Anti-Corruption Efforts and Electoral Manipulation in "Dirty" Democracies

Marko Klašnja[*]   Grigore Pop-Eleches[†]

April 19, 2019

Abstract

While many nascent and developing democracies have competitive elections and peaceful turnover of power, they are also characterized by persistent corruption and frequent electoral manipulation. We demonstrate why such "dirty" democracies find it hard to clean up their politics and how corruption and electoral manipulation can go hand in hand. Focusing on the case of Romania and utilizing a number of diagnostic approaches and research designs, we show how anti-corruption efforts systematically induce electoral manipulation by the threatened dirty-democracy elites. However, this manipulation is constrained by electoral competition, which may be the key to longer-term political consolidation of dirty democracies.

PRELIMINARY AND INCOMPLETE

---

[*]Georgetown University, marko.klasnja@georgetown.edu

[†]Princeton University, gpop@princeton.edu

As the "Third Wave" of democratization treached broad swaths of the developing world in the 1980s and 1990s (Huntington, 1993), we witnessed the emergence of a growing number of regimes that featured genuinely contested elections but fell short of fulfilling the requirements of liberal democracy. While some of these regimes have been rightly classified as hybrid or even authoritarian (Levitsky and Way, 2010), in this article we focus on what we will call "dirty democracies"— regimes that fulfill the basic requirements of electoral democracy (free and fair elections, peaceful electoral turnovers), but which have significant shortcomings in the respect for the rule of law. Dirty democracies share important features with what others have called illiberal democracies (e.g. Zakaria, 1997), but unlike the latter, dirty democracies do not necessarily infringe on the civil liberties of particular groups. Instead, we argue that the main feature of dirty democracies is that those who break the law are insufficiently punished by domestic legal institutions.

While the deviations from the rule of law in electoral democracies can take many different forms (e.g. O'Donnell, 1994), we will here focus on two: political corruption and electoral manipulation. We define political corruption as the misuse of public office for private gain, and electoral manipulation as a menu of measures, ranging from pre-electoral manipulations of registration and electoral procedures to election-day actions (such as ballot stuffing and intimidation), which are intended to influence the outcome of elections. As Figure 1 illustrates, such deviations can sometimes occur even in liberal democracies, but they are much more widespread in "electoral democracies" where some degree of electoral manipulation and political corruption appear to be the norm rather than the exception.[1]

Even though Figure 1 suggests that dirty democracies are a widespread phenomenon, such regimes are nevertheless vulnerable to two types of challenges. First, democratic elections should in principle put pressure on political elites to refrain from law-breaking in order to avoid electoral punishment, and/or facilitate their replacement with less corrupt challengers. To the extent that this mechanism functions properly, we should expect electoral democracies to transition gradually toward cleaner, liberal democracies with a strengthened rule of law. However, there is also a second

---

[1]Figure A1 in the supplementary appendix shows very similar trends using several different measures of corruption and electoral manipulation. Note that references to tables and figures with "A" in the title point to the material in the supplementary appendix.

Figure 1: Perceptions of corruption and electoral manipulation across regime types

potential challenge, in the opposite direction of the optimistic transition scenario: faced with the prospect of losing valuable revenue streams—or worse yet being sent to prison—incumbents may decide to resort to (greater) electoral manipulation to ensure their political survival. If they succeed, the country may backslide ever further from the liberal democratic ideal and possibly fall short of even the minimal requirements for electoral democracy.

These tensions between electoral democracy and significant rule-of-law violations suggest that while political corruption and electoral manipulation are conceptually distinct—it is quite possible to steal state funds without stealing elections and vice versa—we would nevertheless expect them to be positively correlated: dirtier elections should reduce electoral penalties of corruption, while corrupt politicians may have greater incentives and capabilities to engage in electoral manipulation. This logic is supported by empirical patterns: using the same indicators of corruption and electoral

manipulation as in Figure 1, we find that political corruption and electoral manipulation are highly correlated in the post-Cold War era (at .7), particularly in a sample of democracies (at .73).

How can countries overcome this pernicious link between political corruption and electoral manipulation? Since severing this link requires changing the cost-benefit calculus of politicians deciding whether or not to break the law, much attention in recent years has focused on promoting institutions with political independence and the resources required to investigate and prosecute illegal activities at all levels, including political elites. While such *deterrence* is difficult to achieve for a variety of reasons (e.g. Fukuyama and Recantini, 2018), in this paper we focus on what happens in cases where the rule-of-law reforms *do* succeed in disrupting the dirty democracy status quo. We argue that while deterrence may indeed work and enable such countries to transition toward cleaner liberal democracies, they could also be vulnerable to a serious risk: a possible *backlash* by corrupt elites not only against the particular reforms but potentially against democratic institutions more broadly. Our first aim is therefore to evaluate the balance between the deterrent and blacklash effects of a successful anticorruption effort.

Beyond this first-order concern with the knife-edge quality of effective rule-of-law reforms in dirty democracies, we also examine the logical follow-up question about the contextual factors that may affect the direction and magnitude of elite reactions to such rule-of-law reforms. We focus on two broad types of features: first, we would expect that the magnitude of both deterrence and backlash will be greater in contexts where the signal of these rule-of-law reforms is stronger and more threatening to political elites. Second, we argue that elite reactions to reforms are shaped by capabilities, such as the availability of resources to engineer backlash against the reforms, and local constraints, such as the presence of a strong opposition.

We address these questions with empirical evidence from Romania, a typical dirty democracy (see Figure 1), which has nonetheless over the past decade experienced a robust anticorruption campaign that has seriously threatened the interests of corrupt political elites (Popova and Post, 2018; European Commission, 2012). In particular, we focus on the effects of these anticorruption efforts on the incidence of electoral manipulation during the 2012 presidential impeachment referendum. The referendum had a pronounced anticorruption dimension, because removing the

3

president was a crucial element in the broader strategy of the dirty democracy establishment to undermine the independence and the functioning of anticorruption institutions. Using a variety of electoral manipulation diagnostics and several data sources and research designs, we identify subnational variation in the incidence of electoral manipulation, and show how it is affected by the interaction between anticorruption efforts, which we measure using an original database of anticorruption actions geocoded at the locality level, and the patterns of local partisan control and political corruption among local officials.[2] We focus on local officials because even though electoral fraud is often orchestrated by national elites, its implementation depends crucially on cooperation by local elites (e.g. Rundlett and Svolik, 2016; Simpser, 2013).

At the most basic level, our analysis shows that on balance the backlash effects were much stronger than the deterrence effects, as electoral manipulation was significantly higher in places with stronger anticorruption actions. These effects, which are quite consistent across a range of data sources and diagnostics, are concentrated in high-corruption localities, and more pronounced in places experiencing a stronger anticorruption signal (i.e. where anticorruption actions included arrests as well as indictments). With respect to the contextual moderators of these main effects, we find weaker backlash in places with a stronger local opposition, but no evidence of greater backlash by incumbents with greater resources (i.e. greater patronage opportunities) at their disposal.

Our study makes three types of contributions. First, it contributes to the small but growing literature on the effects of anticorruption campaigns, by highlighting an understudied risk that such campaigns could become the victims of their own success. Related, since this backlash often produces broader collateral damage among democratic institutions, our findings highlight a significant tension between efforts to promote liberal democracy by strengthening the rule of law and efforts to safeguard basic democratic institutions against challenges from entrenched elites in dirty democracies. We think that this "dirty democracy dilemma" represents a potentially important contribution to understanding the failure to promote liberal democracy in many new democracies of the Third Wave, as well as the more recent trends of authoritarian backsliding among some of

---

[2]As we explain in greater detail below, we measure corruption separately from anticorruption charges because the two phenomena, though naturally related, are not identical, given that corruption is hard to detect, and that Romanian anticorruption institutions had a limited mandate and investigative resources.

4

these countries. Finally, while much of the literature on electoral manipulation has focused on hybrid and authoritarian regimes (e.g. Magaloni, 2010; Schedler, 2006), our paper complements these studies by analyzing the dynamics of electoral manipulation in (albeit imperfect) democratic settings and by highlighting the link between corruption and anticorruption efforts as drivers of electoral manipulation.

1   Theoretical Framework

Even though free and fair elections are a fundamental requirement of even minimalist definitions of democracy, some degree of electoral manipulation occurs in many democratic systems (Lehoucq, 2003, p. 234).[3] As illustrated in the right panel of Figure 1, while the quality of elections is unsurprisingly much worse in "electoral autocracies," these problems are also widespread in what we have termed dirty democracies—electoral democracies that fall short of liberal democracy requirements. Nonetheless, the vast majority of recent research on fraud has focused on authoritarian and hybrid regimes, or on countries transitioning to democracy (e.g. Beaulieu and Hyde, 2009; Gehlbach and Simpser, 2015; Lehoucq and Molina, 2002; Levitsky and Way, 2010; Little, 2015; Magaloni, 2010; Rozenas, 2016; Rundlett and Svolik, 2016; Schedler, 2006). While other scholars have studied electoral manipulation in several modern electoral democracies (e.g. Casas, Díaz, and Trindade, 2017; Cantú, 2014; Mares and Young, 2018), our understanding of the dynamics of electoral fraud in democratic contexts remains more limited.[4]

This paper focuses on the drivers of electoral manipulation in dirty democracies. While political corruption has not figured prominently among the explanations for electoral manipulation (but see Callen and Long, 2014), we argue that these two deviations from the rule of law are likely to be more closely connected in democratic regimes, where electoral fraud is not only *de jure* but also *de facto* an illegal activity. If we analyze electoral fraud as an illicit activity in the context of binding rule-of-law constraints, then there are good reasons to expect a correlation between electoral fraud

---

[3]Though relatively rare, electoral manipulation occurs even in established liberal democracies. For example, in Japan parties have exploited lax residency requirements to fraudulently inflate municipal electorates (Fukumoto and Horiuchi, 2011). For other examples, see Breunig and Goerres (2011); Leemann and Bochsler (2014).

[4]The exception is the rich literature on vote buying (Mares and Young, 2016, provide a recent review); however, our study takes a broader view of electoral manipulation.

and other types of illicit behavior (such as corruption) by public officials. First, the types of public officials who engage in corruption may have lower moral qualms and/or risk aversion when faced with the opportunity to pursue personal or political gains through another type of illegal activity. Second, corrupt public officials may be more vulnerable to political pressures (or blackmail) from their superiors were they to refuse to support the party through whatever means necessary. Third, corrupt politicians may worry about being subject to prosecution by their partisan opponents were they to lose power. Finally, pre-existing corruption networks may be more effective in the pursuit of electoral fraud than starting an operation from scratch, so corrupt politicians may have an organizational advantage in addition to stronger incentives and proclivities for committing electoral fraud.

The logic of this "mutual affinity" between political corruption and electoral manipulation, corroborated by the high empirical correlation between aggregate-level measures of the two phenomena discussed above, suggests that in order to break out of this vicious cycle, dirty democracies may need to target the two phenomena simultaneously. Of course, the demand for more decisive anticorruption measures is rooted not only in a desire to clean up elections but in a broader drive to reduce corruption and law-breaking more generally. Not surprisingly, such demands have featured prominently in many election campaigns (Bågenholm, 2013; Klašnja, Tucker, and Deegan-Krause, 2016) and are often a key reason why incumbents lose elections (Klašnja, 2015).

The salience of anticorruption sentiments in many dirty democracies (combined with an ongoing push for better governance by international organizations) have led to a proliferation of anticorruption institutions. However, in practice many anticorruption efforts have produced modest effects (Meagher, 2005; Popova and Post, 2018), which has meant that much of the recent research has focused on identifying the institutional arrangements that could improve the prospects for effective anticorruption campaigns (e.g. Recanatini, 2011). While this is an important scholarly pursuit, in this paper we focus on the less studied follow-up question: what are the political consequences of having *successful* anticorruption institutions that manage to pose a significant threat to the dirty democracy status quo?

In answering this question we consider two main mechanisms. The first builds on the classical

idea that beyond their retributive function in punishing public officials who broke the law, anticorruption institutions should induce *deterrence* against illegal acts by raising the costs of malfeasance (Becker, 1968). While the deterrence deterrence effect with respect to political corruption has been documented in a few success cases, such as Singapore and Hong Kong (Quah, 2010) and Georgia (Kupatadze, 2012), given the mutual affinity between corruption and electoral fraud, we are here focusing on whether significant anticorruption measures carry over to deterring public officials from engaging in electoral manipulation.

Hypothesis H1 (Deterrence): Prior anticorruption actions reduce electoral manipulation.

However, to the extent that anticorruption measures start imposing serious costs on corrupt politicians, they can also trigger a political *backlash* and result in concerted efforts to neutralize these institutions. While attacks against liberal democratic institutions can occur in a variety of ways (e.g. Bánkuti, Halmai, and Scheppele, 2015), electoral manipulation should be an important component of a backlash strategy because it helps corrupt politicians take over (or maintain) control of political institutions (such as legislatures or presidencies) that can in turn be used to control and/or undermine anticorruption institutions. Therefore, from a backlash perspective, greater prior anticorruption initiatives may induce greater electoral manipulation.

Hypothesis H2 (Backlash): Prior anticorruption actions increase electoral manipulation.[5]

Our previous arguments indicate that the deterrent and backlash effects of anticorruption actions should primarily affect the calculus of *corrupt* political elites. On the one hand, such politicians have good reasons to fear losing their positions, wealth and possibly freedom, if anticorruption efforts continue or even accelerate, making them potentially more likely to engage in backlash-driven

---

[5]Even though deterrence (H1) and backlash (H2) imply opposite links between anticorruption efforts and electoral manipulation, they are nevertheless not simply the flip side of one another. It is conceivable that anticorruption efforts could produce neither deterrence nor backlash, as long as even relatively tougher anticorruption measures are insufficient to challenge the general sense of impunity in a particular dirty democracy. If that is true, we would reject both the deterrence and the backlash hypotheses.

electoral manipulation. Less corrupt politicians, by contrast, are likely to be dissuaded by stricter rule-of-law enforcement from engaging in electoral fraud, because they have less to fear from the continuation of anticorruption measures, while the costs of breaking election laws are higher. On the other hand, corrupt politicians may be particularly wary of drawing additional attention of anticorruption institutions through attempts at electoral manipulation, especially when they are pressured by party leaders to engage in a coordinated fraud campaign. In that case, less corrupt elites may in relative terms be more susceptible to pressures or inducements to engage in electoral manipulation than elites that already have reasons to fear tougher rule-of-law constraints. In either case, our baseline hypothesized relationships (H1 and H2) should primarily manifest in the behavior of the more corrupt relative to the less corrupt elites.

Hypothesis H3 (Corruption): Anticorruption measures trigger either stronger deterrence or stronger backlash among the more corrupt relative to the less corrupt politicians.

It is further plausible that sufficiently serious anticorruption measures would produce some degree of *both* deterrence and backlash. A factor likely to affect the balance between these two effects is the strength of the anticorruption "signal"—how threatening the elites perceive the anticorruption actions to be. However, the precise nature of this relationship is ambiguous. On the one hand, we may intuitively expect that a stronger anticorruption signal would simply amplify the predominant mechanism, thereby producing either stronger deterrence or stronger backlash.

Hypothesis H4a (Monotonic intensity): More intense anticorruption actions trigger stronger deterrence/backlash.

On the other hand, the effects of signal strength could be non-monotonic. For example, a moderate signal could trigger backlash as corrupt politicians try to defend a still-dominant dirty democracy equilibrium, while a strong signal could result in deterrence, as the fear of being punished by the new rule-of-law regime intensifies. Conversely, moderate anticorruption measures could

8

trigger deterrence, for example, because they are seen as appropriate punishments for egregious corruption, while harsh anticorruption measures could trigger backlash, if enough politicians perceive the new penalties as excessive/unfair.

Hypothesis H4b (Non-monotonic intensity): More intense anticorruption actions trigger switching between deterrence and backlash.

Beyond the intensity of anticorruption measures, the relative strength of backlash and deterrence is likely to vary as a function of contextual characteristics that affect the constraints and capabilities to engage in electoral manipulation. On the constraints side, if anticorruption actions act as a deterrent, a strong opposition can accentuate such an effect through greater opportunity to monitor the incumbents' compliance with anticorruption actions. Moreover, should the elites try to undermine the anticorruption drive, a strong opposition can act as a costly check against electoral fraud. A strong opposition may also deter incumbents' corrupt behavior in the first place (e.g. Grzymala-Busse, 2007), further lowering the prospects for backlash.[6]

Hypothesis H5 (Opposition checks): Stronger opposition accentuates deterrence and/or reduces backlash in response to anticorruption actions.

Finally, on the resource side, incumbents with more capabilities at their disposal—such as more extensive patronage networks—may be able to weaken any deterrent effects by using those resources to insulate themselves (for example, coopting the stakeholders tasked with monitoring them), or to accentuate the backlash against the anticorruption authorities through greater means of engaging in electoral manipulation. For example, Frye, Reuter, and Szakonyi (2014) demonstrate some of the mechanisms by which resources such as patronage networks can be deployed for coercive electoral mobilization practices.

---

[6]A stronger opposition may pressure incumbents—by way of greater electoral uncertainty—into committing more rather than less electoral manipulation (e.g. Golden and Chang, 2001; Nyblade and Reed, 2008). This is less likely in the context of our empirical case of the impeachment referendum, because the incumbents' key objective was not to win close local elections but rather to inflate turnout toward a nation-wide quorum target.

Hypothesis H6 (Incumbent resources): Greater incumbent resources reduce deterrence and/or accentuate backlash in response to anticorruption measures.

2 Context

To analyze the hypotheses laid out in the previous section, we focus on Romania—a representative case of a dirty democracy (see Figure 1). Here, we provide a brief overview of the key elements of the political context that shape our approach to evaluating our theoretical framework.

While elections have been competitive and the transfer of power peaceful, corruption has been a pronounced problem in Romania; for example, the European Union postponed Romania's accession over concerns about pervasive violations of the rule of law, and continues to monitor its progress in the rule-of-law reforms to this day (through the Cooperation and Verification Mechanism). Moreover, allegations of electoral manipulation have been a constant feature of post-communist elections, levied against all the major parties (Carey, 1995; Mares, Muntean, and Petrova, 2016).[7]

In response to these issues, several anticorruption institutions were set up in the early 2000s, most prominently the Romanian Anti-Corruption Directorate (DNA), a specialized anticorruption agency with its own prosecutors, investigators, and police officers.[8] Under pressure from the EU during Romania's preparations for accession, with the initiative of reformist ministers (most notably Monica Macovei as Minister of Justice), and under the reign of activist chief prosecutors (such as Daniel Morar and Laura Kövesi), the DNA for the first time since the fall of communism vigorously pursued high-level corruption investigations. For example, between 2005 and 2012, it secured close to 1,500 sentences, including for a former prime minister, three ministers, two senators, six MPs, and several hundred local politicians and judges.[9] The agency has been praised internationally

---

[7]After the 2009 presidential elections, which President Băsescu narrowly won, Victor Ponta, the leader of the governing USL complained that "their" (i.e. the PDL's) electoral fraud system had worked better than the PSD's. Interview on Realitatea TV, available at: `https://www.youtube.com/watch?v=8hEfzktmiSs&playnext=1&list=PLA7BAED4923CE4F05&feature=results_main`.

[8]Other prominent institutions include the National Integrity Agency, tasked with managing the disclosure of assets and the verification of conflicts of interest of public officials, and the General anticorruption Directorate, a specialized police structure combating corruption within police and military forces.

[9]See: `http://www.pna.ro/faces/obiect2.jsp?id=192`.

for its effectiveness (e.g. European Commission, 2014), and its track record judged as successful compared to many of its peers in Eastern Europe and elsewhere (Popova and Post, 2018).[10]

At the same time, numerous politicians, most vocally from the center-left ex-communist PSD (Social Democratic Party), decried the DNA's activities as politically motivated and its procedures as judicial overreach. While such concerns have gained some credibility recently, during our period of study the DNA was widely seen as non-politicized (e.g. Mungiu-Pippidi, 2018). Indeed, as Figure A2 shows, we find no evidence that during 2008-2012 the DNA's caseload exhibited any systematic bias against any of the main parties, incumbents, or particularly vulnerable—or entrenched—politicians (see Section A2.1 for more details).

Given the threat that its track record was posing for the dirty democracy status quo, (part of) the establishment embarked on a campaign to eliminate or undermine the DNA. There were a number of legislative attempts to curtail its resources, remove its prosecutors or reduce their independence, and decriminalize many of the offenses that were under the DNA's mandate. The key obstacle in the way of many of these attempts was the then-President Traian Băsescu.[11]

Therefore, removing Băsescu was an important component of a successful strategy by the dirty democracy establishment to weaken or eliminate the DNA, of which the 2012 impeachment attempt was arguably an integral part.[12] On July 6, 2012 Băsescu was suspended by a wide parliamentary majority on allegations of overstepping presidential powers in a variety of cases, such as phone-tapping of political enemies and pressures on the judiciary. However, according to the Romanian Constitution his suspension had to be confirmed by a popular referendum, which took place on July 29. For the impeachment to be confirmed, Romanian law required a turnout of 50%+1 of registered voters and a majority of yes-votes among voters to the referendum question: "Do you agree with the dismissal of the President of Romania Mr Traian Băsescu?"

The main driving force behind the impeachment was the governing coalition of USL (Social

---

[10]Perhaps in response, Romania experienced a significant reduction in (perceptions of) corruption; for example, between 2005 and 2016, the values of both the World Bank's Control of Corruption Governance Indicator and the V-Dem's Political Corruption Index fell by close to 40%.

[11]Romania has a semi-presidential system of government with both a president and a prime minister, and the president has significant influence over anticorruption institutions, including over the naming of the head of the DNA.

[12]See for example Aligica (7/24/2012), `http://revista22.ro/16553/.html`.

Liberal Union), made up of the PSD headed by the then-Prime Minister Victor Ponta, the center-right PNL (National Liberal Party), led by Crin Antonescu, who became interim president after Băsescu's suspension, and the PC (Partidul Conservator), whose leader, Dan Voiculescu was under DNA investigations at the time (and was eventually sentenced to prison for corruption). The main political force opposing the referendum was the largest opposition party, the PDL (Democratic Liberal Party), which supported Băsescu in his two presidential campaigns in 2004 and 2009.[13] In the remainder of the paper, we call the USL the "governing coalition" and the PDL the "opposition."

Given Băsescu's low approval rating at the time, it quickly became clear that the crucial question would be whether the government would succeed in getting 50% of voters to turn out. Băsescu, who had initially encouraged voters to turn out and vote no, reversed his position and instead endorsed the rational strategy of asking his supporters to stay home. In the end, turnout was 46.24%, with 87.6% of those voting in favor of impeachment. While the referendum was unsuccessful[14] (and, as a result, the Romanian Constitutional Court reinstated Băsescu as president), there were numerous complaints of electoral manipulation.[15] Given the context of the referendum, we argue that these manipulation attempts represent a measurable way of capturing the logic of elite response to the DNA's anticorruption drive.

Based on journalistic accounts and court evidence,[16] the repertoire of fraudulent practices allegedly used in the referendum was quite broad and included standard ballot stuffing, vote buying, voter intimidation, "electoral tourism" (i.e. voting in multiple constituencies), the use of personal data to vote on behalf of people who are dead or absent, and the misuse of mobile urns, intended for voters who cannot physically get to the polling station. Given the context of the referendum and the opposing sides, there are strong reasons to believe that any electoral manipulation was

---

[13]The positions of other, smaller political parties were more ambiguous. The Hungarian minority party UDMR, which had previously been part of the PDL governing coalition, switched sides and voted in favor of impeachment. The new populist PP-DD (People's Party), which had come in third place in the June 2012 parliamentary elections, did not take a clear position on the referendum, as its leader, TV-host Dan Diaconescu, condemned both the PDL and the USL.

[14]This was not the first attempt to remove Băsescu, whose impeachment was attempted by a similar coalition in 2007 as well. That referendum failed too, with more than two-thirds of voters opposing impeachment.

[15]See: http://www.roaep.ro/legislatie/wp-content/uploads/2015/06/RAPORT-privind-referendumul-national-din-29-iulie-2012-2.pdf.

[16]See for example: http://www.pna.ro/faces/comunicat.xhtml?id=3522, and http://www.pna.ro/faces/comunicat.xhtml?id=4342.

committed largely by the governing coalition and its allies. Since the opposition's agenda in the referendum was to reduce turnout, most of the fraud strategies (particularly electoral tourism, voting on behalf of others and mobile urns) could not be employed by the opposition even if it had the motives and means to do so.[17] Indeed, using the diagnostics of electoral manipulation we describe in the next section, we find no evidence of manipulation committed by the opposition (see Section A4.1 for more details).

Moreover, the journalistic accounts and the criminal prosecutions suggest that the crucial aspect of electoral manipulation in the referendum was the involvement of local political networks—mayors and other local political elites from the governing coalition (and particularly the ex-communist PSD).[18] The important role of local officials in electoral fraud is partly due to some of the direct legal responsibilities of mayors and local councils in the administration of elections (including, for example, the updating of electoral lists), but is more broadly facilitated by discretionary powers inherent in determining access to social assistance and public housing, local public employment, as well as ensuring local public order. These actors therefore appeared to be a key component in both legal and illegal electoral mobilization efforts.[19]

3   Data, Variables, and Research Designs

We now describe how we operationalize the key variables of interest, as well as the data sources we rely on.

---

[17]Moreover, the governing coalition's local control outnumbered the main opposition party's by a ratio of 4:1, thus giving the governing coalition much greater opportunities to marshal administrative resources for electoral purposes.

[18]On studies examining the local execution of fraud in other contexts, see for example Cantú (2014); Hidalgo and Nichter (2016); Simpser (2013).

[19]For example, one Romanian mayor told an undercover journalist posing as a PSD party operative about his plans to boost turnout:

> "We go to people's houses in the evening around 10pm. We see who they are, how they are, what their faces are like. Depending on how they present themselves, we go after them. We don't want to create an uproar. The idea is to take as many as possible. We will act exactly like Dragnea [Liviu Dragnea, the Secretary General of the PSD (and a former Interior Minister)] has taught us. We have prepared cars for polling stations. We have five cars from party members. If they're not enough we also take the Logan from the mayor's office. It's a good Logan with eight seats."

http://www.gandul.info/stiri/referendum-2012-reportaj-sub-acoperire-din-mijlocul-armatei-psd-daca-la-ora-17-la-sectia-93-sa-zicem-nu-s-a-iesit-decat-40-actionam-in-forta-exclusiv-gandul-9903249.

Diagnostics of Electoral Manipulation

Our outcome of interest is the locality-level patterns of electoral manipulation, which we have argued can be considered a meaningful measure of local elite response to anticorruption actions. Because electoral manipulation is covert and thus difficult to uncover, we develop four different diagnostics of turnout manipulation in the referendum. These diagnostic measures and tests are sometimes inspired by existing approaches to the identification of electoral fraud; however, we adapt them to the context of the referendum with a minimum turnout requirement, as well as to the particularities of our theoretical expectations and data.

1. Disparities between local election and referendum outcomes. As a first diagnostic approach, we examine the local variation in the correlation between party support in the June 2012 local election and the July 2012 referendum turnout. Given that the referendum took place only seven weeks after the local election, party support in local elections should be strongly correlated with patterns of referendum turnout in predictable ways.[20] We focus on the correlation between the main opposition party's vote share in the local election and referendum turnout.[21] Intuitively, higher proportions of votes for the opposition party (as a percentage of registered voters) should translate into lower turnout in the referendum, since opposition voters had a strong incentive to stay home in order to deprive the referendum of its required 50% quorum.

What matters for our theoretical questions, however, is not the extent to which opposition voters were more likely to abstain, but whether their participation rates *differed* across localities with anticorruption actions and other factors of theoretical interest. Manipulating turnout in the referendum meant turning out not just the government's base but also supporters of other parties, most numerous of who were the main opposition party's voters. We anticipate that the expected negative correlation between opposition local election vote shares and referendum turnout will be *lower* (or even positive) in localities where our hypotheses predict greater electoral manipulation

---

[20]The short time interval between the local election and the referendum makes major partisan realignments of local politicians between the two events highly unlikely. At the same time, the local elections (June 10, 2012) were held more than three weeks before the presidential recall procedures were launched (July 6, 2012), and therefore the possibility of impeachment did not "contaminate" the local electoral campaigns.

[21]We utilize the main opposition party's vote share for the county council (there are 41 counties in Romania). Alternatively, we could have used the vote shares for the local council or for mayor. We prefer the county council vote shares because the local council and mayoral elections are more affected by local-level "noise" related to particular personalities. The difference is minor, however, as these different vote shares are highly correlated—at .8 and above.

(and vice versa for deterrence).

To simplify the terminology, we henceforth call this diagnostic the "opposition conversion rate"—the rate at which the opposition local election vote share is "converted" into referendum turnout. This diagnostic is similar in spirit to other electoral fraud measures that examine correlations between election turnout and party vote shares (Myagkov, Ordeshook, and Shakin, 2009; Klimek et al., 2012). We rely on official polling station-level vote shares and referendum turnout,[22] as published by the Romanian Central Electoral Bureau. To control for differences between localities that may be correlated with both referendum turnout patterns and local partisan vote shares, we include locality-level characteristics (educational breakdowns, the locality's ethnic composition, and its size), drawn from the Romanian National Statistical Institute.[23] We also include county fixed effects.

2. Regression discontinuity-based turnout patterns. We have argued in the previous section that in the context of the 2012 impeachment referendum, the deterrent or backlash incentives most clearly applied to the elites belonging to the governing coalition (the USL coalition). In the main text, we will therefore limit our analysis to the localities run by the USL, while demonstrating that we indeed find no evidence of systematic patterns of manipulation in localities run by other parties (Figure A3).

Our main analyses therefore presuppose local partisan control effects. It stands to reason that such effects are correlated with many other observable and unobservable locality-level characteristics, which in turn may affect referendum turnout. To minimize this potential problem of confounding—and further check the validity of our assumption to focus mainly on governing coalition-run localities—our second diagnostic approach relies on the regression discontinuity design (henceforth the RDD). The RDD compares the referendum outcomes in localities where the governing coalition won a closely-contested election for mayor to outcomes in localities where it

---

[22]Except for a handful of minor exceptions, the number and boundaries of polling stations were unchanged between the local election and the referendum, thereby allowing for direct comparisons.

[23]Because the government allowed citizens to vote outside of their resident locality, and the timing of the referendum corresponded with peak summer vacation season, in some localities the number of local voters was augmented considerably by tourists. We therefore also control for the log-difference in the number of tourists in July and August of 2012 relative to those in the same months in the preceding two years, based on the data from National Statistical Institute.

barely lost. As discussed above, mayors have important local responsibilities that allow them to influence any manipulation efforts.[24] This approach potentially approximates a natural experiment, because parties in close elections are unlikely to perfectly control their vote share, and therefore local governing coalition control may be as-if randomly assigned (Lee, 2008).[25]

While the RDD aims to facilitate the causal identification of the effect of the local governing coalition control on referendum outcomes, our intention is once again to examine the variation in the RDD effect in relation to the factors of interest, such as local anticorruption actions. As usual in RDD analyses, the key independent variable is the margin of victory of the governing coalition, which we calculated based on the June 2012 mayoral election results.[26] The outcome is once again referendum turnout, for which we use the same data as for the conversion rate analysis.

3. Survey-based measures of electoral manipulation. One of the unique features of our analysis is that we are able to complement the aggregate-level data typically used in analyses of electoral fraud with individual-level data from a nationally representative face-to-face survey of 1,200 adult Romanian citizens fielded in early November 2012, a little over two months after the referendum. We solicited respondents' *perceptions* of the degree of referendum fraud, and employed a list experiment to try to infer respondents' direct *experiences* with intimidation and/or turnout inducements. Crucially, the survey identified the respondents' locality, allowing us to merge the individual data with the locality-level information on partisan control, anticorruption actions, etc. The text of both survey questions is given in Section A3, which also describes how we constructed our outcome variables from these questions.

We therefore use the variation in the responses to these two questions as our third diagnostic approach to referendum fraud. The strength of this approach is that unlike the aggregate-based conversion rate and RDD approaches, which may ultimately mainly reflect the legitimate get-

---

[24]All the newly (re)elected mayors assumed office before the referendum announcement, because their mandates must be validated and activated by the relevant territorial court within at most 20 days of the day of the local election (Article 58 of Law 215/2001).

[25]The described RDD likely provides conservative estimates of interest, because the qualitative evidence suggests that much of the alleged manipulation happened in the ruling coalition *strongholds*. See for example: `https://www.realitatea.net/lista-completa-a-inculpatilor-in-dosarul-frauda-la-referendum_1287488.html`.

[26]In line with the common practice in RDD applications, we use a local-linear estimator with an optimal bandwidth that minimizes the mean-squared-error of the regression. We rely on the optimal bandwidth procedure outlined in Calonico, Cattaneo, and Titiunik (2014).

out-the-vote patterns, the individual level data should help elicit more directly the micro-level dynamics we are interested in. As with the other diagnostic approaches, we will analyze how these responses vary in relation to locality-level anticorruption actions and other factors of interest. We also control for a number of individual-level characteristics (age, gender, education, ethnicity, employment status, and party vote in the local election), locality-level characteristics (size and administrative type of locality), as well as region fixed effects.

4. Distributional Turnout Anomalies. Our final diagnostic approach is related to one of the more common fraud diagnostic applications—examining the anomalies in the distribution of election results (e.g. Beber and Scacco, 2012; Myagkov, Ordeshook, and Shakin, 2009; Rozenas, 2017). In particular, because local officials who pondered manipulation were most clearly incentivized to inflate referendum turnout, we are most interested in any anomalies in the turnout rate at the *right tail* of the distribution (i.e. anomalies in high turnout rates).

We analyze two measures of distribution *tailedness*. The first is kurtosis, a well-known summary measure commonly used as one of the electoral fraud diagnostics (Hicken and Mebane, 2017). Turnout proportions usually follow the Normal distribution (Myagkov, Ordeshook, and Shakin, 2009), which has a kurtosis of three. Turnout distributions with a considerably higher value of kurtosis may point to the presence of manipulation, by indicating that the tails of the distribution are noticeably 'heavier' than what would be expected.

The drawback of kurtosis is that it measures not just the heaviness in the tails of the distribution (relative to the Normal distribution), but also its peakedness (DeCarlo, 1997); that is, a large value of kurtosis can be driven either by heavy tails or by a highly populated peak. Moreover, large kurtosis can be driven by a heavy *left* as well as right tail, whereas we are only interested in capturing the latter. For these reasons, we also utilize a second measure of tailedness not subject to these limitations—the medcouple (Brys, Hubert, and Struyf, 2004). This measure is not influenced by a distribution's peakedness, and it is separately derived for a distribution's right and left tails. We therefore focus on the right medcouple (henceforth RMC), as well as on the ratio of the right to the left medcouple (LMC). The reference value for both medcouples for a standard Normal distribution is 0.2. Larger values of the RMC, as well as a large RMC-to-LMC ratio should both

be indicative of suspicious patterns of referendum turnout.

As with all the other manipulation diagnostics, we are interested in how these tailedness measures vary across localities with different anticorruption actions, corruption levels, and other factors of interest.[27]

Local anticorruption Actions

Our key independent variable is a measure of local anticorruption actions. As discussed above, the institution spearheading the anticorruption reforms has been the Romanian anticorruption Directorate (DNA). We therefore compiled an original dataset of all anticorruption actions taken by the DNA, by combing through more than 2,000 prosecution announcements in the period 2008-2012.[28] To the extent possible, we geocoded each case in order to develop a measure of anticorruption action by locality and year. In the baseline analyses of Hypotheses H1 and H2, we use a simple binary variable indicating whether any public official in a locality was subject to at least one DNA case in the two years prior to the referendum. A total of 152 localities fit this criterion (out of 3,034 localities for which we have data, or 4.77%). We also coded the strength of the local anticorruption signal (to test Hypotheses H4a and H4b), by distinguishing cases that involved at least one arrest in addition to indictments; 61 of the 152 localities (1.91% of all localities) fit this criterion. The logic here is straightforward: arrests in one's locality are likely to be a more forceful and immediate demonstration of threat to a dirty democracy status quo than indictments.

Local Elite Corruption

As argued above, both the deterrent and the backlash effects of anticorruption actions should primarily manifest themselves among the more corrupt local elites (Hypothesis H3). Therefore, our second key independent variable is a measure of local-level corruption.

While anticorruption actions by the DNA indicate the presence of some (suspected) corruption

---

[27]Unlike the conversion rates and the RDD diagnostic tests, which both rely on polling station-level turnout data, here we utilize locality-level referendum turnout rates. This is because the tailedness measures do not allow us to account for intra-locality correlations across polling stations, which we do by clustering the standard errors for both of the other diagnostic measures. We also cluster the standard errors by locality in the analysis with the survey-based measures of manipulation.

[28]http://www.pna.ro/comunicate.xhtml.

in a locality, the DNA does not have the mandate (nor the resources) to investigate all instances of corruption in every locality.[29] Moreover, it is possible that the DNA measure is skewed toward more readily observable—and prosecutable—corruption cases. Therefore, in order to measure local corruption we collected two additional original datasets.

First, we collected data on a large number of public procurement contracts for the period 2008-2012, which we use to develop three intuitive measures of corruption risk in local procurement: the frequency with which local tenders are conducted through discretionary low-transparency procedures (as opposed to the default highest-transparency procedure), the frequency of single-bidder local tenders, and the average price per quantity for regularized homogenous purchases, such as office or medical supplies. Less transparent, uncompetitive, and more expensive contracts for standardized products are often an indication of corrupt tenders (see for example Fazekas and Kocsis, Forthcoming).

The intended purpose of this measure is to broadly capture the misappropriation of public resources for corrupt use. One of the most common areas of such misappropriation is infrastructure spending (Golden and Picci, 2005). To dive more deeply into this type of practice, we utilize several administrative datasets to construct another measure of local corruption risk, which we term "missing infrastructure." This measure captures any discrepancies between the change in infrastructure spending and the change in the actual physical stock of infrastructure for the period 2008-2012. A large discrepancy between the money allocated and the stock of infrastructure potentially indicates corruption in the allocation of funds. We focus on water and sewage distribution systems because maintenance of this type of infrastructure is primarily under the local authority, and their capital expenditures are among the most clearly earmarked and available in the data. Both this measure, and the procurement risk measure (which combines the three individual risk indicators) are standardized to have a mean of zero and standard deviation of one (more details on the construction of each measure and the data sources used are given in Section A2.2).

To maximize the sample of localities for which these indirect measures of corruption risk are

---

[29]The DNA is tasked with investigating and prosecuting mid- to high-level crimes, defined as cases causing large monetary damages or obtaining high-value objects or property. Smaller corruption crimes remain under the purview of ordinary prosecution offices.

available, we combine them into one simple binary corruption indicator equal to one if a locality is above the median on either of the proxies, and zero otherwise.[30] By this measure, 57% of localities exhibit higher-than-usual corruption risks. Note that while this local corruption variable is positively correlated with the DNA anticorruption actions, the two measures are by no means identical—the sample correlation is .12 (see Table A1).

Local Constraints and Resources

Hypotheses 5 and 6 indicate, respectively, that the strength of the local opposition and the resources available to incumbents may influence the extent of the deterrence and/or backlash effects of anticorruption reforms. We draw on electoral and other locality-level data to operationalize these potential moderators. We measure opposition strength by the share of local council seats won by the opposition parties. For simplicity, we code localities as having a weak opposition if the seat share of the governing coalition in the local council is two-thirds or greater. 15% of localities exhibit such weak opposition in the local council (all of which also have a USL mayor; 58% of localities with a stronger opposition have a USL mayor).

To capture incumbent resources that can potentially be deployed for turnout manipulation, we construct a measure of 'patronage resources.' The logic is that a more extensive preexisting patronage network may facilitate manipulation of referendum turnout by providing a more easily accessible pool of citizens who can be coerced and/or incentivized to go to the polls. Such network may also facilitate buying off the actors (e.g. the opposition) who may otherwise exert pressure against the backlash. We proxy for the capacity for patronage with the size of the citizen pool reliant on the city hall for employment. We use three variables drawn from a large-scale survey conducted in 2010 of almost all mayoral offices in Romania (Toth, Darasteanu, and Tarnovschi, 2010): full-time employees, part-time employees, and contractors employed by the city hall. The patronage resources measure is the sum of these three variables (expressed as a share of the total population in a locality). For analysis, we use a binary variable that assigns localities above the 75th percentile (about 1.5% of the locality population) as having higher patronage resources.

---

[30]This measure is available for 2,537 of the 3,186 localities (79.6%) in our data.

4   Analysis and Results

We start by evaluating Hypotheses H1, H2, and H3. To reiterate, we examine whether prior anticorruption actions in a locality on average decrease electoral manipulation (H1) or increase it (H2), as well as whether any patterns consistent either with either H1 or H2 are more pronounced in localities with higher local corruption. Given these expectations, we compare electoral manipulation across four types of localities characterized by the presence or absence of prior anticorruption actions, and by higher or lower local corruption.

As discussed in the previous section, we operationalize turnout manipulation through four diagnostic approaches: conversion rates, RDD approach, survey-based measures, and distribution tailedness measures. We assess evidence for Hypothesis H1-H3 for each of the diagnostic measures in turn.

Figure 2 shows the results for the opposition conversion rate approach. The opposition conversion rate is the correlation between the polling station-level turnout in the July 2012 referendum and the vote share for the main opposition party in the June 2012 local election (conditional on locality-level covariates and county fixed effects). Since the opposition supporters had a clear incentive to abstain in the referendum, the conversion rate should on average be negative. While the precise magnitude of this correlation is *ex ante* unclear, manipulation of referendum turnout should be manifested in a less negative (or potentially even positive) conversion rate. Hypothesis H1 (deterrence) therefore suggests that the conversion rate in localities with prior anticorruption actions should be no less negative, and potentially more so, than the rate in localities without prior indictments. Hypothesis H2 (backlash) implies precisely the opposite pattern.

Results in Figure 2 are consistent with the hypothesized backlash effect, and inconsistent with the deterrence effect. The estimates in black show the opposition conversion rate for localities with prior anticorruption actions (top estimate) and without such actions (estimate in the fourth row). While the latter conversion rate is negative (-.16), the former is *positive* and larger in absolute terms (.22; the difference between the two rates is significant at $p < .001$). In other words, in localities with no prior anticorruption actions, a higher opposition party vote share in the local election translated—expectedly—into lower referendum turnout seven weeks later. However, this

21

Figure 2: Opposition conversion rates, prior anticorruption actions, and local corruption
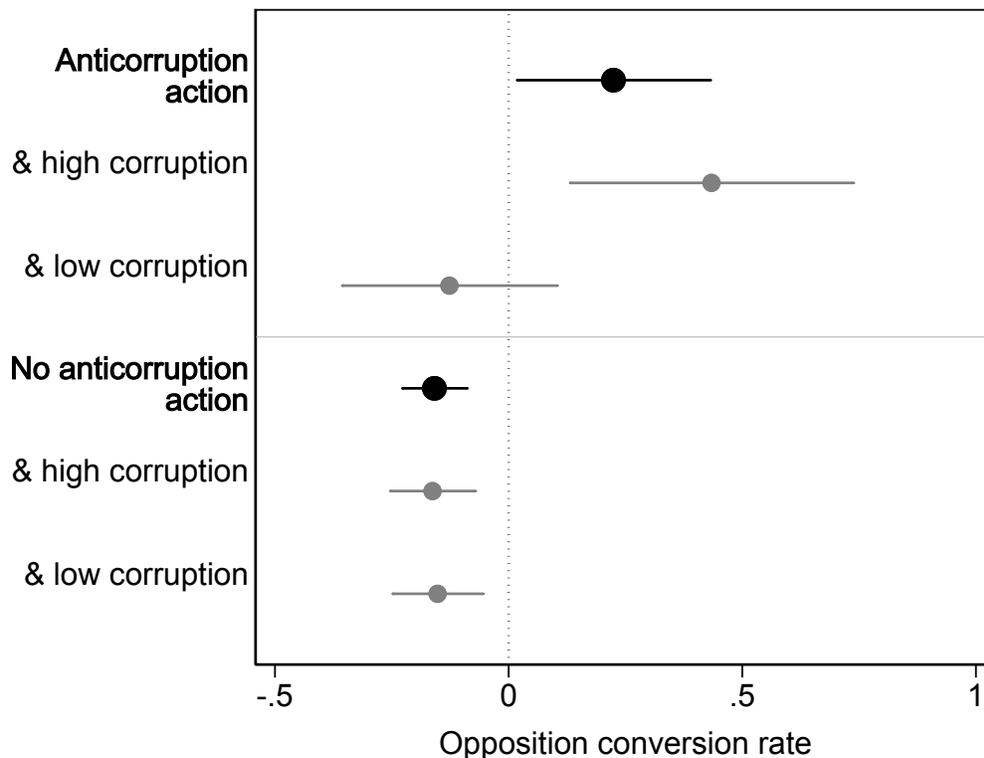
Note: The variables and the research design details are described in Section 3. The figure shows estimates for localities run by mayors from the governing coalition (USL). Figure A3 shows the results for other localities.

was demonstrably not the case in localities with prior anticorruption actions.

The remaining estimates (in gray) in Figure 2 help us evaluate Hypothesis H3, by disaggregating the conversion rates by both anticorruption actions and local corruption level. The results indeed suggest an accentuating impact of local corruption: backlash seems to be primarily concentrated in the higher-corruption localities with prior anticorruption actions, and absent elsewhere—including in the lower-corruption localities with anticorruption actions (the differences are significant at $p < .005$).

We next evaluate the same hypotheses with the other electoral manipulation measures. Figure 3 shows the results with the RDD approach. Here, we compare referendum turnout in places where

the governing coalition narrowly won the local mayoral election to places where it narrowly lost. As for the conversion rate analysis, we examine the variation in the RDD effect across the four types of localities. Hypothesis H1 suggests that turnout should be no higher in localities with prior anticorruption actions relative to localities without prior indictments, whereas H2 suggests that turnout should be higher. Hypothesis H3 implies that these turnout patterns should be accentuated in the higher-corruption relative to the lower-corruption localities.

Figure 3: RDD effects on turnout, prior anticorruption actions, and local corruption
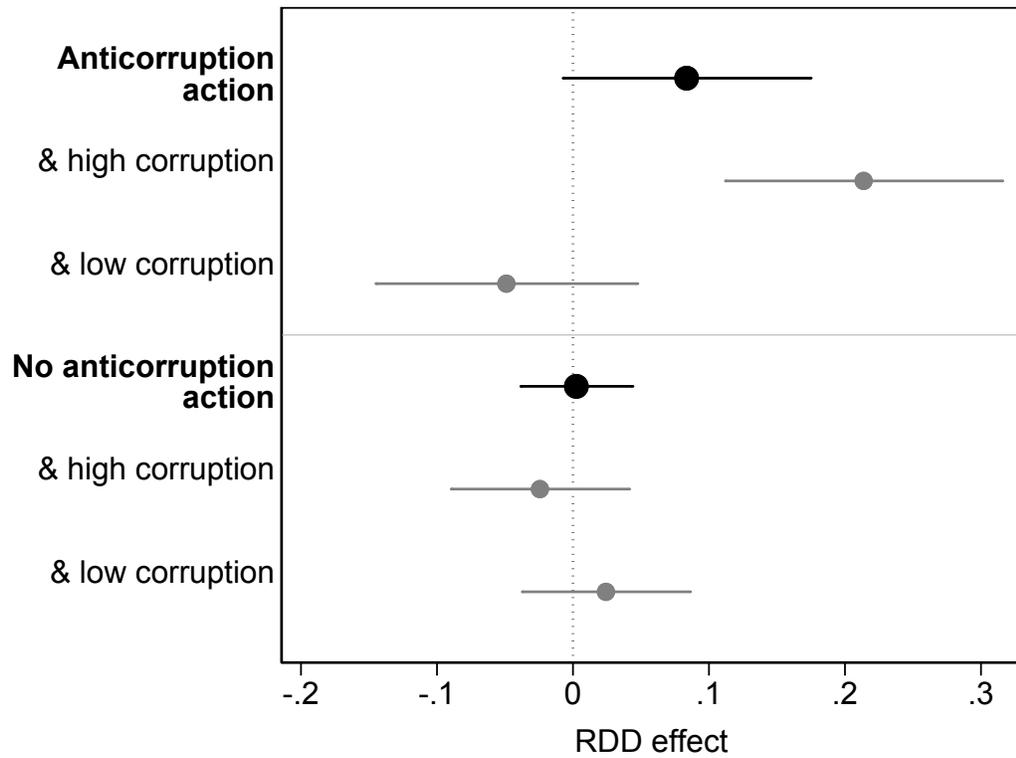
Note: The variables and the research design details are described in Section 3.

The RDD effects in Figure 3 follow patterns that are quite similar to those for the conversion rates in Figure 2.[31] The USL-induced referendum turnout is noticeable in localities with prior an-

---

[31]The key assumption in the RDD approach is that parties cannot precisely control their vote share in close elections. Two types of tests are usually undertaken to examine the validity of this assumption: to ascertain no RDD effects on important pre-determined variables (Caughey and Sekhon, 2011), and no disproportionately many

ticorruption actions (top estimate in black of about eight percentage points, significant at $p < .07$), but virtually non-existent in localities without prior anticorruption indictments (fourth estimate, also in black; the difference between the two estimates gives the p-value of .21). These patterns are once again inconsistent with the deterrence effect and in line with the backlash effect. Moreover, in line with Hypothesis H3, this apparent backlash was concentrated in the higher-corruption localities with prior indictments (21 percentage points, significant at $p < .001$), but absent from the lower-corruption localities with prior indictments (point estimate of -5 percentage points, p-value of .3). By contrast, turnout boost does not vary by the level of local corruption in localities without prior anticorruption actions.

Figure 4 conveys broadly similar patterns with our third set of fraud diagnostic measures based on individual-level survey data. The left panel in Figure 4 shows the predicted probability of citizens perceiving "organized fraud" in the referendum across the same locality types as in the previous analyses. The right panel plots the estimated experience with intimidation and/or inducement to turn out, as elicited through the list experiment. While the estimates are generally noisier than for the aggregate-level analyses, which is at least in part due to fairly small samples within locality types (on average about one hundred respondents), both perceptions of and reported experience with manipulation are most pronounced in localities with prior anticorruption actions and higher local corruption (this estimate is statistically different from the other estimates in gray—combined—at $p < .01$ and $p < .04$ for the perceptions and experience, respectively).

Finally, Table 1 examines the variation in the tailedness of the turnout distributions across the same types of localities as before. The left-most column shows the kurtosis, the middle column the right medcouple (RMC), and the right-most column the ratio of the right to the left medcouple (RMC/LMC ratio). To reiterate, these measures convey how heavy the tails of the turnout distribution are, with our interest primarily in the right tail (i.e. localities with high turnout).

close wins just above the winning threshold (McCrary, 2008). Figure A4 indicates no RDD effects for a number of relevant predetermined variables. Figure A5, however, shows that within the optimal bandwidth around the winning threshold, the governing coalition won disproportionately many close mayoral elections than it has lost, possibly indicating some degree of electoral manipulation. We discuss in Section A4.2 why we think this evidence of sorting makes it *more* difficult to use the RDD approach to uncover referendum fraud. Moreover, Figure A6 shows that our key result is unchanged across a number of different bandwidths, alleviating concerns that it is entirely driven by strategic sorting.

Figure 4: Individual perceptions of and experiences with manipulation, prior anticorruption actions, and local corruption
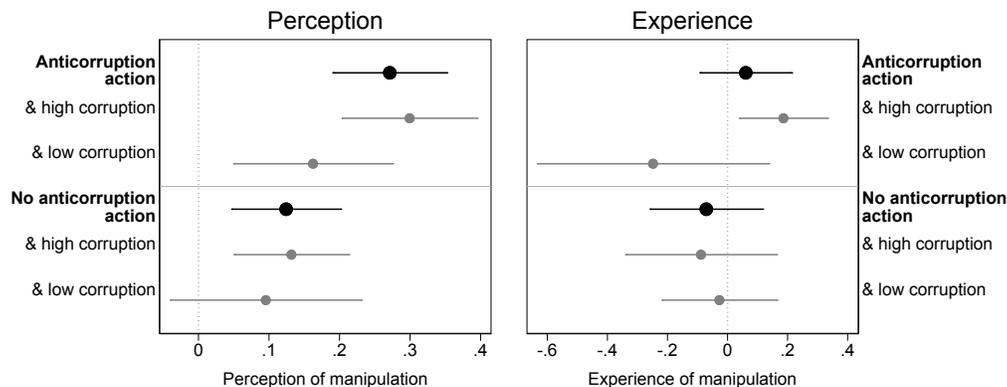
Note: The *y* axis in the left panel shows the predicted probability of perceiving "massive election fraud," conditional on covariates. The *y* axis in the right panel shows the list experiment-based estimate of the reported experience with intimidation and/or inducements to turn out in the referendum. Section A3 gives details about the survey questions and the dependent variable construction. Section 3 describes the other variables.

The benchmark values are a kurtosis of three, the right medcouple of 0.2, and the right-to-left medcouple ratio of one.

Table 1: Referendum turnout tailedness, anticorruption actions, and local corruption

	Kurtosis	RMC	RMC/LMC
Anticorruption action	5.29	0.04	0.16
& high corruption	6.09	0.58	2.05
& low corruption	1.92	0.27	0.33
No anticorruption action	3.49	0.31	1.26
& high corruption	3.70	0.35	1.21
& low corruption	3.48	0.29	1.27

Note: The variables and the research design details are described in Section 3.

By and large, the patterns are again similar to those with the previous diagnostic measures. Namely, for localities with prior anticorruption actions and higher corruption, the kurtosis (of 6.09, twice the benchmark value), the RMC (of .58, almost three times the benchmark value), and the RMC/LMC ratio (of 2.05, twice the benchmark value) all point to a turnout distribution with a

noticeably heavier right tail than it would be under the usual Normal distribution. None of the other distributions attain nearly as pronounced a right-tailedness.[32] These patterns are once more most consistent with a combination of Hypotheses H2 and H3.

In sum, the patterns across the four types of manipulation diagnostics are quite consistent, pointing toward backlash against anticorruption actions that is concentrated in incumbent-run localities with higher local corruption. Nonetheless, all of these measures are indirect. To get at more direct evidence, we briefly analyze the data from an additional source. In the aftermath of the referendum, the anticorruption Directorate was mandated with investigating and bringing for prosecution any cases of *referendum fraud*. As of mid-2016, the DNA had indicted close to 130 individuals[33] from twenty-nine localities for a variety of alleged violations, including ballot stuffing, intimidation, electoral roll falsification, multiple voting, etc. We geocoded these cases; while the sample size is too small for a rigorous analysis, Figure A7 shows very similar patterns to the ones observed with the indirect diagnostic measures. These results lend additional credence to the plausibility of the backlash effect.

Manipulation and Anticorruption Signal Strength

We now proceed to evaluate the link between the strength of the anticorruption signal—the clarity of the threat to the political elites—and the patterns of electoral manipulation. Recall that H4a predicts a monotonic relationship, in that more intense anticorruption actions should trigger a stronger first-order effect—deterrence or backlash. Given the preceding evidence, we focus on backlash. Hypothesis H4b, by contrast, suggests that the link may be non-monotonic, involving switching between backlash and deterrence. To reiterate, we measure the variation in the strength of the anticorruption signal by distinguishing the DNA cases with at least one arrest (a stronger signal) from the cases involving indictments but no arrests (a weaker signal).

Figure 5 compares the opposition conversion rates across localities experiencing signals of dif-

---

[32]In all localities with prior anticorruption actions, the distribution is markedly left-skewed (given the low RMC/LMC ratio and a large kurtosis). This is driven by a combination of a large mass in the left tail among localities with lower corruption, and the fact that there are considerably more such localities than those with higher corruption and prior anticorruption actions.

[33]Most prominent among those indicted was Liviu Dragnea, the leader of the socialist PSD party, who ultimately received a suspended two-year sentence.

ferent strength.[34] The top estimates show the results for the strongest signal; the middle estimates for the weaker signal, and the bottom estimates for localities not facing any anticorruption actions. The estimates in gray (triangles) are for all localities, irrespective of the local corruption level; the black (circle) estimates are specifically for higher-corruption localities.[35]

Figure 5: Anticorruption signal strength and electoral manipulation
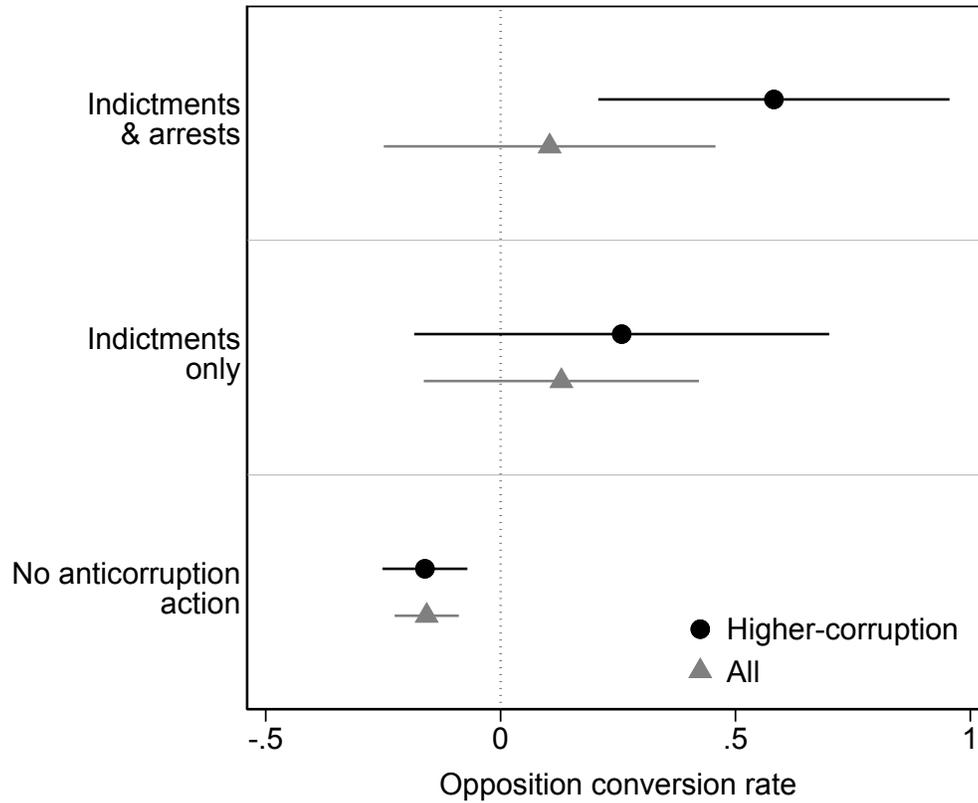
Note: The variables and the research design details are described in Section 3.

The patterns are largely consistent with Hypothesis H4a (but not with Hypothesis H4b), of a monotonic relationship between signal strength and manipulation, and further reinforce evidence for a backlash effect. As before, the opposition conversion rates are negative in localities with no prior DNA actions, with or without higher corruption (around $-.14$, with the SE of around

---

[34]Because of small sample sizes for this analysis and the analyses for Hypotheses H5 and H6, hereafter we focus on the conversion rate diagnostic measure, as it is available for all the localities in our data.

[35]There are few localities with DNA arrests and lower corruption, making it difficult to estimate results separately for lower-corruption localities.

.04). They are less negative in localities with prior DNA actions (.13 in all localities and .25 in higher-corruption localities), but primarily in localities experiencing at least one arrest—and only in higher-corruption localities (.58, sig. at $p < .01$).[36] In other words, the backlash effect is most evident where the local corrupt elites likely felt the most threatened.

Constraints, Opportunities, and Manipulation

Finally, Figure 6 evaluates Hypotheses H5 and H6, which postulate, respectively, that a stronger opposition may reduce backlash, and that greater incumbent resources may accentuate backlash. To reiterate, we measure opposition strength with a binary indicator of whether the governing coalition has more than two-thirds of the seats in the local council. Incumbent resources are operationalized with a binary measure of the magnitude of patronage opportunities in the locality.

For simplicity, and given that the previous results strongly suggest the presence of a backlash effect concentrated in higher-corruption localities, Figure 6 focuses only on localities with both anticorruption actions and high corruption. The left panel of Figure 6 evaluates Hypothesis H5, and the right panel evaluates Hypothesis H6.

The first takeaway from the left panel of Figure 6 is that in localities with the greatest backlash, even a relatively stronger opposition did not seem to fully constrain electoral manipulation, as the bottom estimate is positive (.4, sig. at $p = .05$). Nevertheless, in line with H5, a stronger opposition does appear to have reduced the backlash somewhat, since the conversion rate in localities with a weaker opposition is noticeably higher (.91, sig. at $p < .01$; the difference between the two rates is significant at $p = .12$). In fact, this high a conversion rate in places with a weak opposition essentially suggests that the governing coalition was able to turn out *almost all* of the opposition supporters. While some of this mobilization prowess may be legitimate, as the opposition voter block is relative small and thus may require less coordination, it is nevertheless hard to reconcile with a complete absence of electoral manipulation.

With respect to Hypothesis H6 (the right panel), we do not find evidence that the availability

---

[36]The difference between the "indictments only" conversion rate and the rate in localities without any actions in higher-corruption localities is significant at $p < .07$. The difference between the localities with some arrests and indictments only is significant at $p = .26$.

Figure 6: Constraints, opportunities, and electoral manipulation
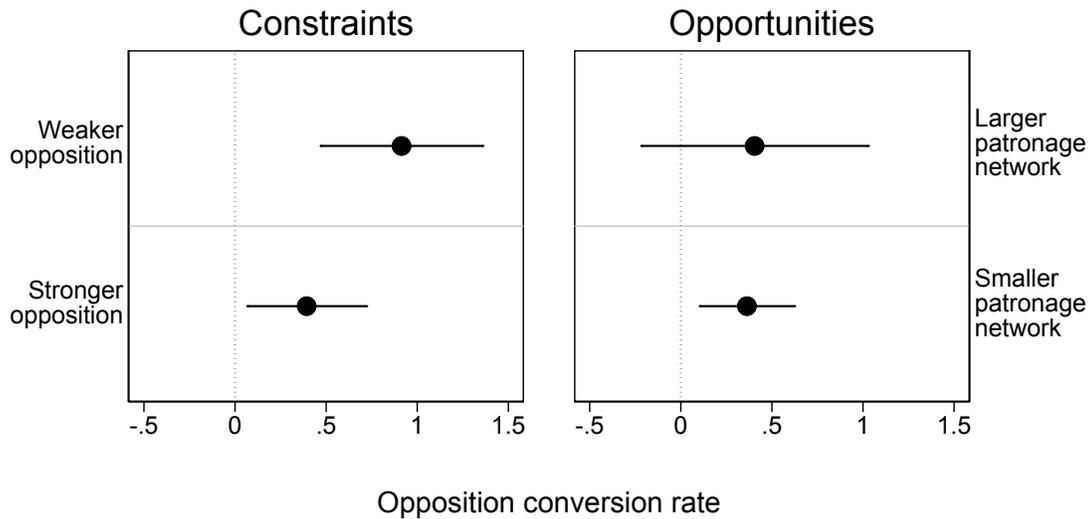
of greater patronage resources (in the form of a higher share of welfare recipients and/or employees dependent on the city hall) accentuates the backlash, as the conversion rate is similar in magnitude in both localities with larger (.4, SE of .37) and smaller patronage networks (.36, SE of .16). That no difference appears may be due to a number of reasons, from the ability of the governing coalition to manipulate turnout through means other than targeting voters with patronage (e.g. ballot stuffing or electoral roll fabrication), to a potentially high cost of this manipulation strategy in the face of uncertainty about the referendum outcome.

5 Conclusion

In recent years anticorruption efforts have figured prominently in both the domestic political debates of many countries and on the good governance agenda of a variety of international institutions. Despite its importance for a broad range of outcomes—ranging from the more effective delivery of public goods to the preservation of democratic legitimacy and political stability—progress in the fight against corruption has been fairly modest. Much of the scholarly and policy focus in

29

explaining this failure has rightly been on the difficulty of breaking what we here call the "dirty democracy equilibrium" given that entrenched political elites have often colluded in undermining the emergence of effective anticorruption institutions and an effective rule of law system more broadly.

In this paper we have focused on the political dynamics of what happens when the dirty democracy equilibrium is disrupted in significant ways by the emergence of anticorruption institutions that start imposing real and visible costs on political elites in these countries. In particular, we show that when such institutions are effective they can trigger a concerted political backlash from corrupt elites to defend the corrupt status quo by all means necessary. In the context of the empirical case we used in this paper—the 2012 presidential recall referendum in Romania—this backlash meant a higher propensity to resort to a range of electoral manipulation tactics among corrupt local elites in places where prior anticorruption actions raised the salience of the national campaign to combat Romania's endemic corruption. We document these patterns using electoral fraud diagnostics based on a combination of original public opinion surveys and locality and polling station-level data on electoral participation, and the geocoded measures of both anticorruption actions and corruption.

Of course, as with any single-country study, we are faced with questions about the scope conditions of both the theoretical approach and the empirical results we present in this paper. In theoretical terms, we expect both the general deterrence-versus-backlash framework for understanding the effects of anticorruption (and more broadly rule-of-law) measures, as well as the more specific predictions about the crucial role of corrupt politicians in the dynamics of backlash to be applicable to a much broader set of cases. While the details and tactics are likely to vary as a function of the political and institutional context (e.g. the strength of political parties or the extent to which local governments are fiscally dependent on the center), we expect that corrupt local politicians across a broad range of contexts should have both the incentives and the means to help implement the electoral manipulation efforts of national leaders.

What is somewhat less certain is whether our empirical findings about the powerful backlash against anticorruption institutions in the Romanian case would be replicated in different empirical contexts. While this question ultimately needs to be answered by future research in different

settings, we will briefly discuss the likely scope conditions by placing Romania in a broader comparative setting along a few key dimensions. First, in terms of the nature of its regime, as illustrated by Figure 1, Romania is quite representative of a fairly large group of dirty democracies, which in the post-Cold War era has included large swaths of Eastern Europe, Latin America as well as many of the democracies in Africa and Asia. Second, while Romania was at least in part chosen because of its rather successful recent anticorruption initiatives, it is by no means a complete outlier.[37] However, in line with the logic of Hypothesis H4, it is conceivable that the backlash we observe in the Romanian case would not occur in situations where anticorruption measures are sufficiently weak that they do not upset the corrupt status quo or, conversely, in cases where efforts to impose rule of law have been so effective that the deterrence effects outweigh any backlash incentives.[38] Third, in terms of the domestic and international constraints on the actions of the backlash coalition, Romania is arguably not particularly unique. Even though as an EU member Romania was subjected to international scrutiny and political pressures to respect its rule of law commitments, the EU has not been particularly effective in limiting the erosion of the rule of law in some of its other member states (especially Hungary and Poland). Furthermore, even non-EU countries are subject to pressures to reduce corruption and respect liberal democratic norms from a variety international sources (including the World Bank, the International Monetary Fund and bilateral aid donors).

Finally, it is worth keeping in mind that while our empirical focus in this paper was on electoral manipulation practices, the menu of political measures used by the backlash coalition is much broader. While a detailed discussion of this backlash repertoire is beyond the scope of the current paper, the post-2012 evolution of the fight over Romania's anticorruption campaign highlights a few of them. Following the failure of the July 2012 referendum, the "backlash coalition" used its clear victory in the December 2012 parliamentary elections to try to launch a revision of the Constitution, which would have significantly reshaped (and weakened) the independence of the

---

[37]When judged by the 10-year change in the V-Dem Political Corruption Index used in Figure 1, Romania in 2012 was at roughly the 95th percentile of the distribution. While this is of course quite high, it is at least in part reflective of the ceiling effects experienced by many of the relatively clean countries in the V-Dem dataset.

[38]This may be the case in countries, such as post-2003 Georgia, where anticorruption initiatives were put in place in the wake of the complete collapse of the old corrupt regime, which may undermine the ability of corrupt elites to mount a coherent backlash strategy.

anticorruption institutions. When that effort also failed, the backlash coalition resorted to a multi-pronged approach to undermine not only the DNA but also a range of other crucial elements in the anticorruption institutional framework (such as the Prosecutor General). While this fight is still ongoing as of the writing of this paper, the tenacity and creativity of the backlash coalition suggests that far from being a one-off fluke, the link between anticorruption measures, corrupt political elites and antidemocratic backlash dynamics is likely to be a frequent—and perhaps inevitable—side effect of any systematic effort to break up the dirty democracy equilibrium. While this may well be a risk worth taking, it is nevertheless important to keep in mind that rather than ushering in clean liberal democracies, these struggles may well result in the victory of backlash coalitions, in which case dirty democracies may well transition to dirty non-democracies.

References

Bågenholm, Andreas. 2013. "Throwing the Rascals Out? The Electoral Effects of Corruption Allegations and Corruption Scandals in Europe 1981–2011." *Crime, Law and Social Change* 60 (5): 595–609.

Bánkuti, Miklós, Gábor Halmai, and Kim Lane Scheppele. 2015. "Hungarys Illiberal Turn: Disabling the Constitution." In *The Hungarian Patient: Social Opposition to an Illiberal Democracy*, ed. Peter Krasztev and Jon Van Til. Budapest, Hungary: Central European University Press.

Beaulieu, Emily, and Susan D. Hyde. 2009. "In the Shadow of Democracy Promotion: Strategic Manipulation, International Observers, and Election Boycotts." *Comparative Political Studies* 42 (3): 392–415.

Beber, Bernd, and Alexandra Scacco. 2012. "What the Numbers Say: A Digit-Based Test for Election Fraud." *Political Analysis* 20 (2): 211–234.

Becker, Gary S. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy* 76 (2): 169–217.

Breunig, Christian, and Achim Goerres. 2011. "Searching for Electoral Irregularities in an Established Democracy: Applying Benfords Law Tests to Bundestag Elections in Unified Germany." *Electoral Studies* 30 (3): 534–545.

Brys, Guy, Mia Hubert, and Anja Struyf. 2004. "A Robust Measure of Skewness." *Journal of Computational and Graphical Statistics* 13 (4): 996–1017.

Callen, Michael, and James D. Long. 2014. "Institutional Corruption and Election Fraud: Evidence from a Field Experiment in Afghanistan." *The American Economic Review* 105 (1): 354–381.

Calonico, Sebastián, Matías D. Cattaneo, and Rocío Titiunik. 2014. "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica* 82 (6): 2295–2326.

Cantú, Francisco. 2014. "Identifying Irregularities in Mexican Local Elections." *American Journal of Political Science* 58 (4): 936–951.

Carey, Henry F. 1995. "Irregularities or rigging: The 1992 Romanian parliamentary elections." *East European Quarterly* 29 (1): 43.

Casas, Agustín, Guillermo Díaz, and Andre Trindade. 2017. "Who Monitors the Monitor? Effect of Party Observers on Electoral Outcomes." *Journal of Public Economics* 145: 136–149.

Caughey, Devin, and Jasjeet S. Sekhon. 2011. "Elections and the Regression Discontinuity Design: Lessons from Close US House Races, 1942–2008." *Political Analysis* 19 (4): 385–408.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Agnes Cornell, Sirianne Dahlum, Haakon Gjerløw, Adam Glynn, Allen Hicken, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Moa Olin, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Johannes von Römer, Brigitte Seim, Rachel Sigman, Jeffrey Staton, Natalia Stepanova, Aksel Sundström, Eitan Tzelgov, Yi ting Wang, Tore Wig, Steven Wilson, , and Daniel Ziblatt. 2018. "V-Dem [Country-Year/Country-Date] Dataset v8." Varieties of Democracy (V-Dem) Project. `https://doi.org/10.23696/vdemcy18`.

DeCarlo, Lawrence T. 1997. "On the Meaning and Use of Kurtosis." *Psychological Methods* 2 (3): 292.

European Commission. 2012. "Report from the Commission to the European Parliament and the Council on Progress in Romania under the Cooperation and Verification Mechanism." European Commission Report COM(2012) 410 Final, `https://ec.europa.eu/transparency/regdoc/rep/1/2012/EN/1-2012-410-EN-F1-1.Pdf`.

European Commission. 2014. "EU Anti-Corruption Report." COM(2014) 38, `https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/documents/policies/organized-crime-and-human-trafficking/corruption/docs/acr_2014_en.pdf`.

Fazekas, Mihály, and Gábor Kocsis. Forthcoming. "Uncovering High-Level Corruption: Cross-National Objective Corruption Risk Indicators Using Public Procurement Data." *British Journal of Political Science*.

Frye, Timothy, Ora John Reuter, and David Szakonyi. 2014. "Political Machines at Work: Voter Mobilization and Electoral Subversion in the Workplace." *World Politics* 66 (2): 195–228.

Fukumoto, Kentaro, and Yusaku Horiuchi. 2011. "Making Outsiders' Votes Count: Detecting Electoral Fraud through a Natural Experiment." *American Political Science Review* 105 (3): 586–603.

Fukuyama, Francis, and Francesca Recantini. 2018. "Beyond Measurement: What is Needed for Effective Governance and Anti-Corruption Reforms?" In *Governance Indicators: Approaches, Progress, Promise*, ed. Helmut K. Anheier, Matthias Haber, and Mark A. Kayser. Oxford, UK: Oxford University Press.

Gehlbach, Scott, and Alberto Simpser. 2015. "Electoral Manipulation as Bureaucratic Control." *American Journal of Political Science* 59 (1): 212–224.

Golden, Miriam A., and Eric C.C. Chang. 2001. "Competitive Corruption: Factional Conflict and Political Malfeasance in Postwar Italian Christian Democracy." *World Politics* 53 (4): 588–622.

Golden, Miriam A., and Lucio Picci. 2005. "Proposal for a New Measure of Corruption, Illustrated with Italian Data." *Economics & Politics* 17 (1): 37–75.

Grzymala-Busse, Anna. 2007. *Rebuilding Leviathan: Party Competition and State Exploitation in Post-Communist Democracies.* Cambridge University Press.

Hicken, Allen, and Walter R. Mebane. 2017. "A Guide to Election Forensics." USAID Research and Innovation Grants Working Papers Series.

Hidalgo, F. Daniel, and Simeon Nichter. 2016. "Voter Buying: Shaping the Electorate through Clientelism." *American Journal of Political Science* 60 (2): 436–455.

Huntington, Samuel P. 1993. *The Third Wave: Democratization in the Late Twentieth Century.* University of Oklahoma Press.

Klašnja, Marko, Joshua A. Tucker, and Kevin Deegan-Krause. 2016. "Pocketbook vs. Sociotropic Corruption Voting." *British Journal of Political Science* 46 (1): 67–94.

Klašnja, Marko. 2015. "Corruption and Incumbency Disadvantage: Theory and Evidence." *Journal of Politics* 77 (4): 928–942.

Klimek, Peter, Yuri Yegorov, Rudolf Hanel, and Stefan Thurner. 2012. "Statistical Detection of Systematic Election Irregularities." *Proceedings of the National Academy of Sciences* 109 (41): 16469–16473.

Kupatadze, Alexander. 2012. "Explaining Georgia's Anti-Corruption Drive." *European Security* 21 (1): 16–36.

Lee, David S. 2008. "Randomized Experiments from Non-Random Selection in U.S. House Elections." *Journal of Econometrics* 142 (2): 675–697.

Leemann, Lucas, and Daniel Bochsler. 2014. "A Systematic Approach to Study of Electoral Fraud." *Electoral Studies* 35: 33–47.

Lehoucq, Fabrice. 2003. "Electoral Fraud: Causes, Types, and Consequences." *Annual Review of Political Science* 6 (1): 233–256.

Lehoucq, Fabrice E., and Iván Molina. 2002. *Stuffing the Ballot Box: Fraud, Electoral Reform, and Democratization in Costa Rica.* Cambridge University Press.

Levitsky, Steven, and Lucan A. Way. 2010. *Competitive Authoritarianism: Hybrid Regimes After the Cold War.* Cambridge University Press.

Little, Andrew T. 2015. "Fraud and Monitoring in Non-Competitive Elections." *Political Science Research and Methods* 3 (1): 21–41.

Magaloni, Beatriz. 2010. "The Game of Electoral Fraud and the Ousting of Authoritarian Rule." *American Journal of Political Science* 54 (3): 751–765.

Mares, Isabela, Aurelian Muntean, and Tsveta Petrova. 2016. "The Incidence of Economic Intimidation at Times of Elections: Evidence from Romania and Bulgaria." Manuscript.

Mares, Isabela, and Lauren E. Young. 2016. "Buying, Expropriating, and Stealing Votes." *Annual Review of Political Science* 19: 267–288.

Mares, Isabela, and Lauren E. Young. 2018. "The Core Voters Curse: Clientelistic Threats and Promises in Hungarian Elections." *Comparative Political Studies* 51 (11): 1441–1471.

McCrary, Justin. 2008. "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test." *Journal of Econometrics* 142 (2): 698–714.

Meagher, Patrick. 2005. "Anti-Corruption Agencies: Rhetoric Versus Reality." *The Journal of Policy Reform* 8 (1): 69–103.

Mungiu-Pippidi, Alina. 2018. "Romania's Italian-Style Anticorruption Populism." *Journal of Democracy* 29 (3): 104–116.

Myagkov, Mikhail G., Peter C. Ordeshook, and Dimitri Shakin. 2009. *The Forensics of Election Fraud: Russia and Ukraine*. Cambridge, UK: Cambridge University Press.

Nyblade, Benjamin, and Steven A. Reed. 2008. "Who Cheats? Who Loots? Political Competition and Corruption in Japan." *American Journal of Political Science* 52 (4): 926–941.

O'Donnell, Guillermo A. 1994. "Delegative Democracy." *Journal of Democracy* 5 (1): 55–69.

Popova, Maria, and Vincent Post. 2018. "Prosecuting High-Level Corruption in Eastern Europe." *Communist and Post-Communist Studies* 51 (3): 231–244.

Quah, Jon S.T. 2010. "Defying Institutional Failure: Learning from the Experiences of Anti-Corruption Agencies in Four Asian Countries." *Crime, Law and Social Change* 53 (1): 23–54.

Recanatini, Francesca. 2011. "Anti-Corruption Authorities: An Effective Tool to Curb Corruption?" In *International Handbook on the Economics of Corruption*, ed. Susan Rose-Ackerman and Tina Søreide. Vol. 2. Edward Elgar Publishing.

Rozenas, Arturas. 2016. "Office Insecurity and Electoral Manipulation." *Journal of Politics* 78 (1): 232–248.

Rozenas, Arturas. 2017. "Detecting Election Fraud from Irregularities in Vote-Share Distributions." *Political Analysis* 25 (1): 41–56.

Rundlett, Ashlea, and Milan Svolik. 2016. "Deliver the Vote! Micromotives and Macrobehavior in Electoral Fraud." *American Political Science Review* 110 (1): 180–197.

Schedler, Andreas. 2006. *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Lynne Rienner Publishers, Inc.

Simpser, Alberto. 2013. *Why Governments and Parties Manipulate Elections: Theory, Practice, and Implications*. New York, NY: Cambridge University Press.

Toth, Alexandru, Catalin Darasteanu, and Daniela Tarnovschi. 2010. "Autorităţile locale faţă în faţă cu fondurile europene." Bucuresti: Fundaţia Soros România.

Zakaria, Fareed. 1997. "The Rise of Illiberal Democracy." *Foreign Affairs* 76 (6): 22-43.

Supplementary Appendix to "Anti-Corruption Efforts and Electoral Manipulation in 'Dirty' Democracies"

Contents

A1 Corruption and Electoral Manipulation Across Regime Types

Figure A1 shows additional measures of corruption (left plot) and electoral manipulation (right plot) by regime type (electoral autocracies, electoral democracies, and liberal democracies). Regime types are defined by variable `v2x_regime` in the V-Dem country-year dataset (Coppedge et al., 2018).[1] From left to right, the corruption measures are the Transparency International's Corruption Perception Index (Transparency International, 2017), the ICRG Quality of Governance Index (PRS Group and others, 2018), and the World Bank Control of Corruption Index (Kaufmann et al., 2009). For electoral manipulation, from left to right are the Perceptions of Electoral Integrity Index (Norris et al., 2018), the Quality of Elections Index (Kelley, 2014), and the Index of Electoral Malpractice (Birch, 2008). All measures are for the most recent year available, and have been rescaled from original scales to 0-1, with lower values indicating less corruption or electoral manipulation.

Figure A1: Corruption and electoral manipulation by regime type—additional measures
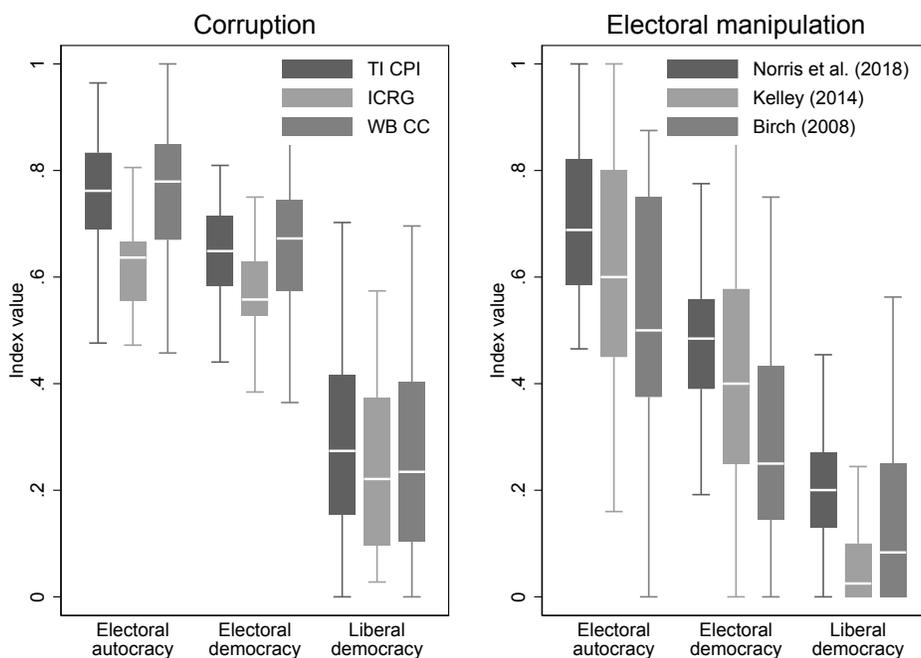
Note: Regime types are defined by variable `v2x_regime` from V-Dem country-year dataset (Coppedge et al., 2018). The corruption and electoral manipulation measures are referenced in the text.

---

[1]The patterns are qualitatively unchanged if we used the regime classification based on Polity scores or the Freedom House scores.

A2 Background on Anti-Corruption Actions and Local Corruption Measures

A2.1 Characteristics of Anti-Corruption Agency's Caseload

Figure A2 suggests no evidence that the Romanian Anti-Corruption Directorate (DNA) exhibited political bias in terms of its caseload, contrary to frequent allegations in the popular press. The figure shows two types of estimates: (a) from a regression model (indicated with black circles in the graph), with control variables for administrative locality type,[2] population size, and share of women, Hungarians, Roma, and university-educated inhabitants in each village; (b) from a regression discontinuity model (indicated with gray triangles), with the running variable defined based on the criterion indicated on the y-axis.[3]

Going from top to bottom, there is no evidence that in the period we study (two years before the 2012 referendum) the anti-corruption agency was more or less likely to press charges against public officials in: (a) localities run by government coalition mayors; (b) localities run by mayors from the main governing coalition party (the PSD); (c) localities run by mayors from the main opposition party (the PDL); (d) localities run by mayors from the main government party with a seat share in the local council of less than 20%; (e) localities run by first-time mayors from the main government coalition party; or (f) localities run by mayors from any party concurrently represented in the national government.

We further find no evidence of uneven geographical distributions of anti-corruption cases, whether across Romania's regions or across the forty counties.[4]

A2.2 Local Corruption Measures

Our measure of local corruption combines two indirect corruption risk indicators. The first is based on red flags in local procurement contracts. The second is based on the mismatch between infrastructure spending and infrastructure outcomes.

The procurement-based measure is an average of three corruption risk indicators. The first indicator is the frequency of use of a *less-transparent procurement procedure* instead of the default, highest-transparency procedure (the open auction). The less-transparent procedures are: restricted auction, accelerated restricted auction, negotiation, accelerated negotiation, and negotiation without a participation notice. The second indicator is the *price per quantity* of regularized purchases procured in the overwhelming majority of localities, such as office or medical supplies.[5] The third indicator is the frequency of *single bidder contracts*, whereby the procurement tender was fulfilled with only one submitted bid. Each indicator is standardized with respect to the relevant product market to mean zero and standard deviation one across all contracts for the period 2008-2012,

---

[2]The three types of localities are comunes, towns, and municipalities (with capital Bucurest having special status). Among other things, these administrative designations determine local tax rates, size of transfers from central government, and size of the local council.

[3]For example, for the top-most estimate, the running variable is based on the winning margin for the government coalition in the 2008 local election (i.e. the election preceding the anti-corruption actions).

[4]In both cases, we ran a regression model of the binary DNA charge indicator on dummies for geographic areas (regions or counties). The regions are the South, Transylvania/Banat, and Moldova. The county model excludes the capital Bucurest and its suburbs in the Ilfov county.

[5]Unlike in some other countries, such as Italy, in the period we study, Romania did not have a centralized and standardized framework agreement that would encompass these purchases for all procurement contracts.

Figure A2: Patterns in anti-corruption agency's caseload, 2008-2012
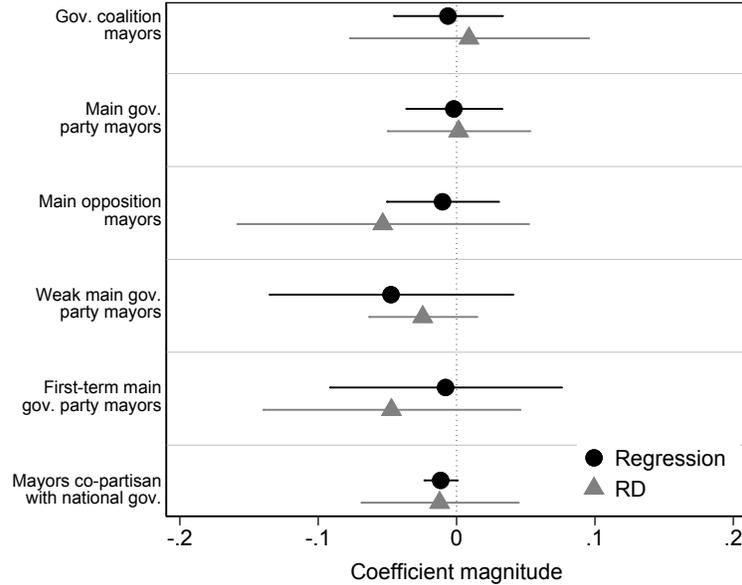
Note: The figure shows two types of estimates: from a regression model (black circles) and (b) a regression discontinuity model (gray triangles). The samples, indicated on the *y*-axis, and the model details are described in the text.

and then averaged across all product markets.[6] These standardized values are then averaged by locality. While none of the three indicators are a definite proof of corruption in procurement, the expectation is that suspicious patterns on all three measures are more likely to point to corrupt practices.

The data on procurement contracts come from the Agency of Digital Agenda of Romania, which maintains a portal where contract-level data are available.[7] We focus on two most common types of contracts: direct acquisitions (applied for small and regularized purchases of standard products), and public works/service contracts (used for the majority of other, more complex and expensive works or services).

The measure of "missing infrastructure" compares the change in the actual stock of infrastructure with the change in spending on the same infrastructure in the period 2008-2012, controlling for other factors. We focus on sewer and water pipes, because it includes key local infrastructure (beside roads and electricity provision), and because spending on this type of infrastructure is most clearly under the purview of the local government. The annual data on the stock of sewer and water pipes (in km of length) comes from the Romanian Statistical Office.[8] The data on sewer and water spending comes from the Ministry of Finance and the Ministry of Regional Development and Public Administration.[9]

We define the missing infrastructure indicator as the difference between the predicted and the

---

[6]The relevant market is determined by the first two digits of the Common Procurement Vocabulary (CPV) codes.

[7]`www.e-licitatie.ro`.

[8]Available for a fee at `www.insse.ro`

[9]`www/dpfbl.mdrap.ro/sit_ven_si_chelt_uat.html`, and `www.mfinante.ro/rapoarteMFP.html?pagina=domenii`, respectively.

observed change (inverse residuals) in the physical stock of sewer and water pipes within the period 2008-2012, based on a multi-level regression model of the change in the physical stock on the change in spending at the local level on the same infrastructure for the same period, controlling for a variety of other factors at the local and county levels.[10] Higher values indicate a greater mismatch between the changes in the physical stock and changes in spending. Like the procurement risk measure, this indicator is standardized to mean zero and standard deviation one.

To simplify the analysis and reduce the risk of measurement error, we created a binary 'local corruption' measure that equals one if either of the two indicators is above the sample median, and zero otherwise.

A2.3 Association Between Anti-Corruption Actions and Local Corruption Measure

Table A1 shows the cross-tabulation between our binary measure of local corruption and the anti-corruption charges. As is to be expected, our local corruption measure is correlated with the anti-corruption action. However, the two measures are not identical; the correlation coefficient is .12 (significant at $p < .001$).

Table A1: Local corruption and anti-corruption actions

Local corruption	Anti-corruption action No	Yes	Total
No			
Frequency	1,061	25	1,086
Row %	97.70	2.30	100.00
Column %	44.15	18.66	42.81
Yes			
Frequency	1,342	109	1,451
Row %	92.49	7.51	100.00
Column %	55.85	81.34	57.19
Total			
Frequency	2,403	134	2,537
Row %	94.72	5.28	100.00
Column %	100.00	100.00	100.00

Note: The local corruption measure is described in Section A2.2.

---

[10]The controls at the local level are: the central government transfers to the local council for water, sanitation, and road maintenance; amount of repatriated income tax revenue; change in total locality expenditures and revenues; change in capital expenditures; tax collection effectiveness as calculated by the Ministry of Finance; exposure to floods during the period 1999-2007; mayoral co-partisanship with the central government; and the mayor's margin of victory in 2008. At the county level, the controls are: central government transfers to the county council for water, sanitation, and road maintenance; change in total county expenditures and revenues; change in capital expenditures; county GDP in constant 2008 lei; average road utilization in 2008 (vehicles/km); county president's co-partisanship with the central government; and the county president's margin of victory in 2008.

A3 Survey Questions on Perceptions of and Experiences with Manipulation

To create individual-level measures of perceptions of and experience with electoral manipulation, we utilize a nationally representative face-to-face survey of 1,204 adult Romanian citizens, fielded October 30-November 10, 2012 by the University Babeş-Bolyai of Cluj-Napoca and TNS-CSOP, an independent survey company in Romania.

To measure perceptions of manipulation, we make use of the following survey question (marginals in parentheses):

> *In recent months, much has been discussed about possible electoral fraud in the July 29, 2012 referendum. Which of the following statements is closest to your opinion on the referendum:*
>
> 1. *The referendum proceeded correctly, without fraud (27%).*
> 2. *There was some local fraud, but it did not affect the general vote (27%).*
> 3. *There was an organized referendum fraud campaign, and the real turnout was considerably lower than the official result (13%).*
> 4. *Don't know (32%).*

In the analysis, we use a binary variable that treats respondents who chose the third response option as perceiving electoral manipulation.[11]

To measure respondents' experiences with manipulation, we included a list experiment in the survey that aimed to capture any experience with intimidation or attempts to induce an individual to turn out (say, through turnout-buying). The control group received the following question:

> *People decided whether or not to go to the referendum based on different reasons. On this list there are a few of the reasons that people have told us. Could you please tell me how many of these reasons influenced whether or not you went to the referendum this year. I am not interested in which these reasons are or whether or not you went to the referendum, but only how many of the three reasons influenced your decision to go or not to go. These reasons are:*
>
> 1. *What I saw on TV during the referendum campaign.*
> 2. *My personal opinion on President Băsescu.*
> 3. *Discussions with other people about the referendum.*

The treatment group saw the same question, but with a fourth, potentially sensitive, item added to the list: "Someone threatened you or gave you something."

As is standard in list experiments, the dependent variable is the average difference in the number of items chosen between the treatment and the control group (Blair and Imai, 2012).[12] In

---

[11]We treat the "don't know" responses as missing. Results are qualitatively unchanged when these responses are multiply imputed.

[12]The randomization was successful, as the respondent background characteristics (gender, age, education, Hungarian, Roma, employment status, public sector employment, and vote for USL, PDL, or others), are all balanced. We also find no evidence for design or ceiling/floor effects (Blair and Imai, 2012).

the analysis, we examine this outcome in separate subsamples defined by the anticorruption actions and local-level corruption.

A4 Additional Results

A4.1 Referendum Outcomes in Non-Government Coalition Localities

In the paper, the majority of the analyses focus on estimates for government coalition mayors. We have argued that this group has the clearest incentives and opportunities for electoral manipulation. Here, we demonstrate that this focus is empirically warranted as well, as we see no evidence of manipulation in localities run by mayors from parties outside of the government coalition.

Figure A3 shows the main opposition party supporter conversion rates—the correlation between polling station vote shares for the main opposition party in the local election and referendum turnout—in localities run by opposition mayors. To mirror the main analysis, we once again break estimates down across two dimensions: local corruption, and presence of any anti-corruption cases. The estimates are shown in black triangles (with the associated confidence intervals). For reference, the conversion rates in localities run by government coalition mayors (the same ones shown in Figure 2 in the text) are in gray circles.

Figure A3: Conversion rates in government-coalition and opposition localities
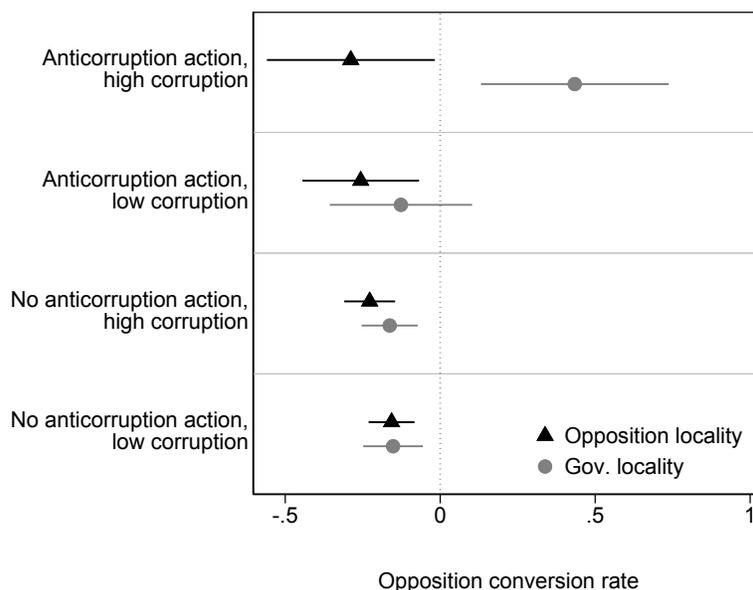
Note: The variables and the research design details are described in Section 3 in the paper. The figure shows estimates for localities run by mayors from the opposition. Figure 2 in the text shows the results for localities run by the mayors from the governing coalition.

Figure A3 shows that the conversion rates in opposition-run localities do not vary much across the local corruption and anti-corruption action dimensions. Importantly, if there was manipulation by the opposition, and if it followed the same logic as that for the government coalition mayors, we would expect to see greater referendum turnout *repression* in localities with anti-corruption cases

that are run by corrupt opposition mayors. However, no such evidence is present, as the conversion rates in this type of localities is not significantly different from conversion rates in other types of localities.

Because of sample size constraints, we cannot perform analogous sub-sample analyses for our other manipulation measures (the survey-based and RDD-based measures).[13]

A4.2   Validity of the Regression Discontinuity Design

Figures A4 and A5 examine the validity of the regression discontinuity design (RDD), which underlies the results shown in Figure 3 in the text. Figure A4 shows that a number of background characteristics of localities with close local election races are balanced around the margin-of-victory cutoff. The figure shows the p-values from RD models identical to those employed in the main analysis, but with the background characteristics (listed on the y-axis) replacing referendum turnout as the outcome variables. None of the p-values is close to traditional levels of statistical significance, which is consistent with the validity of one of the key identifying assumptions—of no average differences in observable pre-determined characteristics.

Figure A4: Balance in background characteristics of localities around the winning-margin cutoff
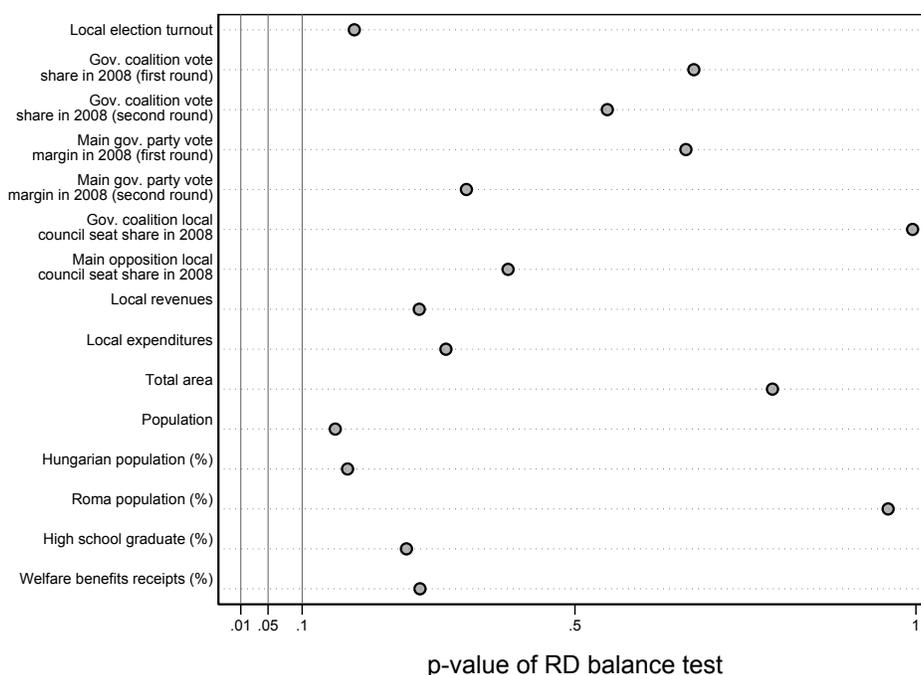
Note: Circles represent the p-values from RD models identical to those employed in the main analysis, but with background characteristics (listed on the y-axis) as outcome variables.

Figure A5, however, suggests that the other key identifying assumption—that the government coalition mayors are no more likely to win in close races than lose—may be violated. The large

---

[13]There are considerably fewer opposition-run localities (only 36% of localities).

and significant positive jump in the density of the winning margin strongly suggests evidence of strategic sorting (the point estimate of the density jump is significant at $p < .001$).

Figure A5: Strategic sorting around the winning-margin cutoff
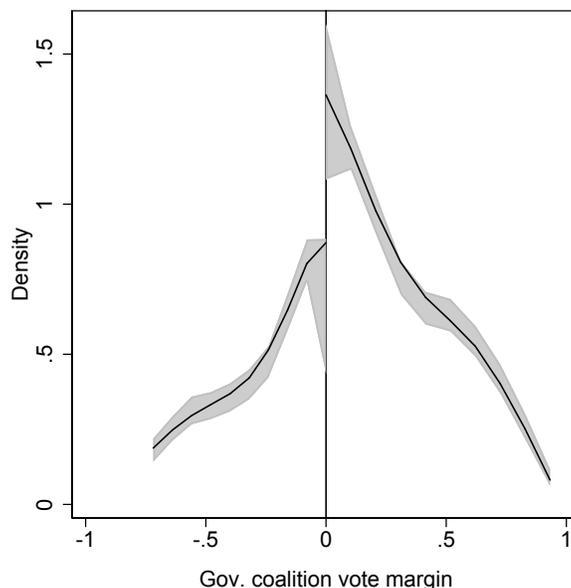
Note: The figure shows the density of the winning margin—the running variable for the RD analysis—within small bins on the x-axis. The estimates are based on the procedure outlined in Cattaneo et al. (2018).

This pattern is possibly due to the coalition government engaging in electoral manipulation not just in the referendum, but also in the local election preceding it. This result has two important implications. The first is that the RDD results must be interpreted with caution (and possibly not as causal). That said, the evidence of strategic sorting dissipates in larger windows around the winning-margin cutoff. Consequently, Figure A6 explores the change in the RD estimate across windows around the winning-margin cutoff of various size, for the key subsample of localities run by corrupt mayors with an anti-corruption case. While the magnitude of the RD estimate changes as the window narrows, the substantive conclusion remains unchanged: the increase in referendum turnout is large and statistically significant, continuing to suggest manipulation of referendum turnout.

The potential electoral manipulation by the government in the local election has another, more general implication for the interpretation of our results. If government coalition mayoral candidates systematically manipulated their way into office in close races, then their actual popularity in those localities is lower compared to the election outcomes. It is thus plausible that it would be harder for these mayors to marshal high referendum turnout purely through legitimate get-out-the-vote efforts than if they had legitimately won their local election races.

A4.3 Anti-Corruption Agency's Post-Referendum Fraud Cases

Throughout the analysis, our focus was on the diagnostic but indirect measures of electoral manipulation, because of the unavailability of direct evidence of fraud. Following the referendum, however,

Figure A6: Key RD estimate across varying windows around winning-margin cutoff
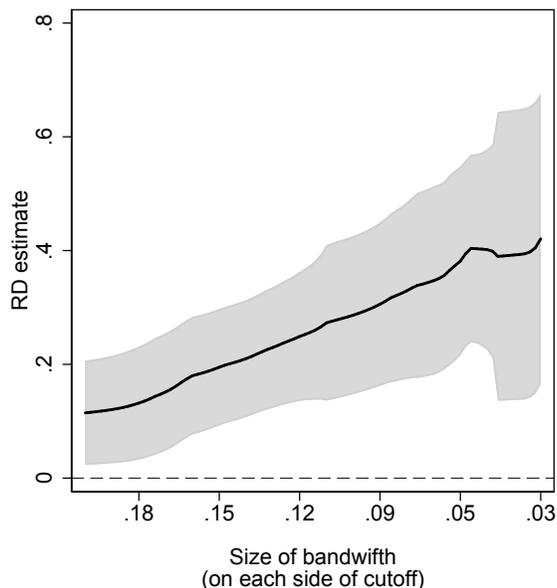
Note: The figure shows on the *y*-axis the key RD effect of the governing coalition mayor's local control on referendum turnout, in localities with prior anti-corruption actions and high local corruption. The effect is shown across bandwidth of different sizes, indicated on the *x*-axis.

the Romanian Anti-Corruption Directorate (DNA) pursued a number of election fraud charges related to the referendum.[14] These cases thus provide an opportunity to examine the validity of our measures and the logic of our argument.

That said, the DNA caseload pertaining to referendum fraud is limited: it brought charges against officials operating in 128 polling stations, belonging to 29 distinct localities. This limited scope constrains our ability to conduct full-scale analyses. Nonetheless, Figure A7 examines the distribution of fraud cases across our two relevant dimensions—DNA's pre-referendum actions and local corruption. Despite the obvious noise due to limited sample size, the patterns of DNA fraud cases generally mirror the patterns we find in the main analysis with indirect measures of fraud.[15]

---

[14]The DNA did not commonly focus on cases of electoral fraud before the referendum.

[15]The analysis is at the locality level. Observations are weighted by the number of polling stations charged with fraud.

Figure A7: Post-referendum fraud charges by the DNA, pre-referendum anticorruption cases, and local corruption
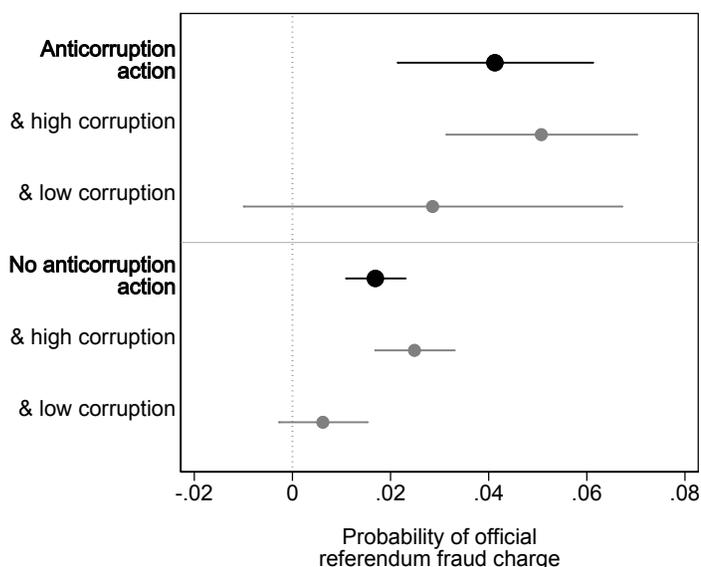
Note: The figure shows the predicted probability of a DNA charge for referendum fraud, across localities of different types described in the text.

References

Birch, S. (2008). Index of electoral malpractice, 1995-2006. UK Data Service. SN: 5991, `http://doi.org/10.5255/UKDA-SN-5991-1`.

Blair, G. and K. Imai (2012). Statistical analysis of list experiments. *Political Analysis 20*(1), 47–77.

Cattaneo, M. D., M. Jansson, and X. Ma (2018). Manipulation testing based on density discontinuity. *The Stata Journal 18*(1), 234–261.

Coppedge, M., J. Gerring, C. H. Knutsen, S. I. Lindberg, S.-E. Skaaning, J. Teorell, D. Altman, M. Bernhard, M. S. Fish, A. Cornell, S. Dahlum, H. Gjerløw, A. Glynn, A. Hicken, J. Krusell, A. Lührmann, K. L. Marquardt, K. McMann, V. Mechkova, J. Medzihorsky, M. Olin, P. Paxton, D. Pemstein, J. Pernes, J. von Römer, B. Seim, R. Sigman, J. Staton, N. Stepanova, A. Sundström, E. Tzelgov, Y. ting Wang, T. Wig, S. Wilson, , and D. Ziblatt (2018). V-dem [country-year/country-date] dataset v8. Varieties of Democracy (V-Dem) Project. `https://doi.org/10.23696/vdemcy18`.

Kaufmann, D., A. Kraay, and M. Mastruzzi (2009). Governance matters viii: Aggregate and individual governance indicators, 1996-2008. *World Bank Policy Research Working Paper* (4978).

Kelley, J. (2014). Data on international election monitoring: Three global datasets on election quality, election events and international election observation. Ann Arbor, MI: Inter-university

Consortium for Political and Social Research [distributor], 2014-08-29, `https://doi.org/10.3886/ICPSR31461.v2`.

Norris, P., T. Wynter, and S. Cameron (2018). Perceptions of electoral integrity, (pei-6.0). Harvard Dataverse, `doi:10.7910/DVN/Q6UBTH`.

PRS Group and others (2018). International country rish guide. Political Risk Services, `https://www.prsgroup.com/explore-our-products/international-country-risk-guide/`; Retrieved from the QOG Standard Dataset, `https://qog.pol.gu.se/data/datadownloads/qogstandarddata`.

Transparency International (2017). Corruption perceptions index. `https://www.transparency.org/news/feature/corruption_perceptions_index_2017`; Retrieved from the QOG Standard Dataset, `https://qog.pol.gu.se/data/datadownloads/qogstandarddata`.