



POLICY  
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SPECIAL REPORT

# ARMENIA'S 2012 PARLIAMENTARY ELECTION



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# EXECUTIVE SUMMARY

The May 6, 2012 parliamentary election in Armenia resulted in the Republican Party of Armenia solidifying its control on power by winning an outright majority of the vote (69 of the total 131 votes). The three opposition parties/blocs combined received 17 seats, having barely cleared the passing thresholds. Much of the balance of the vote went to the governing coalition members, the Prosperous Armenia and the Rule of Law parties.

While observers noted improvements in election conduct, there is a strong body of evidence to suggest that the election fraud was not gone but instead transformed into less

obvious and observable forms, while remaining largely outcome-neutral. This phenomenon is becoming common in the region as well as other countries with authoritarian leaderships.

This Report provides an overview of political-economic and legislative developments in the period preceding the 2012 election and summarizes the reactions of key stakeholders—the opposition parties, foreign observers, and local civil society groups—to the election outcome. More importantly, the Report conducts a range of statistical tests to provide evidence of election fraud and to point out the main beneficiary of these corrupt practices.

Specifically, the report documents the following:

- ▶ Voter lists in recent national elections have not been adjusted for Armenia's massive emigration.
- ▶ The official turnout (i.e., number of individuals recorded as voted) in recent elections exceeded any reasonable projections by at least 370,000, or 30 percent of total.
- ▶ While the artificially enhanced turnout in 2012 appears to have increased broadly in line with recent national elections (less than in 2007 but more than in 2008), the main mechanism for delivering this outcome changed from ballot stuffing to multiple and fictitious voting.
- ▶ Consistent with foreign observer (and other eyewitness) accounts, fraud outside of polling stations (e.g., bribing and intimidation) had increased to compensate for the reduction in unlawful activities inside the polling stations (e.g., ballot stuffing).
- ▶ There is a statistically significant evidence of fraudulent vote counting in electoral districts outside of Yerevan.
- ▶ The Republican Party of Armenia is the only beneficiary of the turnout-enhancing fraud observed during the May 2012 election.
- ▶ Presence of foreign observers appears to result in a statistically significant reduction of fraud in polling stations visited by observers during the 2003 and 2008 elections.

Finally, the Report offers some concluding remarks and recommendations to the opposition, civil society, foreign observers, and the Diaspora.

# INTRODUCTION

Citizens of Armenia went to the polling stations on May 6, 2012 to elect a new parliament. On the following day, the Republican Party of Armenia (RPA) was declared a winner of the election with 44 percent of total vote allocated via the proportional system. Factoring in the seats received through the majoritarian system, the party received 69—an outright majority—of the total 131 seats in the National Assembly (NA), Armenia’s parliament. The governing coalition partner, Prosperous Armenia Party (PAP), came in second with 30 percent of the vote and a total of 37 seats in the parliament. The remaining 25 seats were distributed among four parties/blocs (23), which barely cleared the passing thresholds, and independent candidates (2).<sup>1</sup>

**Recent promises** from the very top of Armenia’s leadership to hold free and fair elections gave way to a deeply flawed process leading to the outcome. While disagreements persist to date about the degree of freedom of choice and fairness present on Election Day, the experience left much of the society puzzled. After all, the track record of the party that was declared an absolute winner includes: the worst macroeconomic record and social conditions since 1994; a failure to address the widening polarization of domestic politics; and

the inability to put forth adequate solutions for the country’s long-lasting external challenges.

As pointed out by Schedler (2002), “elections, usually taken to be a hallmark of democracy, can also become a tool of authoritarian power holders seeking to legitimize their rule.” In the **“managed democracy” model** (of Russia, for example), strong control over the institutions of election becomes key for the autocrat’s ability to retain power. While election fraud has the direct effect of getting the establishment candidates elected, it also has an indirect, psychological effect on a country’s population, in the form of fraud, intimidation, and violence that are often used to signal confidence and the ability to have control over the process (IFES, 2012). These two often become self-enforcing.

As in every single election since Armenia’s independence in 1991, the election of May 6, 2012 too was marred by irregularities and systematic fraud. However, as noted by many observers, this election was quieter and saw less reported fraud than the national elections of the recent past. Yet, there was a sense among many analysts that election fraud was not gone—it just took other forms. It has become less obvious and observable while remaining just as effective in producing a specific, pre-assigned election outcome. Given the degree

<sup>1</sup> In addition to RPA and PAP, the list of parties/blocs participating in the election included the Armenian National Congress (ANC), Armenian Revolutionary Federation-Dashnaksutyun (ARF-D), Communist Party of Armenia (CPA), Democratic Party of Armenia (DPA), Heritage Party, Rule of Law Party (ROL), and United Armenians Party (UAP). The list of parties making the final cut included ANC, ARF-D, Heritage, PAP, ROL, and RPA. It is interesting to note that ROL, UAP, and CPA received fewer votes than the number of their declared party members. There were a total of 71 political parties registered in Armenia as of 2012, compared to 75 at the time of the 2007 parliamentary election.

<sup>2</sup> PFA’s report on **“Armenia: Averting an Economic Catastrophe”** (hereafter, PFA, 2012) provides a detailed overview of Armenia’s economic performance under the current administration.

of manipulations and fraud, many wonder whether Armenia's electoral system can ever regain public legitimacy. Can a serious reform agenda be advanced in a country where the level of public trust in government and institutions is so low?<sup>3</sup>

In a recent White Paper published by the International Foundation for Election Systems, Vickery and Shein (2012) define election fraud as *“deliberate wrong-doing by election officials or other electoral stakeholders, which distorts the individual or collective will of the voters.”* The remainder of this report shows that what happened in Armenia on May 6, 2012 would largely fall under this definition of election fraud. The report does so by undertaking statistical analysis of official election data and complementing it with other evidence of elec-

tion irregularities. Fortunately, in the era of Internet and social media, much of this evidence is available publicly, and its collection and transmission are often done in real time.

The remainder of this report is structured as follows. Chapter II provides an overview of political-economic and legislative developments in the period preceding the 2012 election. Chapter III summarizes the responses from the opposition parties, foreign observers, and local civil society groups with regards to the election conduct and outcome. Chapter IV conducts the statistical tests for some categories of election fraud and provides evidence as to which party benefitted from fraud. Finally, Chapter V concludes the analysis and offers recommendations for key stakeholders.

<sup>3</sup> EBRD's [“Life in Transition” report](#) ranks the trust towards public institutions in Armenia the lowest among the transition countries of Europe and former Soviet Union.

# CONDITIONS PRIOR TO THE ELECTION

## Legislation

After the political crisis of 2008—which followed the presidential election and claimed the lives of 10 citizens—the governing coalition parties (RPA, PAP, ROL, and ARF-D)<sup>4</sup> proposed a new Electoral Code as a way to improve electoral processes in Armenia and increase trust towards elections, which had all but disappeared at that point. However, it was clear that the reasons behind arguably the worst election in the history of independent Armenia were not the shortcomings of the electoral legislation but rather the lack of political will to enforce that legislation.<sup>5</sup> After all, the Electoral Code, which had been adopted in 1999, was amended fifteen times before the adoption of the new Code in May 2011. The primary focus on amending the Code, as opposed to improving its enforcement, was a clear signal that little, if anything, would change in the approach of the authorities to address the root causes of the problem.

The latest round of electoral reforms started in June 2008 with the creation of an ad hoc working group in the NA. While the working group developed a number of recommendations within a few months, the governing coalition did not circulate the draft of the new Electoral Code until the end of 2010. Although the draft

contained some improvements in the areas of campaign procedures, campaign financing, and complaint processing, it did not address the most critical issues of the voter list compilation, the formation of balanced electoral commissions, and the misuse of administrative resources.

The parliamentary opposition (Heritage and ARF-D) responded to the draft by presenting its own version of the Electoral Code. However, when it had become clear that the ruling coalition was determined to pass its own version, the opposition pushed for the adoption of certain provisions. This effort remained largely unsuccessful.<sup>6</sup> The bill—coauthored by coalition MPs—was voted into law with 75 “for” and 14 “against” on May 26, 2011. And, while the debate on some provisions of the Code intensified after its passage, the parliamentary opposition concentrated mainly on the following two topics:

- ▶ **Publication of voter lists after the election (to eliminate the use of missing individuals); and**
- ▶ **Passage of a 100 percent proportional electoral system (to ensure proper reflection of the electorate’s political preferences and to limit the influence of oligarchs and local strongmen on the final outcome).**

<sup>4</sup> ARF-D remained in the governing coalition until April 27, 2009.

<sup>5</sup> This concern was clearly reflected in the [final report](#) of OSCE/ODIHR Election Observation Mission as well as in the [Joint Opinion](#) on the Electoral Code of Armenia by the Venice Commission and OSCE/ODIHR. See also PFA (2008) for a detailed account of 2008 election and its aftermath.

<sup>6</sup> The most organized opposition force at the time, ANC, was reluctant to be actively engaged in the public debate on legislation before the new Code was passed.

# CONDITIONS PRIOR TO THE ELECTION

## Voter Lists

The issue of voter lists has, at least since 2003, been a concern for both Armenian political parties and international organizations. Despite the fact that in certain areas, the compilation and maintenance of voter lists have improved since 2005, when the police force became responsible for maintaining a unified voter registry, serious concerns remain about the integrity of the voter lists. As part of the February 2007 amendments to the Electoral Code, lawmakers banned voting at Armenian embassies abroad, potentially leaving hundreds of thousands of individuals with Armenian citizenship residing abroad unable to cast a vote.<sup>7</sup> The existence of these “missing voters” effectively reduced the number of those eligible to vote and, if accounted for—as presented in Chapter III—would suggest implausibly high turnout rates.<sup>8</sup>

To eliminate the misuse of the missing individuals’ names, the opposition parties demanded the elimination of a provision from the Electoral Code, which bans the publication of

signed voter lists. This demand was refused on the grounds that it would violate the principle of voter privacy, which is secured in the Constitution as well as in Armenia’s international commitments. However, a couple of provisions were introduced into the Code to address the opposition’s concerns. Most notably, representatives of the opposition were guaranteed seats in the voting room, which would enable them to monitor the voting process, including the stamping of the voters’ passports with a special ink.<sup>9</sup> Additionally, harsher punishments for double-voting were introduced. However, the opposition parties were not satisfied. ANC, ARF-D, and PAP jointly appealed to the Constitutional Court to have the ban of publication of voter lists dismissed, only to be overruled by the Court.<sup>10</sup>

## Fully proportional system

The adoption of a fully proportional electoral system remains a critical issue for political parties and has been on the agenda since the adoption of Constitution in 1995. (Appendix I provides a summary of key features of both

<sup>7</sup> However, the Code provides an opportunity for embassy personnel and their families located abroad to vote electronically.

<sup>8</sup> In 2008, presidential candidate Arman Melikyan appealed this amendment in the Constitutional Court prior to the 2008 election, arguing that officially reported voter numbers would suggest turnouts in the 90 percent range, if measured against people who were physically in Armenia and therefore able to cast their votes. See “Arman Melikyan is Ready to Dispute with Three Political Powers,” A1+, February 5, 2008.

<sup>9</sup> The introduction of passport stamps with the use of special (temporary) ink was meant as a measure to prevent multiple voting during Election Day, but it was also used to uphold the principle of voter secrecy, as the special ink was supposed to evaporate after a few hours. However, as mentioned below, on Election Day, stamps in the passports were disappearing within minutes, instead of hours. Interestingly enough, once recognition of the problem became widespread, the Central Electoral Commission (CEC) instructed the polling stations to use permanent ink, thus violating the voters’ right to secrecy.

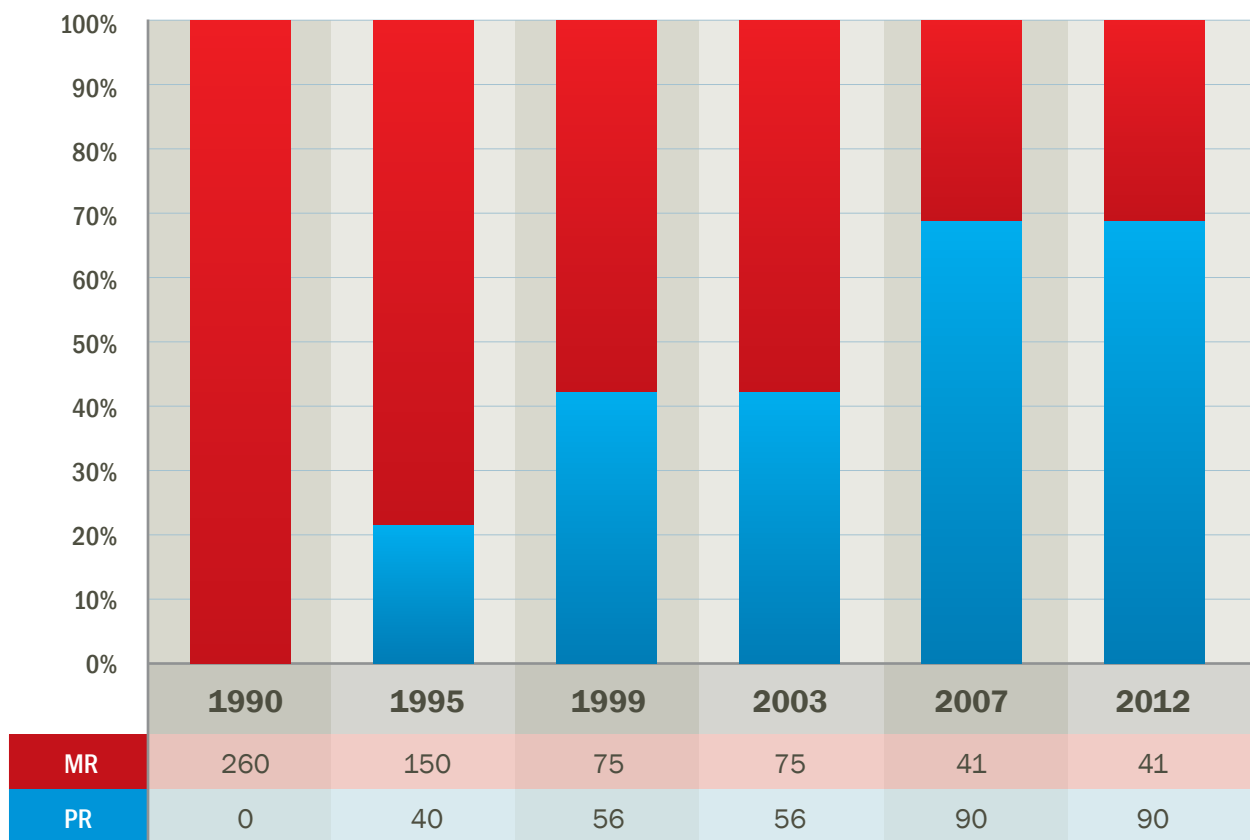
<sup>10</sup> The May 5, 2012 decision of the Constitutional Court is available [here](#) (in Armenian).



# CONDITIONS PRIOR TO THE ELECTION

**Figure 1.**

Number of Seats in the Parliament per Allocation Methods since 1990



fully proportionate and fully majoritarian electoral systems). Since then, it has been generally thought that the adoption of a fully proportional system would simply be a matter of time (Figure 1). However, in the newly adopted Electoral Code, the share of proportional seats has not changed.

This issue became the cornerstone of the debate on electoral legislation on the eve of the 2012 election. In a **statement** issued on December 27, 2011, ARF-D and Heritage proposed the adoption of a fully proportional representation structure. The statement **was supported** by ANC, some PAP representatives, and many smaller political parties. With the

## CONDITIONS PRIOR TO THE ELECTION

support of PAP, this proposition was brought to the parliamentary floor for discussion. The RPA was against the proposal and together with ROL blocked the passage of the bill into the NA.<sup>11</sup> There was reluctance on RPA's part to discuss even consensual proposals of 120 vs. 11, or 110 vs. 21, of proportional vs. majoritarian seats, respectively, instead of the current 90 vs. 41 ratios.

In retrospect, it is clear that if the proposal had been adopted, it would have had tangible political implications. As shown in Table 1 below, if

elections were run based on a fully proportional system, RPA would not have enough seats in the NA to form the government. This remains the case, even if RPA were in coalition with ROLP, which would have had a total of 65 seats. The remaining four factions: ANC, ARF-D, Heritage, and PAP, would have gained a majority with 66 seats. Although a coalition between RPA and PAP would have been the most probable outcome—given their history of coalition partnership and the motivation for retaining that symbiosis—it would have forced RPA to share its political power with other players.<sup>12</sup>

**Table 1.**

Parliamentary Factions under Mixed and Fully Proportional Systems

	Political Parties					
	PAP	HP	ANC	ARF-D	RPA	ROL
Current Number of MPs in party factions	37	5	7	5	69	6
Number of MPs if results were counted according to 100 percent proportional system	40	8	10	8	58	7
Difference, gain(+)/loss(-)	3	3	3	3	-11	1

*Note:* The figures are as of June 2012. At present, two MR seats are empty, and special elections are scheduled in December 2012. Composition of the 2007 Parliament is available from [here](#).

<sup>11</sup> Interestingly, the adoption of a 100 percent proportional system for parliamentary elections was part of ROL party's election platform.

<sup>12</sup> A brainchild of Robert Kocharyan during his term in office, PAP has remained its main political base since his departure. Its *de jure* leader, Gagik Tsarukyan, Armenia's wealthiest oligarch, is the main financial muscle behind the structure, which includes other oligarchs. The party has no notable ideological differences with the ruling RPA and has benefited significantly from a power sharing arrangement.

# RESPONSE OF THE OPPOSITION, OBSERVERS, AND CIVIL SOCIETY

## What happened on Election Day?

A review of publicly available information and personal accounts of dozens of eyewitnesses—voters and proxies—canvassed by our team, the unlawful acts that took place on Election Day can be summarized as follows:

Main types of fraudulent activities reported during the election:

- ▶ Harassment, voter intimidation, and physical abuse;
- ▶ Widespread use of voter bribes;
- ▶ Multiple and fictitious voting;<sup>13</sup>
- ▶ Controlled voting;<sup>14</sup> and
- ▶ Misuse of administrative resources and abuse of official positions.

**Table 2.**

Election Violations Reported through the iDitord Platform

Categories of violations	Number of violations	Percent of total
<b>Bribing and intimidation</b>	284	21.9
<i>of which, bribing and charitable giving</i>	247	19.0
<b>Voter lists</b>	151	11.6
<b>Pre-election campaigning</b>	175	13.5
<b>Procedural violations</b>	182	14.0
<b>Election day falsifications</b>	78	6.0
<i>of which, ballot stuffing</i>	11	0.8
<b>Public order</b>	161	12.4
<i>of which, violence and harassment</i>	53	4.1
<b>Other</b>	266	20.5

Source: The **iDitord** election fraud reporting platform.

<sup>13</sup> The latter was allegedly done using fake passports and a dedicated group of individuals.

<sup>14</sup> This was done through use of “carousels”, **colored pens**, and similar mechanisms.

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Other observed activities indicating intent to commit fraud or to prevent proper monitoring and reporting:

- ▶ **Disappearing ink** (see Appendix II);<sup>15</sup>
- ▶ **Unauthorized individuals** in polling stations;
- ▶ **Election ballots printed** by a company belonging to an RPA candidate;
- ▶ **Individuals convicted for election fraud in the past** serving as election officials; and
- ▶ **Attacks on journalists** covering the election.

Many of these unlawful activities are described in a **report** by Armenia's Human Rights Defender. They are also contained in a recent **statement** issued by Heritage MP, Zaruhi Postanjyan. In addition, **iDitord** (see Table 2 below) and Transparency International Anticorruption Center's **election website** contain a wealth of information and preliminary analysis.<sup>16</sup> Finally, reports by international media outlets and international election observers provide further support for these observations.<sup>17</sup>

Interesting points to note about Table 2 are: (i) the high incidence rate of *bribing* (nearly one in every five cases reported) and (ii) low incidence rate of *ballot stuffing* (less than one in

every hundred cases reported). Of course, the latter was the dominant type of election fraud observed during the 2008 presidential election in Armenia.<sup>18</sup> This shift from one type of election manipulation to another is consistent with much of the other available evidence, which is presented below.

## Response of the main opposition parties

While the RPA praised the conduct and the outcome of the election, the opposition parties saw things differently. Specifically, Heritage Party election headquarters issued the following **statement**:

*"Heritage campaign headquarters has determined that the parliamentary elections of May 6 in Armenia were corrupted by an extreme number of serious violations throughout the Republic. The level of bribery and vote-buying – conducted through numerous methods, including phony charities – was at an all-time high, rising dramatically since the prior election and amounting to an unprecedented influence on the election's outcome."*

<sup>15</sup> The CEC's initial response to the disappearing ink was **"Shake it more vigorously!"**

<sup>16</sup> A video recording of a **discussion** sponsored by A1+ Internet TV station covers many of the inconsistencies and fraud perpetrated during the election.

<sup>17</sup> Articles in **The Weekly Standard**, **BBC News**, and **IWPR** are good examples of this.

<sup>18</sup> See PFA (2008) for a summary of fraudulent activities observed during the 2008 presidential election.

# RESPONSE OF THE OPPOSITION, OBSERVERS, AND CIVIL SOCIETY

In a [statement](#) issued in the aftermath of the election, the ARF-D notes:

*“It was clear that the general vote rigging was premeditated and took place outside the districts’ centers, on May 6 and the days before that. The ruling coalition members registered high numbers; first and foremost due to the complete use of the state and administrative levers and of the unprecedented large financial means that were turned into vote rigging tools. The proof is unquestionable that corruption had its detrimental impact on the election results.”*

Finally, the ANC statement announced this characterization of the election:

*“The sixth of May of 2012, instead of becoming the day of free expression of the will of Armenians and the day of victory for Democracy, is marked by an unprecedented scale of electoral violations by the state to falsify the Parliamentary Elections.”<sup>19</sup>*

## Response of International and Local Election Monitors

The May 6 parliamentary election was monitored by a large number of observers.<sup>20</sup> What follows is a summary of their findings.

In the [final report](#) issued on June 26, 2012, the OSCE Office for Democratic Institutions and Human Rights (OSCE/ODIHR) emphasized that the election registered some positive advances, characterizing it as “a competitive, vibrant and largely peaceful campaign, which was, however, marked by a low level of confidence in the integrity of the process.” The report mentioned the use of administrative resources, attempts to limit voters’ freedom of choice, undue interference in the process of elections during Election Day, and organizational problems as shortcomings. Whereas credit was given for some new provisions of the Election Code, its actual implementation was mentioned as a cause for concern. In relation to the accuracy of the voter lists, the report stated that “additional efforts and better coordination among government institutions are required for further improvement,” but fell short of calling upon the CEC to publish the list of actual voters.

<sup>19</sup> As cited in the following [report](#).

<sup>20</sup> According to the Organization for Security and Co-operation in Europe (OSCE), the CEC accredited observers from 10 international organizations and 54 local NGOs (with a total of 27,141 observers). Only four of the registered NGOs produced post-election reports on their findings. The OSCE/ODIHR joined forces with delegations of the OSCE Parliamentary Assembly (PA), the Parliamentary Assembly of the Council of Europe (PACE), and the European Parliament. Overall, 349 short-term observers from 42 OSCE participating States and one OSCE partner were deployed. The representatives of the IAMNCIS [were present](#) in 66 polling stations in 6 of the 10 regions of Armenia.

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Regarding the issue of misuse of administrative resources, OSCE/ODIHR gave the following specific examples: (i) campaigning by education sector employees, including cases in which the RPA actively involved teachers and pupils in campaign events; and (ii) charitable giving by the PAP as part of its campaign.

Regarding the complaint mechanisms, the report focused on the restrictions to file election-related complaints and stated the following:

*“Election commissions and courts in general took an overly formalistic approach to handling complaints, frequently dismissing complaints on technicalities or without examining their core substance or relevant evidence. In some cases, legally unsound decisions were issued. The prosecutor general’s office and the police were transparent in their follow-up activities on reported violations but launched few criminal investigations in election-related cases and often rejected opening criminal cases on spurious grounds.”*

On May 7, 2012, the OSCE/ODIHR, OSCE PA, PACE, and the European Parliament issued a **joint statement**, which characterized the election campaign as "vibrant, competitive, and largely peaceful." Nevertheless, the statement also mentioned that "an unequal playing field due to violations of campaign provisions and cases of pressure on voters, as well as deficiencies in the complaints and appeals process were causes for concern."

The following shortcomings were mentioned in the statement:

- ▶ **The absence of an effective complaints mechanism;**
- ▶ **Violations of the Electoral Code;**
- ▶ **Deficiencies in voter lists;**
- ▶ **Pressure on governmental employees;**
- ▶ **Voter intimidation in a number of polling stations;**
- ▶ **Non-functioning ink, which had been intended to work against multiple voting;**
- ▶ **A relatively high number of negative assessments by observers.**

Overall, the statement noted that:

*“Organizational problems, undue interference in the process and cases of serious violations were observed in a significant number of polling stations, resulting in a negative assessment of voting in 120 observations (9.4 per cent), which is considerable.”*

In a **press release** issued on March 14, 2012, the PACE pre-electoral delegation praised the electoral environment, but also raised concerns over the possibility of multiple voting by inclusion of the list of voters living abroad.

The European Union’s High Representative Catherine Ashton’s and Commissioner Štefan Füle’s **statement** on the preliminary results published on May 8, 2012 defined the outcome as a step “towards more transparent and progressive elections.”

## RESPONSE OF THE OPPOSITION, OBSERVERS, AND CIVIL SOCIETY

The representative of the Eastern Partnership's Civil Society Forum Steering Committee, Krzysztof Bobinski, during an [interview with GALA TV](#), noted that the main problem during the elections was widespread corruption, administrative harassment, and multiple voting. The Inter-parliamentary Assembly of Member Nations of the Commonwealth of Independent States (IAMNCIS) praised the organization of the elections and, during its [press-conference](#) on May 7, 2012, called the elections "open, free, and competitive," and without systemic violations.<sup>21</sup>

The US Ambassador John Heffern, in an [interview](#) on May 18, 2012 praised the progress in granting access to the media as well as commanding order and transparency in polling stations. However, he also mentioned vote buying

and misuse of administrative resources as persistent problems. In a subsequent [video address](#), he raised the issue of election quality and emphasized the need for creating a fair environment for all political parties during and after the elections.

*While nearly all western observers expressed concerns over the voting lists—the largest source of potential fraud in the Armenian context, as shown below—all stopped short of calling upon the authorities to publish the list of actual voters. More importantly, despite the overwhelming body of evidence, no foreign observer referred to the possible intent on the part of the authorities to commit fraud, instead preferring to implicitly categorize the conduct as malpractice without the intention to commit fraud.*

<sup>21</sup> It is interesting to note that IAMNCIS has given [similar characterizations](#) to recent elections that took place in Belarus, Kazakhstan, and Tajikistan, authoritarian countries with chronic election irregularities.

# RESPONSE OF THE OPPOSITION, OBSERVERS, AND CIVIL SOCIETY

## Box 1.

### Impact of Foreign Election Monitors on the Outcome of Presidential Elections in Armenia

International observers are typically believed to have an impact on election outcomes by reducing fraud that can be detected. A groundbreaking study by Hyde (2007) notes that “[t]hey pressure governments to hold democratic elections and they directly engage in the electoral process through provision of technical assistance and funding or by sending teams of observers to monitor elections.” The study also cites a broad range of research that found international pressure to be an increasingly important element of domestic political transformations.

This section attempts to quantify the impact of foreign observers on election outcomes (via their impact on election fraud) during the 2003 and the 2008 presidential elections in Armenia. Appendix III describes in detail the specifics of the econometric analysis undertaken for this purpose. Here we present a summary of that analysis. In essence, the analysis compares the share of votes cast in favor of the establishment candidates in polling stations with and without foreign observers, both in and outside Yerevan. The difference between the group averages is the “observer effect.”

To make the regression results in Appendix III easy to interpret, the output was transformed into the following simplified tables:

#### Table B1.

2003 Election Outcome: Kocharyan’s share  
(average across polling stations)

	In Yerevan	Outside Yerevan	Overall
Observed	0.38	0.54	0.48
Not observed	0.40	0.56	0.54

#### Table B2.

2008 Election Outcome: Sargsyan’s share  
(average across polling stations)

	In Yerevan	Outside Yerevan	Overall
Observed	0.415/0.40	0.555/0.50	0.52
Not observed	0.46/0.50	0.59/0.60	0.58

*Note:* Coefficients reported in OLS/IVREG pairs, based on equations in Table A1 (see Appendix III). The “Overall” column is based on OLS.



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The overall result in Table B1 (last column) essentially replicates one of the results of Hyde (2007), showing that election monitors on average reduced the share of Kocharyan's vote in the first stage election by 6 percent. After controlling for the Yerevan effect (i.e., looking at averages for polling stations inside and outside Yerevan), the "observer effect" declines to 2 percent within each grouping.

Interestingly enough, the overall "observer effect" in 2008 remains broadly the same (last column of Table B2). The share of votes received by Serge Sargsyan 6 percent lower on average in polling stations visited by observers compared to those where no observers were present. However, the "observer effect" goes up after averages are compared across polling stations inside and outside Yerevan—the "observer effect" becomes 4.5 percent vs. 2 percent in 2003.

In addition to taking averages across groups, the analysis was extended further to control for potential endogeneity of selection of polling stations for monitoring during the 2008 election. To do so, we applied instrumental variable regression methodology described in Appendix III. The outcome supports the initial findings of a sizable and statistically significant "observer effect" during the 2008 presidential election at 10 percent, once the impact of Yerevan is controlled. The result of a stronger fraud-reducing impact of election monitors in 2008 compared to 2003 is interesting and could be explained inter alia by a higher level of fraud and/or by better preparedness of monitors in 2008.

The most important finding of the above analysis is the observation that if resources were available to dispatch monitors to all polling stations across Armenia (as opposed to 52 percent of them)—all other things being equal—the outcome of the 2008 election may have been too close to call. Depending on the actual size of the "observer effect"—which in our estimates ranges from a 4.5 to 10 percent reduction in the establishment candidate's vote—the final election outcome may have ended up in the 48 to 50.6 percent range ( $=52.8\% - (1 - 0.52) * (4.5\% \text{ or } 10\%)$ ). Any ratio below 50 percent would have, of course, triggered a second round.

# RESPONSE OF THE OPPOSITION, OBSERVERS, AND CIVIL SOCIETY

## Reaction from civil society monitors

A group of eleven local NGOs, specializing in the areas of human rights and democracy, on May 12, 2012 issued a **strongly worded statement**, which specifically said:<sup>22</sup>

*“As civil society representatives engaged in the promotion of human rights and democracy, we are profoundly concerned over perpetual sophistication and “improvement” of election fraud mechanisms, as well as the impunity of those implementing the fraud. We believe that both local and international organizations should draw appropriate conclusions from yet another failure of Armenia to honor her international commitments of implementing democratic reforms.”*

The statement mentioned that widespread vote buying, abuse of administrative resources, and political imposition and harassment of employees by the public sector and private employers, as well as the use of numerous other illegal “techniques,” have affected the voting process and the election result on a widespread level. It also called for the publication of the list of voters that participated in the election to regain public trust and to reconstruct the real outcome of the election.<sup>23</sup>

Another NGO, “It’s Your Choice” (IYC), believed

to be linked to the establishment, in a statement published on May 8, 2012, characterized the voting procedures and the election campaign as “being far from being perfect (...), as a dynamic process that brought certain progress.” However, IYC noted the following violations: disappearing ink, unlawful charity acts, and cases of pressure on the free will of voters, among others.

Polling stations were filled by a large number of other local monitors, whose authenticity was questioned by some observers. A Diasporan journalist observing elections on behalf of US-based Armenian Weekly **noted**:

*“What seemed strange was the presence of observers, and even journalists, who seemed unaware of what organization they represented, or had to check their badges to identify themselves.”*

This sentiment was echoed during a **discussion** of prominent activists organized by independent A1+ Internet TV channel on May 11, 2012.

Overall, it should be noted that the indirect/unofficial monitoring of the election by civil society actors—through the use of social media outlets, such as Facebook, Twitter, and YouTube—has clearly been on the rise relative to past elections, a factor that is likely to be only partially explained by the growth of Internet penetration rates throughout the country.

<sup>22</sup> The group included: Armenian Helsinki Committee, Protection of Rights without Borders, Transparency International Anti-Corruption Center, Journalists’ Club “Asparez”, Helsinki Citizens’ Assembly (Vanadzor Office), Open Society Foundations–Armenia, Menk Plus, Arena of Education, Committee to Protect Freedom of Expression, Collaboration for Democracy Center, and Journalists for the Future. However, not all of these NGOs were registered as local observers.

<sup>23</sup> “**Election Monitors Make Statement about May 6 Vote**”, Asbarez, May 12, 2012.

# STATISTICAL ANALYSIS OF ELECTION DATA

## General considerations

Recent political science literature has made significant advances in understanding election fraud. Papers that look at various aspects of election fraud—ranging from definitions to incentives and modalities—are plentiful. In a recent thought-provoking article on election fraud, Sjoberg (2012b) argues that autocrats successfully adapt to changes in laws and monitoring pressures by taking on board new methods of falsification that compensate for the reduction of more blatant forms of fraud in such a way that leave the “desired” election outcome unaffected (and as such are outcome-neutral). He describes the incentive structure and the thought process of an autocrat as follows:

*“The ideal setup in terms of electoral institutions in a noncompetitive autocracy should fulfill the following criteria. First, signal democratic credentials to both domestic and international audiences by making it appear that fraud is being reduced. Second, allow for less detectable forms of fraud to continue (or even increase) in order to continue delivering supermajorities that would deter future challengers.”*

Thus, Sjoberg argues that fraud can change forms in such a way so as to minimize the impact on the final outcome. This adaptation of outcome-neutral fraud in response to monitoring pressures could take the form of taking

fraud outside of the polling stations—via intimidation or vote buying—to secure a desirable outcome. This theory would explain, for instance, why in the Armenian context—and consistent with the observers’ reports—certain types of irregularities and fraudulent activities declined (such as, ballot stuffing), while other categories increased (such as, vote buying and multiple voting). Unfortunately, some categories of fraud are rather difficult to detect empirically, and research must rely on eyewitness evidence. We present some additional evidence of this in the remainder of this Chapter.

## Voter List as a Potential Source of Fraud

The most serious forms of fraud in the Armenian context are rooted in the inflated voter lists. The problem originates from the inclusion of the names of citizens in voting lists that are residing abroad and are unable to cast their votes either because they have relinquished their Armenian citizenship or are unable to travel to Armenia to vote.<sup>24</sup> Interestingly enough, the number of eligible voters has risen continuously in recent years despite declining overall population numbers. The most significant increase in the number of voters was registered between the 2008 and 2012 national elections (by almost 195 thousand, or 8.3 percent of the total), which raises some questions. To try to understand the mechanics of the voter list compilation in Armenia, we put forth two hypotheses, which we present below along with relevant calculations.

<sup>24</sup> Unless a special notification is filed with the police prior to emigration requesting removal from the voter list, the Election Code presently requires citizens to be included in the voter lists at the citizen’s last known address.

# STATISTICAL ANALYSIS OF ELECTION DATA

## **Hypothesis # 1: Armenia’s eligible voter list is calculated without factoring in emigration.**

To show this, we calculated the net addition to the voter list between 2008 and 2012 using officially reported statistics for births and deaths. If the number calculated using this approach ends up at or below the one calculated by the CEC, it can be safely concluded that emigration has not been taken into account.

Table 3 below shows the relevant (officially reported) population statistics for years 2008-12. To arrive at the estimate of the net increase, first

we calculate the annual flows into the pool of eligible voters for those years individually (“New net eligible voters” line in Table 3) and then add them up to calculate the increase for 2008-12. This results in an estimated cumulative increase of 199.7 thousand eligible voters between February 2008 and May 2012. While marginally higher, this number is fairly close to the official number of eligible voter increase between the two elections, 194.6 thousand.<sup>25</sup> Therefore, we conclude that the CEC’s eligible voter list can—within a margin of error—be derived from population growth and death statistics without adjustment for permanent emigration.

**Table 3.**

Increase in Net Voter Eligibility between 2008 and 2012 Elections (in ‘000)

	2012	2011	2010	2009	2008
Turning 18 during the year in question (A) <sup>1/</sup>	20.9	70.9	77.8	79.9	62.1
Died during the previous year <sup>2/</sup>	38.8	27.9	27.5	27.4	0 (26.8)
of which died in “18 and older” age group (B) <sup>2/ 3/</sup>	35.7	25.7	25.3	25.2	0 (24.7)
Net new eligible voters (C=A-B)	-14.8	45.2	52.5	54.7	62.1
Memorandum item					
Total number of persons eligible to vote	2,522.9	...	...	...	2,328.3

Source: National Statistical Service and PFA calculations.

<sup>1/</sup> Number of individuals born from 1990 through 1994. Values for 2012 and 2008 were adjusted to account for the fact that elections were held in May and February, respectively.

<sup>2/</sup> The effective value for 2008 used in the calculation is zero, indicating that individuals who died in 2007 should have already been factored in the list of eligible voters for 2008. Similarly, the value for 2012 was adjusted upwards to reflect individuals who died during the period of January 1-May 5, 2012.

<sup>3/</sup> Approximately 8 percent of all deaths take place in 0-17 age group. Therefore, only 92 percent of total deaths are used in this calculation.

# STATISTICAL ANALYSIS OF ELECTION DATA

Thus, in a closed system without emigration, the number of eligible voters could increase despite a declining overall population.<sup>26</sup> Yet, it is important to keep in mind that this pattern is very rare and should not happen under normal circumstances, particularly in the coming years owing to a dramatic decline in the births in mid-1990s. However, Armenia has been subjected to large and consistent emigration pressures, and if the population statistics (including those eligible to vote) are not being adjusted for emigration, a natural question arises as to how the situation would change if emigration were properly accounted for in the calculation.

**Hypothesis # 2: *If a reasonable level of emigration is assumed, the level of turnout in the latest nation-wide elections would be implausibly high.***

To prove this, we conducted a simple exercise. We augmented the total official population number by assuming that some 25,000 people (or 20,000 eligible voters) have left Armenia each year since 1991. Although still believed to be understated, this assumption of emigration volume is consistent with data **reported by the national migration authorities** on various occasions. The upper panel of Figure 2 shows how this assumed population

path would differ from that reported by the three relevant censuses of Armenia's population. It appears that our augmented path closely mimics the population dynamics between the 1989 and 2001 censuses, but it also suggests a larger population loss between 2001 and 2011 than that suggested by the 2011 census. However, like many analyses, we do not consider the 2011 census data particularly credible.<sup>27</sup>

The two lower panels in Figure 2 show the relevant data—numbers of eligible voters and election turnout—during all presidential and parliamentary elections in Armenia, respectively. In addition, we also plotted the augmented eligible voter numbers that would be consistent with our assumption about the scale of emigration (i.e., 20,000 voting-age individuals emigrating on average every year since 1991).

The final piece of the puzzle is the calculation of the implied turnout ratios. It should be noted that if, instead of the official eligible voter list, one uses the augmented eligible voter count, the average turnout ratio would be equal to 94 percent for the 2008 presidential election and 92 percent for the 2012 parliamentary elections.<sup>28</sup> Obviously, both levels of participation

<sup>25</sup> This is the difference between the two numbers in the final row of Table 3.

<sup>26</sup> As shown above, this could happen if there are more people who were born 18 years ago than those who die in the current year.

<sup>27</sup> Doubts about the integrity of the population counting process have been expressed by number of observers in recent years. Armenia's former Prime Minister Hrant Bagratyan **questioned** the headline population number on the basis of the labor force statistics. Ethnographer and the former head of the Armenian Department of National Minorities and Religious Affairs, Hranush Kharatyan, **expressed similar doubts** about the census outcome.

<sup>28</sup> Not surprisingly, the turnout ratio in our model will cross the 100 percent mark rather quickly, as we continue to increase the assumption of average annual emigration from Armenia (i.e., assume a number above 25,000/year).

# STATISTICAL ANALYSIS OF ELECTION DATA

**Figure 2.**

Population Count, Eligible Voters, and Election Turnout



# STATISTICAL ANALYSIS OF ELECTION DATA

of participation are impossible to achieve in reality, hence supporting Hypothesis #2.

A corollary to this is that the official voter tally (1,559 thousand; as reported by the CEC) is unrealistically high. It is not difficult to see why this is the case. Applying a reasonable (and arguably still somewhat high) assumption of 70 percent turnout rate to our augmented eligible voter number list (1,697 thousand), we arrive at 1.188 million ( $=1,697 \times 0.7$ ) voters.

This shows an excess of 371 thousand voters ( $=1,559-1,188$  thousand) over the official numbers—or 31 percent—which is the number that in all likelihood was artificially added to the final election tally. Given our very conservative assumptions for emigration and turnout, this number should be treated as the lower limit of voter numbers added to the official count by the CEC. One unfortunately gets to see this in reality while traveling to rural areas in the far North or far South of Armenia, where population has declined to a bare minimum. Ironically, some of these locations are among those registering abnormal turnout during the recent national elections.

While these outcomes may not be very surprising to someone who has been following Armen-

ian elections for years, establishing results in Hypotheses 1 and 2 should help the casual reader to better understand the nature of election-related manipulations in Armenia.<sup>29</sup> While fully accounting for emigration on the voting lists may be methodologically and technically difficult to do, claiming that more people voted than actually did constitutes outright fraud, likely to be criminally punishable in many countries, including Armenia.

## Turnout-enhancing fraud

To provide further evidence of artificially enhanced turnout, we apply the methodology used previously (see PFA's election reports on 2008 and 2009 elections) to the 2012 election data.<sup>30</sup> The basic premise underlying this approach is that it is expected that the voter turnout (as well as the share of votes cast in favor of any candidate) will follow a normal (Gaussian) distribution.<sup>31</sup> Recent literature on election conduct uses election turnout as a proxy for fraud in countries with chronic election irregularities.<sup>32</sup> As argued by Klimek et al. (2012), augmented turnout can be indicative of ballot stuffing, multiple voting, and fraudulent vote counting. Incidentally, all of these

<sup>29</sup> Relevant officials have, **at times, admitted** the difficulties associated with properly accounting for emigration.

<sup>30</sup> In both reports, we have found strong evidence of turnout-enhancing fraud, which benefits the establishment candidate and party, respectively.

<sup>31</sup> In this case, the turnout ratio would be shaped like a bell curve, with the top of the bell representing the average, median, and mode of distribution. More formally, a normality of distribution for any large number of variables is followed from Lyapunov's Central Limit Theorem. The latter requires that the random variables in question be independent for their sum/average to be normally distributed.

<sup>32</sup> Studies by Sobianin and Sukhovolskiy (1993) and Sobianin, Gelman, and Kaiunov (1994) are considered pioneer studies of this literature.

# STATISTICAL ANALYSIS OF ELECTION DATA

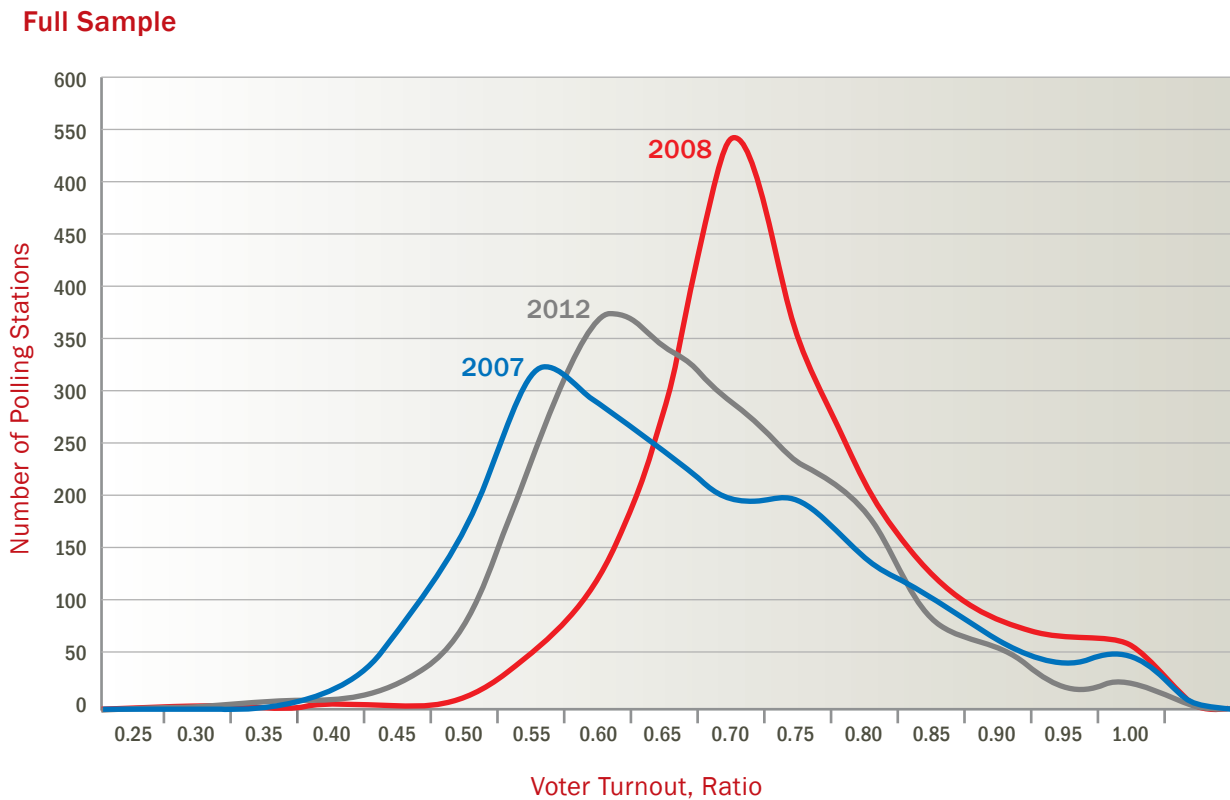
types of activities were widely reported in the context of the May 6, 2012 election in Armenia.

Figure 3 below depicts the distribution of polling stations as a function of turnout during the 2007 and 2012 parliamentary elections. While the 2012 curve shows an improvement over 2007 (in terms of having a shape that is

closer to a normal curve)—suggesting a slight reduction in turnout-enhancing fraud in 2012 as compared to 2007—there are still some noteworthy anomalies. The right tail is rather ‘fat’, indicating a disproportionately large number of polling stations with high turnout. Indeed, out of 1,963 polling stations, 104 reported turnout above 85 percent, with 25

**Figure 3.**

Frequency of Voter Turnout in Recent National Elections (2007, 2008, and 2012)





# STATISTICAL ANALYSIS OF ELECTION DATA

registering above 95 percent turnout.<sup>33</sup> This “bump” on the curve—an augmentation of the expected normal distribution—resembles closely that observed in many elections that have widely been considered fraudulent.<sup>34</sup>

The important point to note here is that, despite fewer reports of outright fraudulent activities during the 2012 election, the data still shows significantly “enhanced” turnout compared to theoretical predictions. This picture becomes even stronger if one compares the 2012 line with the 2008 outcome (see Figure 3). While key differences exist between presidential and parliamentary elections, and such differences may explain the difference in average turnouts across these two elections, the comparison can still be useful. If anything, the line for 2008 looks more normal, albeit with a larger mean and smaller variance, than the one for 2012, which has a much ‘fatter’ tail (i.e., a larger number of polling stations with higher-than-expected turnout). This suggests a greater amount of turnout-enhancing manipulations in 2012 compared to 2008.<sup>35</sup>

The natural next step is to determine how this squares with the fact that there was much less reported ballot stuffing in 2012 than in 2008. The answer, in our view, lies in the type of manipulations used in 2012. Consistent with the observer accounts reported above, we conjecture that in 2012, multiple voting replaced ballot stuffing as the main mechanism for turnout-enhancing fraud. Both types of fraud are turnout-enhancing and can be detected by statistical methodology (such as that applied above), but ballot stuffing can be detected by monitors, while multiple voting cannot.

Before we examine more specifics of the turnout-enhancing fraud and who, specifically, benefitted from it, we present tests for another type of fraud, which is related to vote counting.

## Digit tests

In this section we test for another type of fraudulent activity, one associated with the vote counting process. We follow the academic literature that uses the distribution of the last digit of all numeric entries in the final election

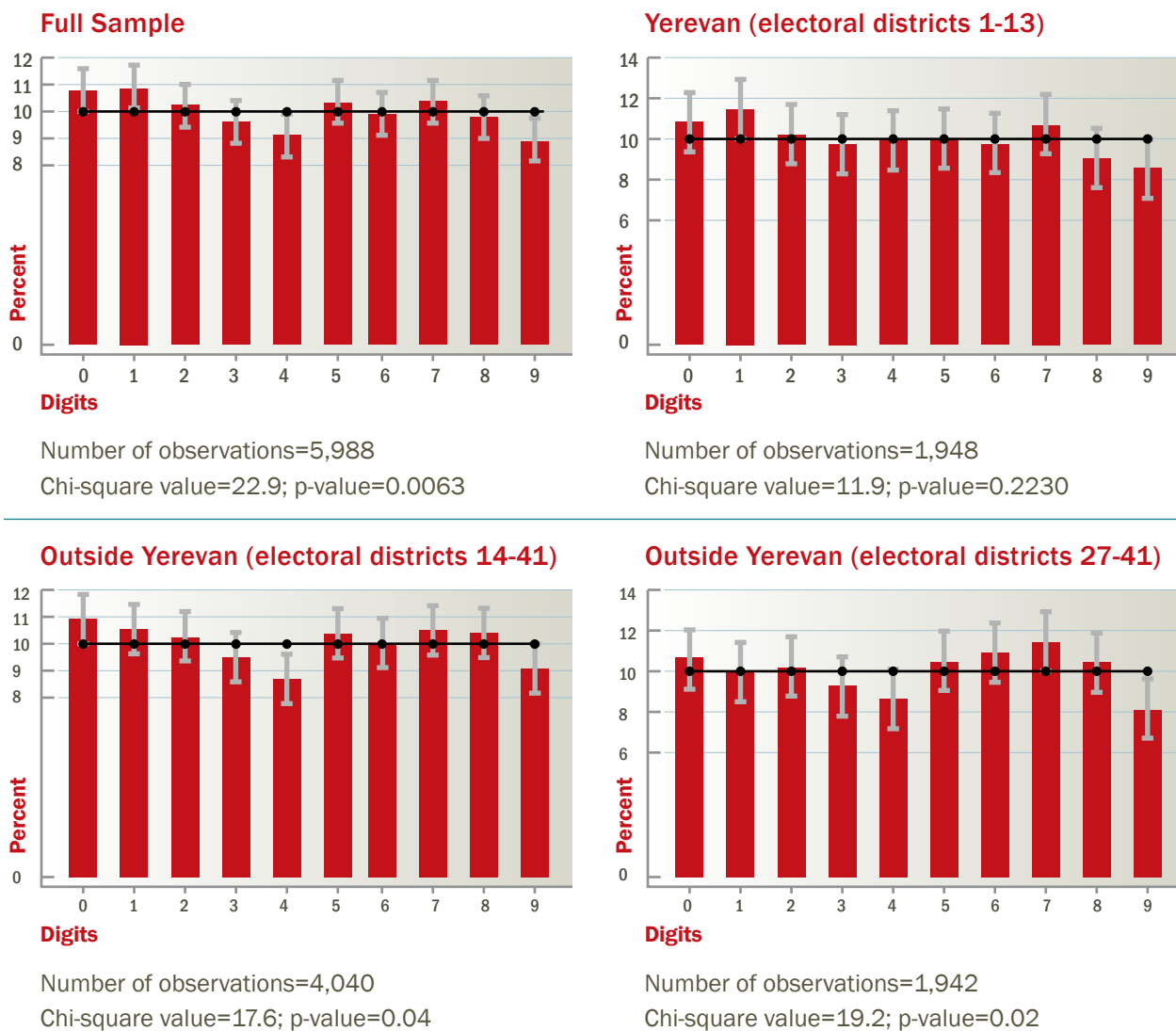
<sup>33</sup> Referring to an observer testimony, a [BBC News article](#) notes that, in one polling station in Yerevan, the number of votes counted exceeded that of voters registered by 15 percent.

<sup>34</sup> Examples include Russia’s federal republics during the 1996 and 2000 presidential elections, and the 1995, 1999, and 2003 Duma elections, and Ukraine’s second round of 2004 presidential election, among others (see Myagkov et al., 2005). At the same time, approximately normal distributions were found for non-republic regions of Russia in both rounds of the 1996 presidential election, the 2000 presidential election, and 1999 and 2003 Duma elections; Ukraine’s 1999 and the first round of 2004 presidential election.

<sup>35</sup> A comparison of curves in Figure 2 also suggests that in 2008 the turnout may have been enhanced in a large number of polling stations by a small amount, while in 2012, it may have been enhanced in a small number of polling stations by a larger amount.

# STATISTICAL ANALYSIS OF ELECTION DATA

**Figure 4.**  
Distribution of Last Digits by Sub-groups



Source: Central Electoral Commission and PFA calculations. Only three-digit vote counts are included. The line (with value of 10) indicates the expected uniform distribution under conditions of a clean vote count. The capped spikes indicate the 95 percent confidence interval for each individual digit.

# STATISTICAL ANALYSIS OF ELECTION DATA

protocols to gauge the degree of fabrication of vote totals.<sup>36</sup> The premise of the test is that without human interference, the (last) digits should be distributed uniformly with a probability of 10 percent, since there are ten digits in total, 0-9. Digit fraud is mainly driven by human biases in number generation, presumably by the secretary of the electoral district commission. Therefore, digit fraud is an explicit measure of bureaucratic fraud.<sup>37</sup> A reassignment of votes from one party to another would fall under this category. Figure 4 below presents the results of the tests conducted based on the official polling station-level data. Again, the intention is to compare the actual outcome with the theoretical predictions to see if the difference is statistically significant.

First, we look at vote-count fraud at the aggregate level (Full Sample). The first panel in Figure 4 clearly shows systematic deviations of the last digit if compared to the theoretical prior (i.e., uniform distribution at probability 10 percent; see the horizontal solid line).<sup>38</sup> Interestingly enough, the observed pattern is consistent with “human number generation,” as opposed to random number generation, patterns. Boland and Hutchinson (2000) show

that when asked to select digits at random humans prefer lower digits, a pattern that we see on the first panel in Figure 4. These vote counts were not randomly drawn, but rather they were generated in a way that the officials considered random.

Second, we break the sample into two and look at polling stations inside and outside of Yerevan. This is to test the hypothesis that there may be a significant difference in vote-counting fraud between Yerevan and other areas. It should be noted that there was a significant difference between Yerevan and areas outside of Yerevan in terms of degree of fraud during the 2008 election (see PFA, 2008).

The results presented in the second and third panels of Figure 4 are as predicted. In Yerevan, the distribution of last digits is not statistically different from uniform, suggesting an insignificant amount of vote-counting fraud in Yerevan.<sup>39</sup> On the contrary, in electoral districts outside of Yerevan, the last digits deviate from uniform, suggesting a sizable amount of vote-counting-related fraud.<sup>40</sup> In addition to the difference in levels of civic/political activism, this difference in the level of fraud between Yere-

<sup>36</sup> Sjoberg (2012a) uses election data from Azerbaijan, Kyrgyzstan, and Georgia to demonstrate the extent of fraud. Other studies that focus on the last digit include Beber and Scacco (2012) and Mebane and Kalinin (2009). The former study shows that a last-digit test requires weak distributional assumptions, suggesting that this method may be more suitable to detect fraud than focusing on the second digits.

<sup>37</sup> This test, however, only captures fraud related to the counting of votes, which is only one of many forms of election fraud.

<sup>38</sup> The chi-square test statistic has a value of 22.9 (p-value of 0.006), rejecting the hypothesis of uniform distribution at any significance level.

<sup>39</sup> With a chi-square statistic of 11.9 and a p-value of 0.223.

<sup>40</sup> With a chi-square statistic of 17.6 and a p-value of 0.04.

# STATISTICAL ANALYSIS OF ELECTION DATA

van and areas outside of Yerevan could be due to the difference in emigration patterns. Specifically, because of the greater extent of emigration from rural areas, as opposed to emigration from Yerevan, engineering similar levels of turnout by election officials would require more vote-counting-related manipulations. This provides a much-needed link between the extent of “missing voters” and fraud.

Finally, to avoid a potential problem due to the sensitivity of the chi-square statistic to sample size, another sub-sample of polling stations was picked to conduct the same test. Specifically, those in electoral districts 27 through 41, which have almost as many observations as those in Yerevan (i.e., 1,942 vs. 1,948), were used. The results reported in the fourth panel of Figure 4 are similar to those drawn from the largest sample (“Outside Yerevan”): that is, the last digits clearly deviate from uniform distribution, again suggesting fraud involving vote counting.<sup>41</sup>

There was strong evidence of voter counting fraud in the context of the 2008 presidential election in Armenia. As noted by the Assistant Secretary of State for European and Eurasian Affairs, Daniel Fried, during his testimony before the Foreign Affairs Committee of the U.S. Congress “[r]ecounts were requested, but [OSCE/]ODIHR observers noted “shortcomings in the recount process, including discrepancies and mistakes, some of which raise questions over the impartiality of the [electoral commis-

sions] concerned.” One such case, as **reported** by Hetq Online, was a recount done in the polling station 9/31 in Yerevan, which revealed that as a result of the initial counting all ballots cast for other candidates had been “allocated” to Serge Sargsyan. The final account had to be adjusted in several other polling stations that underwent a recount. However, as noted in PFA (2008; footnote 27), the number of polling stations that could have been recounted was restricted by both legal as well as administrative capacity-related considerations, leaving much of fraudulent vote counting undisclosed.

*In conclusion, the test shows evidence of statistically significant levels of fraud associated with vote counting in electoral districts outside Yerevan. Tampering with the final vote count could have been one of the channels for the ruling party to compensate for less ballot stuffing, a feature observed during 2012 election.*

## Who benefited from fraud?

To find out who benefitted from the turnout-enhancing fraud observed in the previous sections, we use another test proposed by Sobianin and co-authors, which examines the link between the share of individual candidates’ votes and voter turnout. They argue that the slope coefficient of the Ordinary Least Squares (OLS) regression of a candidate’s share of total eligible voters on turnout should be a positive number less than one and close to the share of total votes collected by that can-

<sup>41</sup> With a chi-square statistic of 19.2 and a p-value of 0.02.

# STATISTICAL ANALYSIS OF ELECTION DATA

didate.<sup>42</sup> If the resulting slope is much larger than the candidate's share of votes, this would indicate: (1) ballot stuffing to benefit this particular candidate and/or (2) the mobilization of voters beyond the normal turnout, which would disproportionately support the candidate in question and not others. If the resulting slope is larger than one, this would indicate not only that the party in question benefitted from additional ballots added to the final count, but that it also benefitted from votes subtracted from other parties.<sup>43</sup>

Figure 5 below depicts the relationship between candidates' votes for individual polling stations for two coalition partners (RPA and PAP) and two opposition parties (ANC and Heritage). It also presents the OLS regressions of candidates' voter shares on turnout and a constant term. These results are very interesting, since none of the estimated relations resembles the theoretical prior; that is, having an estimated coefficient that equals the share of votes obtained during the election.

First, as shown on Panel I, the slope coefficient in RPA regression is 0.96 compared to the theoretical prior of 0.44. Assuming that there are no systematic differences between the polling

stations, this result suggests that from every 100-voter marginal increase at a polling station, RPA received approximately 96 votes. In other words, RPA received almost the full benefit of enhanced turnout.

Second, while positive, the slope coefficient in regression for PAP is less than the share of votes obtained during the election (0.15 versus the theoretical prior of 0.3; Panel II). This suggests that from every 100-voter increase at a polling station, PAP received approximately 15 votes—half of what it received on average—suggesting some efforts to artificially divert the votes away from PAP.

Third, the slope coefficients for ANC and Heritage are negative, indicating not only they were unable to retain their share of votes as a result of incremental increases in voter turnout, but that they actually lost votes cast in their favor as turnout increased. This indicates large-scale tampering against these two parties in the form of stuffing ballots or artificial vote counting.

These observations point to RPA as the only beneficiary of the turnout-enhancing fraud observed during the election.

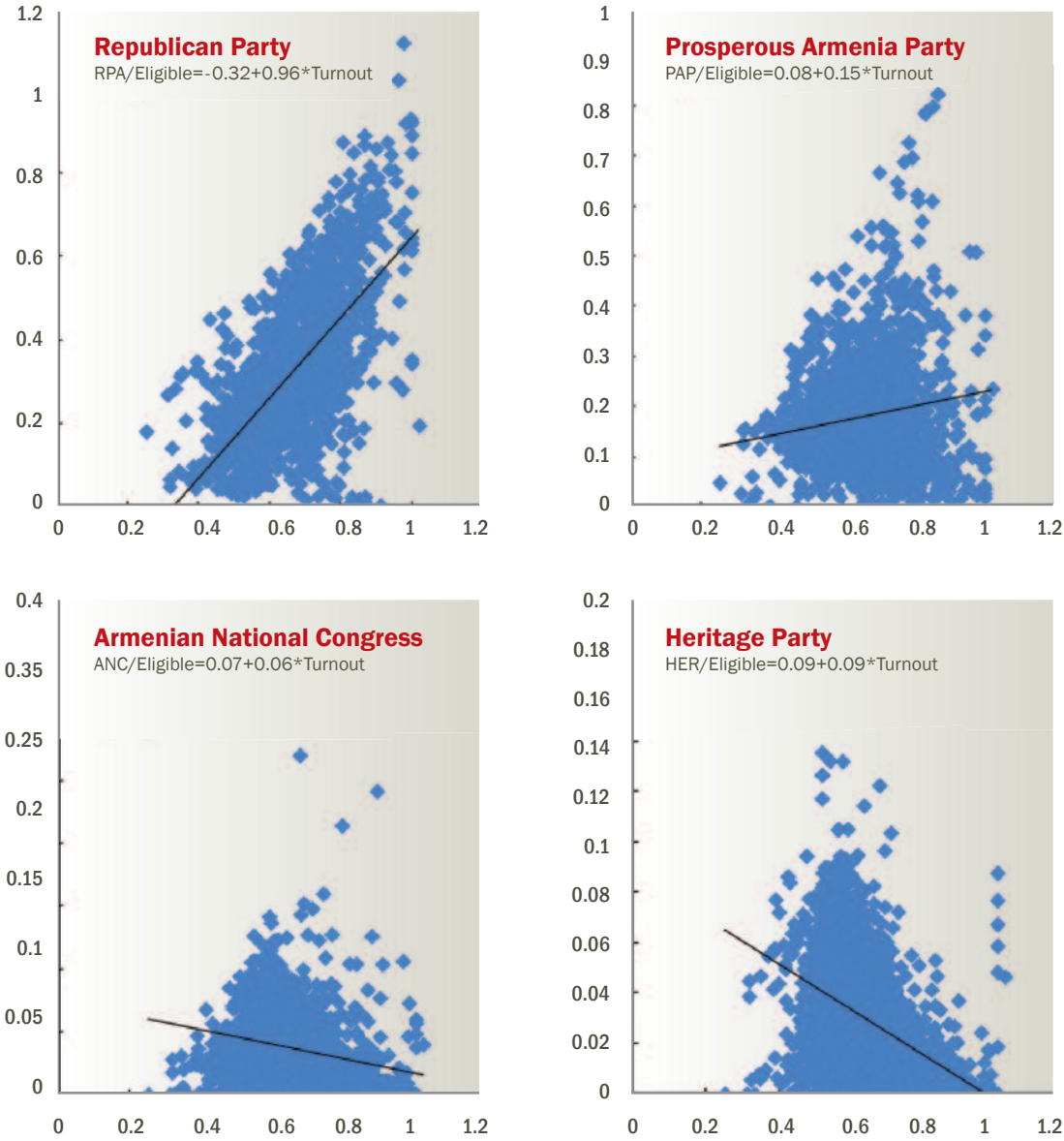
<sup>42</sup> The described regression for the  $j$ th candidate and  $i$ th polling station can be written in the following way, ignoring the constant term for presentational simplicity:  $V_{ij}/E_i = \beta \cdot T_i + \varepsilon_i = \beta_j \cdot S_i/E_i + \varepsilon_i$ , where,  $V$  is the number of votes received by the candidate,  $T$  is turnout (defined as  $S$  divided by  $E$ ),  $S$  is the number of eligible voters who showed up at the polling station to vote, and  $E$  is the total number of eligible voters. Finally,  $\varepsilon$  is the error term. It can be shown that the following estimator  $\hat{\beta}_j = \sum V_{ij} / \sum S_i$  (which is the share of votes collected by the  $j$ th candidate across all polling stations) has an expected value equal to that of the OLS estimator (i.e., where  $E(\hat{\beta}_{j,OLS}) = \beta_j$ ) plus a small term.

<sup>43</sup> This particular pattern was observed during the 2008 presidential election in the case of votes cast in favor of Serge Sargsyan (see PFA, 2008).

# STATISTICAL ANALYSIS OF ELECTION DATA

**Figure 5.**

Relationship Between Party Votes and Turnout (percent of eligible voters)



Source: Central Electoral Commission data and PFA calculations. Number of observations is 1963.

# CONCLUSIONS AND RECOMMENDATIONS

The analysis conducted in this report shows the presence of the following types of election fraud, which taken together could have materially altered the outcome of the 2012 election:

- ▶ **Massively inflated voter lists and, as a result, participation rates, or turnout;**
- ▶ **Changing forms of fraud, with falsifications outside of polling stations becoming increasingly common, including bribing, intimidation, and fictitious voting; and**
- ▶ **A significant amount of vote-counting falsifications, being especially pronounced in areas outside of Yerevan.**

This report shows that the ruling party is the main beneficiary of turnout-enhancing fraud. Much of what has been examined in the report acknowledges the growing sophistication of fraud mechanisms, making it ever more difficult for international observers to notice and record, and is consistent with intensifying migration and widening social disparities.

While much of the blame for falsifications discussed above naturally rests with the ruling regime, the opposition parties too have their share of responsibility. Paralyzed by the regime's formidable PR machine and unable to innovate, they have not been able to prevent the country's downward slide along a kakistocratic path by offering a credible way forward.<sup>44</sup> From election to election, they have de facto legitimized a deeply flawed and highly predictable process without presenting credible fallback op-

tions. As a result, elections have become largely irrelevant and should perhaps be reevaluated by the disenfranchised majority as a means of participating in the governance of the country.

These developments have rendered the citizenry disillusioned in elections and have prompted them to either completely withdraw or else to seek unconventional ways to address the looming political crisis.<sup>45</sup> A **recent announcement** by a large group of prominent independent intellectuals and civil society activists to establish a “pre-parliament”—a stepping stone toward alternative elections to be held in the near future—may well be the “way out” that many in Armenian society have been longing for.

However, society itself has some serious soul-searching to do. Why do people take election bribes and allow themselves to be bullied into voting for one party? If they do take bribes, what prevents them from voting the way they want to vote? To what extent can the vote provided in exchange for a bribe be considered free? With election fraud being increasingly carried out outside of the polling stations and taking forms that are inherently voluntary, such as vote buying, can one only blame the election authorities for conducting fraudulent elections? How does one break the self-enforcing cycle between the culture of electoral bribes and poor governance?

One thing should be kept in mind: achieving cleaner elections is not an end in and of itself.

<sup>44</sup> **Kakistocracy** [Ancient Greek *κακιστος* (*kakistos*, “worst”)], government under the control of a nation's worst or least-qualified citizens.

<sup>45</sup> In the category of generalized and institutional trust, EBRD's “**Life in Transition**” report states in reference to Armenia: “The level of trust among respondents, at only eight per cent, is the lowest in the transition region and has dropped from about 20 per cent since 2006. The already low level has especially fallen among the younger and the middle-aged groups and among the lower-income sections of the population.”

# CONCLUSIONS AND RECOMMENDATIONS

Better elections are likely to result in stronger social cohesion and better governance, the most important ingredients of development and progress. In our most recent report issued weeks before the May 2012 election (see PFA, 2012) we noted that:

*“The effective handling of challenges facing the country should begin by forming a legitimate authority to oversee the new policy course on behalf of the people of Armenia. The upcoming parliamentary election provides that opportunity. Allowing people to exercise their free will and creating a sense of moral justice would enhance the public buy-in and—all other things being equal—would make policy measures more effective.”*

This has not happened. Yet, it may be too early to fully grasp the implications of the 2012 election for Armenia’s future. One thing is clear: people’s patience with the regime’s handling of the country’s affairs is running thin and this may well be the temporary calm before a storm.

## Recommendations

### To opposition parties and civil society

- ▶ The elimination of the “missing voters” issue should be made a priority. However, absent the political will to disclose the voter lists after elections (and given the Constitutional Court’s position on the issue), an alternative solution should be pushed whereby citizens residing abroad and unable to travel to Armenia to vote should be allowed to withdraw their names from the local voting lists temporarily, on an

election-by-election basis.<sup>46</sup> The names of those who withdrew in such a way should be published to reduce the opportunities for tampering with the list.

- ▶ Disclosure of the voter lists in polling stations with a turnout above 90 percent (i.e., abnormally high) should be pursued. Not only this will provide more direct evidence of fraud in those polling stations and potentially beyond, but this will also to a certain degree prevent fraud and discourage corrupt election officials from approaching the 90 percent mark, knowing that they will be audited.

### To foreign election observers

- ▶ While taking many forms, election fraud in Armenia is adapting to monitoring pressures. This puts a premium on a more candid observer assessment of election conduct, especially when it comes to commenting on the “elephant in the room”—the degree of sponsorship of election fraud from the highest level.
- ▶ Related to this is the need for better education of monitors about Armenia’s political-economy landscape and history of election fraud.
- ▶ Resources permitting, more observers should be dispatched to areas outside of Yerevan, where evidence of fraud is much stronger than that in Yerevan.

### To the Diaspora

- ▶ Given the level of challenges facing Armenia and the impact that clean elections could have on Armenia’s future, providing funding for, and directly participating in, election monitoring efforts could be the best use of time and money.<sup>47</sup> However, the involvement of Diasporan monitors should be done independently of traditional Diasporan structures, within which the regime’s influence may still be significant.

<sup>46</sup> Needless to say, those who relinquished their Armenian citizenship should withdraw permanently.

<sup>47</sup> Diasporan monitors are likely to have a better sense of the local peculiarities, language, and the tangible stake in Armenia’s future.



# APPENDIX I: ELECTORAL SYSTEMS<sup>48</sup>

Electoral System	Majoritarian Representation (MR)	Proportional Representation (PR)
<b>Definition</b>	This is the simplest form of a plurality electoral system. The winning candidate is the one who gains more votes than any other candidate, even if this is not an absolute majority of valid votes. The system uses single-member districts and the voters vote for candidates rather than for political parties.	Under this system each party or grouping presents a list of candidates for a multi-member electoral district, the voters vote for a party, and parties receive seats in proportion to their overall share of the vote. The winning candidates are typically taken from the lists in accordance with their position on the lists.
<b>Advantages</b>	<ul style="list-style-type: none"> <li>▶ Provides a clear-cut choice for voters between two main parties.</li> <li>▶ Gives rise to single-party governments.</li> <li>▶ Gives rise to a coherent opposition in the legislature.</li> <li>▶ Excludes extremist parties from representation in the legislature.</li> <li>▶ Promotes a link between constituents and their representatives, as it produces a legislature made up of representatives of geographical areas.</li> <li>▶ Allows voters to choose between people, rather than just between parties.</li> <li>▶ Gives a chance for popular independent candidates to be elected.</li> <li>▶ Is simple to use and understand. A valid vote requires only one mark beside the name or symbol of one candidate.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Faithfully translates votes cast into seats won.</li> <li>▶ Encourages or requires the formation of political parties or groups of like-minded candidates to put forward lists. This may clarify policy, ideology, or leadership differences within society.</li> <li>▶ Produces very few wasted votes.</li> <li>▶ Facilitates minority parties' access to representation.</li> <li>▶ Encourages parties to campaign beyond the districts in which they are strong, or where the results are expected to be close.</li> <li>▶ Restricts the growth of 'regional fiefdoms'.</li> <li>▶ Leads to greater continuity and stability of policy.</li> <li>▶ Makes power-sharing between parties and interest groups more visible.</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>▶ Excludes smaller parties.</li> <li>▶ Excludes minorities. As a rule, parties put up the most broadly acceptable candidate in a particular district so as to avoid alienating the majority of constituents.</li> <li>▶ Excludes women from the legislature. The 'most broadly acceptable candidate' syndrome also affects the ability of women to be elected to legislative office because they are often less likely to be selected as candidates by male-dominated party structures.</li> <li>▶ Encourages the development of political parties based on clan, ethnicity or region, which may base their campaigns and policy platforms on conceptions that are attractive to the majority of people in their district or region but exclude or are hostile to others.</li> <li>▶ Exaggerates the phenomenon of 'regional fiefdoms' where one party wins all the seats in a province or area.</li> <li>▶ Leaves a large number of wasted votes which do not go towards the election of any candidate.</li> <li>▶ May be unresponsive to changes in public opinion and dependents on the drawing of electoral boundaries.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Coalition governments, which in turn lead to legislative gridlock and consequent inability to carry out coherent policies.</li> <li>▶ Governing coalitions, which have insufficient common ground in terms of either their policies or their support base.</li> <li>▶ A destabilizing fragmentation of the party system.</li> <li>▶ Small parties getting a disproportionately large amount of power.</li> <li>▶ The inability of the voter to enforce accountability by throwing a party out of power or a particular candidate out of office.</li> <li>▶ Difficulties either for voters to understand or for the electoral administration to implement the sometimes complex rules of the system.</li> <li>▶ Weak links between elected legislators and their constituents.</li> <li>▶ Excessive entrenchment of power within party headquarters and in the hands of senior party leaderships.</li> <li>▶ The need for some kind of recognized party or political groupings to exist.</li> </ul>
<b>Examples/Countries</b>	Azerbaijan, Canada, India, UK, US and many former UK colonies.	Most of EU member states, Russia, Turkey, some CIS countries.

<sup>48</sup> Based largely on information obtained via the [ACE Electoral Knowledge Network](#).

# APPENDIX II: SOCIAL MEDIA REPORTS OF INK MALFUNCTIONING BY PROMINENT ACTIVISTS

## Դավիթ Սանասարյան

ԱՀԱԶԱՆԳ: Ընտրատեղամասում անձնագրի վրա դրվող կնիքը բավական հեշտությամբ ջնջվում է մի փոքր այն տրորելու դեպքում: Սա հավաստի ինֆորմացիա է

## Արմեն Հովհաննիսյան

Թանաքը աչքիդ առաջ ջնջվում է: ԱՀԱԶԱՆԳ: Շատ լուրջ խնդիր է: The ink on stamp is disappearing in a minutes! #armvote

## Levon Barseghyan

Գյումրու մի քանի տեղամասերից ահազանգեր ունեմ, որ անձնագրի կնիքի դրոշմը ցնդում է 20-30 րոպեից 34/18-ում որոշել են դադարեցնել, մոտ 20 րոպե ընտրություն տեղի չի ունեցել, 08:50-ին զանգել են ԿԸՀ, որտեղ հանձնարարել են շարունակել քվեարկությունը անկախ այն հանգամանքից որ դրոշմը ցնդում է: Քվեարկությունը այդ տեղամասում շարունակվում է:

Գյումրի 34/4, թիվ 11 դպրոցի շենք  
08:20 թանաքը 20 րոպեից վերացել է

Գյումրի 34/7, թիվ 18 նախակրթարանի շենք  
Կնիքները ցնդում են անձնագրերի միջից: ԿԸՀ-ից ասել են շարունակեք, դա ձեր խնդիրը չէ:  
9:00 ԿԸՀ-ից հանձնարարել են այդ թանաքը փոխաչդինել սովորական թանաքով:

Գյումրի 34/8, թիվ 37 դպրոցի շենք  
08:25-Կնիքը վերացել է 20 րոպեից:

Գյումրի 34/18, թիվ 4 դպրոցի շենք  
08:40-Կնիքները ցնդում են անձնագրերից, հանձնաժողովը որոշել է դադարեցնել ընտրությունները: ԿԸՀ-ից  
08:50-ին հանձնարարել; են շարունակել քվեարկությունը, անկախ այն հանգամանքից որ դրոշմը ցնդում է: Մինչ այդ 20 րոպեով հանձնաժողովի որոշմամբ քվեարկությունը դադարեցված է եղել:

Գյումրի 34/22, թիվ 7 դպրոցի շենք  
08:25- Միջադեպ դիտորդների եւ վստահված անձանց միջեւ:  
ՀԱԿ-ի վստահված անձինք ստուգում են քվեարկածների անձնագրերը  
9:05 Կռիվ երկու մեծամասնական թեկնածուների ներկայացուցիչների միջեւ:

Գյումրի 34/23, Պետական Բժշկական քոլեջի շենք  
08:12-ԲՀԿ-ն կամեցել է տեսախցիկ տեղադրել, ծեծկռտուք են սարքել, թույլ չեն տվել տեսախցիկ տեղադրել:

# APPENDIX III: ECONOMETRIC ESTIMATION OF THE OBSERVER EFFECT

This section provides the background for the calculations reported in Box 1. The dependent variable in the regressions is the share of the establishment candidate (during the first stage of the 2003 and the 2008 presidential elections). The main explanatory variable (Observed) takes a value of 1 if the polling station was visited by an international observer and 0

otherwise. By introducing an explanatory variable, Yerevan—which takes a value of 1 if the polling station is located in Yerevan and 0 otherwise—we also control for any difference in demographic characteristics (i.e., education and activism) and emigration rates between Yerevan and areas outside of Yerevan.

**Table A1.**  
Regression Output

	DEPENDENT VARIABLE: Share of R. Kocharyan (2003, 1st stage)		DEPENDENT VARIABLE: Share of S. Sargsyan (2008)		
	I (OLS)	II (OLS)	III (OLS)	IV (OLS)	V (IVREG)
Observed	-0.06 (-5.92)***	-0.02 (-2.00)**	-0.06 (-7.80)***	-0.045 (-5.96)***	-0.10 (-1.66)*
Yerevan		-0.16 (-13.51)***		-0.14 (-15.13)***	-0.13 (-10.35)***
Constant	0.54	0.56	0.58	0.60	0.63
R-squared	0.02	0.11	0.03	0.13	0.11
No. of polling stations	1,764	1,764	1,923	1,923	1,923

(\*\*\*), (\*\*), and (\*) denote significance at 1, 5, and 10 percent levels, respectively.

## APPENDIX III: ECONOMETRIC ESTIMATION OF THE OBSERVER EFFECT

The result in Column I essentially replicates one of the result of a groundbreaking study by Hyde (2007), showing that election monitors on average reduced the share of Kocharyan's vote in the first stage elections by 6 percent. As indicated in the report, concerns about potential endogeneity of choice of which polling stations to monitor were relieved because the selection was done randomly.<sup>49</sup> After controlling for the Yerevan effect, the observer impact declines to 2 percent (Column II).

Interestingly enough, the overall effect of monitoring during the 2008 election is unchanged—the share of votes received by Serge Sargsyan is lower by 6 percent in polling stations where visited by observers, compared to those where no observers were present (Column III). However, relative to 2003, the impact is higher when the Yerevan effect is controlled for: the impact is 4.5 percent in 2008 vs. 2 percent in 2003 (Column IV).

To control for potential endogeneity of selection of polling stations for monitoring in 2008, in case the decision to monitor a polling station was made based on factor(s) correlated with the degree of fraud, we applied instrumental variable regression methodology (IVREG). For this purpose, we used the following two instruments: (1) the distance from Yerevan to the

center of the electoral district (in kilometers) and (2) the average share of polling stations visited by observers in a particular electoral district during the previous presidential election (i.e., in 2003).<sup>50</sup>

Finally, given the differences observed between various localities in the sample, such as polling stations in and outside of Yerevan, we chose the generalized method of moments (GMM) option in IVREG to correct for the potential heteroskedasticity of the error terms. GMM allows for efficient estimation in the presence of heteroskedasticity of unknown form (see Baum and Shaffer (2002) for a discussion).<sup>51</sup> The STATA command used for estimation is as follows:

```
ivregress gmm sargsyanshare Yerevan  
(observed=distance 2003observedav-  
erage)
```

The IVREG results reported in Column V (Table A1) show a stronger “observer effect” than those reported in Column IV (OLS)—10 percent vs. 4.5 percent—so much so that if all polling stations in Armenia were monitored by foreign observers (instead of only 52 percent) the results of the 2008 presidential election may have been too close to call.

<sup>49</sup> The latter problem may have arisen if, for example, stations with a priory greater share of vote for the establishment candidate were the ones monitored by observers.

<sup>50</sup> Both instruments have the predicted signs in the first stage regressions and are highly statistically significant.

<sup>51</sup> Using 2sls option in *ivregress* instead of *gmm* produces a slightly smaller coefficient on *observed* (0.08) but larger standard errors, rendering the coefficient borderline insignificant. Results are available upon request.

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