Between Electoral Cooptation and Violence: Managing Competitive Authoritarian Elections

Ahmed Ezzeldin Mohamed

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Abstract

Autocratic elections are often marred with systematic intimidation and violence towards voters and candidates. When do authoritarian regimes resort to violent electoral strategies? I argue that electoral violence acts as a risk-management strategy in competitive authoritarian elections where: (a) the regime's capacity for coopting competitors, local elites, and voters is low, and (b) the expected political cost of electoral violence is low. I test these propositions by explaining the subnational distribution of electoral violence during the most violent election in Mubarak's Egypt (1981-2011): the 2005 Parliamentary Election. The results indicate that electoral violence is higher in districts where: the regime's capacity for coopting local elites and competitors is low, clientelistic strategies are costlier and less effective, and citizens' capacity for non-electoral mobilization is low. The conclusions provide lessons for efforts to contain electoral violence in less democratic contexts.

Elections perform critical functions for autocratic survival by providing information to the authoritarian regime and legitimizing its rule. Electoral competitiveness increases the returns from autocratic elections, but also the political risks associated with them (Knutsen, Nygård and Wig, 2017). To hedge against potential risks, authoritarian regimes might rely on cooptive electoral strategies to buy elites' and voters' support. Violence and intimidation offer another option to obstruct the opposition from reaching voters and translating their support into victories. Unlike clientelistic electoral strategies that might be perceived by voters and elites as "the way of doing business" in autocracies, violent electoral strategies could lead to the loss of lives and destruction of property, fueling voters' grievances and potentially de-legitimizing the electoral process. Given that, when do authoritarian regimes resort to violent electoral strategies? Why do some electoral contests witness more violence than others?

I approach these questions in the case of Mubarak's Egypt (1981-2011); an authoritarian regime where the ruling National Democratic Party (NDP) exercised hegemony over Egypt's political life for three decades. Specifically, this paper focuses on the most competitive and violent electoral contest during Mubarak's reign: the parliamentary election of 2005. In response to domestic and international pressures, Mubarak's regime created more room for contesting the NDP's hegemony, leading the main opposition group -the Muslim Brotherhood (MB)- to secure its largest share of the parliament in its history at the time. Nevertheless, the ruling NDP leveraged its political impunity and control of the state to benefit from violent electoral strategies in tipping plenty of electoral contests to its side. This increased violence during the election, but disproportionately across districts.

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Explaining this subnational variation in electoral violence, I argue that the level of electoral violence in autocratic elections is governed by the regime's assessment of the relative potential costs and benefits associated with inclusive (i.e, cooptive) and exclusive electoral strategies to manage the risks from holding a competitive election on the regime's political control. Since violent electoral strategies involve higher political costs relative to cooptive strategies, the regime should resort to them only when the latter is less effective. Following that same logic, the regime should also limit the use of violent electoral strategies, if it expects them to result in politically costly reactions. Thus, electoral violence should increase in contexts where: (1) the regime's capacity for coopting competitors, local elites, and voters is low, and (2) the expected political cost of electoral violence is low. Electoral violence, therefore, is a calculated response to the low prospects of cooptation on the regime's side.

Empirically, I draw on quantitative and qualitative data to test this argument in the context of the 2005 Egyptian Parliamentary Election, leading to three key results. First, violence decreases where the regime's capacity for coopting local elites and competitors is higher. Where the regime manages to coopt local elites to run under the NDP's label or faces competition from non-ideological (and rent-seeking) elites with a higher probability of post-election cooptation, elections are more peaceful. On the contrary, where ideological opponents (the MB) to the regime are competing, violence rises. Second, violence increases in districts where clientelistic strategies are less effective for the regime's mobilization. These are mainly urban areas, where the regime cannot fully rely on patronage politics and kinship loyalties to mobilize voters similar to rural districts. Meanwhile, districts where mass vote-buying is observed experience less violence. Third, districts with a high capacity for non-electoral mobilization witness lower levels of violence, suggesting that the regime's expectation

about the political cost of violence tames its reliance on intimidation. Therefore, the viability of cooptive strategies and the political cost of violence explain the phenomenon of electoral violence in less democratic settings.

This paper contributes to the literature on electoral manipulation in autocracies by approaching the relatively understudied issue of electoral violence. Several cross-region comparisons of the prevalence of electoral violence place the Middle East and North Africa on par with sub-Saharan Africa, post-communist states, and Latin American countries (Birch, 2020, 20). However, the systematic study of electoral violence in MENA countries has not received significant attention. The Egyptian case expands the regional scope of the existing literature and addresses the paucity of subnational analyses -particularly beyond sub-Saharan Africa- of electoral violence (see: Birch, Daxecker and Höglund, 2020, 7).

The findings conform to scholarly accounts linking electoral violence to elections' competitiveness (e.g., Asunka et al., 2019, Taylor, Pevehouse and Straus, 2017, Wilkinson, 2006, Salehyan and Linebarger, 2015, Fjelde and Höglund, 2016). However, it refines this understanding by posing that different forms of electoral competition could lead to divergent levels of violence. This is because the incumbent regime's expectation of coopting challengers is what defines the relationship between competitiveness and violence. In fact, it is in the regime's interest to guarantee peaceful competition between its candidates and challengers who can be easily coopted into its institutions later to maximize its informational returns from holding elections. Competition with ideological opponents carries no such prospect for cooptation, hence induces violence.

This article also contributes to a growing literature on the strategic use of both violence and clientelism. It supports accounts showing that violent and clientelistic electoral strategies have different functions and target different constituents (e.g., Collier and Vicente, 2014, Bratton, 2008, Gonzalez-Ocantos et al., 2020, Rauschenbach and Paula, 2019, Gutiérrez-Romero, 2014). More importantly, it underscores that the cost-benefit calculus of clientelism shapes the incentives of political actors to deploy violent electoral strategies, rendering electoral times a season of terror in some districts and perks in others.

Finally, on the issue of containing electoral violence, scholars have highlighted the critical role of international pressures and election monitors (Birch and Muchlinski, 2018, Asunka et al., 2019). Our evidence adds citizens' non-electoral mobilization as a potential constraint on politicians' use of violence in elections, calling for more attention to bottom-up accountability mechanisms in less democratic settings.

1   The Argument

1.1   Theoretical Framework

Elections serve a multi-faceted informational role for authoritarian regimes. First, they allow the regime to assess the strength of opposition groups and facilitate the allocation of repression and spoils (Magaloni, 2006, Blaydes, 2010). Second, they aid the regime in identifying politically influential local elites. These could be targets for cooptation into the regime's political institutions (Magaloni, 2006, Blaydes, 2010, Lust-Okar, 2006). Third, electoral competition enables the regime to evaluate the effectiveness of its political strategies (e.g., clientelism) in generating political support. It also helps define constituents where repressive strategies might be opti-

mal to contain political threats. Furthermore, the regime's electoral victories could legitimize its rule and project an image of popularity (Schedler, 2002, Levitsky and Way, 2010).

More competitive elections are more effective in delivering these goals. In a non-competitive and predetermined election, the opposition might have no incentives to seriously participate. The relative influence of local leaders could be hard to detect. Voters might disengage. And, the regime's electoral victories would be less credible. Following that logic, electoral fraud should limit autocrats' ability to benefit from elections to coopt contenders, legitimize the regime, and gather information. Additionally, ballot-box fraud is risky, as it can agitate the opposition and raise democratization demands (Tucker, 2007, Magaloni, 2010, Lankina and Skovoroda, 2017). Accordingly, authoritarian regimes might not only have incentives to hold elections, but also permit a fair degree of competitiveness.

However, competitive elections could jeopardize the regime's stability. Political openness, even if imperfect, alleviates barriers to coordination and collective action for the opposition. Fair elections might reveal the regime's unpopularity. These risks increase with the competitiveness of the election. Indeed, Knutsen, Nygård and Wig (2017) find that autocratic elections are associated with a higher probability of autocratic breakdown in the short-term, but have a stabilizing effect once the regime survives this immediate post-election turbulence. So, autocratic regimes holding competitive elections as a long-term political survival strategy need to manage the risks associated with such a strategy in the short term.

This dilemma of authoritarian elections guides our understanding of the phenomenon

of electoral violence and intimidation in autocracies. There exist two understandings of electoral intimidation in the literature. On one hand, electoral intimidation could be a form of clientelism that employs negative inducements -mostly relying on economic rather than violent physical threats- for mobilization (Mares and Young, 2016, Frye, Reuter and Szakonyi, 2019). On the other hand, electoral intimidation can be an exclusionary and demobilizing strategy, for example, by attacking voters and preventing them from casting their ballots. This type of electoral intimidation is more violent than economic intimidation and subsequently is the focus of this paper. Hence, I use electoral intimidation and violence to refer to an exclusionary form of electoral manipulation entailing coercive and disruptive actions in connection to the electoral process and directed towards electoral actors and objects.[1] What explains electoral violence and intimidation in autocratic elections? Why do some districts suffer more electoral violence than others?

Before laying out my argument, it is important to state its underlying assumptions. First, it presupposes negligible variation in the supply of electoral violence at the local level. Incentives of local actors could determine the supply of economic intimidation (Mares, 2015). More violent forms of intimidation, however, require the involvement of state actors directly by providing intimidation via security forces (e.g., the police), or indirectly by acting passively and allowing violence by the regime's favorites. Unlike economic intimidation, electoral violence is publicly visible, and hence less likely to be supplied without the state's partial or full involvement.[2] Second, the regime's opponents would suffer a disadvantage in using violence. This is particularly true in autocracies, where the state's security appara-

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[1]This working definition resembles others in the literature (e.g., Birch, 2020, 8).

[2]Cross-national evidence indicates that electoral violence in autocracies is primarily led by state actors (e.g., Birch, 2020, 2).

tus is often biased against opposition candidates. This raises the opposition's cost of engaging in violence.[3] Given these assumptions, I take that electoral violence would be primarily shaped by the authoritarian regime's demand.[4]

1.2   Theoretical Predictions

I argue that electoral violence acts as a risk-management strategy in competitive authoritarian elections where: (a) the regime's capacity for coopting competitors, local political elites, and voters is low, and (b) the expected political cost of violence is low. Because violent electoral strategies are politically costlier relative to cooptive tactics, they should constitute a reaction to a lower probability of cooptation. As the regime's capacity and expectations to coopt potential competitors and voters improve, the opportunity cost of violent electoral strategies increases. The regime should then shun violent electoral strategies and limit their use by its affiliates to ensure electoral competitiveness and maximize its returns from holding elections. Similar to how the political opportunity cost of electoral intimidation shapes the regime's incentives to tolerate such a strategy, the expected political cost of electoral violence should also tame the regime's utilization of violent electoral tactics.

Electoral competitiveness and the threat of the opposition are widely documented explanations of electoral violence (Collier and Vicente, 2012, Wilkinson, 2006, Hafner-Burton, Hyde and Jablonski, 2014, Taylor, Pevehouse and Straus, 2017). The previously described dilemma of autocratic elections suggests that the regime might

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[3]These assumptions align with works showing that incumbents enjoy an advantage in the production of electoral violence (e.g., Taylor, Pevehouse and Straus, 2017, Straus, 2012, Carey, Mitchell and Lowe, 2013).

[4]In this study's context, violence does not involve politically motivated paramilitary groups, militias, or organized crime (e.g., mafia or drug cartels). These actors might affect the supply of electoral violence in other settings.

want to maintain serious competition and limit electoral intimidation to maximize its returns from holding elections, but also hedge against losing to competitors that might challenge its political control. This trade-off should lead us to refine our expectations on the role of electoral competitiveness in explaining electoral violence. It requires a distinction between two forms of competitors facing the regime, pending their probability of cooptation.

The first challenge comes from non-ideological local political elites. In many autocratic regimes and contexts with weak party systems, local elites might pursue political careers without a specific ideological agenda, but for rent-seeking opportunities (Blaydes, 2010). These elites often rely on their wealth, kinship, and charisma to cultivate votes for themselves or back certain candidates in exchange for material favors, potentially competing with the regime's candidates. However, their rent-seeking goals make it easier for the regime to coopt them during or after the election through political and economic perks. Even more, it should be in the regime's interest to maintain fair competition between such elites and the regime's candidates to learn about the strengths of various local players, and subsequently, enhance its electoral performance in later contests by coopting the winners. Because the regime's expected capacity for coopting these elites is high, it should limit the use of violence and maintain enough competitiveness for the election to be informative where they compete.

Although the participation of the ideological opposition adds to the elections' credibility and informational returns, it creates serious risks. A high degree of ideological polarization between the regime and its opponents inhibits the regime from buying off its ideological challengers and their supporters (Chaturvedi, 2005). And, if ideo-

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logical opponents were to accumulate enough electoral victories, they could broaden their influence on policy-making and threaten the regime's survival. Therefore, the regime should have incentives to encourage its ideological opponents' electoral participation, but also hinder their success. Electoral violence can serve the regime's goals by obstructing the opposition's campaigning and its supporters' electoral mobilization, leading to over-representing the regime's supporters in the polls (Klopp, 2001, Gutiérrez-Romero, 2014, Rauschenbach and Paula, 2019).

This distinction suggests a refined understanding of the role of competition in authoritarian elections, by conditioning such role on the potential cooptation of elites and competitors. Hence, hypothesis (1) states:

Hypothesis (1): In any given district, electoral violence increases as the regime's capacity for coopting local political elites and challengers decreases.

Similarly, the regime's expectations about the effectiveness of its candidates' electoral strategies in coopting voters should shape the level of electoral violence. Clientelism and patronage are commonly used strategies to mobilize voters and buy their support. Compared to exclusionary forms of electoral manipulation such as violence, the provision of positive inducements is less likely to get detected by large factions of voters, cause loss of lives and property, or agitate the public. Therefore, clientelism should precede intimidation on the menu of electoral manipulation strategies (Frye, Reuter and Szakonyi, 2019). The cost-benefit calculus of clientelism should then determine the regime's demand for electoral violence.

The regime's actors should resort to electoral violence to control the electoral par-

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ticipation of non-supporters when clientelism is less efficient.[5] Several conditions could lower the returns from clientelism and render it less favorable relative to violent electoral strategies. Better economic conditions increase the price of the vote. Empirical evidence suggests that clientelistic strategies are more effective among the poor, but less so among better-off voters (e.g., Stokes et al., 2013, Kitschelt and Wilkinson, 2007). A higher cost of monitoring voters' electoral behavior would also render clientelism less efficient. This cost might be shaped by the rural-urban nature of districts. In rural areas, the regime can rely on local leaders and kinship networks to deliver block votes in exchange for services, because monitoring behavior and activating norms of reciprocity is easier in closely-knit communities. However, monitoring becomes costlier and less feasible in urban areas, where patron-client relationships are less likely to rely on loyalty and kinship ties (Kitschelt, 2000). These rationales shape our second hypothesis:

Hypothesis (2): Electoral violence would be higher in districts where clientelistic strategies are less efficient and costlier.

These two conditions define the regime's incentives to engage in electoral intimidation and violence. However, violent strategies are risky and potentially costly, especially since electoral violence could be easily detected by electoral monitors and voters. Electoral violence could lead to the accumulation of voters' grievances against the regime (Bratton, 2008, Rosenzweig, 2021, Smidt, 2016). Fueled by their agitation, voters might participate in anti-regime collective action, eroding the elections' credibility and threatening the regime's political survival (Staniland, 2014,

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[5]This assumes that the authoritarian regime is rather unpopular. Allowing for competitive elections coupled with higher turnout and lower ability to buy votes could turn electoral outcomes against the regime.

Smidt, 2016). The regime's calculus, therefore, should take into account the potential political costs of violent electoral strategies. For example, the regime might tame its repressive strategies in contexts where voters enjoy more capacity for non-electoral mobilization (e.g., protest). This could maximize the regime's returns from its portfolio of electoral strategies by minimizing the risks associated with violent electoral tactics.[6]

Hypothesis (3): Electoral violence would be lower in districts where it is politically costlier (i.e., where voters have more capacity for non-electoral mobilization).

Next is to situate these predictions in the Egyptian case.

2 The 2005 Egyptian Parliamentary Election

In September of 2005, Egypt held its first multi-candidate presidential election, demarcating a significant turn in Egypt's politics. Domestically, political parties, civil society groups, and the Muslim Brotherhood (MB) were pushing for more political reforms to contest the ruling NDP's political hegemony. International pressures, mainly from the US, led the regime to implement liberalizing political reforms. Hence, when Egyptian voters went to the polls to elect their parliamentary representatives in November of 2005, hopes for a competitive and fair election were high.

Within the ruling NDP, divisions over the party's political strategies were growing between two factions. The old guard preferred experienced candidates and old par-

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[6]The presence of election monitors could also deter the incumbent from using violent electoral strategies. Here, I only focus on the mobilization potential as the judiciary monitored elections in all districts in Egypt's 2005 election.

liamentarians to maintain the party's electoral hegemony. The new guard doubted this strategy, given the declining popularity of the NDP.[7] They sought to expand the party's support base by coopting and nominating new faces. This internal conflict on whom the NDP should nominate in the election led many members to dissent and run as independent candidates to prove their electoral value to the party. The 2005 parliamentary election presented an opportunity for the two factions to adjudicate between these two competing views, learn about the party's strengths and weaknesses, and identify who the party needs to expand its support. The election, therefore, had a critical informational value for the NDP that required a considerable degree of competitiveness.

Indeed, the 2005 parliamentary election proved to be the most competitive in Mubarak's era. The election took place in 222 districts over three subsequent phases. In each phase, a set of governorates elected their districts' representatives over two rounds.[8] The ruling NDP incurred heavy losses. Only 141 candidates running on its ticket made it to the parliament, securing about 33 percent of all contested seats.[9] Meanwhile, the main political opposition, the Muslim Brotherhood, made the biggest gain in their history by winning 88 seats.[10] Other opposition parties, however, won only 9 seats (2.5 percent), reflecting their limited popularity. Independent candidates won 195 seats. Yet, 170 of them were former members of the NDP, who were then coopted again into the party after the election, bringing the NDP's share of

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[7]The new guard was mostly constituted of business elites and led by Mubarak's son, Gamal Mubarak.

[8]The governorate is the main subnational administrative unit. Each includes a set of districts. Governors are not elected, but appointed by the president.

[9]There were two contested seats for each district. Yet, 12 seats remained vacant after the election with no declared winner.

[10]Since the MB was banned from establishing a political party, MB candidates ran officially as independents. Yet, they campaigned under the slogan of the group and publicly distinguished themselves from other independents. Note that the MB competed in only 132 districts.

the parliament to 72 percent (Zahran, 2006, 178).[11]

Incidents of electoral fraud were particularly limited in 2005 (Brancati and Penn, 2022). Election monitoring groups reported serious fraud in only 10 districts (Abdel Magid, 2005, 13). This is due to the enforcement of the judiciary's supervision over the election. Judges remained impartial throughout the process and many openly opposed attempts of electoral manipulation. Domestic civil society organizations were also allowed to monitor the election for the first time. These factors contributed to limiting violations inside polling stations, yet they were rampant outside.

The 2005 election was the most violent under Mubarak's rule. 12 citizens were killed and hundreds were injured or arrested. As one of the Muslim Brotherhood's leaders described it, "they [the regime] turned the polling stations into a battlefield" (Allam, 2005). Reports by different electoral observers provide detailed accounts of the violent nature of this election. Hired thugs attacked voters with swords. Public and private properties were destroyed. Few candidates were subject to kidnapping and assassination attempts. The police turned a blind eye to most of these violations since they often involved candidates favorable to the regime.[12] Even more, in many districts, security forces actively prevented voters from reaching the polls by blocking roads, firing teargas, and making random arrests. This significant level of violence became a hallmark of the 2005 election.[13]

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[11]This is a common practice in the NDP's politics. Independent candidates are left to compete with the party's candidates, but most independent winners are later coopted into the NDP. Independents tend to have weak political inclinations. They compete to land rent-seeking opportunities by securing parliamentary seats and membership in the ruling party.

[12]In some cases, violence involved supporters of the Islamist opposition. However, in such accounts, the opposition tends to react to violent threats by the regime's favorites or push against unfair treatment by security forces.

[13]For more detailed accounts, see Rabi'a (2006) and Abdel Magid (2005).

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3 Empirical Analysis

3.1 Data

I test my hypotheses by studying the subnational predictors of electoral violence. The main outcome measures the total number of acts of electoral violence reported on election day in the district. It includes violence against candidates (i.e., murder, threats of murder, kidnapping, and physical attacks), hindering electoral campaigning for certain candidates, destruction of campaigning material, the intervention of security forces in favor of particular candidates (e.g., preventing opposition voters from casting their ballot), blockades of polling stations by security forces, physical intimidation of voters, and disruptive acts around polling stations (such as sieges of polling stations and destruction of ballot boxes).

The data for this variable are obtained from Abu-Taleb (2006), who collects reports on the incidence of electoral violence in the 2005 election from top Egyptian newspapers (al-Ahram, al-Wafd, al-Masry al-Youm, Nahdet Masr, al-A'sbo'o, al-Dostor, al-'Arabi) and reports by local NGOs that monitored the election (such as: Cairo Institute for Human Rights Studies, the Egyptian Organization for Human Rights, the Egyptian Center for Human Rights, Sawasia Center for Human Rights, the Egyptian Independent Committee for Monitoring the Elections, EACPE, and others).[14] Each action is a reported incident of violence/intimidation in a given geographical area within the boundaries of the electoral district. Note that this measure counts separate reports of violent incidents, not necessarily the number of affected polling stations. Though some actions might affect voting in multiple polling stations within the district due to stations' physical proximity, data limi-

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[14]This data collection process is part of al-Ahram Center for Political and Strategic Studies', one of Egypt's most distinguished think tanks, analysis of the election.

tations render knowing all affected polling stations infeasible. Hence, the outcome focuses on reports of the occurrence of violent actions, regardless of their impact on the electoral process.[15] The diversity of sources used to construct this data reduces measurement concerns, especially since local NGOs that monitored the election deployed observers in both rural and urban districts across the country.

The dataset includes 2170 acts of electoral violence and intimidation on election day. Around 97 percent of all reported actions were targeted at voters. About a quarter involved police forces as the main perpetrator. The majority of acts were carried out by thugs (often with unknown affiliations) and candidates' supporters. However, according to most monitoring reports, the police -deliberately- did not intervene to contain the violence, indirectly contributing to its escalation.[16]
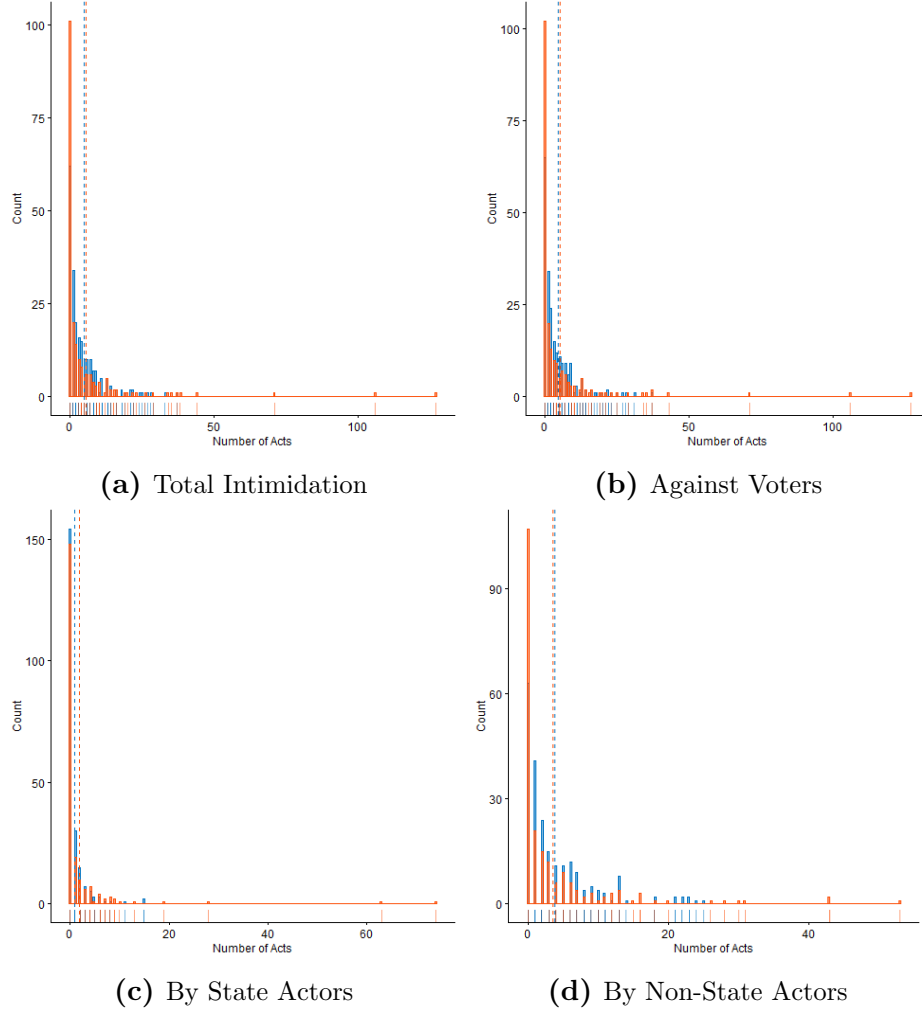
The first and runoff rounds of the election witnessed comparable levels of violence.[17] The mean district experienced about 5 incidents of violence in any given round, while the median district suffered two violent acts in the first round versus one incident in the runoff, reflecting the outcome's skewness. Figure 1 shows the distribution of the overall level of electoral violence and its subcategories for the two electoral rounds, illustrating the relative stability of violence levels over the two rounds.

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[15]For example, the police might block a street leading to one or more polling stations. This is counted as one act because it is not clear how many stations were affected and the perpetrator remains the same actor (i.e., a police unit).

[16]For reference, Abdel Magid (2005) and Abu-Taleb (2006) provide detailed accounts from election monitoring reports on the police's passivity towards electoral violence. Even more, some reports suggest that thugs might have been commissioned by security forces in some districts. If we account for this indirect role of security forces, the scope of the state's involvement should be much higher than a quarter of all incidents. This also supports our theoretical assumption that most violence was committed by the regime's affiliates.

[17]Note that 14 districts did not have runoff rounds, so the rate of violence slightly increased in the runoff stage relative to the number of contested seats.

Figure 1 – Distribution of Electoral Violence and Intimidation by its Different Subcategories for the First (in Blue) and Runoff (in Brown) Rounds

(a) Total Intimidation

(b) Against Voters

(c) By State Actors

(d) By Non-State Actors

Note: The blue plots refer to the first round. Brown plots refer to the runoff round. The vertical lines mark the mean values.

The violence gradually escalated during the later phases of the election. As shown in Figure 2, districts in governorates that were part of the second and third phases of the election experienced more violence, with the average district in the later two phases suffering triple the average level of violence in the first phase. This is a reflection of the rising electoral threat to the regime after the first phase, which brought major losses to the NDP's candidates and historical gains for the opposition.

Figure 2 – Density Plots of Electoral Violence and Intimidation by its Different Subcategories Summed over the Two Rounds for the First (in Blue), Second (in Brown), and Third (in Yellow) Phases

(a) Total Intimidation

(b) Against Voters

(c) By State Actors

(d) By Non-State Actors
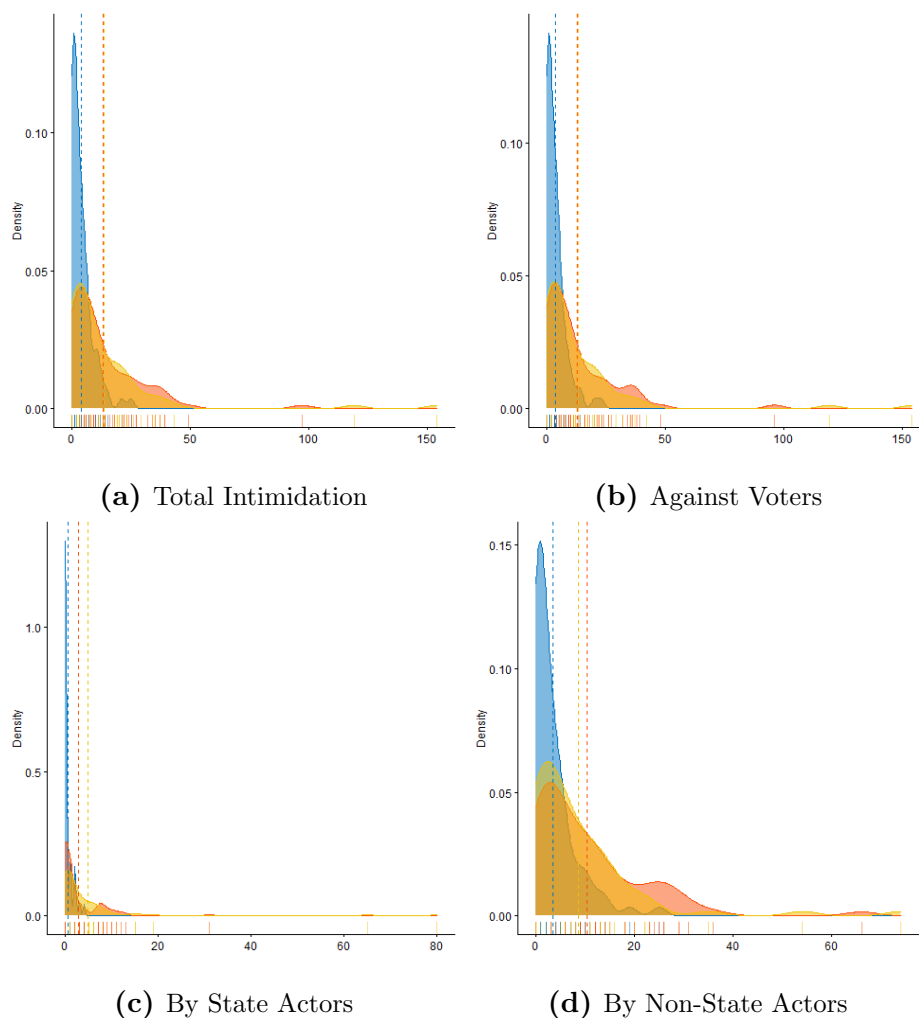
Note: The blue plots refer to the first phase, brown plots refer to the second phase, and yellow plots present the third phase. The vertical lines mark the mean value.

The geographical distribution of electoral violence exhibits significant variation. Figure 3 maps the 2-round total number of reported acts of violence and their subcategories. Aside from the sparsely populated areas in the eastern and western parts of the country, we see noticeable variation in the region around the Nile, where most of Egypt's population resides. This geographical variation also characterized the violence in both rounds. At least one act of violence was reported in 72 percent of

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the districts in the first round and in 51 percent of the runoff districts. Our goal is to explain this subnational variation in electoral violence.

Figure 3 – The Geographical Distribution of Electoral Violence and Intimidation by its Different Subcategories Summed over the Two Rounds

(a) Total Intimidation

(b) Against Voters

(c) By State Actors

(d) By Non-State Actors
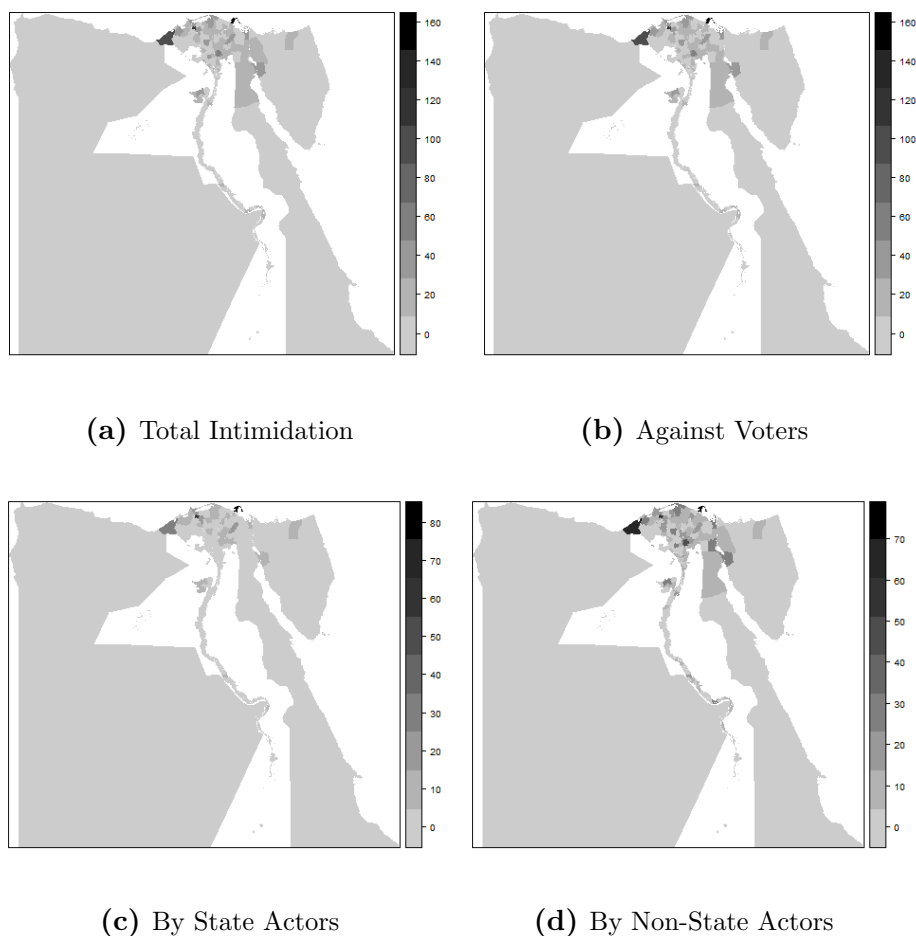
Note: Darker shades refer to higher levels of violence. The white areas refer to mostly uninhibited regions.

Hypothesis (1) poses the regime's capacity to coopt local elites and challengers as an explanation for electoral violence. I test this claim using three different variables. The first is the electoral threat of the ideological opposition. The Muslim Brotherhood presented the most credible threat to Mubarak's regime, due to its distinct Islamist political agenda (different from that of the NDP and other secular

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opposition parties), historical standoffs with the regime, and significant mobilization capacity. The regime's concerns over the MB's electoral threat translated into mass detentions of MB leaders and supporters in the lead-up to the election (Allam, 2005). This worry was well-founded, since the MB managed to secure 88 parliamentary seats. Meanwhile, opposition parties won only 12 seats, mostly going to their high-profile officials. So, I focus on the MB's electoral threat, measured by a dummy variable (MB Threat) with a positive value if at least one MB candidate ran in the district in a given electoral round. The presence of MB candidates should be associated with more violence.

The second indicator of cooptation is the number of NDP candidates officially competing under the party's label for the first time. These are either incumbents who ran and won as independent candidates in the previous parliamentary election in 2000, or new nominees from local leaders with no previous parliamentary experience.[18] Bringing new cadres to run under the NDP's label reflects its ability to revitalize its local presence through cooptation. A competitive election enables the party to evaluate the returns from recruiting these new cadres and identify valuable members. So, we should expect violence to drop in these districts.

The third measure is the number of incumbents dissenting from the NDP to compete as independents. These are incumbents who were NDP members or won under the party's label in the previous election, but split from the party after being denied its official nomination for the 2005 election. They run as independents (labeled as the NDP dissidents) to prove their electoral strength and improve their future stance

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[18]Note that the party might also coopt new competitors after the first round, and before the runoff. The measure accounts for these cases.

within the party. Most are re-welcomed into the party once victorious.[19] Therefore, competition with these dissidents comes with high expectations for the cooptation of the best performers into the NDP. This competition is also informative to the regime, weakening its incentives to tolerate costly violent electoral strategies.

My second hypothesis suggests the efficiency (and cost) of clientelism as a second explanation. Various indicators might determine the political appeal, cost, and feasibility of clientelistic strategies. First, clientelism should be more efficient in rural districts. Lower income levels in rural districts decrease the price of the vote. Their closely knit communities and kinship-based loyalties facilitate the monitoring of voters and reliance on local leaders for delivering block votes. As scholars of Mubarak's Egypt note, the regime enjoyed a mobilization advantage in rural areas by relying on patronage politics and clientelistic exchanges (Blaydes, 2010, Masoud, 2014). Accordingly, we should expect the regime to rely more on violent strategies in urban areas, where clientelism might be less rewarding. I measure urbanization as the percentage of the district's population living in urban areas.

Clientelism is also related to the constituency's economic conditions. Worse economic conditions expand the pool of voters willing to accept clientelistic exchanges, reducing candidates' need to employ violent strategies in economically worse-off districts. As economic conditions improve, electoral violence should be more appealing relative to clientelism. I measure the district's economic conditions using two variables. The first is the employment rate; the percentage of those employed out of those in the labor force. The second is the level of education in a district, measured as a weighted average of the level of education of the adult population of the dis-

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[19]As previously noted, most independent winners (aside from the MB) joined the NDP after the election.

trict.[20] These two variables should be positively associated with electoral violence.

My third hypothesis supposes that the expected political cost of violence should determine the level of electoral violence in a district.[21] In line with the literature, I focus on the threat of non-electoral mobilization (protests) as the main potential cost of electoral manipulation (Tucker, 2007, Gonzalez-Ocantos et al., 2020, Rosenzweig, 2021). Places with a high potential for protests should be less likely to witness electoral violence. Since a district's mobilization capacity would depend on its historical experience with contention, I take the log of the total number of protests over the five-year period (2000-2005) preceding the election, obtained from the ACLED dataset, as a measure for protest capacity. Note that the ACLED dataset might under-report protest activities during this period, but it could still offer a measure of protest activity particularly relevant to our case. The regime utilized the 2005 election to signal its openness to democracy to the international community and the US. It, thus, might be mainly concerned about protest activities significant enough to draw international attention. Since ACLED relies on reports of protest activities from international media outlets, it captures protests particularly concerning the regime, even if not the whole universe of protest activities.

The estimation procedure uses negative binomial regressions to account for overdispersion in the count outcome.[22] The models include fixed effects for governorates

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[20]This variable has a theoretical range from 0 to 5, capturing 6 levels of education starting from illiteracy to university level. It is standardized to facilitate interpretation. Note that measures for education, urbanization, and employment come from the official census estimates published in 2006. Yet, such data were collected over a period overlapping with the election, offering us the closest and most reliable estimates.

[21]There is also an economic cost of violence to perpetrators, which could entail the cost of hiring thugs or buying support from security forces. However, these are unobserved costs.

[22]A test of overdispersion, suggested by Cameron and Trivedi (1990), leads to rejecting the null at the 99 percent level. The variance of the outcome exceeds its mean, so negative binomial regression offers the best model that fits the count dependent variable.

to absorb local-level factors that could affect the outcome for any set of districts within a given governorate, such as the identity of the governor, the capacity of police forces, and most importantly the phase of the election. Standard errors are clustered for governorates.[23] In addition, the models control for the size of the voting population (the log of the number of registered voters), the percentage of the female population, the round of the election (a dummy indicator for the runoff round), the number of candidates competing, and the number of incumbents re-running.[24]

3.2 Findings

Column (1) of Table 1 presents negative binomial coefficient estimates from regressing the total acts of electoral violence on the predictors for the two rounds of the election. The coefficients on the indicators for cooptation align with hypothesis (1). The presence of MB candidates in a district is associated with more violence. In districts where at least one MB candidate competes, the number of violent incidents increases by more than 200 percent. This is expected as the MB candidates present the most serious electoral threat to the regime. On the contrary, in districts where the NDP has a higher capacity to coopt local leaders and potential competitors by nominating them under the party's label, violence drops. The coefficient on (New NDP) is statistically significant and negative, indicating that one newly coopted nominee is associated with a 34 percent decrease in the number of violent actions. Similarly, competition from NDP dissidents (with high potential for cooptation) is

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[23]These two specification choices address concerns related to spatial correlation in the outcome and error terms. Generally, I do not find consistent evidence for spatial dependency in the main outcome. Moran's test indicates no support for spatial dependence in the runoff round, but only in the first round. However, testing for spatial dependency among districts of the same electoral phase (with phases being determined based on districts' governorates) fails to reject Moran's null hypothesis of random dispersion (i.e., no spatial dependencies), as presented in Appendix B. This justifies our choice to use governorate fixed effects and clustered standard errors.

[24]Appendix A provides the variables' definitions, data sources, and descriptive statistics.

linked to lower violence, though the coefficient is statistically insignificant.

The second set of variables evaluates the relationship between electoral violence and the theoretical predictors of clientelism. The most notable result here is the positive association between urbanization and violence. As theoretically suggested by hypothesis (2), because rural voters are easier to mobilize by the regime's candidates using clientelistic means (Blaydes, 2010), there is less need to use costly violent strategies in rural districts. Urban constituents, however, suffer a bigger toll of electoral violence, perhaps due to the relatively lower effectiveness of the regime's clientelistic strategies in urban settings. This urban-rural divide in electoral violence is also substantively meaningful: a one percent increase in the proportion of the district's urban population predicts a 7 percent increase in the number of violent incidents. However, I find no statistically significant association between the outcome and the level of employment or education.

The third hypothesis focuses on the cost of violence, captured by the district's capacity for protest activity. Constituents with a higher capacity to protest (based on past protest activity) experience lower rates of violence. Therefore, a higher expected political cost of electoral violence limits the regime's tolerance and utilization of violent electoral strategies.

Table 1 – Negative Binomial Regression Estimates of the Predictors of Electoral Violence

	(1) Two Rounds	(2) First Round	(3) Second Round	(4) Pre-Election and Two Rounds
MB Running	1.17***	0.415	2.10***	1.05***
	(0.231)	(0.291)	(0.317)	(0.241)
New NDP	-0.422***	-0.401*	-0.476*	-0.354**
	(0.117)	(0.175)	(0.241)	(0.111)
NDP Dissidents	-0.329	-0.573*	0.417	-0.340
	(0.262)	(0.232)	(0.521)	(0.250)
Urban (%)	0.073**	0.093***	0.095*	0.072**
	(0.023)	(0.020)	(0.037)	(0.024)
Employment (%)	0.126	0.163^{+}	0.106	0.142
	(0.121)	(0.090)	(0.244)	(0.117)
Education (sd)	-0.186	-0.176	-0.360	-0.087
	(0.169)	(0.149)	(0.271)	(0.168)
Protest (log)	-0.380**	-0.455**	-0.385	-0.409**
	(0.124)	(0.144)	(0.312)	(0.128)
Registered (log)	-0.128	-0.141	-0.001	-0.043
	(0.505)	(0.369)	(0.770)	(0.512)
Female (%)	-0.018	0.082	-0.024	0.071
	(0.184)	(0.184)	(0.233)	(0.165)
Incumbents	0.095	-0.046	0.181	0.070
	(0.163)	(0.144)	(0.261)	(0.152)
Candidates No.	0.023*	0.028**	0.123	0.020^{+}
	(0.011)	(0.010)	(0.235)	(0.012)
Runoff	0.480			3.12***
	(0.364)			(0.373)
Round (1)				2.71***
				(0.250)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates. $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In columns (2) and (3), I assess how various factors matter during different rounds

of the election. Here, there are two key observations. First, the magnitude of the coefficient on (MB candidates) is much larger in the second round than in the first, suggesting that the threat of the ideological opposition becomes a more critical driver of electoral violence in more consequential electoral contests. Second, the coefficient on (NDP Dissidents) is significantly negative in the first round, but carries the opposite sign in the runoff. This might be an indication of learning and growing risk-aversion on the regime's part over the two rounds. In the first round, the regime might tolerate dissidents to learn about their strength and assess their cooptation potential, yet risk-aversion (toward electoral loss) could trump such an incentive in the decisive round. Although these differences suggest that the logic of cooptation operates differently over time, violence remains a function of the calculus of cooptation.

Column (4) expands the analysis to include the pre-election period, constituted of the two months preceding the election and dedicated to campaigning. The pre-election period is treated as a separate round with its own variation on the outcome, but similar district characteristics to the first round.[25] This analysis yields very similar results to those presented in column (1).

In all models, we see no significant role for the size of the voting population, the gender composition of the district, or the number of running incumbents. Yet, a higher number of candidates competing in the district, an indicator of the election's competitiveness, positively predicts violence.

Altogether, the findings support our argument that electoral violence in autocratic

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[25]The pre-election period contains only 66 additional acts of electoral intimidation, involving mostly attacks on candidates and campaigns.

elections is a function of the regime's cooptation capacity and its expectations on the political cost of violence. Where the regime has a weak (actual or expected) capacity to coopt competitors, local elites, and voters, electoral violence rises as a risk-management strategy. Yet, since violent electoral strategies could involve serious political costs, the regime limits their use in places where threats from mass protests are more credible.

4 Robustness

I conduct additional analyses to check the robustness of the empirical findings to various concerns regarding measurement, analysis, and interpretation.

4.1 Measurement of the Outcome

I first test whether the conclusions hold for the different operationalizations of the outcome presented in Figure 1.[26] Figure 4 presents the main coefficients of interest estimated by replicating the analysis in Table 1 for the three subcategories of the outcome. Though the magnitude of the coefficients differs for different outcomes, their direction and significance remain as predicted and in support of our conclusions.

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[26]Refer to Appendix A for variables' definitions.

Figure 4 – Negative Binomial Regression Estimates of the Predictors of Electoral Violence towards Voters, by State Actors, and by Non-State Actors
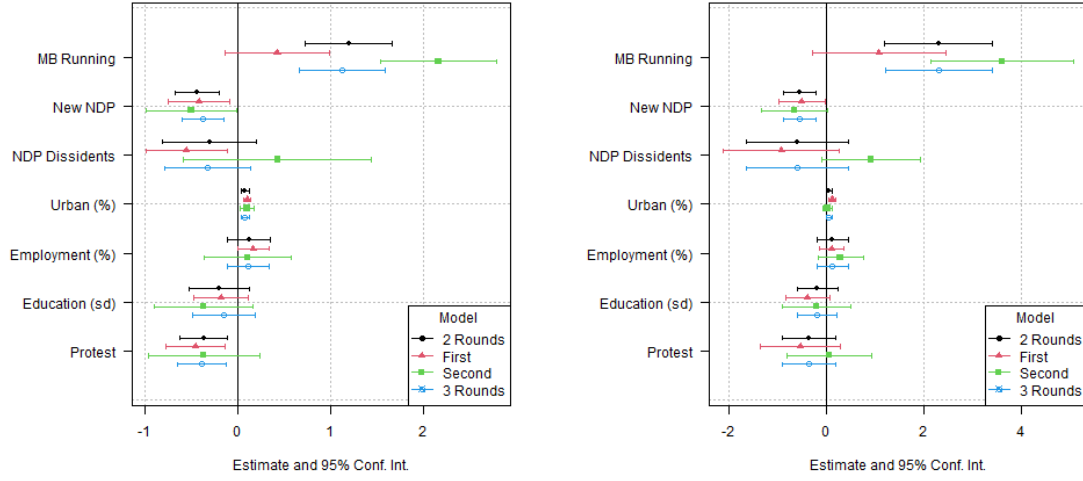
(a) Voter Intimidation

(b) Intimidation by State Actors
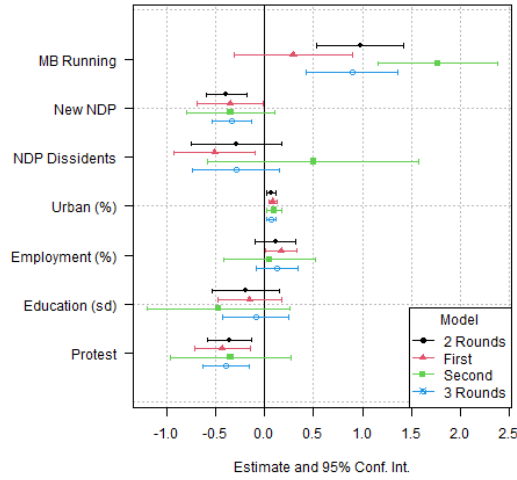
(c) Intimidation by Non-State Actors

Note: All models include governorate fixed effects and the same set of controls in Table 1. Standard errors are clustered for governorates. Confidence intervals are estimated at the 95 percent level. The model for the three rounds covers the first round, runoff, and the pre-election period.

4.2 Clientelism and Electoral Violence

The results remain inconclusive on the relationship between the feasibility of clientelism (i.e., vote-buying) and electoral violence. So, I leverage additional data from election monitoring reports to further investigate this link. I employ a direct measure of large-scale vote-buying to understand the correlation between clientelistic and violent electoral strategies. The National Campaign for Monitoring the Elections, an alliance of civil society organizations, was one of the main entities that observed the electoral process. Its final report (see: Abdel Magid, 2005) provides detailed accounts of violations related to mass vote-buying. I utilize this source to identify the districts where mass vote-buying is reported, creating a dummy indicator for clientelism. One limitation of this measure is that it does not specify the electoral round when vote-buying was observed. Accordingly, the following analysis aggregates our main outcome (electoral violence) over the two rounds for each district.[27]

This measure is not a comprehensive account of all incidents of vote-buying because clientelistic exchanges often take place away from monitors' eyes. This measure, however, captures incidents of large-scale vote-buying (such as buying blocks of voters) occurring on election day. These violations are reported in 18 percent of the districts. They are severe incidents of vote-buying that are politically significant, involve the mobilization of large factions of voters, and reflect concerns raised by opposition candidates in the media or official complaints.

In column (1) of Table 2, I regress the total number of electoral violence actions

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[27]There is no consistency across districts on when candidates use mass vote-buying. In a few cases, vote-buying is observed in the first round. In others, it is reported in the runoff.

(aggregated over the two rounds) on the dummy for vote-buying with only fixed effects and basic controls. The coefficient is negative, albeit only statistically significant at the 90 percent level. This negative correlation persists across different model specifications. In column (2), I include the main political explanatory variables, except covariates that might be related to clientelism. This improves the precision of the estimated coefficient. Model (3) includes all predictors, but yields a smaller and statistically insignificant correlation. Model (4) drops the fixed effects to leverage more variation. Here, the coefficient on vote-buying is negative, statistically significant, and larger in magnitude.

Despite the minor fluctuations of the coefficient of interest across different model specifications, we consistently observe a negative correlation between mass vote-buying and electoral violence. This suggests that the use of electoral violence is perhaps a function of the feasibility of cooptive electoral mobilization strategies.[28] Complementing this analysis, I also report descriptive evidence that electoral violence might be related to the cost of clientelism (i.e., the price of votes) in Appendix C.1. In Appendix C.2, I provide additional support to the hypothesized link between electoral violence and clientelism by considering electoral turnout as a proxy for clientelistic mobilization and leveraging the specifics of turnout patterns in the Egyptian case.

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[28]One empirical concern about this analysis is post-treatment bias, due to the inclusion of vote-buying into the models as a predictor, hence I employ various specifications with different sets of controls.

Table 2 – Negative Binomial Regression Estimates of the Relationship between Electoral Violence and Clientelism

	(1)	(2)	(3)	(4)
Vote-buying	-0.452+	-0.454*	-0.341	-0.688**
	(0.258)	(0.222)	(0.245)	(0.255)
Female	-0.144	-0.060	-0.034	0.048
	(0.239)	(0.213)	(0.203)	(0.090)
Registered (log)	0.164	-0.200	-0.077	0.601+
	(0.448)	(0.500)	(0.467)	(0.318)
Incumbents	0.288	0.229	0.245	0.227
	(0.188)	(0.208)	(0.202)	(0.200)
Candidates No.	0.046**	0.060**	0.047+	0.051*
	(0.017)	(0.022)	(0.025)	(0.020)
MB Running		0.805***	0.831***	1.02***
		(0.224)	(0.234)	(0.232)
New NDP		-0.345*	-0.344*	-0.025
		(0.135)	(0.139)	(0.113)
NDP Dissidents		-0.187	-0.278	0.369
		(0.382)	(0.386)	(0.318)
Protest (log)		-0.106	-0.252*	-0.227+
		(0.157)	(0.106)	(0.118)
Urban (%)			0.065**	0.030+
			(0.022)	(0.017)
Employment (%)			0.028	-0.053
			(0.109)	(0.077)
Education (sd)			-0.214	-0.097
			(0.141)	(0.130)
Fixed-effects	Yes	Yes	Yes	No

Note: Total number of districts is 222. Standard errors in parentheses are clustered for governorates. The variables Incumbents, Candidates No., New NDP, and NDP Dissidents are measured as the mean of the two rounds. $^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.3 Model Specification

I confirm the robustness of the findings to various model specifications. I first replicate the main analysis using OLS (Appendix D.1) and Poisson (Appendix D.2) regressions. I then redo the analysis after removing the governorate fixed effects to exploit more variation in Appendix D.3, and alternatively with more restrictive FEs (governorate x election round) in Appendix D.4. I also confirm that the results are not driven by influential observations in Appendix D.5. Finally, Appendix E presents a sensitivity analysis of the main coefficient estimates to unobserved confounders, following the procedure suggested by Cinelli and Hazlett (2020), which still yields support to the robustness of our conclusions.[29]

5 Electoral Violence in Three Districts

To substantiate the quantitative results, I provide a brief overview of electoral contests in three districts. The first is Damanhour, a case of a high level of violence. The second is Esna, which witnessed a significantly low level of violence. Finally, I look at Bila, where violence was notably high in the first round, but dropped in the runoff.

5.1 Damanhour

Damanhour (*Qism Damanhour*), one of the most urbanized districts in al-Beheira governorate, lies in the upper quartile in terms of its level of violence in the 2005 election. It is one of the districts where security forces played a major role in intimidating voters and preventing them from reaching the polls. At three main

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[29]The only exception is the coefficient on protest activity, with its magnitude exhibiting sensitivity to unobserved confounders, albeit still carrying the predicted sign.

voting sites, the police suspended the voting process and blocked roads leading to polling stations. When gatherings of voters and election monitors protested against these restrictions, security forces responded with tear gas and random arrests (Abdel Magid, 2005, 164). The police's interventions preferred the regime's candidate (*Mostafa al-Feki*), a distinguished figure in the NDP, against his main opponent of the Muslim Brotherhood (the incumbent). In return, the MB candidate hired gangs armed with swords and sticks to block the roads and prevent buses carrying NDP voters from reaching the polls. Armed gangs, affiliated with the NDP, reacted by attacking the MB supporters and burning the MB's electoral headquarter (Abdel Magid, 2005, 156). The violence escalated, leading to hundreds of injuries and arrests and turning the district into a "war zone" (Rashid, 2006, 454). What factors contributed to this high level of violence?

The district witnessed strong competition between the NDP and the MB. The NDP nominated one of its most distinguished members, who held a parliamentary seat by appointment in the preceding parliamentary cycle. However, the MB candidate was the incumbent and had a dedicated popular following and local political experience. Being a member of the MB, he was part of the most serious ideological opposition to the regime. The strength of the MB candidate was apparent during the campaigning period and his popular conferences attracted a much larger audience compared to his challenger (Rashid, 2006, 428). On election day, more voters indicated that they chose the MB over the NDP during the early hours of the election (Rashid, 2006, 454). Accordingly, the NDP faced a serious electoral threat in Damanhour with almost no possibility of coopting its opponent.

The NDP had a weak capacity to coopt voters through patronage politics and vote-

buying. Its candidate was a national-level politician residing in Cairo. He lacked strong ties with locals and failed to secure alliances with local leaders. In contrast, the MB had a strong local presence, provided various social services to the district, and relied on a loyal support base.[30] This meant that the NDP's attempts to buy votes on election day were unlikely to succeed in turning the election. Indeed, there were no reports of significant vote-buying in the district.

Given these limitations on cooptive electoral strategies, the NDP resorted to violence as the last option to secure their candidate's victory. The regime rallied both the police and thugs to sway the election to their candidate's side.

5.2 Esna

Esna, the seventh electoral district in Qena governorate, is a predominantly agrarian district with about 80 percent of its inhabitants living in rural areas. 19 candidates competed for two parliamentary seats in the district. Nevertheless, the election went peacefully during both rounds with negligible reports of violence toward voters or intimidation by security forces. Two key factors might have contributed to the low level of violence in the district.

The district posed no electoral threat to the regime and the NDP. The main opposition, the MB, did not nominate or support a candidate in the district. The NDP candidates still faced competition from independents. Yet, they presented no serious future threat to the NDP's control over the parliament. The most serious independent competitors held previous positions within the NDP, meaning that they were

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[30]For example, two MB candidates won the district's two parliamentary seats in the 2000 parliamentary election. Yet, one was later disqualified from the parliament and his seat went to an NDP member.

easy to coopt into the party after the election. Indeed, two independents managed to beat the NDP's candidates, and both joined the NDP once victorious. With the competition being a win-win situation for the NDP, security forces remained neutral in the election and had no intentions to enable violence by candidates.

The second factor is the prevalence of patronage politics in the district. Esna is an agrarian tribal society, where few families have alternated holding the district's parliamentary seats, sometimes through implicit agreements between the major families. This reflected on the pool of candidates: 6 of the candidates had previous personal political experience or came from families with a political background (Rashid, 2006). During the campaigning period, candidates offered favors to the heads of the main families in exchange for block votes. This order made reliance on forming these alliances more important than inciting violence, which could agitate clans and affect the long-term prospects of candidates. Those who lacked strong local ties relied heavily on money for buying support. For example, one of the candidates who spent only 6 months in the district secured the fifth position in the first round by mainly relying on vote-buying, capitalizing on his wealth and the poor economic conditions of the district (Rashid, 2006, 430).

In Esna, electoral intimidation was an unnecessary costly strategy. The regime did not see competition in the district as a threat to its political control. Candidates relied on patronage politics and clientelism to inflate their support.

5.3 Bila

In Bila, a historically competitive district in Kafr al-Sheikh governorate, electoral outcomes were often hard to predict, lending it the title of "the district of wonders"

(Munufi and Husayn, 2006, 241). During the first round of the election, electoral intimidation was severe and primarily led by security forces, who took different measures to hinder voters from casting their ballots and engaged in violent clashes with opposition voters that led to the use of tear gas and the burning down of four houses (Munufi and Husayn, 2006, 263). However, the runoff round passed with no significant violence. This drop in violence could be explained by the changing patterns of competition in the district.

In the first round, the MB nominated a strong candidate who represented the district in the preceding parliamentary cycle. He campaigned heavily by visiting various villages and holding public meetings with voters outside his core support base. Meanwhile, the NDP could not afford to lose more seats to the MB. This was the third phase of the election. In the first two phases, the NDP had already lost 76 seats to the MB. Hence, the third phase was the last chance to contain the losses, which led to violence in many districts where the MB had contestants. In the case of Bila, the police suspended voting in the MB candidate's village and arrested a group of his supporters. However, the NDP candidates and independents were allowed to campaign freely and bring their voters to the polls (Munufi and Husayn, 2006, 255-256). These factors culminated into the loss of the MB candidate in the first round.

By eliminating the electoral threat of the MB, the regime's actors had no strong incentives to intervene in the runoff round, which was held between two NDP candidates and two independents. Although both NDP candidates lost, the two independents were coopted into the NDP's parliamentary block. Knowing that the independent candidates had no leanings toward the opposition made it unattractive

for the regime's actors to use intimidation. In addition, reported vote-buying by the regime's favorites and independents facilitated voters' mobilization in the runoff (Munufi and Husayn, 2006), further reducing the need for violent strategies.

6 Conclusion

This paper presented an explanation for electoral violence in competitive authoritarian regimes that rests on two main propositions. The first is the regime's (represented by the ruling hegemonic party, in our case) capacity for cooptation of both elites and voters. Where the regime succeeds in coopting local elites, or expects to coopt its competitors by leveraging its control of the state's resources and rent-seeking opportunities, it has weak incentives to permit or employ electoral violence. Peaceful elections could better serve the regime's goals by increasing the informational returns from the election and legitimizing its authority. Yet, when competition comes with no possibility of coopting the winners, the threat to the regime's political control becomes more credible, leading to a rise in violence. Similarly, if the regime cannot buy off enough voters with clientelism and patronage, it might resort to violent exclusionary strategies to secure electoral victories. Nevertheless, the regime is not unconstrained in its use of electoral violence which is a politically costly strategy. Hence, the second proposition contends that the regime's utilization of violence also takes into account the potential for post-election citizens' mobilization, which could thwart the regime's stability. The quantitative and qualitative evidence gathered from the 2005 Egyptian parliamentary election supports these two propositions.

The results highlight ideological competition as a driver for electoral violence and intimidation. However, there is no evidence that competition for rent-seeking oppor-

tunities, as is the case between the NDP candidates and independents, is associated with increased violence. This departs from the argument that competition for rent-seeking opportunities drives up violence in corrupt states with weak rule of law and limited political accountability (Birch, 2020). Yet, it aligns with the notion that elite alliances (even among potential competitors from the same political party) could contain electoral violence (Turnbull, 2021). This divergence in conclusions might be a reflection of the characteristics of different contexts, calling for expanding the regional scope of future studies of electoral violence.

Finally, this study has two implications for policy interventions combating electoral violence and intimidation. First, for international and domestic observers pushing for electoral reforms and democratic development, the interdependencies between different forms of electoral manipulation strategies in contexts with weak democratic institutions should be seriously taken into account. Daxecker (2012) shows that monitors' revelations of electoral manipulation could spark political unrest. In the Egyptian context, Brancati and Penn (2022) show that when electoral fraud is harder to commit, electoral violence rises. Similarly, our results indicate that electoral violence increases where "peaceful" electoral manipulation strategies are less effective. This is not to say that non-violent electoral manipulation should be ignored, but to develop comprehensive monitoring strategies that take into account such tradeoffs. Second, long-term investments in citizens' capacity to communicate their demands and lowering the barriers of collective action could raise the cost of electoral intimidation in less democratic contexts. Strengthening such bottom-up accountability mechanisms, by empowering citizens and civil society organizations, can act as a preventive measure against electoral violence, and thus should receive more attention in democracy promotion efforts.

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Appendix A   Variables: Definitions, Sources, and Descriptive Statistics

A.1   Variables: Definition and Sources

- Electoral Violence (outcome): The total number of acts of electoral violence and intimidation on election day. These include: violence against candidates (i.e., murder, threats of murder, kidnapping, and physical attacks), hindering electoral campaigning for certain candidates, destruction of campaigning material (such as billboards and posters), interventions of security forces in favor of particular candidates (e.g., blockades of polling stations by security forces, preventing voters from casting their ballots, firing tear gas against voters), fights and physical attaches on voters, and disruptive acts around polling stations (such as sieges of polling stations and destruction of ballot boxes). In models where the preelection period is analyzed, the variable includes acts of violence conducted in the two months period preceding the election. The data for this variable are obtained from Abu-Taleb (2006), as described in the main text.

- Voter Intimidation (outcome): This is a sub-category of the main outcome and excludes violence against candidates, destruction of campaigning material, and the obstruction of campaigning.

- Violence by State Actors (outcome): This variable includes only interventions by security forces in the electoral process in favor of particular candidates (e.g., blockades of polling stations by security forces, preventing voters from casting their ballots by the police, firing tear gas against voters).

- Violence by Non-state Actors (outcome): This excludes acts of violence where

security forces are directly involved.

- MB Running: A dummy variable with a positive value if the MB has at least one candidate competing in the district. The variable was obtained from Masoud (2014).

- New NDP: The number of NDP candidates officially competing under the party's label for the first time: incumbents who ran and won as independent candidates in the previous parliamentary election, or new nominees from local leaders with no previous parliamentary experience. This variable is constructed from the official lists of candidates published by the Egyptian Ministry of Interior and records of members of the parliament published in Rabi'a (2000).

- NDP Dissidents: The number of incumbents dissenting from the NDP to compete as independents in the 2005 election. These are incumbents who were NDP members or won under the party's label in the previous election, but split from the party to run as independents in this election. This variable is constructed from the official lists of candidates published by the Egyptian Ministry of Interior and records of members of the parliament published in Rabi'a (2000).

- Urban: The percentage of the district's population living in urban areas. The variable is based on the official population census estimates of 2006 by the Egyptian Central Agency for Public Mobilization and Statistics.

- Employment: The percentage of the employed out of those in the labor force in the district. The variable is based on the official population census estimates of 2006 by the Egyptian Central Agency for Public Mobilization and Statistics.

- Education: A weighted average of the level of education of the district's adult population. This variable has a theoretical range from 0 to 5, capturing 6 levels of education starting from illiteracy to university level. It is then standardized to have a mean of 0 and a standard deviation of 1. The variable is based on the official population census estimates of 2006 by the Egyptian Central Agency for Public Mobilization and Statistics.

- Protest: The log of the total number of protests (peaceful and non-peaceful) over the five-year period preceding the election. It is constructed from protest data collected by the Armed Conflict Location and Event Data Project.

- Registered: The log of the number of registered voters in the district. It is obtained from the official electoral results published by the Higher Electoral Commission of Egypt.

- Female: The percentage of females out of the district's population. The variable is based on the official population census estimates of 2006 by the Egyptian Central Agency for Public Mobilization and Statistics.

- Incumbents: This is the number of incumbents running in the district in a given round. This variable is based on records of the members of the parliament published in Rabi'a (2000) and the official lists of candidates published by the Egyptian Ministry of Interior.

- Candidates No.: This number of candidates competing in the district for any given round. The variable is based on data from Masoud (2014) and the official lists of candidates published by the Egyptian Ministry of Interior.

- Runoff: A dummy for the runoff round.

- Round 1: A dummy for the first round.

- Vote-buying: A dummy variable for whether mass vote-buying was reported in the district in either round. This is constructed from reports by the National Campaign for Monitoring the Elections (Abdel Magid, 2005).

- Turnout Rate: The percentage of voters who cast a ballot out of the number of registered voters. The variable is based on data from Masoud (2014) and the official electoral results published by the Higher Electoral Commission of Egypt.

A.2 Descriptive Statistics

Table 1 – Descriptive Statistics of the Main Variables over the Two Rounds

Statistic	N	Mean	St. Dev.	Min	Median	Max
Electoral Violence	430	5.047	10.891	0	1	127
Voter Intimidation	430	4.874	10.794	0	1	127
State Intimidation	430	1.319	5.301	0	0	74
Non-state Intimidation	430	3.728	6.438	0	1	53
MB Running	430	0.612	0.488	0	1	1
New NDP	430	1.463	0.979	0	1	4
NDP Dissidents	430	0.147	0.373	0	0	2
Urban	430	84.984	9.294	65.439	83.671	99.861
Employment	430	95.786	1.510	91.437	95.866	99.297
Education	430	−0.033	0.979	−1.772	−0.118	3.151
Protest	430	0.137	0.464	0.000	0.000	4.025
Registered	430	11.820	0.409	9.816	11.905	12.782
Female	430	48.772	1.329	37.524	48.806	53.263
Incumbents	430	1.186	0.753	0	1	2
Candidates No.	430	13.828	11.854	2	10	53
Turnout	423	26.253	9.215	3.232	26.065	72.538

Table 2 – Descriptive Statistics of the Main Variables over the Two Rounds and the Pre-election Period

Statistic	N	Mean	St. Dev.	Min	Median	Max
Electoral Violence	652	3.429	9.132	0	0	127
Voter Intimidation	652	3.262	9.048	0	0	127
State Intimidation	652	0.870	4.349	0	0	74
Non-state Intimidation	652	2.560	5.488	0	0	53
MB Running	652	0.637	0.481	0	1	1
New NDP	652	1.437	0.898	0	2	4
NDP Dissidents	652	0.178	0.406	0	0	2
Urban	652	85.082	9.340	65.439	83.739	99.861
Employment	652	95.793	1.505	91.437	95.866	99.297
Education	652	−0.000	1.000	−1.775	−0.097	3.218
Protest	652	0.136	0.463	0.000	0.000	4.025
Registered	652	11.819	0.408	9.816	11.905	12.782
Female	652	48.771	1.325	37.524	48.805	53.263
Incumbents	652	1.293	0.736	0	1	2
Candidates No.	652	17.083	11.880	2	17	53

Table 3 – Descriptive Statistics of the Main Variables for the First Round

Statistic	N	Mean	St. Dev.	Min	Median	Max
Electoral Violence	222	4.752	6.658	0	2	37
Voter Intimidation	222	4.482	6.427	0	2	37
State Intimidation	222	0.856	2.060	0	0	15
Non-state Intimidation	222	3.896	5.253	0	2	25
MB Running	222	0.685	0.466	0	1	1
New NDP	222	1.383	0.720	0	2	2
NDP Dissidents	222	0.239	0.458	0	0	2
Urban	222	85.274	9.447	65.439	83.818	99.861
Employment	222	95.805	1.500	91.437	95.874	99.297
Education	222	−0.000	1.001	−1.772	−0.101	3.151
Protest	222	0.135	0.462	0.000	0.000	4.025
Registered	222	11.818	0.406	9.816	11.902	12.782
Female	222	48.771	1.321	37.524	48.805	53.263
Incumbents	222	1.500	0.657	0	2	2
Candidates No.	222	23.378	9.099	7	22	53
Turnout	222	28.242	9.961	3.232	28.958	72.538

Appendix B   Results of Moran's Test for Spatial Dependence

Below, I present the p-value of Moran's test for spatial dependence. I first run the test for the first and second rounds separately and aggregated. Here, we note that the null hypothesis is rejected for the first round and the 2-round aggregation. However, when the test is run for districts by the phase of the election, we fail to reject the null of no spatial dependency. Since each phase includes a set of governorates, incorporating governorate fixed effects and clustered standard errors should address the concern that spatial dependence might affect our estimates.

Data	Moran's Test P-Value
First Round	0.02
Second Round	0.196
Aggregated Two Rounds	0.021
Phase (1) Governorates	0.204
Phase (2) Governorates	0.358
Phase (3) Governorates	0.279

Appendix C   The Relationship between Clientelism and Electoral Violence

C.1   Electoral Violence and The Price of the Vote

Though estimating the feasibility and cost of clientelistic strategies is a major empirical challenge, the report by the National Campaign for Monitoring the Elections provides information about the highest price of the vote observed by monitors in 21 districts. We should expect electoral violence to rise in contexts where votes are more expensive. Figure 1 plots the number of electoral violence actions (summed over the two rounds) by the maximum reported price of the vote. Although this analysis is descriptive and only suggestive given the small sample size, it still adds to the plausibility of the positive association between electoral violence and the cost of clientelism.

Figure 1 – The Relationship between Electoral Violence and the Price of the Vote
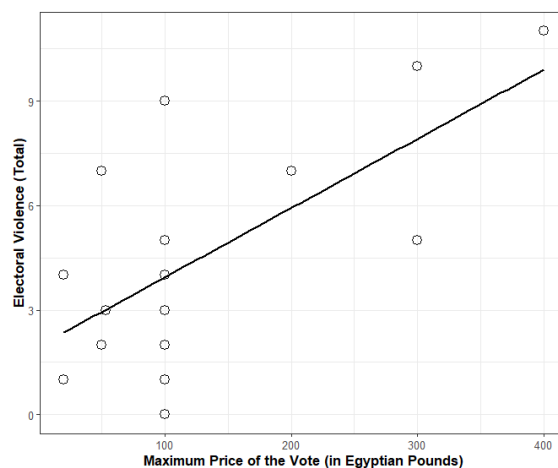
Note: Electoral violence is the total number of actions related to electoral violence reported in the district. The price of the vote is the maximum reported price of the vote in the district in 2005 Egyptian pounds.

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C.2 Clientelism and Electoral Violence: Turnout Patterns

As an alternative approach to understanding the link between clientelism and electoral violence, I consider turnout as a proxy for clientelism. This non-conventional strategy fits the Egyptian case. Voters' interest in Mubarak's elections was relatively low given their autocratic nature. As scholars of Mubarak's Egypt point out (Blaydes, 2010), the regime and independent candidates depended on their clientelistic machine to drive voters to the polls. Although the Muslim Brotherhood also relied on its provision of services to attract voters, its supporters tend to be more ideological. The MB's strategy capitalized on grassroots organizational structures that offer services more regularly and build support over the long run, rather than heavily depending on vote-buying on election day (Brooke, 2019, Masoud, 2014). Thus, controlling for the MB's electoral presence, turnout should proxy for clientelistic mobilization in favor of the regime.

Given that, we should see that the same demographic factors theoretically associated with clientelism drive turnout. We should also expect these factors to differ from those we found predicting violence. Accordingly, I regress the turnout rate (measured as the percentage of registered voters who cast their ballot) on the same set of controls included in Table 1 using OLS regression.[31] The most notable finding is the significant negative correlation between urbanization and turnout. As I previously argued, vote-buying and block-voting are more common in closely-knit rural constituencies. Hence, clientelism precedes violence in rural areas, while urban constituents face more electoral violence. Areas with worse employment conditions are also easier to mobilize, in line with the literature on clientelism. These two key

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[31]The only exception is that we exclude the size of the voting population, as it is correlated with the turnout rate by definition.

findings do not change in model (2), when our main measure of electoral violence (logged) is included. In sum, these patterns indicate that districts that are successfully mobilized to the polls differ from those suffering electoral violence (even after we account for the correlation between violence and turnout), which adds to the plausibility of our claim that violent electoral strategies are a response to failed cooptation attempts through clientelistic means.

Table 4 – OLS Regression Estimates of
the Predictors of Turnout

	(1)	(2)
Urban (%)	-0.402***	-0.399***
	(0.079)	(0.081)
Employment (%)	-1.42**	-1.41**
	(0.423)	(0.425)
Education (sd)	-0.767	-0.779
	(0.903)	(0.892)
MB Running	0.398	0.447
	(0.883)	(0.879)
New NDP	0.182	0.167
	(0.313)	(0.297)
NDP Dissidents	0.770	0.753
	(1.14)	(1.12)
Protest (log)	-1.05$^+$	-1.06$^+$
	(0.597)	(0.589)
Female (%)	-0.629	-0.627
	(0.456)	(0.457)
Runoff	-1.42	-1.40
	(1.58)	(1.60)
Incumbents	1.16**	1.16**
	(0.365)	(0.366)
Candidates No.	0.121*	0.122*
	(0.056)	(0.057)
Violence (log)		-0.064
		(0.375)

Note: Total number of districts is 423 for the two rounds, since turnout rates were not officially reported in 7 districts. The models include fixed effects for governorates. Standard errors in parentheses are clustered for governorates. $^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Altogether, these analyses provide additional support to hypothesis (2), suggesting that clientelistic and violent electoral strategies are perhaps substitutes.

Appendix D Replication of Table 1 using Different Model Specifications

D.1 Replication of Table 1 using OLS Regressions

Table 5 – OLS Regression Estimates of the Predictors of Electoral Violence (log)

	(1) Two Rounds	(2) First Round	(3) Second Round	(4) Pre-Election and Two Rounds
MB Running	0.704***	0.322+	0.983***	0.500***
	(0.133)	(0.160)	(0.201)	(0.105)
New NDP	-0.239***	-0.194*	-0.193*	-0.170***
	(0.048)	(0.091)	(0.081)	(0.041)
NDP Dissidents	-0.231+	-0.378*	0.475	-0.139
	(0.118)	(0.148)	(0.315)	(0.097)
Urban (%)	0.043***	0.056***	0.034+	0.033***
	(0.010)	(0.013)	(0.017)	(0.008)
Employment (%)	0.072	0.119+	0.057	0.064
	(0.050)	(0.060)	(0.120)	(0.041)
Education (sd)	-0.160+	-0.182	-0.136	-0.082
	(0.093)	(0.113)	(0.130)	(0.070)
Protest (log)	-0.148*	-0.188*	-0.079	-0.117*
	(0.068)	(0.081)	(0.115)	(0.050)
Registered (log)	0.045	0.208	-0.007	0.003
	(0.264)	(0.250)	(0.399)	(0.206)
Female (%)	0.016	0.049	0.016	0.037
	(0.091)	(0.118)	(0.088)	(0.068)
Incumbents	0.014	-0.024	0.071	-0.011
	(0.089)	(0.094)	(0.108)	(0.069)
Candidates No.	0.022**	0.021*	0.050	0.009
	(0.008)	(0.008)	(0.117)	(0.005)
Runoff	0.294			1.03***
	(0.214)			(0.184)
Round (1)				1.05***
				(0.122)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates. Note that the outcome here is the log of the total number of actions of electoral violence. $^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D.2 Replication of Table 1 using Poisson Regressions

Table 6 – Poisson Regression Estimates of the Predictors of Electoral Violence

	(1) Two Rounds	(2) First Round	(3) Second Round	(4) Pre-Election and Two Rounds
MB Running	1.30***	0.329	2.30***	1.26***
	(0.275)	(0.374)	(0.424)	(0.268)
New NDP	-0.369*	-0.315*	-0.251	-0.357*
	(0.158)	(0.151)	(0.193)	(0.158)
NDP Dissidents	-0.087	-0.349	0.680*	-0.093
	(0.257)	(0.243)	(0.336)	(0.251)
Urban (%)	0.053*	0.076***	0.028	0.055*
	(0.025)	(0.019)	(0.035)	(0.025)
Employment (%)	0.144	0.104	0.170	0.151
	(0.114)	(0.086)	(0.194)	(0.115)
Education (sd)	-0.267	-0.232	-0.279	-0.245
	(0.176)	(0.154)	(0.284)	(0.171)
Protest (log)	-0.299*	-0.391**	-0.199	-0.310*
	(0.129)	(0.126)	(0.235)	(0.123)
Registered (log)	0.272	0.088	0.547	0.256
	(0.387)	(0.327)	(0.515)	(0.394)
Female (%)	-0.146	-0.013	-0.397	-0.110
	(0.228)	(0.208)	(0.309)	(0.222)
Incumbents	-0.041	-0.103	0.228	-0.041
	(0.170)	(0.158)	(0.264)	(0.165)
Candidates No.	0.017	0.024**	-0.236	0.016
	(0.011)	(0.009)	(0.236)	(0.011)
Runoff	0.740*			3.47***
	(0.350)			(0.390)
Round (1)				2.77***
				(0.244)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D.3 Replication of Table 1 after Removing Governorate Fixed Effects

Table 7 – Negative Binomial Regression Estimates of the Predictors of Electoral Violence - Without Governorate FEs

	(1) Two Rounds	(2) First Round	(3) Second Round	(4) Pre-Election and Two Rounds
MB Running	1.24***	0.280	2.43***	1.11***
	(0.184)	(0.221)	(0.318)	(0.172)
New NDP	-0.202*	-0.167	-0.159	-0.188*
	(0.089)	(0.160)	(0.140)	(0.085)
NDP Dissidents	-0.093	-0.380	0.599	-0.055
	(0.236)	(0.233)	(0.631)	(0.204)
Urban (%)	0.035*	0.022	0.081**	0.034*
	(0.015)	(0.017)	(0.029)	(0.014)
Employment (%)	-0.006	-0.081	0.002	0.012
	(0.064)	(0.070)	(0.115)	(0.056)
Education (sd)	-0.128	0.039	-0.455	-0.064
	(0.163)	(0.184)	(0.289)	(0.144)
Protest (log)	-0.322	-0.293	-0.394	-0.356$^+$
	(0.207)	(0.223)	(0.387)	(0.188)
Registered (log)	0.671**	0.409	0.782$^+$	0.610**
	(0.255)	(0.304)	(0.465)	(0.233)
Female (%)	0.059	0.111	0.065	0.082
	(0.071)	(0.076)	(0.156)	(0.066)
Incumbents	-0.059	-0.121	0.271	-0.043
	(0.127)	(0.162)	(0.223)	(0.115)
Candidates No.	0.030*	0.045***	-0.211	0.023*
	(0.013)	(0.012)	(0.208)	(0.011)
Runoff	0.569$^+$			3.29***
	(0.323)			(0.310)
Round (1)				2.82***
				(0.204)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates. $^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D.4 Replication of Table 1 after Adding (Governorate x Round) Fixed Effects

Table 8 – Negative Binomial Regression Estimates of the Predictors of Electoral Violence - (Governorate x Round) FEs

	(1) Two Rounds	(2) Three Rounds
MB Running	1.36***	1.18***
	(0.248)	(0.267)
New NDP	-0.332*	-0.296*
	(0.131)	(0.122)
NDP Dissidents	-0.140	-0.087
	(0.313)	(0.224)
Urban (%)	0.047+	0.043*
	(0.025)	(0.021)
Employment (%)	-0.017	0.018
	(0.112)	(0.086)
Education (sd)	-0.243	-0.145
	(0.178)	(0.148)
Protest (log)	-0.239+	-0.286*
	(0.134)	(0.117)
Registered (log)	0.474	0.389
	(0.410)	(0.306)
Female (%)	-0.028	0.020
	(0.136)	(0.102)
Incumbents	0.062	0.064
	(0.137)	(0.114)
Candidates No.	0.028+	0.023
	(0.015)	(0.014)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates. $^+$ $p <$ 0.10, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D.5 Replication of Table 1 after Removing Outliers

Table 9 – Negative Binomial Regression Estimates of the Predictors of Electoral Violence - Outliers Removed

	(1)	(2)	(3)	(4)
	Two Rounds	First Round	Second Round	Pre-Election and Two Rounds
MB Running	1.07***	0.415	1.72***	0.961***
	(0.230)	(0.291)	(0.276)	(0.235)
New NDP	-0.393***	-0.401*	-0.334$^+$	-0.325***
	(0.105)	(0.175)	(0.187)	(0.098)
NDP Dissidents	-0.376	-0.573*	0.254	-0.366
	(0.242)	(0.232)	(0.516)	(0.230)
Urban (%)	0.063**	0.093***	0.066*	0.061**
	(0.020)	(0.020)	(0.029)	(0.021)
Employment (%)	0.062	0.163$^+$	-0.087	0.074
	(0.109)	(0.090)	(0.224)	(0.106)
Education (sd)	-0.142	-0.176	-0.171	-0.050
	(0.154)	(0.149)	(0.239)	(0.155)
Protest (log)	-0.350**	-0.455**	-0.293	-0.375**
	(0.121)	(0.144)	(0.267)	(0.124)
Registered (log)	-0.465	-0.141	-0.619	-0.390
	(0.436)	(0.369)	(0.694)	(0.452)
Female (%)	0.004	0.082	0.075	0.088
	(0.176)	(0.184)	(0.208)	(0.156)
Incumbents	0.096	-0.046	0.070	0.076
	(0.156)	(0.144)	(0.227)	(0.150)
Candidates No.	0.031**	0.028**	0.276*	0.028*
	(0.010)	(0.010)	(0.136)	(0.011)
Runoff	0.495			3.12***
	(0.354)			(0.362)
Round (1)				2.73***
				(0.240)

Note: Total number of districts is 222 in the first round and 208 in the runoff. Standard errors in parentheses are clustered for governorates. $^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix E   Sensitivity to Unobserved Confounders

Though our empirical analysis is limited to determining the factors associated with electoral violence rather than making causal claims about their role, it remains important to establish the robustness of our estimates to potential unobserved confounders. Following Cinelli and Hazlett (2020), I conduct a sensitivity analysis to understand how strong unobserved confounders would need to be to substantively alter our conclusions. Since the described procedure is better suited for OLS models, I implement the analysis using the estimates from the replication of Table 1 using OLS analysis, presented in Appendix D.1. For simplicity, I will also focus on our main model (1), which incorporates the two electoral rounds and constitutes the core of our discussion.

Table 10 – Sensitivity Statistics of the Main Explanatory Variables Following Cinelli and Hazlett (2020)

Outcome: *Total Acts of Electoral Violence (Log)*						
Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mid \mathbf{X}}$	$RV_{q=1}$	c
MB Running	0.704	0.131	5.354	6.8%	23.6%	15.7%
New NDP	-0.239	0.047	-5.106	6.2%	22.7%	14.6%
NDP Dissidents	-0.231	0.116	-1.984	1%	9.5%	0.1%
Urban	0.043	0.009	4.492	4.9%	20.3%	12%
Protest	-0.148	0.067	-2.222	1.2%	10.6%	1.3%

Table 10 provides sensitivity statistics for the main variables of theoretical interest. The robustness value ($RV_{q=1}$) refers to the proportion of the residual variance in the outcome and the independent variable of interest that the unobserved confounder should explain to overturn or fully explain the estimated correlation. Across all main variables, this value is reasonably high, suggesting the robustness of our con-

clusions on the direction and magnitude of the relationships of interest. However, $RV_{q=1,\alpha=0.05}$, which similarly assesses the strength of the confounder that could diminish the variable's statistical significance, indicates that the coefficients on (NDP Dissidents) and (Protest) are more vulnerable to losing statistical significance. Figure 2, which plots the whole range of possible estimates that confounders with different strengths could cause, leads us to a similar conclusion. It illustrates that even a confounder with 5 times the explanatory power of the variable (Candidates No.), as a benchmark, would not be sufficient to nullify the outcome's correlation with MB Running, New NDP, and Urbanization. Yet, again, the coefficients on (NDP Dissidents) and (Protest) are sensitive to potential unobserved confounders. Altogether, this analysis establishes the robustness of our main findings, but indicates that our findings on the magnitude and significance -but not the direction- of the protest variable should be taken with more caution.

Figure 2 – Sensitivity Analysis of the Main Variables of Theoretical Interest

(a) MB Running   **(b)** New NDP   **(c)** NDP Dissidents

(d) Urban   **(e)** Protest
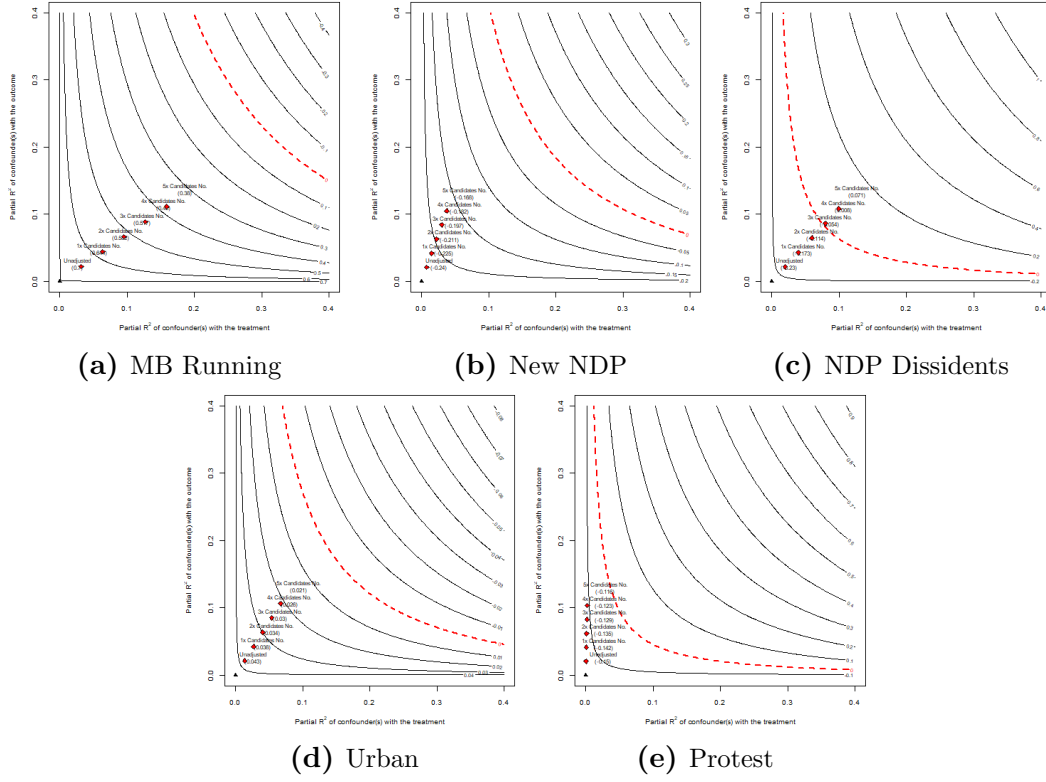
Note: Sensitivity of point estimates with bounds. Sensitivity analysis including benchmark bounds derived from claims that confounding is 1 to 5 times "stronger" than (Candidates No.) in explaining residual variation in the outcome and the examined explanatory variable. The horizontal axis shows hypothetical values for the percentage of the residual variance of the independent variable explained by the confounder. The vertical axis shows hypothetical values for the percentage of the residual variance of the outcome explained by the confounder. The contour levels represent the adjusted estimates of the coefficient of interest. The bound points (diamonds) show the partial R2 of the unobserved confounder under the assumption that it is k times "as strong" as the observed covariate (Candidates No.). Their placement thus shows the maximum bias caused by confounding under each assumption on k (1, 2, 3, 4, or 5).

ABOUT CDDRL

Since 2002, the Center on Democracy, Development and the Rule of Law (CDDRL) at Stanford University has collaborated widely with academics, policymakers and practitioners around the world to advance knowledge about the conditions for and interactions among democracy, broad-based economic development, human rights, and the rule of law.

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