays three actual examples from the dataset. The first column shows the assigned ID number for each firm. The second column represents the running variable, which denotes the number of days before and after the repression. The third column is an indicator variable that takes a value of 1 if a municipality publishes a contract, and 0 if a government agency publishes a contract. The fourth column shows the main outcome of interest, which measures the extent of connectedness between firms and both municipal and government patronage.

As an example, the first entry in the table pertains to firm 462, which received government contracts before the repression and municipal contracts after the repression. Therefore, the

outcome of interest (`firm_connection`) takes a value of 1 when firm 462 receives a contract from the municipality. The second example, firm 579, displays a similar pattern. However, firm 667 received contracts from both the government and the municipality before the repression, resulting in a value of 1 before repression, which was maintained whenever the firm received a contract.

**Figure A5:** RD Results-Pseudo-Cutoff Points



It is apparent that the variable of interest exhibits an upward trend. This trend may pose a challenge given the positive coefficients in the RD design. To address this issue, I employed two methods. First, I estimated the results by gradually increasing the cutoff point. If the positive results observed in the main analysis were solely due to the upward trend in the firm connection variable, we should also observe significant positive values at the pseudo-cutoff points. However, Figure A5 demonstrates that the coefficients behave randomly and do not

exhibit any systematic positive coefficients at the pseudo-cutoff points. While the results in Figure A5 provide some reassurance, the positive trend in the firm connection variable could still be a concern. To address this, I estimated the results with 30-day period fixed effects to account for the time trend inherent in the patronage diffusion measure. This specification can control for the trend and provide more conservative estimates. Table A6 demonstrates that, if anything, the impact of repression becomes even stronger when the time trend is accounted for. These additional tests increase confidence in the main results and suggest that repression has shifted the patronage networks in favor of the autocrat.

**Table A6:** RD Results - Time Trends

Outcome:	Patronage Diffusion			
	Municipality Contracts		Government Contracts	
	(I)	(II)	(I)	(II)
Repression	0.452	0.881	-0.038	-0.015
Robust p-value	0.034	0.000	0.034	0.459
CI 95%	[0.035,0.869]	[0.442,1.320]	[-0.073,-0.003]	[-0.053,0.024]
Observations	1681	1681	19036	19036
Bandwidth obs.	357	398	7507	5247
Mean	0.370	0.370	0.058	0.058
Effect Mean(%)	122	238	-66	-26
Bandwidth	115.617	127.259	140.656	98.338
30-days Period Fixed Effects	X	✓	X	✓

RDD results are computed by Stata 17's *rdrobust* package developed by Cattaneo et al. (2019), weighted by a triangular kernel. 95% robust confidence intervals and p-values are clustered at the time to repression. Bandwidth represents MSE-optimal bandwidth.

## 9 Lagged Models

TWFE models can account for time-invariant confounders, but perform poorly against the time varying variables that might be associated the likelihood of repression. Lagged models, on the other hand, could deal with time-varying confounders. Lagged models take the following form:

$$Y_{it} = \alpha_1 + \delta_i D_{it} + \theta X_{it} + \tau Y_{it-1} + \delta_t + \epsilon_{it} \quad (2)$$

where  $i$  is city or district, and  $t$  is year.  $\delta_t$  is year-fixed effects.  $Y_{it}$  is the outcome of interest.  $Y_{it-1}$  is 1-year lagged outcome variable.  $D_{it}$  is an indicator variable, being 1 if a HDP mayor is replaced by a government trustees and 0 otherwise. I also included standard demographic controls,  $X_{it}$ : the share of youth population, the distribution of education, log population and the share of males. I am interested in estimating  $\delta_i$ .

Angrist and Pischke (2008) proved an interesting relations between TWFE and lagged models. More specifically, in case of mis-specification of the data generating process, the TWFE and lagged models can constitute the upper and lower bounds, respectively. Tables A7 and A8 demonstrate that the results are robust to lagged models.

**Table A7:** Lagged Models - Legibility

Outcome:	Age Distortions		Audited	
	(I)	(II)	(I)	(II)
Repression	-.003	-.002	-.027	-.013
SE	.001	.001	.024	.017
P-Value	.002	.008	.255	.464
CI 95%	[-.005, -.001]	[-.004, -.001]	[-.074, .02]	[-.046, .021]
Mean	0.090	0.090	0.124	0.124
Mean Impact	3	3		10
Control	X	✓	X	✓
N	891	891	8514	8514
Number of Clusters	81	81	955	955
Outcome:	Log(Tax)		Log(Page + 1)	
	(I)	(II)	(I)	(II)
Repression	.048	.062	-.15	-.097
SE	.018	.024	.087	.062
P-Value	.007	.013	.084	.118
CI 95%	[.014, .083]	[.013, .11]	[-.32, .02]	[-.219, .025]
Inv. Log Transformed Impact	5	6	-14	-9
Control	X	✓	X	✓
N	972	972	8514	8514
Number of Clusters	81	81	955	955

Note: 95% robust confidence intervals are clustered at the city level for city-level outcomes and at the district level for district level outcomes.

**Table A8:** Lagged Models - Cooptation

Outcome:	Cooptation			
	Job Placement (Youth)		Net Schooling Rate	
	(I)	(II)	(I)	(II)
Repression	.024	.015	.001	.006
SE	.016	.014	.003	.003
P-Value	.134	.275	.778	.078
CI 95%	[-.008, .056]	[-.013, .043]	[-.005, .006]	[-.001, .013]
Mean	0.509	0.509	0.830	0.830
Mean Impact	5	3	0	1
Control	X	✓	X	✓
N	972	972	567	567
Number of Clusters	81	81	81	81

Note: 95% robust confidence intervals are clustered at the city level for city-level outcomes and at the district level for district level outcomes.

## 10 Semi-Parametric Models

Another concern about the two-way fixed effects models might occur when we assume staggered treatment timing and heterogeneous treatment effects (Callaway and Sant’Anna 2020). Even though I did not adopt a staggered difference in difference estimation, the institutionalization process of autocratic governance in Turkey is likely to lead the impact of repression to be distributed differently across time. Indeed, Figure ?? in the main text displayed that the repression might have differential impacts on the audit decisions. Therefore, assuming homogeneous treatment effects could be problematic. To address this concern, I employed the semi-parametric approach proposed by Callaway and Sant’Anna (2020).

**Table A9:** Semi-Parametric Estimations

Outcome:	Beta	SE	P-Value	CI 95%	N	N of Clusters	Mean	Impact (%)
<i>Legibility</i>								
Age Distortions	-.006	.002	.006	[-.01 , -.002]	972	81	0.090	7
Log(Tax)	.213	.063	.001	[.09 , .335]	1053	81	10.373	24
Audited	-.059	.026	.024	[-.109 , -.008]	8595	955	0.124	48
Log(Page+1)	-.286	.098	.004	[-.478 , -.094]	8595	955	0.451	25
<i>Cooptation</i>								
Job Placement (Youth)	.036	.03	.227	[-.022 , .094]	1053	81	0.509	7
Net Schooling Rate (Secondary Education)	.04	.009	<.001	[.023 , .057]	648	81	0.830	5

CS estimates are computed by Stata 17’s *csdid* package, developed by Callaway and Sant’Anna (2020). 95% robust confidence intervals are clustered at the city level. For log-transformed variables, effects are calculated through inverse-log transformation. For others, effects represent mean changes.

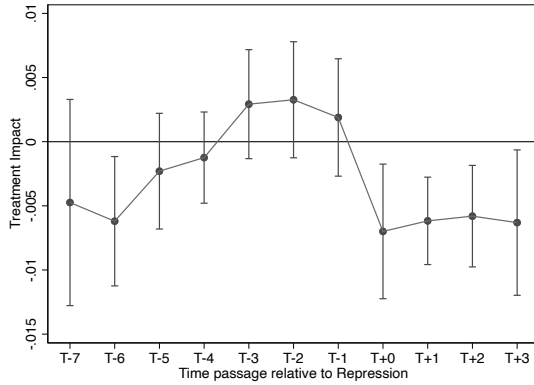
Table A9 shows that the main results are robust to the adoption of the semi-parametric approach proposed by Callaway and Sant’Anna (2020), which accounts for potential staggered treatment timing and heterogeneous treatment effects. While the estimated impact of repression on the share of youth population in the job placements is somewhat noisy, its coefficients and mean impacts are generally consistent with those reported in the main text.

Figures A6 and A7 explore the impact of repression on outcomes of interest across time. Firstly, the parallel trends assumption appears to hold for all variables, except for the legibility measure, which is consistent with the findings in Table 4.

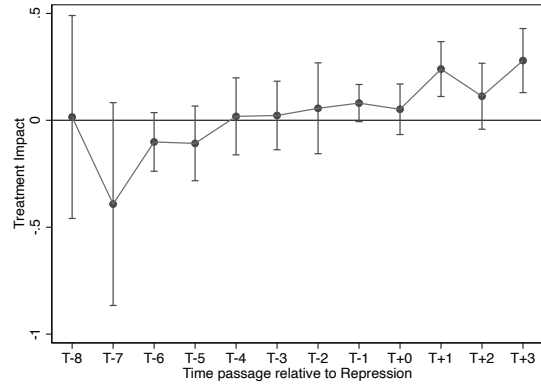
The upper left panel in Figure A7 shows that the impact of repression on job placement of the youth population becomes significant for some years, indicating that even though the



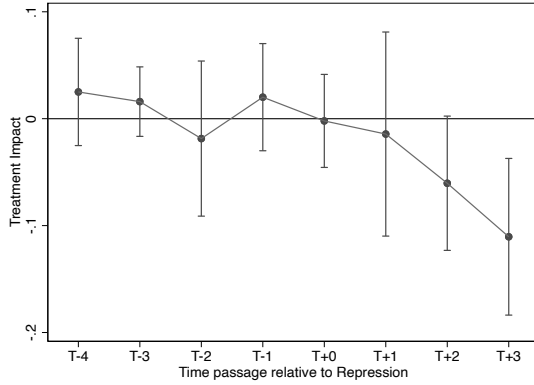
**Figure A6:** State Capacity - Dynamic Dif-in-Diff



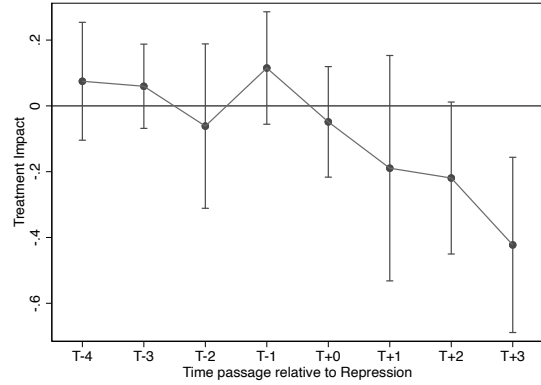
(a) Age Distortions



(b) Log(Tax)



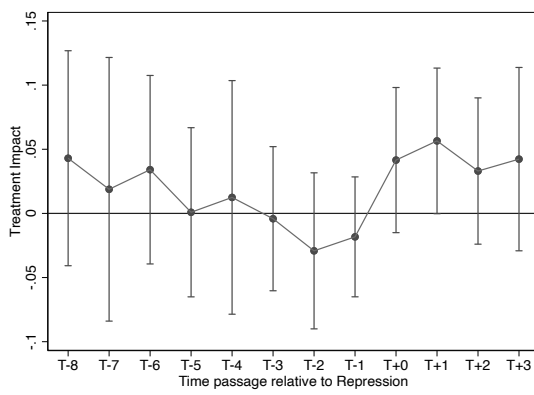
(c) Audit-District



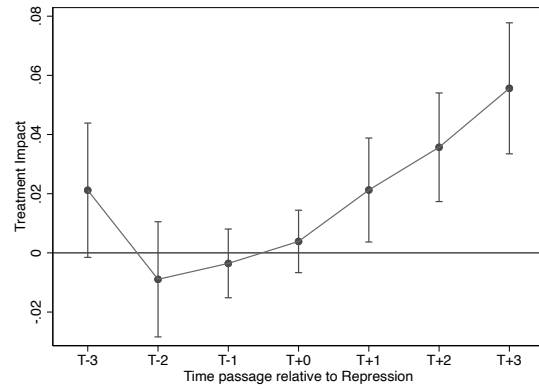
(d) Log(Pages + 1) - District

results are statistically non-significant on average, they do become significant for certain years. It is worth noting that the parallel trends assumption is violated for net schooling rate for secondary education three years before the treatment. However, in the next section, I demonstrate that the results still hold when a synthetic difference-in-differences method is used.

**Figure A7: Cooptation - Dynamic Dif-in-Diff**



**(a) Job Placement (Youth)**



**(b) Net Schooling Rate (Secondary Education)**

## 11 Synthetic Difference in Difference Results

Restive regions by definition might differ from other regions in a country. Even though TWFE models can deal with time consistent differences between restive and other regions, there might be differential trends across regions. Even though the trends plot I presented so far do not tend to raise red flags about the parallel trends assumption, I adopted synthetic difference in difference method to more systematically account for the possibility of the violation of parallel trends assumption (Arkhangelsky et al., 2021). This method assigns differential weights to control regions in a way that the outcomes of the control regions are more similar to the outcomes of the treatment regions. "The use of weights in the SDID estimator effectively makes the two-way fixed effect regression “local,” in that it emphasizes (puts more weight on) units that on average are similar in terms of their past to the target (treated) units, and it emphasizes periods that are on average similar to the target (treated) periods." (Arkhangelsky et al. 2021 p.4090) Table A10 demonstrates that the results are compatible with the main text.

**Table A10:** Synthetic Difference in Difference Results

Outcome	Repression	SE	95 CI	90 CI
Age Distortions	-0.004	0.001	[-0.007,-0.001]	[-0.006,-0.001]
Audited	-0.036	0.022	[-0.078,0.007]	[-0.072,0]
Log(Tax)	0.189	0.025	[0.14,0.238]	[0.148,0.23]
Log(Page+1)	-0.163	0.08	[-0.32,-0.006]	[-0.295,-0.031]
Job Placement (Youth)	0.049	0.022	[0.007,0.091]	[0.013,0.085]
Net Schooling Rate	0.021	0.006	[0.009,0.034]	[0.011,0.032]

## 12 Youth Unemployment

To measure whether authoritarian leaders target the youth population to coopt after repression, I analyzed the share of the youth in job placements conducted by Turkish Employment Agency (ISKUR). It must be noted that only those individuals who are formally employed in the economy can benefit from the opportunities provided by this Agency, whereas those employed in the informal sector do not have access to such opportunities. In the main text, I demonstrated that repression increases the share of youth within job placements conducted, suggesting that authoritarian leaders might target the youth population for cooptation.

Even though this measure could deal with different trends across regions, there might be other factors that influence the capacity of Turkish Employment to place the youth population into jobs. For instance, if the repressed municipalities are fused with businesses that require youth employment, then the share of the youth in job placements might increase independent of repression. However, there is no evidence of such trends. Second, these results might reflect higher levels of unemployment among the youth population. In Table A11, I demonstrated that if anything the share of youth in whole unemployed decreased after the repression. Even though this result might reflect disproportionate job placements favoring the youth, we can not argue that the main drivers of the results in the main text stems from higher levels of youth unemployment.

**Table A11:** Diff-in-Diff Results - Youth Unemployment

Outcome:	Beta	SE	P-Value	CI 95%	N	N of Clusters	Mean	Mean Impact (%)	PT Test
Youth Unemployment	-.034	.012	.008	[-.058 , -.009]	810	81	0.458	7	.008

Notes: Diff-in-diff results are computed by Stata 17's *didregress* package. 95% robust confidence intervals are clustered at the city level.

## 13 Legibility Measure

The concept of legibility, referring to the level of state capacity to observe and control its society, is abstract and cannot be directly tested empirically. As a result, researchers often rely on proxies to measure the level of legibility. In line with recent studies (Lee and Zhang 2017), I developed a proxy measure based on age distortions in new birth entries. While Lee and Zhang used the Myers score, which assesses the accuracy of age data reported in national population censuses, my measure is based on a common practice in Turkey where citizens are required to notify population centers of new births. However, due to physical barriers such as living in mountainous areas, or logistical obstacles such as not obtaining necessary documents, some citizens may be unable to notify the state of newborns in a timely manner. In such cases, population centers register these infants as born on January 1st. Restive regions, particularly those with high Kurdish populations, have been known to have a higher number of births registered on January 1st.<sup>13</sup>

In 2018, Turkey implemented a new policy allowing individuals to pay to fulfill their mandatory military service. Initially, this policy applied to those born on or before December 30, 1993. However, due to concerns of unfair treatment for those born earlier but registered in the system as born on January 1, 1994, the officials expanded the birth-date threshold to January 1, 1994.<sup>14</sup> While this practice generated concerns regarding census accuracy in Kurdish regions during the 1960s and 1970s, recent improvements in state capacity and the easing of birth registration processes have mostly eliminated the difference between Kurdish regions and other developed parts of the country.<sup>15</sup>

I created a proxy variable for state legibility, which measures the density of newborns registered as born on January 1st compared to all newborns. Although using only those born on January 1st would be more precise, the Turkish Statistical Agency only releases

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<sup>13</sup><https://www.rudaw.net/turkish/kurdistan/02012021>

<sup>14</sup><http://gorunumgazetesi.com.tr/haber/53773/bedelliye-1-ocak-1994-dogumlular-da-dahil.html>

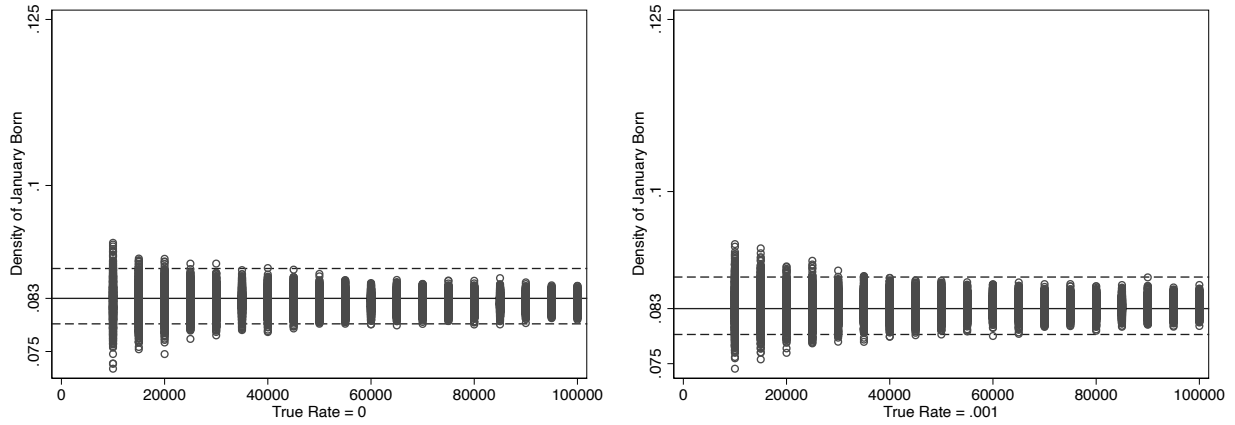
<sup>15</sup><https://www.cumhuriyet.com.tr/haber/binlerce-kisinin-1-ocakta-dogmasi-tesaduf-degil-309688>

monthly data on newborns. The main assumption behind this proxy is that deviations in the proportion of January 1st births can be used to infer the level of legibility. To test this assumption, I conducted a simulation to identify the conditions under which this measure would be a valid proxy for legibility. The simulation aimed to determine the boundary conditions that would produce coefficients ranging from -0.002 to -0.007, which were observed in the models. The goal was to identify the cases in which the observed coefficients would match the actual level of legibility with a 5 percent tolerance rate. This exercise helped to refine the interpretation of the coefficients in the models. The simulation has the following procedure:

1. A distortion (legibility) rate is chosen across 4 values (0, 0.001, 0.005, 0.015).
2. Individuals are assigned as born on January 1st based on this distortion rate across different population sizes. For instance, if population size is 5000 and the distortion rate is 0.005, then 25 individuals ( $5000 * 0.005$ ) born in January the first. Other individuals are assigned into birth dates randomly.
3. The density of those born in January is calculated.
4. This procedure is repeated by 1000 times.

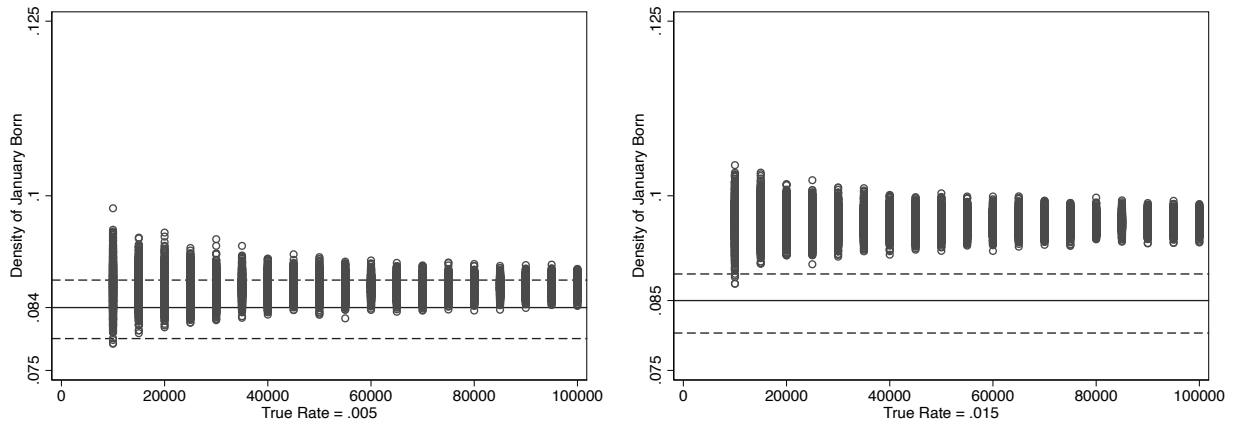
Figure A8 displays the simulation results for different legibility rates. The results show that the proxy performs better as population density increases. However, the proxy converges to its mean at a population level of 74412. Additionally, there is a scaling up effect of legibility where small changes in legibility can lead to a significant increase in the share of those born in January. This effect can inflate coefficients and generate pseudo-significant results. Therefore, small statistically significant coefficients are more likely to reflect the true legibility rate than larger coefficients. For example, a true rate of 0.015 might generate results that are 5 percent above the mean level. Therefore, large differences in this measure between two regions do not necessarily indicate large differences in the actual level of legibility. However,

**Figure A8:** Simulation Results - Proxy of Legibility



(a) True Rate = 0

(b) True Rate = 0.001



(c) True Rate = 0.005

(d) True Rate = 0.015

smaller but significant differences are more credible. In this analysis, the coefficient of the legibility proxy ranges from -0.002 to -0.007, which are relatively small but statistically significant coefficients.

### **Violation in the Parallel Trends Assumption**

Figure 4 in the main text exhibits that the parallel trends assumption is violated for the age distortions variable. Even though the parallel trends were preserved in the five years before repression, I applied three ways to address the violation in the parallel trends assumption:

1. Lagged model estimates (given in Table A7)

2. Synthetic difference in difference (given in Table A10)

3. Relaxing Parallel Trends Assumption

To relax the parallel trends assumption, I let the trends vary across Kurdish and other regions by adding an interaction term between an indicator of Kurdish regions (20 cities in total) and year dummies. Table A12 presents that the results are also compatible with the main text in this estimation strategy. Also, parallel trends seem to hold in this estimation.

**Table A12:** Diff-in-Diff Results - Legibility by Relaxing Parallel Trends Assumption

Outcome:	Beta	SE	P-Value	CI 95%	N	N of Clusters	Mean	Mean Impact (%)	PT Test
Age Distortions	-.003	.002	.049	[-.00632 , -.00001]	972	81	0.090	4	.124

Notes: Diff-in-diff results are computed by Stata 17's *didregress* package. 95% robust confidence intervals are clustered at the city level.