Unintended Consequences of Monitoring Regimes:
The Case of International Election Monitoring

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Abstract

The monitoring of elections by international groups has become widespread. But can it have unintended negative consequences for domestic politics? We argue that high-quality election monitoring, by preventing certain forms of manipulation such as stuffing ballot boxes, can unwittingly induce incumbents to resort to tactics of election manipulation that are more damaging to domestic institutions, governance and freedoms. These tactics include rigging courts and administrative bodies, undermining the rule of law and repressing the media. We identify scope conditions under which our argument holds, and we test it in two ways. First, we trace the mechanisms of our argument in a series of case studies of elections in post-independence Armenia. Second, we use an original panel dataset of 144 countries in 1990-2007 to estimate the average effect of monitoring on the rule of law, administrative performance and media freedom. Both forms of evidence lend support to the argument.

Monitoring regimes in areas as diverse as nuclear power, armament, the environment and business accounting play a crucial role in the enforcement of standards of behavior. But can there ever be a downside to monitoring? We ask this question in the context of international election monitoring. Most countries today hold regular multi-party elections to fill political offices, and most such elections are monitored by international groups (Hyde 2006a; Schedler 2006; Kelley 2008a).[1] Without denying that election monitoring often plays a helpful role in improving electoral quality, we ask whether it can also have unintended negative consequences.

A large literature outside of political science has long recognized the potential for restrictions on behavior to produce unintended consequences. Sam Peltzman argued that automobile safety laws, while reducing driver deaths, actually increased pedestrian and overall fatalities: drivers, feeling safer, engaged in more risky driving.[2] We find that a similar logic applies in the realm of international election monitoring: under scope conditions that obtain in many developing and post-communist countries, high-quality election monitoring can induce governments to substitute forms of manipulation that are potentially more damaging to society than those they would have otherwise chosen.

There are two key parts to the argument. The first part underscores a point that is often overlooked in studies of international law and norms: governments seldom face a binary choice between complying or failing to comply with standards of behavior; instead, they can choose between multiple modes of non-compliance. Not all tools of election manipulation are the same. Some tools, when detected, are more easily *verifiable* by monitors as clear instances of cheating than others. Verifiability is important because it increases the chances that cheating will be punished. Second, different forms of non-compliance differ not only in their sensitivity to monitoring, but also in their consequences for society at large. While some tools of electoral manipulation influence mostly the electoral realm, other tools have broader negative social, political and economic consequences that extend beyond the electoral. We refer

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[1] Both Hyde (2006, 4) and Kelley (2008, 223), estimate that more than 80% of elections outside consolidated democracies were monitored in 2004.

[2] For more examples see Kerr (1975), Jacob and Levitt (2003), Peltzman (1975).

to such extra-electoral consequences as *spillovers*. We will show that those tools that are less-easily verifiable are often also responsible for negative spillovers. Thus, election monitoring, by causing incumbents to substitute less-verifiable forms of electoral manipulation, can also result in unintended negative spillovers. It follows that election monitoring may not always be as beneficial as intended, and in some cases it may even be counterproductive.

We emphasize that certain scope conditions must apply in order for election monitoring to produce such unintended consequences. Politicians must be willing and able to manipulate elections, they must be sensitive to the verdicts of monitors, and they must have at their disposal alternative means of manipulation that are not easily verifiable. Because these scope conditions are not always operative, the rise of election monitoring has likely had divergent domestic effects, depending on the particular characteristics of the country and election in question. Election monitoring has certainly contributed to the promotion of political freedom in many instances. Our goals here are to raise the question of unintended consequences in the minds of scholars and practitioners, to explain how and when such consequences may arise, and to provide evidence about the plausibility and prevalence of the mechanisms we identify.[3]

The paper proceeds as follows. Part I describes the argument, presents a formal model of election manipulation, and identifies scope conditions. Parts II and III investigate the argument empirically. Part II focuses on link between monitoring and incumbent choices about manipulation. It investigates the empirical plausibility of this aspect of the argument through case studies of a series of elections in post-independence Armenia. Part III assesses the reduced-form relationship between high-quality monitoring and negative spillovers. It employs an original dataset of elections around the world in 1990-2007. Part IV discusses implications of our findings.

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[3] The idea that monitoring can have unintended negative consequences was proposed in a think-piece by Simpser (2008). This paper builds upon that idea by specifying scope conditions, modeling incumbent behavior, and drawing and testing observable implications.

I. The Argument

Verifiability

We define electoral manipulation broadly as any action by the government or a political party intended to produce an unfair electoral advantage.[4] This includes actions taken during the pre-election period, as well as actions taken on or after election day. Examples include the arbitrary disqualification of candidates, disruptions of the voting process, and tampering with the counting and tabulation of ballots.

While the tools of manipulation are numerous, attaching consequences to them may be difficult. Even when it is plain that an incumbent is engaging in illegitimate actions to tilt the electoral playing field, it may not be simple to prove it and to punish him for it.[5] To understand why, it is useful to distinguish between tools of electoral manipulation that, if adequately documented, can incontrovertibly be labeled as such (*verifiable* tools), versus tools that can be justified on other grounds and therefore are difficult to unambiguously identify as instances of cheating (*unverifiable* tools). The key distinction between verifiable and unverifiable tools of manipulation is the degree of certainty with which, upon detection, it can be ascertained that their occurrence is intentional and their purpose is election-related.

Destroying or fabricating votes, rigging the vote count, and intimidating voters are generally verifiable because there is virtually no alternative justification for them. In contrast, regulations that somehow weaken or disqualify an opposition candidate, for example, may often be defended on other grounds and therefore may not be easily verified as electoral manipulation. The appointment by an incumbent of partisan members to the electoral commission or to the judiciary, the tightening of government controls over the media, and selective application of laws against opposition supporters are all activities that, even if electorally motivated, may not be easily labeled as election-related cheating. Willful foot-dragging in cleaning up voter registration lists may also be difficult to label as cheating since "it is more difficult to prove that they are intentional manipulation . . . than administrative incompetence"

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[4] For more on the definition of electoral manipulation see Elklit and Svensson (1997), Simpser (2005).
[5] For simplicity, we arbitrarily refer to incumbents as male.

(Hyde 2006a, 221). Similarly, Hartlyn and McCoy (2006) point out that it can be difficult to tell whether a law or administrative procedure is established "primarily to ensure greater control and oversight or to implement targeted disenfranchisement."

We emphasize that the distinction between verifiable and unverifiable tools of manipulation does not concern the potential *observability* of the tools.[6] Verifiable forms of electoral manipulation must, of course, be potentially observable. But unverifiable forms may also be observed; and election monitors often do document and criticize these in their reports.[7] Monitoring missions from the Organization for Security and Cooperation in Europe (OSCE), for example, include assessments of the country's electoral laws, election administration and media in their final reports. Nevertheless monitors may not be able to unambiguously document that problems in these areas are electorally motivated, or to link such problems to intentional government choices in the first place.

This ambiguity carries real consequences for whether manipulation is punished. While election monitors themselves cannot punish a cheating incumbent, the information that they disseminate in their reports can encourage other actors to do so (Hyde and Marinov 2008). International actors can reduce foreign aid, impose trade sanctions, initiate legal prosecution, or push for the annulment of an election. But they are often reluctant to impose such costs without clear proof of cheating. Domestic opposition leaders may also use negative reports from election monitors to help spur protests against electoral misconduct. Such protests are more potent, however, when monitors present verifiable evidence that votes were stolen (Tucker 2007).

There are several specific reasons why the kinds of actions we call unverifiable manipulation are likely to go unpunished even when detected. First, as we have emphasized, they can often be justified on non-electoral grounds. Second, they are often undertaken in advance of the election, sometimes months or

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[6] The distinction between verifiable and unverifiable manipulation has an analogue in scholarship on employment incentives (see Holmstrom and Milgrom 1991; Gibbons 1998; Simpser 2008).
[7] Indeed, as one election expert from the OSCE's Office for Democratic Institutions and Human Rights (ODIHR) noted, pre-election problems—many of which are unverifiable—may actually be easier to observe than election-day tools, which are often concealed by polling station workers (Author's interview, April 2008).

even years before it. Third, they may be implemented gradually. Fourth, it may be difficult to link the government directly to the action in question. And fifth, the very ambiguity inherent in forms of manipulation toward the unverifiable end of the spectrum means that different actors may hold different views about the extent and seriousness of the electoral transgression. However, punishment often requires broad-based agreement on this point, internationally and/or domestically (e.g. to coordinate sanctions, deny membership, or elicit mass protests).

Evidence supports the idea that unverifiable means of manipulation are less likely to be punished than verifiable ones, even when both are well-documented. Peru's 2000 presidential election serves as an example. Monitors from the Organization of American States (OAS) and Carter Center noted and criticized the severe media bias and use of state resources for campaigning (Agence France Presse 2000); but it was only in the run-up to the second round, when the monitors found verifiable evidence of flaws in the vote-tabulation software, that outside actors began imposing real pressure on the government. Prior to this, the public position of the United States was that any punishment would be conditional on evidence of vote fraud produced by international monitors (Associated Press 2000; IPS 2000; McClintock 2006).[8] Similarly, despite campaign restrictions and violence in the run-up to Ukraine's 2004 presidential election (ODIHR 2004b), the European Union and the U.S. only threatened to delegitimize the regime when OSCE monitors presented evidence that the vote tabulation in the second round had been falsified. The OSCE's statement on the second round also preceded—and likely contributed to—massive domestic protests in Kiev.[9]

As these examples suggest, the issue of verifiability is distinct from the issue of the *quality of the monitoring mission*. While improvements in the quality of monitoring may lead to an increased ability to observe and document manipulation (Foeken and Dietz 2000; Beaulieu and Hyde 2004), the fact remains that evidence of unverifiable tools often does not meet the burden of proof needed for punishment, even when well-documented.

[8] For a more complete account of Peru's 2000 election, see Cooper and Legler (2006).
[9] See ODIHR (2004a, 2004b). For a comprehensive account, see Aslund and McFaul (2006).

Table 1 lists some of the most common verifiable and unverifiable tools. While we draw a dichotomous distinction between these two types for expositional purposes, these categories should be seen as the opposite ends of a continuum. For one thing, context matters: it is conceivable that there exist circumstances under which a tool listed as unverifiable is in fact closer to the verifiable end of the spectrum. Because, among unverifiable tools, we are interested in those with the potential for negative spillovers in governance, institutions and freedoms, we do not list certain unverifiable tools that do not meet this criterion.[10]

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[10] For example, working to fragment the opposition, creating fake opposition parties or changing electoral systems are all potentially unverifiable tools the consequences of which are mostly electoral in nature.

Table 1
Sample Forms of Electoral Manipulation

a. Mostly-Verifiable Forms of Election Manipulation

Targets	Actions
Ballots	Destroying or fabricating votes, multiple voting and ballot box stuffing
Ballots	Rigging the vote count or tabulation process
Voters	Intimidation or coercion of voters on election day
Voters	Vote buying
Opposition	Intimidation or coercion of opposition candidates or activists

b, Mostly-Unverifiable Forms of Election Manipulation

Targets	Actions	Potential Extra-Electoral Negative Spillovers
State institutions	Biasing judicial bodies with competence over issues affecting the election	Rule of law
State institutions	Failing to remedy and/or creating inaccuracies in voter registration lists	Administrative effectiveness
State institutions	Using state resources, bureaucracy, and/or civil service for campaigning on behalf of ruling party/incumbent	Rule of law; administrative effectiveness
Legislation	Implementing laws that restrict opposition access to public finances, disqualify opposition candidates or disenfranchise certain groups of voters on arbitrary grounds	Rule of law; administrative effectiveness
Media	Engineering a pro-government media bias; restricting opposition access to media; shutting down media outlets	Media freedom
Opposition; Civic Associations	Imposing legal or administrative restrictions on freedom of association with a view to limiting opposition's ability to campaign and/or grassroots organization	Civil liberties

Unintended Consequences of Electoral Manipulation

Irrespective of the specific form that it takes, electoral manipulation is unfair and can have consequences for government performance and opposition strength. But the welfare consequences of verifiable and unverifiable forms of manipulation can differ considerably. The manipulation of legal, judicial, and electoral institutions, the arbitrary rewriting of laws for electoral purposes, and the consolidation of government control over the media for electoral advantage carry deeper social, governmental and economic consequences than the stuffing of ballot boxes on election day.

The last column of Table 1b indicates the realm, other than the electoral one, in which each form of manipulation listed may have potential negative consequences. Four areas are identified. First, 'rule of law' refers to a state of affairs in which the law is applied equally and impartially to all. When governments use laws to their own electoral advantage or when they engineer biases in institutions that play a role in election administration, the effects of these actions spill over into political life beyond elections. Certain institutions, such as courts and the bureaucracy, perform functions outside of the electoral arena, meaning that tampering with these institutions for electoral purposes likely affects their performance in a host of other issue areas.

Second, 'administrative effectiveness' refers to the ability of the state to implement policy goals. If a government deliberately encourages incompetence and bias in state institutions—including, as listed in Table 1b, voter registration lists or the civil service—this hinders policy implementation in other areas. The consequences of flaws in voter registration lists can extend beyond elections because they are often closely related to civil registries and census data that are used by the state for distributing welfare benefits and allocating resources to different localities.

Third, when a government inhibits media freedom or engages in intimidation of journalists for electoral purposes, this limits the general ability of the press to fulfill its crucial role as disseminator of policy-relevant information and "watchdog" over all aspects of government activity (Adsera et al 2003; Besley and Burgess 2002; Djankov et al. 2001; Ferraz and Finan 2005).

Fourth, freedom of assembly and association are civil liberties that are fundamental to a well-functioning liberal polity. If electorally-motivated laws limit citizens' ability to publicly gather and to form nongovernmental associations, this also carries negative consequences for their general ability to promote issues and to hold the government accountable.

Strategic Adaptation in Response to Monitoring

As the quality and frequency of election monitoring has increased, incumbents seeking to win elections have tended to shift away from election-day fraud and toward measures generally taken in the pre-election period that tilt the playing field in their favor. Bjornlund writes that "where effective monitoring is permitted, rulers willing to cheat have learned to focus on other parts of the process, particularly in the pre-election period, that can be more easily manipulated and for which domestic and international monitors have yet to develop effective deterrents" (2004, 282–83).[11]

We present a simple formal model that identifies circumstances under which monitoring increases the absolute amount of unverifiable manipulation, thereby producing unintended negative consequences. We find that this effect occurs under fairly natural assumptions.

Consider an incumbent seeking reelection. Suppose that the incumbent has two tools of manipulation at his disposal, one near the verifiable end of the spectrum, the other near the unverifiable end (henceforth, we call the former "verifiable" and the latter "unverifiable").[12] Both forms of manipulation increase his chances of victory, but they also entail resource costs, like any other policy. Moreover, when monitors are present, both forms of manipulation carry the risk that, if detected, they could lead to punishment – specifically, they could decrease the chances that the incumbent could retain office. However, the risk of punishment is larger for verifiable manipulation than for the unverifiable kind. Detection is a function of the presence and quality of the monitoring mission.

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[11] See also Beaulieu and Hyde (2004), Carothers (1997, 22), Hartlyn and McCoy (2006) and Hyde (2005).
[12] One could think of this incumbent as one who has exhausted all legitimate means to gain vote share and is now looking to further enhance his electoral prospects by illegitimate means.

Formally, let $x \in [0,1]$ denote an amount of verifiable manipulation and $y \in [0,1]$ an amount of unverifiable manipulation, expressed as a proportion of the total potential vote, with $x + y \leq 1$. Let $m = 0$ denote the absence of monitors, and higher values of m denote a monitoring mission of higher quality (let $0 \leq m \leq M$, where M is a parameter denoting the highest feasible quality of a monitoring mission). Let $p(x + y)$ denote the probability that the incumbent wins when the total amount of electoral manipulation is $x + y$, and $mq(x)$ the downward adjustment to that probability when monitors of quality m are present and the level of verifiable manipulation is x. In other words, q captures the severity of punishment that the incumbent can expect in response to manipulation, if the manipulation is detected and verified as cheating. Similarly, let $\lambda mq(y)$ denote the downward adjustment to p when the level of unverifiable manipulation is y. The parameter λ, $0 \leq \lambda < 1$, captures the degree of verifiability of the tool of manipulation represented by y, with smaller values corresponding to a lower degree of verifiability. This tool was defined as being close to the unverifiable end of the spectrum, which is equivalent to saying that λ is small.[13] As noted before, the issue of verifiability is distinct from the issue of observability or detection – the former is captured in the model by λ, the latter by m.

Let the resource costs associated with verifiable manipulation be given by $c_x(x)$, and those associated with its unverifiable counterpart by $c_y(y)$. Finally, let $w > 0$ denote the value to the incumbent of winning the election in comparison with losing it. The incumbent's expected utility, then, is:

$$u(x, y, m) = w[p(x + y) - mq(x) - \lambda mq(y)] - c_x(x) - c_y(y)$$

Two things must happen in order for an election to be monitored. First, the host country must issue an invitation. Second, the monitoring group must send in a mission. We focus on the case in which

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[13] The technical condition on λ should become apparent in the proof to Proposition 1.

the host country is willing to accept a monitoring mission if one is sent in, and therefore interpret m as capturing the choice of a monitoring group about the presence and scope of a mission. We believe that host countries are willing to accept monitoring missions in a large proportion of the universe of cases. One reason for this is that, as many have pointed out, monitoring has become a norm (Hyde 2005; Kelley 2008). A second reason is that many incumbents face strong incentives to let monitors in: foreign aid or membership in an international organization, for example, are often conditioned on the holding of certifiably free and fair elections.[14] Without such carrots or sticks, an incumbent who contemplated the possibility of even minimal cheating would be unlikely to allow monitors in since they would simply increase the chances of punishment. To capture this idea, we let the value of winning office be greater under monitoring. Formally, $w(m)$ is a strictly increasing function of m with $w(m) > 0$.[15]

We obtain the result that the amount of unverifiable manipulation with monitoring is equal to or greater than the amount without monitoring. The result relies on the following simple assumptions. First, greater levels of manipulation result in a greater risk to the incumbent of losing or failing to attain power (formally, q is strictly increasing). Second, a higher total amount of manipulation increases the probability of incumbent victory, p, at a decreasing rate (p is strictly convex). Third, the tool of manipulation represented by y is close enough to the unverifiable end of the continuum – that is, λ is small.[16] Finally, the magnitude of the expected punishment is sensitive enough to the extent of cheating.[17] For simplicity, let u be twice continuously differentiable. We have the following result:

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[14] For example, disbursement of Millennium Challenge Account funds are conditioned on indicators of political freedom. We discuss additional examples in the case study below.

[15] One could think of various scenarios. In a first scenario, the incumbent is powerless to reject monitors, and thus the monitoring organization chooses m. In a second scenario, the incumbent stands to gain from inviting monitors. He issues an invitation for his ideal monitoring mission (call it m^*), and the monitoring organization says yes (in which case $m = m^*$) or no (in which case $m = 0$). These two scenarios (as well as many others with more involved 'bargaining' about m) are subsumed in our analysis.

[16] Technically what is needed is that $\lambda < w'(m)p'(x+y)/[(w'(m)m + w(m))q'(y)]$ for feasible (x, y, m) (see equation (5) in the proof to Proposition 1 below). For example, let $\hat{\lambda}$ minimize the right-

Proposition 1: *Suppose that* $(x^*(m), y^*(m))$ *uniquely maximizes incumbent utility at every* m,

$0 \le m \le M$. *Then the total amount of unverifiable manipulation* y^* *in the presence of monitoring is*

equal to or greater than the total amount in their absence. Moreover, y^* *is increasing in the quality of*

the monitors.

Proof: It suffices to show that y^* is increasing in m. Consider the change of variable $\tilde{x} \equiv -x$, and

define $\tilde{u}(\tilde{x}, y, m) \equiv u(-x, y, m)$. By monotone comparative statics (Athey et al 1998), if $\tilde{u}$ is

supermodular, then y^* is increasing in m. Thus, it is sufficient to show that $\tilde{u}$ is supermodular. If $\tilde{u}$

has increasing differences in (y, m), $(\tilde{x}, m)$ and $(\tilde{x}, y)$, then $\tilde{u}$ is supermodular. Under the assumption

that u is twice continuously differentiable, so is $\tilde{u}$, and therefore we have that:

$$\frac{\partial^2 \tilde{u}}{\partial m \partial \tilde{x}} = w'(m)\left[-p'(-\tilde{x} + y) + mq'(-\tilde{x})\right] + w(m)q'(-\tilde{x}) \tag{1}$$

$$\frac{\partial^2 \tilde{u}}{\partial m \partial y} = w'(m)[p'(-\tilde{x} + y) - \lambda mq'(y)] - w(m)\lambda q'(y) \tag{2}$$

$$\frac{\partial^2 \tilde{u}}{\partial x \partial y} = -w'(m)p''(-\tilde{x} + y) \tag{3}$$

By the strict concavity of p, (3) is positive and therefore $\tilde{u}$ has strictly increasing differences in

$(\tilde{x}, y)$. Now, $\tilde{u}$ has strictly increasing differences in $(\tilde{x}, m)$ when $\partial^2 \tilde{u} / \partial m \partial \tilde{x} > 0$, and in (y, m)

when $\partial^2 \tilde{u} / \partial m \partial y > 0$. Using (1) and (2) and rearranging terms, these conditions are equivalent,

respectively, to:

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hand side over the domain of (x, y, m) and pick $\lambda = \hat{\lambda} / 2$. Note that the right-hand side is positive for
feasible (x, y, m).

[17] We need that $q'(x) > w'(m)p'(x + y) / [w'(m)m + w(m)]$ for feasible (x, y, m) (see equation (4) in
the proof to Proposition 1 below). Rearranging terms, this condition is equivalent to requiring that the
stakes of victory be high enough – that is, that $w(m) > w'(m)[p'(x + y) / q'(x) - m]$.

$$q'(-\tilde{x}) > \varphi \tag{4}$$

$$\lambda q'(y) < \varphi \tag{5}$$

where

$$\varphi \equiv \frac{w'(m)p'(-\tilde{x}+y)}{w'(m)m+w(m)}$$

Since $\varphi > 0$ in the domain of $(\tilde{x}, y, m)$, it follows that (5) can always be satisfied for λ small enough, as shown previously. Thus, $\tilde{u}$ has strictly increasing differences in (y, m). Finally, (4) is satisfied by the assumption on the sensitivity of punishment, q'. Hence, $\tilde{u}$ has strictly increasing differences in $(\tilde{x}, m)$. Therefore, $\tilde{u}$ is supermodular. ∎

A Corollary to Proposition 1 is that *monitoring can have negative spillovers*. This follows immediately from our claim, documented previously, that in general, unverifiable forms of manipulation produce greater negative spillovers than their verifiable counterparts.[18]

From a policy standpoint, our result implies that the decision of a monitoring organization to send in a monitoring mission can increase the total amount of unverifiable manipulation and, consequently, increase negative spillovers. Normatively speaking, then, the decision to send monitors should be informed by the possibility of unintended negative consequences.

As mentioned before, the Proposition and its corollary presuppose that four necessary scope conditions hold.[19] First, the monitored party must have the desire to manipulate elections, and the ability

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[18] The proof to Proposition 1 also shows that, under the assumptions set forth above, the amount of verifiable manipulation is decreasing in monitoring: the supermodularity of $\tilde{u}$ implies that $\tilde{x}^*$ is increasing in m, and therefore that x^* is decreasing in m.

[19] Conditional on the model, the scope conditions to be described below plus the assumptions on p, q and λ are one set of sufficient conditions in order for monitoring to have unintended negative consequences.

to do so. The taste for cheating may vary among leaders and over time, as do the opportunities for engaging in such practices and the consequences associated with detection and prosecution.

Second, the incumbent must care about the monitors' verdicts (in the model, this is equivalent to assuming that $q(z) > 0$ for $z > 0$). Negative reports must be expected to impose costs on the regime that make it more difficult for leaders to hold and retain office. Specifically, costs could include the withholding of membership from an international organization, economic or diplomatic sanctions, or anti-government protests.[20] The degree to which governments are sensitive to monitors' reports can vary substantially over countries and over time. The governments of larger, powerful countries are more insulated from international criticism than are smaller, more economically dependent ones. Similarly, countries that are of strategic importance to the West are less likely to face international consequences for holding fraudulent elections (Levitsky and Way 2005). Some countries may also be more sensitive to monitors' reports at key points in time, for example, when aid disbursement depends on monitors declaring an election "free and fair."

Third, unverifiable manipulation must be available and not prohibitively costly. When substitutes for verifiable manipulation are unavailable, then monitoring is likely to reduce verifiable manipulation without unintended negative effects. In practice, this depends largely on the pre-existing quality and stability of domestic institutions. In advanced, liberal democracies, dismantling institutions and curbing freedom in any significant way is usually too costly. In many developing countries, however, such actions may well be possible because political, judicial and economic institutions are new or fragile. Of course, in extreme cases with very high governmental control over media and institutions – such as in totalitarian regimes that hold elections – there is little scope for additional unintended consequences.

Fourth, substitute forms of manipulation must have negative socio-economic effects beyond those on the result of the election in question. Only if governments pursue unverifiable tools associated with

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[20] On the importance of membership conditionality see Kelley (2004). On the role of election monitors' verdicts in inciting protests, see Beissinger (2007), Hyde and Marinov (2008) and Tucker (2007).

negative externalities, such as those identified in Table 1b, can monitoring produce negative spillovers of the sort we have discussed.

II. Case Study: Elections in Armenia 1998-2007

In this section, we present an in-depth case study of elections in Armenia between 1998 and 2007. The main goal of the case study is to probe the plausibility of the argument in a context where our theory predicts, ex ante, that it is likely to hold. In particular, the case provides "proof of concept" for the notion that monitoring can induce a shift toward unverifiable forms of electoral manipulation. Where appropriate, we indicate the ways in which the shift toward unverifiable tactics might have led to negative spillovers beyond the electoral realm.[21]

We present evidence that the Armenian president, Robert Kocharian, reacted to the scrutiny of international monitors by shifting away from ballot fraud and towards tactics more difficult to verify as electoral cheating. Strikingly, as a result of this tactical shift, the verdicts of international monitors became more positive over time, contributing to a decline in international pressure on the regime.

We selected these elections because they meet the scope conditions of our theory, outlined in the previous section.[22] First, the incumbent was evidently willing and able to cheat. Second, for the government, a range of potential costs and benefits hinged on monitors' reports. Membership in the Council of Europe (COE) and bilateral aid from the United States and Europe were contingent on positive verdicts. And, just as importantly, negative verdicts had the potential to spur domestic protests, as they had elsewhere in the region. Third, as we document below, unverifiable tools of electoral manipulation were certainly available to the Armenian government. Finally, the potential for negative spillover effects beyond the electoral arena was there: Armenia's institutional framework was functional enough that there was room for decline, but not solid enough to prevent considerable electoral manipulation by the

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[21] We undertake a more systematic assessment of negative externalities in the next section using cross-national panel data.

[22] The theory was developed independently of the Armenian case, and prior to our selection of it as a case study.

incumbent (Freedom House classifies Armenia as "partially free" throughout its post-independence period).

The cases we select have the added advantage of holding constant a number of time-invariant factors, including the identity of the incumbent—Robert Kocharian—who presided over all the elections under study.

Background Information

Armenia gained independence in 1991, and since 1995 has held regular multiparty elections.[23] While opposition parties have had varying levels of success, the electoral arena has consistently been dominated by parties allied with the president.

As a member state of the OSCE, Armenia agreed in the Copenhagen Document (1990) to issue a standing invitation to OSCE election monitors for all national executive and legislative contests. The OSCE's Office for Democratic Institutions and Human Rights (ODIHR) is widely regarded as a pioneer in the field of election observation (Bjornlund 2004).[24] Missions in Armenia during the period under study were long-term and large, with the number of observers ranging from 168 (in 1999) to 411 (in 2007).

Conduct of Armenian Elections, 1998-2007[25]

Table 2 summarizes the key findings from the five elections. On March 16, 1998, Armenia held a presidential election following the resignation of President Levon Ter-Petrossian. Prime Minister Robert Kocharian served as acting president throughout the campaign period, and he won the election with 60

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[23] We exclude from our study the founding elections in 1995 (legislative) and 1996 (presidential).
[24] We therefore rely on the factual content of the ODIHR's reports as one important source of information on electoral conduct in Armenia.
[25] Unless otherwise noted, factual information about electoral conduct cited in this section is taken from the ODIHR's final reports (ODIHR 1998, 1999, 2003a, 2003b, 2007). Information on election results comes from the IFES Election Guide (www.electionguide.org).

percent of the vote in the second round. Legislative elections were held in May 1999, in which the pro-government 'Unity Alliance' received 42% of the popular vote and won 62 of 131 legislative seats, retaining its status as the dominant parliamentary bloc.

Table 2.
Summary of Key Features of Armenian Elections, 1998-2007

	1998 (Pres.)/ 1999 (Parl.)	2003 (Pres., Parl.)	2007 (Parl.)
International Monitors Present	Yes	Yes	Yes
Verifiable Manipulation	High	High	Low
Unverifiable Manipulation	Low	High	High
Monitors' Verdict	Negative	Negative	Positive
Opposition Performance	Poor	Poor	Worst

Both contests were marked by serious irregularities in the balloting, counting and tabulation of votes. Nearly all the problems noted by observers related to verifiable tools of manipulation, including: intimidation of voters and opposition party representatives in polling stations; widespread ballot stuffing and multiple voting; and major discrepancies in the vote count. In the second round of the presidential election, the ODIHR election observation mission (EOM) compiled data that showed a suspicious spike in turnout rates during the last hour of voting. During the count and tabulation, the EOM reported discrepancies between the number of registered voters and the number of votes actually cast in 42 – 63% of polling stations that were observed in each region.

To give a sense of the scope of verifiable manipulation documented by the EOM, Table 3a shows, for each election we study, the percent of polling stations in which the balloting and counting processes was reported as "bad or very bad." While the Table documents only a subset of the types of verifiable

manipulation that were reported, it gives a sense for shifting patterns over time. We discuss some

additional evidence in the text.

Table 3
Verifiable and Unverifiable Manipulation in Armenia, 1998-2007

a. Severity of Verifiable Manipulation

Percent of polling stations:	Presidential 1998	Legislative 1999	Presidential 2003	Legislative 2003	Legislative 2007
Observers noted the presence of unauthorized persons	25% first round	23%	24% second round	10%	16%
Observers assessed voting process as "bad or very bad"	16% first round; 13% second round	10%	10% first round; 13% second round	10%	6%
Observers assessed counting process as "bad or very bad"	25% first round; 33% second round	22%	20% first round;	33%	7%**

**The percent of polling stations in which observers witnessed "deliberate tampering" with protocols during the count process. (Figures for the assessment of counting as "bad or very bad" not reported for this election.)

Sources: ODIHR 1998, 1999, 2003a, 2003b, 2007b.

b. Use of Unverifiable Tools of Manipulation

	Presidential 1998	Legislative 1999	Presidential 2003	Legislative 2003	Legislative 2007
Biased judicial bodies with competence over issues affecting the	yes	yes	yes	yes	yes
Failing to remedy and/or creating inaccuracies in voter registration lists	yes	yes	yes	yes	improvement
Use of state resources, bureaucracy, and/or civil service for campaigning on behalf of ruling party/incumbent	no	no	yes	yes	yes
Implementing electoral laws that restrict opposition access to public finances, disquality opposition candidates or disenfranchise certain groups of voters on arbitary grounds	no	no	possible - some questionable disqualifications	yes	yes
Engineering a pro-government media bias; restricting opposition access to media; shutting down media outlets	some	no	yes	yes	yes
Imposing legal or administrative restrictions on freedom of association with a view to limiting opposition's ability to campaign and/or grassroots organizations	no	no	yes	no	yes

In contrast to the widespread use of verifiable tools, the government made relatively little use of unverifiable tools in 1998 and 1999. Of the tools listed in Table 2, the two that were clearly used in 1998-1999 were biased election administration bodies and inaccurate voter registration lists. However, other aspects of the pre-election periods were relatively positive. Violations of media freedom were qualitatively less severe than in later elections. A media monitoring mission conducted by the European Institute for the Media noted no major violations of the media law and no imbalance in the coverage of different parties on state television in the run-up to the legislative contest (ODIHR 1999). Political pluralism was generally respected. Twelve candidates ran in the presidential contest, and 21 parties and blocs in the parliamentary race. No candidates or parties were arbitrarily disqualified, and opposition campaign activity, particularly during the parliamentary elections, was vigorous.

In 2003, the scope and severity of verifiable tools were comparable to 1998-1999 (Table 3a), but the use of unverifiable tools increased. In the March 2003 presidential election, Kocharian easily won a second term in office, with 67 percent of second-round votes. In the May parliamentary elections, the ruling party and its allies won 63 of 131 seats; five opposition parties gained representation in the legislature, for a combination of 31 seats. Remaining seats were won by nominal independents who supported the president.

Table 3b summarizes the use of unverifiable tools of manipulation in the five elections we examine, giving a sense of trends over time. For each category of unverifiable manipulation listed in Table 1b, Table 3b records whether problems were present. It reveals four areas in particular in which conduct worsened from 1998-2007: the passing of laws to limit political competition; state-sponsored media bias; the use of state resources and employees to support the ruling party; and restrictions on the opposition's ability to campaign.

As 2003 approached, media freedom—though weak to begin with—experienced a noteworthy decline. In 2002, the government revoked the license of a popular independent television channel, "A1+," which regularly presented critical views of the president. The shut-down, combined with intimidation of journalists and control over media regulatory boards, created a heavy pro-government bias in television

coverage during the campaign period (ODIHR 2003a; U.S. State Department 2004). In April 2003, just one month before the legislative elections, the government made libel a criminal offense and increased the punishments associated with "insulting government officials" (Committee to Protect Journalists 2003). These laws were presumably passed with a view to giving the incumbent an edge in the upcoming elections, but their effects transcended the election itself, limiting the ability of the press to serve as a disseminator of information about matters unrelated to elections and as a "watchdog" over non-electoral aspects of government performance.

Negative trends also emerged in the opposition's freedom to campaign. On 22 February 2003, one month before the presidential election, police arrested more than 200 known supporters of opposition candidates, on the grounds that they had engaged in unsanctioned public gatherings. More than 80 protesters were sentenced to jail time of 15 days in closed proceedings and without legal counsel. Unlike in 1999, the 2003 legislative elections featured restrictions on political pluralism. The government made use of a legal provision on the "declaration of private property" to deny registration to 22 potential candidates for seemingly arbitrary reasons.

The 2007 legislative elections marked a further evolution in strategy toward mainly unverifiable tools. As Table 3a shows, the use of verifiable tools of manipulation – specifically those relating to the voting process and the counting of ballots – declined in this election. ODIHR monitors also noted a qualitative improvement in the kinds of problems prevalent in polling stations. Previously, violations consisted mainly of ballot fraud and protocol falsification, but the main election-day issues in 2007 were overcrowding of polling stations and failure to ensure conditions for secret voting.

However, other aspects of the contest were decidedly worse than in previous years, particularly when compared to the 1999 legislative contest. Opposition requests for billboard space in Yerevan were denied on legal technicalities, and rates for television advertising were prohibitively high, preventing opposition parties from mounting any serious advertising campaigns. The independent television channel A1+ remained off the air. Television—even privately owned stations—was devoid of viewpoints that were critical of the government. This control was achieved in part through intimidation and in part

through the action of the media regulatory commissions, all the members of which were appointed by the president (ODIHR 2007b).

ODIHR monitors documented a greater-than-usual blurring of the divide between the ruling party and the state during the pre-election period. Celebrations for the 15th anniversary of the Armenian national army were fused with campaign events for the Republican Party (the party in power). Local government officials, particularly in rural areas, restricted opposition campaign activity and prevented parties from meeting with voters (Fuller 2007b). In April 2007, the press secretary for the Heritage Party described this trend: "…bureaucrats and policemen try to create obstacles to our campaign….The head of the Karakert village community, Harutyun Ekimyan, tried to resist the placement of the Heritage Party campaign posters. The head of the Lernagog village stated that the whole village has made a decision to vote for the Republican Party" (BBC 2007b). Local officials, the judiciary, the police and the civil service were all complicit in unverifiable electoral manipulation. Electoral concerns, thus, presumably contributed to sustaining a state of affairs where officials served the government instead of the public, and broke the law with impunity.[26]

The shift to unverifiable methods is perhaps most effectively suggested by the words of a spokeswoman for the opposition People's Party, who stated that no real improvement in electoral conduct had been made vis-à-vis previous contests, simply that "the authorities tried their best to commit all violations outside polling stations" (BBC 2007c).

The Role of Election Monitoring

Was the shift in methods of manipulation that we have documented spurred by the expected presence of high-quality election monitoring missions, as we claim? The evidence we examine is consistent with the idea that monitoring plays a causal role in the choice of method of manipulation, particularly when the costs associated with negative reports are high.

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[26] See Transparency International (2004; 2006) for details on corruption and accountability in Armenia.

The first piece of evidence consistent with our claim is that the incumbent was under pressure to obtain better verdicts from monitors, providing him with a clear motive to shift away from verifiable tools. For Kocharian, the potential international and domestic costs of a negative report from ODIHR monitors, particularly in 2007, loomed large. After the failure to improve electoral conduct in the 2003 elections, Armenia was placed under permanent COE monitoring, and the organization's Parliamentary Assembly (PACE) threatened to suspend Armenia's voting rights if the 2007 elections did not improve (Financial Times Information 2003; Agence France Presse 2003). If the COE imposed sanctions for electoral misconduct, it was likely that the European Union would follow suit (BBC 2007a). The United States' Millennium Challenge Corporation also threatened to withhold a major aid package if the 2007 contest was not free and fair (Fuller 2007a.). As a small, landlocked, and poor country, sandwiched between rivals Turkey and Azerbaijan, Armenia had a clear incentive to try to maintain its economic ties with the West.[27] The Armenian authorities' rhetoric indicates their awareness of these stakes: in the run-up to the 2007 election, senior government officials made repeated public statements assuring that the contest would meet European electoral standards (Fuller 2007c).

The potential domestic costs of a negative verdict from monitors were also significant. Beissinger (2007) identifies "unusually large electoral monitoring" as one of the critical elements behind electoral revolutions. He also identifies Armenia is the country whose structural conditions make it most likely to experience a breakthrough election between 2007-2010 (Beissinger 2007, 261). The Armenian regime had good reason to fear. By the 2007 parliamentary elections, three countries in Armenia's post-Soviet neighborhood— Georgia (2003), Ukraine (2004) and Kyrgyzstan (2005)—had experienced "electoral revolutions" in which negative verdicts from ODIHR monitors helped spur protests and international intervention (Donno 2008; Tucker 2007). Indeed, the protests staged by the Armenian opposition in April 2004—which the authorities eventually squelched—were a conscious attempt to emulate events in Georgia (Agence France Presse 2004a; 2004b).

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[27] On Armenia's dependence on Western aid, see Levitsky and Way (forthcoming, Ch.5). On its sensitivity to Western criticism, see Hakobyan (2004).

When placed within this context of international pressure and the threat of domestic protests, the Armenian government's shift in electoral tactics can clearly be seen as an attempt to please the West and thwart the chain of events that might lead to an electoral revolution. It appears to have succeeded: as the conduct of balloting, counting and tabulation improved—all verifiable aspects of electoral conduct— monitors' verdicts became more positive. In its report on the 1998, 1999 and 2003 elections, the ODIHR declared that the contests did not meet the standards for electoral conduct enshrined in the Copenhagen Document (ODIHR 1998; 2003a; 2003b). In contrast, the 2007 legislative elections—in which unverifiable tools predominated—were deemed "largely in accordance with OSCE commitments and other international standards for democratic elections" (ODIHR 2007). Strikingly, then, monitors' verdicts improved even as the use of unverifiable tools of manipulation intensified, and in spite of the fact that the EOM in 2007 was the largest that had ever been present in Armenia.

While we have not examined it in detail, it is interesting to note that the 2008 presidential election followed a similar pattern. The government continued to rely on media bias and control over election administration and local officials to create a playing field that favored the ruling party candidate, Serzh Sargsyan. Verifiable manipulation was, again, limited: monitors assessed the voting process positively in 95% of polling stations (ODIHR 2008b, 19). Problems in counting were still apparent in an estimated 16% of polling stations, a level of verifiable manipulation similar to the 2007 election and lower than in 2003. The ODIHR mission deemed the 2008 election "mostly in line with OSCE and Council of Europe commitments and standards" (ODIHR 2008a).

Could there be alternative reasons, other than the expectation of high-quality monitoring, that might have led the government to shift toward unverifiable tools? Some unverifiable forms of manipulation are, of course, part of the repertoire of authoritarian rule. Therefore, they could conceivably be used as part of a general effort to consolidate power that may be at least partly unrelated to elections. While we believe this idea is plausible, we do not believe it can, by itself, account for the patterns that we have documented in Armenia. First, we presented evidence that Kocharian had reason to care about the verdicts of monitors. Second, if he did not, it would be difficult to explain why an incumbent trying to

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consolidate power would have markedly restrained his use of verifiable manipulation. Third, we provided examples of major instances of unverifiable manipulation undertaken in close proximity to elections. If the motivation for such actions was non-electoral, the timing would have to be explained away as coincidental.

III. Effects of Monitoring: Regression Analysis

We have argued that election monitoring, by inducing incumbents to increase their use of unverifiable means of manipulation, can have a negative effect on outcome variables beyond the electoral realm. In this section, we assess whether the mechanisms we have described are prevalent and intense enough to show up when looking across nations and over time. We present evidence from an original panel dataset of elections around the world in 1990-2007. These data allow us to evaluate the "reduced form" of our argument, namely the relationship between monitoring and outcomes such as the rule of law, the quality of governance and media freedom.[28]

To be clear, the argument we have made is not that monitoring will necessarily be associated with negative spillovers. In order for monitoring to potentially lead to negative consequences, the scope conditions of our argument must hold. Cross-nationally, then, we expect that there should be variation in the effect of monitoring on unverifiable manipulation and, thus on the outcome variables.

We use an original dataset containing information for all country-level executive and legislative elections in 1990-2007 in countries with a population of at least one million. The data cover 342 executive and 602 legislative elections in 144 countries. We collected information on the presence of international election monitors, the quality of the monitoring mission and the type of political system (presidential, parliamentary or mixed). An election is coded as hosting a "high-quality" monitoring mission if monitors from one or more of the following organizations was present: Asian Network for Free Elections (ANFREL), The Carter Center, Commonwealth, Council of Europe (COE), EISA, European

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[28] We leave for future work the task of assessing the relationship between monitoring and the specific forms that manipulation takes.

Network of Election Monitoring Organizations (ENEMO), European Union (EU), International

Republican Institute (IRI), National Democratic Institute (NDI), Organization of American States (OAS),

Organization for Security and Cooperation in Europe (OSCE), and the United Nations (UN). Missions

sent by these organizations—though not immune to criticism—are generally considered to be credible

and professional, and importantly, they have proved willing to criticize electoral misconduct in at least

some cases.[29] While ideally, our measure of a mission's quality would include information on the size and

scope of the mission, such information is not available for the extent of countries and years in our data.

We employ four outcome variables. Two variables from the International Country Risk Guide

(ICRG) capture different aspects of the rule of law.[30] The first, "investment profile" (IP), measures the

quality of contract enforcement, the risk of expropriation, and the stability of transactions. The second,

"law and order" (LO), captures the impartiality of the legal system, as well as the degree to which the law

is obeyed. To study administrative effectiveness we use the ICRG's index on "bureaucratic quality" (BQ),

which measures the strength and expertise of the bureaucracy, and its ability to implement policies. The

ICRG dataset is widely used by economists and political scientists studying institutions, and it has the

advantage, for our purposes, that its coding criteria appear to be unrelated to the conduct or the outcome

of elections.[31] Finally, to measure media freedom, we employ the Freedom House data on *Freedom of the

Press*.[32] All dependent variables are scored such that higher values indicate better performance.

Descriptive statistics are provided in the Appendix. The dataset is in panel form and the unit of

information is a country-year.

We run panel regressions to estimate the average effect of high-quality international election

monitoring on our four outcome variables, controlling for a range of factors that could potentially be

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[29] Information on the quality of monitoring groups and their record of criticizing flawed elections is taken
from Bjornlund (2004), Carothers (1997) and from documents released by the monitoring groups.
[30] PRS Group. ICRG Political Risk Table 3B.
[31] Some details on the ICRG methodology and on coding rules for the indexes we use available at:
<http://www.prsgroup.com/ICRG_Methodology.aspx> (Accessed 14 October 2008).
[32] This is the most comprehensive available data on media freedom. Available at freedomhouse.org.

associated with both monitoring and the outcomes.[33] Our analysis includes all country-years and therefore

estimates the average effect of monitoring in a sample that presumably includes both cases where our

argument would predict unintended negative consequences as well as cases where it would not.[34]

Therefore, a finding that monitoring has a positive average effect on the outcomes of interest would not

preclude the possibility that it had negative effects in individual cases, but it would decrease our

confidence in our argument. On the other hand, a finding that monitoring has a negative average effect

would strongly suggest that negative spillovers not only exist, but are common and intense enough to

drive the average in that direction.

We use a range of estimation strategies to test whether the data is consistent with this hypothesis.

Consider first the simplest framework, a pooled OLS model:

$$y_{i,t} = \beta I_{i,t} + \gamma x_{i,t} + \mu_t + u_{i,t}$$

where the subscript i indexes countries, t denotes the year, $x_{i,t}$ is a vector of regressors, γ is a vector of

parameters, μ_t is a year effect, $u_{i,t}$ is an error term, and the parameter of interest is β. This approach,

while simple, ignores a potentially important issue, namely that of unit heterogeneity. Unobserved

country-specific factors beyond those that we are able to control for are likely to correlate both with the

presence of monitoring as well as with the outcome variables. If this is the case, pooled OLS estimates are

inconsistent. We deal with the issue of unobserved heterogeneity by running several models with unit-

specific effects.

A second issue is the possibility that the outcome variables of interest could be not only an

outcome of monitoring, but could themselves drive the presence of monitors. Specifically, past values of

outcomes such as media freedom and the rule of law could increase the possibility that an election will be

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[33] Strictly speaking, our empirical exercise uncovers associations between variables which may or may not be causal. Nevertheless, for simplicity we use causal terminology in the text.
[34] We do not have detailed information on the scope conditions that would allow us to distinguish, in a large-N setting, between cases where the argument should hold and cases where it should not.

monitored. In addition, past values of the outcomes are strong predictors of current and future values, and could conceivably proxy for relevant unobserved, country-specific, time-varying factors. For these reasons, we include lagged values of the outcome variables in the model.[35]

Panel regression with lagged dependent variables, however, presents some econometric issues. Specifically, in the presence of a lagged dependent variable and unit heterogeneity, both OLS and fixed effects yield inconsistent estimates. We take a variety of steps to address this issue. Before detailing these, however, it is helpful to ask how serious the problem is likely to be for our analysis. Two points are worth noting. First, we are more interested in the small-sample properties of the estimators than in their asymptotics. Second, what we know about their small sample properties is encouraging for our purposes, as it suggests that estimates of the parameter of interest, β, should be only minimally biased in small samples for a wide range of estimators including OLS and fixed effects, as well as the difference-GMM estimator discussed below (Judson and Owen 1999).[36]

Nevertheless, if one was still worried about potential bias in the coefficient estimates, some alternative methods are available. The difference GMM estimator (Arellano and Bond 1991) eliminates the fixed effects in the model by first-differencing and then uses lags of the included variables as instruments for differences. However, when the outcome variables are persistent, such instruments for their lagged differences could be inadequate. Our four outcome variables are quite persistent, with AR(1) autoregressive coefficients of .94 - .98.[37] Other GMM estimators, such as system GMM (Arellano and Bover 1995), are more suitable under highly-persistent series.

Second, it is possible to mitigate the inconsistency that fixed effects introduce in the presence of lagged dependent variables by using fixed effects not at the unit level but rather at a larger level of

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[35] We address potential endogeneity further in a later section.
[36] Estimates of the coefficient of the lagged dependent variable, in contrast, are subject to considerable small-sample biases that vary across estimators.
[37] The dummy for monitoring has an autoregressive coefficient of about .21, in an AR(1) specification considering only election years.

aggregation – say at the region level, rather than at the country level.[38] This approach has the additional advantage that it does not take out all of the variation across units.

We present as the base model a simple pooled OLS specification with a small set of controls and one lag of the dependent variable. In light of the above discussion, we then present as our main model the pooled OLS regression with a full set of controls (to be discussed in the next subsection) and region fixed effects. For some of the variables, we use more than one lag of the dependent variable with the goal of eliminating serial autocorrelation of the disturbances.[39] This model is:

$$y_{i,t} = \phi y_{i,t-1} + \beta I_{i,t} + \gamma x_{i,t} + \mu_t + \alpha_j + u_{i,t}$$

where α_j are region effects.[40] We also present a model with country fixed effects, estimated through system GMM.[41] In addition, for consistency with the practice in much political science literature, we ran an OLS specification with panel-corrected standard errors (Beck and Katz 1995).[42] We discuss further robustness checks later on.

Model Specification

The independent variable of interest is the indicator variable for high-quality international election monitoring. Because monitors must be invited by the country they are to observe, incumbents know in advance whether monitors will be present in an election. We therefore use actual monitoring at time t as a proxy for an incumbent's expectation that the election will be monitored. This expectation, we have

[38] There is good reason to believe that unit-specific effects should be correlated with the included regressors (which would make a random effects model inappropriate).

[39] We choose the number of lags as the minimum number that passes the Arellano-Bond (1991) test for serial autocorrelation in the system GMM regression.

[40] For purposes of the coefficient on monitoring, β, this model is mathematically equivalent to a regression of differences $y_{i,t} - y_{i,t-1}$ on the same set of regressors.

[41] As a further check of robustness to model choice, we ran two additional models with country fixed effects – the within estimator, and difference GMM. The results are similar to those we present here (available by request).

[42] The results are essentially the same as those presented here (details available by request).

argued, affects incumbent behavior in the period preceding t, and the impact of such behavior on outcomes such as the rule of law, bureaucratic quality and media freedom should be visible at t. Accordingly, we regress outcomes at t on monitoring at t.

We control for a series of political and socio-economic factors that may impact both monitoring and the outcomes. We include measures of GDP per capita (logged), as well as growth in GDP per capita.[43] To capture the strength of democratic political institutions, we include a country's composite Freedom House (FH) score, taken as the average of the civil liberties and political rights sub-indices.[44] In addition, because we expect that the strength of democratic institutions will have an inverted-u-shaped relationship to the likelihood of monitoring, we include the square of the FH score (this expectation receives strong support in Kelley 2008b). And because internal conflict likely impacts the quality of governance, media freedom and the rule of law, as well as the presence of monitors, we include an indicator variable for civil war.[45] The full set of controls also includes once-lagged values of growth, civil war, and FH and its square. We include year effects to control for any time-related factors that might impact both the likelihood of monitoring and the outcome variables.

To distinguish the effect of monitoring from that of elections in general, we include a dichotomous variable that indicates whether an election was held in the country-year in question, and another indicating whether the election in question was a "main" election (an election is considered the "main" election in a presidential system if it is an executive election, in a parliamentary system if it is a legislative election, and in a mixed system it depends on which branch of government is more powerful).[46]

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[43] GDP data comes from the World Bank's World Development Indicators (2008). We present results using this measure instead of that in the Penn World Tables (PWT) because it has wider temporal coverage, but results are substantively unchanged if one uses the PWT VI measures.
[44] Freedom House (2008). The scale is inverted so that higher scores correspond to greater freedom.
[45] Data from Doyle and Sambanis (2006). Information on certain missing country-years was obtained via personal communication with Nicholas Sambanis.
[46] On country-years where more than one election was held, we aggregate the information as follows. If any election was held, the indicator variable for whether an election was held is a 1. If any of the elections was a "main" election, then the indicator for a main election is a 1. If any or all elections were monitored

Finally, the set of region dummies categorizes all the countries in our dataset into seven regions based on geographic and developmental distinctions: high-income industrial countries, Middle East and North Africa, Sub-Saharan Africa, Latin America and the Caribbean, Asia, Central and Eastern Europe, and the Former Soviet Republics.

Results

Table 4 presents the results of the main specifications. Of note first is that the coefficient for high-quality election monitoring is always negative. This is a noteworthy result in and of itself, given that we are estimating only the average effect of monitoring on the outcome variables. As we discussed earlier, we do not expect monitoring to have a negative effect in all cases, so the finding of consistently negative coefficients for monitoring suggests that spillover effects are not uncommon.

As Table 4 shows, high-quality monitoring has a consistent statistically significant (negative) impact on 'investor profile,' 'bureaucratic quality' and 'law and order.' The effects are significant even under system-GMM, which assumes country fixed effects. For media freedom, the effect of monitoring is significant at conventional levels in the base specification, dropping somewhat in the other specifications.[47]

For each outcome variable, the coefficients are roughly similar across specifications, consistent with the suggestion in the literature that estimates of β are not subject to important biases. When interpreting the magnitude of the estimates, it is important to recall that the coefficients represent averages over all the cases, and do not represent the magnitude of the negative spillovers themselves. Even so, the coefficient estimates on high-quality monitoring, while small, are not negligible. Take, for example, the bureaucratic quality index. The coefficient for monitoring of -.048 (model 9 in Table 4) means that, on average, the presence of high-quality international election monitors is associated with a bureaucratic

by a high-quality mission, we code the "high-quality monitoring" indicator as a 1. Otherwise, these indicators are coded as 0.

[47] It is marginally significant (at the 13% level) in the specification with panel-corrected standard errors (not shown), with a coefficient magnitude similar to the system-GMM specification.

quality score that is about .05 points lower than if no monitors had been present. This is equivalent to about 4.1% of the sample standard deviation. The equivalent figures for investor profile, law and order and media freedom are 7.5%, 6.2% and 3.2% respectively.[48]

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[48] Based on the system GMM coefficients for monitoring.

Table 4
Table 4
Effect of High-Quality Election Monitoring

Dependent Variable:	DV: ICRG Investor Profile			ICRG Law and Order			ICRG Bureaucratic Quality			Freedom House Media Freedom		
	OLS - Simple	OLS + Region Effects	System GMM	OLS - Simple	OLS + Region Effects	System GMM	OLS - Simple	OLS + Region Effects	System GMM	OLS - Simple	OLS + Region Effects	System GMM
Independent Variable	1	2	3	4	5	6	7	8	9	10	11	12
High-quality Monitoring Mission	-0.171**	-0.163**	-0.182*	-0.070**	-0.044	-0.090**	-0.054***	-0.039*	-0.048**	-0.880*	-0.349	-0.71
	(.04)	(.05)	(.10)	(.04)	(.21)	(.01)	(.01)	(.06)	(.02)	(.06)	(.46)	(.26)
Election Held	0.048	0.002	0.001	0.027	-0.021	0.006	0.019	0.02	0.027**	0.168	-0.094	0.124
	(.56)	(.98)	(.99)	(.44)	(.55)	(.86)	(.35)	(.34)	(.04)	(.72)	(.84)	(.81)
Main Election	-0.029	0.013	-0.025	-0.005	0.034	0.035	0.006	0	0.001	0.586	0.689	0.193
	(.74)	(.88)	(.80)	(.89)	(.36)	(.33)	(.80)	(.99)	(.97)	(.23)	(.16)	(.73)
Log of GDP per capita	0.078***	0.143***	0.085**	0.029***	0.027*	0.038**	0.041***	0.036***	0.047***	-0.156	-0.076	-0.268
	(.00)	(.00)	(.04)	(.01)	(.06)	(.03)	(.00)	(.00)	(.00)	(.25)	(.68)	(.19)
Growth	0.031***	0.026***	0.031***	0.012***	0.011***	0.011***	0.003**	0.003**	0.002	-0.006	0.017	0.016
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.01)	(.02)	(.19)	(.83)	(.56)	(.57)
Freedom House	0.067	-0.278*	-0.330+	-0.081**	-0.145**	-0.180**	0.02	0.039	0.045	1.382***	-0.057	0.089
	(.41)	(.08)	(.15)	(.02)	(.05)	(.03)	(.33)	(.36)	(.44)	(.00)	(.96)	(.96)
Freedom House ^ 2	0.001	0.061***	0.068***	0.010**	0.017*	0.022**	0	-0.001	-0.001	0.138**	0.229+	0.187
	(.95)	(.00)	(.01)	(.01)	(.05)	(.03)	(.98)	(.85)	(.88)	(.01)	(.10)	(.31)
Civil War	-0.046	-0.041	-0.012	-0.025	-0.073	-0.072	0.02	-0.049+	-0.038	-0.281	-0.256	-0.848
	(.46)	(.75)	(.95)	(.36)	(.19)	(.30)	(.20)	(.14)	(.36)	(.47)	(.74)	(.55)
Constant	0.476+	0.342	0.621*	0.115	0.107	0.176	-0.232***	-0.165*	-0.266***	3.348**	2.954*	1.645
	-0.11	-0.28	-0.10	(.36)	(.44)	(.26)	(.00)	(.05)	(.01)	(.04)	(.10)	(.41)
Lagged Dependent Variable	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lagged Independent Variables	no	yes	yes	no	yes	yes	no	yes	yes	no	yes	yes
Region Effects	no	yes	no	no	yes	no	no	yes	no	no	yes	no
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
AR(2) test:			0.197			0.671			0.296			0.201
Sargan test:			0.156			0.270			0.565			0.168
Number of Observations:	1658	1637	1637	1660	1544	1544	1660	1544	1544	1398	1396	1396
Number of Countries:			117			116			116			132
R-squared:	0.87	0.88		0.94	0.94		0.97	0.97		0.96	0.96	

*Notes: p-values in parentheses   *** p<0.01, ** p<0.05, * p<0.1, + p<.15. The OLS-Simple specification includes only one lag of the dependent variable. All other specifications for investor profile use two lags, those for law and order three, those for bureaucratic quality three and those for media freedom one. See text for further details.*

Table 5
Effect of High-Quality Election Monitoring – Robustness Checks

Dependent Variable:	DV: ICRG Investor Profile			ICRG Law and Order			ICRG Bureaucratic Quality			Freedom House Media Freedom		
	OLS: Ever Monitored	OLS: Years 2000-07	OLS: OSCE Members	OLS: Ever Monitored	OLS: Years 2000-07	OLS: OSCE Members	OLS: Ever Monitored	OLS: Years 2000-07	OLS: OSCE Members	OLS: Ever Monitored	OLS: Years 2000-07	OLS: OSCE Members
Independent Variable	1	2	3	4	5	6	7	8	9	10	11	12
High-quality Monitoring Mission	-0.220***	-0.544***	-0.195**	-0.057+	-0.028	-0.064*	-0.051**	-0.033**	-0.052**	-0.639	-0.517	-0.259
	(.01)	(.00)	(.03)	(.11)	(.52)	(.10)	(.01)	(.05)	(.02)	(.18)	(.33)	(.62)
Monitoring Ever Before	-0.118**			-0.053**			-0.038***			-0.448		
	(.03)			(.03)			(.01)			(.17)		
OSCE Member State			-0.042			0.050*			-0.022			-0.486
			(.51)			(.08)			(.18)			(.16)
OSCE x High-quality Monitoring			-0.068			-0.043			-0.003			-1.01
			(.66)			(.53)			(.93)			(.18)
Election Held	0.034	0.079	0.022	-0.011	-0.015	-0.006	0.016	0.011	0.025	-0.086	-0.332	-0.011
	(.69)	(.51)	(.80)	(.76)	(.72)	(.87)	(.44)	(.50)	(.24)	(.86)	(.52)	(.98)
Main Election	-0.011	0.166	-0.002	0.025	0.059	0.029	0.004	-0.015	0.001	0.773+	0.851+	0.656
	(.90)	(.19)	(.99)	(.51)	(.19)	(.44)	(.86)	(.39)	(.96)	(.12)	(.12)	(.18)
Log of GDP per capita	0.078***	0.224***	0.102***	0.020*	0.018	0.029**	0.037***	0.007	0.046***	-0.318**	-0.159	-0.149
	(.00)	(.00)	(.00)	(.08)	(.18)	(.01)	(.00)	(.25)	(.00)	(.03)	(.30)	(.29)
Growth	0.026***	0.014+	0.025***	0.011***	0.013***	0.011***	0.002**	0.002*	0.003**	-0.002	0.015	0.006
	(.00)	(.14)	(.00)	(.00)	(.00)	(.00)	(.04)	(.08)	(.03)	(.96)	(.71)	(.82)
Freedom House	-0.277+	0.730**	-0.326**	-0.160**	0.097	-0.188**	0.065	0.185***	0.04	0.552	0.505	-0.148
	(.14)	(.04)	(.04)	(.04)	(.45)	(.01)	(.16)	(.00)	(.35)	(.65)	(.74)	(.90)
Freedom House ^ 2	0.066***	-0.028	0.067***	0.019**	-0.007	0.022**	-0.003	-0.018***	-0.001	0.187	0.102	0.256*
	(.00)	(.47)	(.00)	(.04)	(.63)	(.02)	(.53)	(.00)	(.92)	(.20)	(.55)	(.07)
Civil War	-0.034	0.116	-0.065	-0.068	-0.066	-0.063	-0.026	0.015	-0.037	-0.168	-1.418	-0.171
	(.80)	(.63)	(.62)	(.24)	(.45)	(.27)	(.43)	(.67)	(.25)	(.83)	(.17)	(.82)
Constant	0.927***	-0.494	0.668**	0.542***	0.232+	0.161	-0.188**	-0.052	-0.242***	4.770***	3.509*	3.813**
	(.00)	(.28)	(.02)	0.00	-0.15	-0.20	(.01)	(.43)	(.00)	(.00)	(.06)	(.02)
High-quality Monitoring Mission when OSCE = 1			-0.262*			-0.107*			-0.055+			-1.270*
			(0.07)			(0.10)			(0.14)			(0.07)
Lagged Dependent Variable	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Lagged Independent Variables	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Number of Observations:	1535	680	1637	1521	669	1544	1521	669	1544	1387	770	1396
R-squared:	0.88	0.87	0.88	0.94	0.96	0.94	0.97	0.99	0.97	0.96	0.97	0.959

Notes: p-values in parentheses   *** p<0.01, ** p<0.05, * p<0.1, + p<.15. Lag structure as in Table 4.

Endogeneity

It is possible that monitors are more likely to be present at times and locations where the values of the outcome variables are low in the first place. If so, this could drive or inflate the negative association between monitoring and the outcome variables that our analysis uncovered. We take this possibility very seriously, but there is reason to believe that it is not driving the results.

Suppose that monitoring was more likely where the values of the outcome variables were lower to begin with. This could be due observable factors – i.e. to the observed values of the outcome variables before an election – or to unobservable ones, that is, to factors that correlate with both monitoring and the outcome variables, but are not in the dataset. We take three approaches to address these possibilities. First, we control for lagged values of observable factors. If these drive the endogeneity, then controlling for them, as we have, addresses the issue. Second, we control for unobservable factors by including fixed effects in a variety of ways. The main specification includes region effects; we also present a specification with country fixed effects (system GMM, Table 4). These analyses yield similar results. As a further robustness check, we created a dichotomous variable indicating whether any elections had been monitored in the past in the country in question. This variable could conceivably capture unobservable factors beyond those accounted for by unit-specific effects that predict the presence of monitoring. The estimated effect of monitoring and its statistical significance are roughly unchanged for all the outcome variables when adding this control (Table 5).

Third, we circumvent the possibility that the presence of monitors is endogenous by making use of exogenous determinants of monitoring. First, we identified a subset of countries which committed themselves to inviting monitors to all their national elections: the OSCE member states, which signed a treaty obligating them to invite monitors.[49] Presumably, having signed the treaty takes the decision of inviting monitors out of the purview of short-term political considerations, and hence makes it less likely

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[49] For a discussion of the "Copenhagen Commitment" and its obligations, see the previous section.

that monitors' presence is a response to observable or unobservable time-varying factors. We ran a regression interacting an indicator of OSCE membership with our treatment variable, monitoring. The effect of monitoring conditional on OSCE membership is roughly the same as the unconditional effect estimated in the other regressions (Table 5).[50]

Second, because (a) election monitoring has become the norm, and (b) monitoring agencies' resources and expertise have increased over time, we expect that monitoring was less likely to respond to short-term observable or unobservable factors in more recent years. Based on this idea, we repeated the analyses restricting the sample to the years 2000 and on. The results for the investor profile variable are even stronger. For the rest of the outcomes, the coefficient magnitudes are similar to those of the main specifications. Both investor profile and bureaucratic quality are statistically significant at standard levels; the other two outcomes are less-precisely estimated than in the base specification (Table 5).

IV. Conclusion

We have argued that election monitoring, by revealing information about an incumbent's behavior, can sometimes motivate the incumbent under scrutiny to increase his use of those forms of electoral manipulation that are more difficult to verify as cheating. In turn, many of these unverifiable forms of manipulation have negative externalities on the rule of law, media freedom, administrative effectiveness and civil liberties. A case study of a series of elections in post-independence Armenia illustrated the effect of monitoring on the choice of tactics of manipulation. And evidence from elections around the world in 1990-2007 indicates that election monitoring is often associated with negative spillovers, suggesting that unintended negative consequences are indeed present in a non-negligible proportion of those elections that host high-quality monitoring missions.

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[50] In this model, the total coefficient of monitoring is a function of OSCE membership. This coefficient is displayed near the bottom of Table 5, on the line labeled "High-Quality Monitoring when OSCE=1."

Our analysis has implications for the practice of election monitoring. First, it suggests that means to provide stronger disincentives for unverifiable manipulation are needed.[51] In the absence of such means, our analysis suggests that, in the subset of cases with substantial potential for unintended negative consequences, monitoring is often overprovided. Those responsible for the allocation and design of monitoring missions should consider the possibility of unintended negative consequences and develop ways to internalize the costs associated with them. For example, monitoring agencies might consider sending smaller, less comprehensive missions to countries with new, weak or fragile democratic institutions. Unpalatable as this may sound, similar measures are routinely taken in other realms where the normative and the practical collide – for example, when a dictator is granted immunity from prosecution if he steps down.

Our argument and findings also carry implications for our understanding of domestic compliance with international norms, as well as how international actors can promote compliance. When assessing the impact of an international norm, it is important to conceptualize domestic players as strategic actors that can adapt to norms in sometimes counter-productive ways. While monitoring is generally portrayed in a positive light, our findings underscore—perhaps surprisingly—that under certain conditions, monitoring exacerbates the problem of strategic adaptation instead of promoting real compliance.

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[51] For example, Simpser (2008) suggests a reputational mechanism designed to attach greater consequences to unverifiable manipulation, based on a public rating system of incumbents' democratic (or undemocratic) credentials.

Appendix

Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
ICRG Investor Profile	1990	7.45	2.43	0	12
ICRG Bureaucratic Quality	1991	2.24	1.16	0	4
ICRG Law and Order	1991	3.79	1.45	0	6
Media Freedom	1749	55.46	22.06	1	95
High-quality Monitoring Mission	2391	0.15	0.36	0	1
Election Held	2391	0.31	0.46	0	1
Main Election	2391	0.22	0.41	0	1
Log of GDP per capita	2119	8.48	1.26	5.0	10.8
Growth of GDP per capita	2161	1.84	6.20	-44.1	90.1
Freedom House	2086	4.68	1.71	1	7
Civil War	2254	0.15	0.36	0	1
High-Quality Monitoring Ever Before	2232	0.58	0.49	0	1
OSCE Member State	2391	0.31	0.46	0	1
Year	2391	1998.71	5.14	1990	2007

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