

**ELECTION
FRAUD
SOUTH KOREA
2020**

VOL.2

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Preface by Kyungwook Min



Fraudulent elections will destroy democratic societies and their attendant freedoms. No free republic can tolerate abuse of the electoral process, and the integrity of elections must be carefully defended.

These days society is witnessing the development of political oligarchy – joined with mainstream media, mega-corporations, and powerful civic organizations, and resulting in a new form of oligarchy. This threatens to distort the representative branch of government as well as subjugating the judiciary and even the executive branch. This new oligarchy is clashing with popular demands to preserve individual rights and freedoms, and raises fears of eventual despotism.

What makes the situation worse is the vigorous interference of the Communist Party of China (CCP). Unlike the expansionist strategy of the former USSR in the early 20th century that led the world-wide communization, the CCP will Sinicize the world through osmosis of corruption. Much like during the ancient era when the Persian bribes brought Sparta to its destruction, China's dark money and spy organizations are leading to the meltdown of Western Civilization's core from within.

Those who seek to defend the civilized tradition of freedom and rule of law against the globalization of corruption must clearly discern efforts to corrupt the electoral process. And they must establish themselves as a distinct force in opposition – and as defenders of fair elections. The moment we surrender to election fraud, the freedom and rule-of-law that are all based on civilized tradition will disappear like a sandcastle in the surf.

Before the South Korean 2020 elections started, my nomination to run in my district was withdrawn twice in a bizarre development, and when I received this political death sentence, I turned to my faith and sought God through early-morning prayer at my church.

The prayer I lifted up was that I would be used in any way possible, as a small vessel, to play a role in the great change in South Korean politics and political wind of miracle that was sure to come. That prayer was to assume that I would be given the nomination, and reelected, and working hard to ensure a more righteous and fair administration than the current one in power. However, the great change and the miracle that hit us after the elections far exceeded what I ever imagined. It is a perfect example of how God's will always trumps our own thoughts and desires.

I handily defeated both of my opponents on election-day voting. However, I lost in the early voting ballot count. But, if I were to set the ballots cast for me in 'inside jurisdiction' early voting as '1', looking at the 'outside jurisdiction' early voting ballots, the ratio between two was at 0.39. The Democrat Party candidate who ran against me had the same ratio of 0.39, as well as the third candidate from the leftist Justice Party who siphoned votes from her fellow leftist Democrat Party candidate. How can each of the 1st, 2nd, and 3rd ranking candidates in the race all have the same ratio for ballots cast for the 'inside jurisdiction' and 'outside jurisdiction' early voting ballots? What are the odds that this could happen naturally? Myongji University statistics professor, Young-Ah Park stated that for this to happen would be akin to throwing 1,000 coins in the air and all of them landing on the same side. The former Dean of the Korean Academy of Science and Technology, and the honorary Professor of Statistics at Seoul National University, Seong-Hyun Park, asserted that if God himself did not cause this, it is surely manipulation that occurred.

From the April 15, 2020 frontlines of free democracy in the Republic of Korea, to a few months later on November 3, 2020, an election marred by widespread fraud allegations was held in the bastion of democracy, the United States. Democracy and freedom, the rule-of-law and due process have all been insulted.

Only those who work for a miracle to happen and to never let go of hope, and fighting a mighty foe, can have the right to fully enjoy freedom and democracy. I long for and desire for that day to come – when the countless unnamed democratic citizens who waved flags and banners of support on the streets, in hot summer weather of above 80 degrees, or in the below-freezing weather of winter – can share our joy on the day when truth wins.

This report is a record of the fight and resistance the destruction of democracy. Free, liberal democracy, based on natural human rights and born with the Declaration of Independence in 1776, is still going strong. Rather than fall into disappointment, it is time for us to persevere while dreaming of a better and grander future.

I am grateful and thank Ms. Annie Chan, along with so many individuals whose names cannot all be mentioned here, for their dedication and hard work. Their efforts will be recorded in the heavens.

February 11, 2021
Min, Kyungwook
Chair, The 4.15 Election Fraud People's Struggle Headquarters
Former National Assemblymember

Foreword by
Youngah Park



The Republic of Korea, founded in 1948 through a free and equal general election, continues to maintain and develop an election-based liberal democratic system despite the Korean War and the hardships of being one of the world's poorest countries for many years, before achieving economic prosperity. Electing representatives of the people through free and fair elections is the foundation and the core of modern democracy to entrust the representative of the people with the decision-making process of the people.

For the past 70 years, South Korea has been in a chaotic state of competition with numerous national elections, but the fairness of voting and counting votes was kept relatively intact and the people have trusted such integrity. However, that trust could no longer be maintained in the Republic of Korea because of the 21st National Assembly election that was held on April 15, 2020. The results of the April 2020 general election, which resulted in the ruling party's overwhelming victory, resulted from serious fraud and manipulation in various constituencies. As soon as the election was over, I and many other experts analyzed the results of the election and early voting and were astonished at how many statistically improbable things had happened. Suspicions over the authenticity of the ballots, the use of QR codes which goes against election laws, and numerous irregularities found in the mail-in ballots goes beyond only suspicions of rigging elections. We have no choice but to conclude that the election was rigged. It also raised the possibility of mass digital manipulation by interference of foreign forces. As a result, the integrity of elections in Korea is facing serious challenges.

In more than 100 constituencies, lawsuits to invalidate the election have been filed in court, but not a single case has been fully adjudicated with a final ruling. Even a recount has not happened. Also, the election management organization did not disclose the voter roll and the program for the electronic counting machine, and the plaintiffs who filed the invalidity suit are having absolute difficulty proving election fraud in the face of such unfavorable conditions.

In addition, the main opposition party and the conservative media, which should be the first to raise suspicions of election fraud, have remained silent and ordinary citizens, students, experts, and a small number of the media are working to reveal the election irregularities.

The ruling party's restrictions on freedom of assembly and demonstration under the pretext of distancing due to COVID-19 is a serious impediment to any attempt to reveal election fraud. The ruling party, which won an overwhelming majority, is barreling onto the path of enacting anti-constitutional laws, illegal executive orders, totalitarian dictatorship, and the suppression of the people's freedom.

In the United States, the bastion of liberal democracy, the integrity of the November election was often questioned, but ultimately failed to prevent what millions of voters consider to be distorted election results. The freedom and truth that has been acquired through the long history of mankind is proof that we're facing a wide range of challenges around the world.

We hope that the integrity of elections will be secured not only in the Republic of Korea but also in all democratic countries. Through this report, the process of keeping a record of election fraud in Korea will hopefully be a light to our future journey towards freedom and truth.

Youngah Park, Professor
Department of Physics, Myongji University
Former National Assemblymember

Foreword by
Wonmog Choi



What is happening in South Korea in recent years goes beyond the level of a simple political struggle between conservative and progressive. It is foreshadowing the era of 'digital fascism'.

Fascism, which appeared in the 1920s and 1930's, attempted to realize the complete solidarity and integration of the ruling class in order to realize a homogeneous society. The guiding ideology and fascist leaders were subject to enthusiastic worship, and criticism was unacceptable and dangerous. The system established by mankind to fundamentally suppress fascism, which served as a key factor in the outbreak of World War II, is a democratic procedure. The essence of a democratic system, whether liberal or social democracy, lies not in its 'ideology', but in its 'process'. The principles and institutions established by the national community gain legitimacy through the domination of the democratic majority, and in order to do so, the principle of respect for the minority must be observed.

Majority rule is justified when the fairness of the electoral system can be guaranteed. The arguments of minorities claiming fraudulent elections must be sufficiently and promptly verified or disproven. Fair and honest examination of election fraud claims is the core of the principle of respect for minorities. How much longer are the South Korean government, the National Assembly and the courts, who have been thoroughly ignoring, for more than eight months, the young people's ongoing protests and more than 200 formal lawsuits against the fraudulent election of April 15 in South Korea, to prove themselves useless in democratic procedures?

The most commonsensical requests to examine charges of election fraud were blocked from mainstream information channels and framed as conspiracy theories and were quickly killed in the media market. Beyond requests to verify the National Election Commission's computer server, even the most basic requests to examine the electoral list and to investigate ballot QR codes and electronic counting machines are thoroughly ignored. Moreover, the evidence uncovered by numerous observers, witnesses, YouTubers, intellectuals, and politicians who raised these issues is intentionally omitted from official government discovery proceedings. The issues and evidence are suppressed from public view and dismissed as baseless and conspiratorial.

Given this situation, the attached reports and materials are not only honest descriptions and evidence of what actually happened in the April election. These are the records of freedom fighters as faithful stenographers who have kept the precious light of truth and principles in front of the quiet terror of power spreading like a virus. Anyone, including myself who reads, copies, talks about, supports, and transfers those records and information should feel proud of himself or herself in participating in the war between humanity and digital fascism spreading through Korea. What better warfare can one engage in?

Dr. Wonmog Choi
Co-President, Professors Solidarity for Freedom and Justice
Professor of Law, Ewha Womans University
Seoul, Korea

Foreword by
Sung Hyun Park



It is my honor to give a foreword to this report that analyzes claims of fraud in South Korea's April 15, 2020 general election. I was a speaker who participated in the 2020 KCPAC which was held on August 25, 2020 in Seoul and Washington D.C. jointly by webinar conference. It was quite successful to collect a number of election fraud cases, and to alarm South Korea and the U.S.A. about the serious hazard of election fraud.

Korea became liberated from Japan in 1945 by the Second World War and the Republic of Korea was established in 1948. We experienced the bitter Korean War during 1950-1953 and lived a very poor life. In the early 1960's, the per-capita GDP of the Korean people was less than \$100. However, because of liberal democracy and the free-market economy system in addition to the Korea-U.S. alliance, the Korean people have created the so-called 'Han River Miracle', and now the per-capita GDP is over than \$30,000 and has become an economic power in the world.

The liberal democracy is firmly based on fair and honest elections in order to choose the right political leaders to lead the nation. However, the previous 4.15 general election in Korea was full of election fraud, and the liberal democracy is at stake in Korea now. The 2020 KCPAC disclosed many cases of election fraud which were mainly related to the pre-voting which was held during April 10-11, four or five days earlier than the on-site (election day) vote. About 40% of the total voters joined the pre-vote. In the election, 253 parliamentary seats were voted throughout the country, and the results of the votes were that the Democrat Party (DP), which became the ruling party, got 163 seats, and the minority party (the United Future Party, UFP) received 84 seats. It was surprising to know that in the pre-vote, the DP gained 56.3% and the UFP 34.9%, the DP winning by a landslide. However, in the on-site (election day) vote, the DP gained 45.6% and the UFP 46.0%, the UFP won by a thread. Because the DP created a wide gap in the pre-voting, constituency elections ended with a record victory for the DP.

Comparing the results of the pre-vote and the on-site vote, statistical analyses showed highly abnormal voting patterns. Operational errors of the electronic ballot counting machine, forgery of ballots, manipulation of the ballot sorting program, illegal use of QR code in the pre-vote and so on were presented in the 2020 KCPAC. Because of the many cases of election fraud, among the total 253 voting districts, 137 districts (more than half of total districts) filed election invalidation lawsuits, and they are waiting the process of lawsuits.

Just like the Covid-19 virus, the election fraud creeps into the liberal democracy globally and damages the free democratic system. It seems that the 4.15 general election in Korea is the typical case. However, I believe that South Korea, the U.S.A and the world are fortunate to see that the 2020 KCPAC disclosed the whole body of election fraud in Korea to prevent any further election fraud in the future for sound and liberal democracy.

Sung Hyun Park
Emeritus Professor
Department of Statistics, Seoul National University
Seoul, Republic of Korea
February 7, 2021

**ELECTION
FRAUD**

PRIMARY
DOCUMENTS

MAIL-IN VOTE MANIPULATION AND
OTHER FRAUD AND OUTSIDE
INTERFERENCE IN SOUTH KOREA'S
APRIL 15, 2020 ELECTION

Park Ju-Hyun

Synopsis for “Mail-in Vote Manipulation and Other Fraud and Outside Interference in South Korea’s April 15, 2020 Election”

Attorney Park’s paper offers a detailed assessment of clear and large-scale irregularities involving ‘mail-in’ votes cast during the South Korean election’s two-days of ‘early voting. Attorney Park’s research highlights the importance of exposing the vulnerability and danger posed by the existing scheme for handling ‘mail-in’ ballots. According to Attorney Park’s assessment, upwards of 1 million votes cast in the April 15th, 2020 election were of questionable provenance and potentially fraudulent.

The paper also lays out allegations of efforts by the incumbent Moon administration to interfere with the electoral process by clamping down on dissent and muzzling freedom of speech of South Korean citizens, and also using the COVID-19 pandemic as cover for such efforts. Attorney Park also addresses in some detail allegations of foreign (Chinese) manipulation and interference in the South Korean general election held on April 15, 2020, to include allegations of vulnerable Chinese-made technology in the South Korean election network, and allegedly introduced and utilized without proper oversight or transparency.

The paper concludes by highlighting the efforts of South Korean citizens to expose and seek redress for alleged election fraud. The activities of a citizens group led by former National Assemblyman Min Kyung-Wook, get particular notice, as do claims that the incumbent Moon Jae-in administration is attempting to hinder and block such effort of citizens seeking to raise alleged electoral irregularities to public examination.

As a final plea, Attorney Park requests the international community to help address the irregularities exposed during the April 15, 2020 national assembly election.

Mail-in Vote Manipulation and Other Fraud and Outside Interference in South Korea's April 15, 2020 Election

Attorney Park Ju-hyun

1. Unprecedented challenges facing South Korea's democracy offer a context for understanding the April 15, 2020 election and reactions to its outcome

South Korea's 19th President Moon Jae-in said he would "create a country that we have never experienced before" in his inaugural speech. In 2020, South Korea has become a country that its citizens should never experience again and never want to experience again.

Cho Kuk, Choo Mi-ae, Yoon Mi-hyang, Son Hye-won, Yoo Jae-soo, huge corruption scandals like Lime Asset Management-Optimus Asset Management, politicization of disease control, recession, tax hikes, rise in foreign debt, unemployment rate increases and incompetence in governance, including the disappearance of diplomacy. South Korean citizens criticize President Moon and the ruling party whenever they gather together. According to opinion polls conducted on the streets and subway stations, Moon's approval rating was very low.

Regardless of these circumstances, the ruling party took 180 seats, or 60 percent, of the 300 total seats of the National Assembly in the recent April 15 general election, which is a result that many find hard to believe. According to public opinion polls conducted after he took office, his approval rating has never fallen below 41.08 percent, which was the percentage he received in the presidential election. In his fourth year in office, it was found that there were many who accessed the petition page run by the Blue House through IP addresses from China. So-called "Chinagate" became a big issue. This refers to Chinese and ethnic Koreans with Chinese nationality (Joseonjok) manipulating public opinion using major internet portal service providers like Naver and Daum. A local lawyers' association filed a lawsuit regarding Chinagate over obstruction of business, but the investigation never took off.

Meanwhile, a day after the April 15 election, statistics and data analyzing the election became available right away on a website called "Wuhan Gallery." There was a clear difference in results for early voting depending on whether it was "Inside Jurisdiction," which is for those who vote in their registered district, or "Outside Jurisdiction," for those who cast their ballots at a polling station outside of their registered district. For early voting in the Seoul metropolitan areas, the count for the ruling Democratic Party (DP) was 63 percent and the opposition Liberty Korea Party (LKP) received 36 percent of the vote. There also was a certain ratio between mail-in voting and the Inside Jurisdiction early voting. Additionally, Lee Geun-hyung, a chief policy analyst at the DP, predicted the election results ahead of time. These were the reasons why people became suspicious about election fraud. There were a total of 125 lawsuits filed with courts requesting the invalidation of the election. During the process of requesting the preservation of evidence, ripped-off seal stickers and ballot boxes, illegal ballot boxes such as bread boxes used to store ballots and bunches of ballot papers that were never folded and looked like new dollar bills were found. It has been five months since the lawsuits were filed requesting the preservation of evidence. However, the government still hasn't provided the integrated voter list to the public. During the video analysis of the ballot counting process, multiple cases were

discovered where ballot papers with ballot 2 (the opposition party) selected or marked as invalid suddenly change to having ballot 1 (the ruling party) selected. There also was a case where the machine read 1,810 votes as 1,680 votes. There was even a case where ballot papers were stuck to each other as well as papers with different sizes. We found out that Chinese nationals participated in the election as polling workers and multiple districts had more votes cast than the actual number of voters. It was also discovered that 1.1 million votes out of the 2.72 million mail-in votes were manipulated. It normally takes about three months for the court to finish the cases and recount the votes. However, the court has not even set the first date for hearing arguments for a recount this time under the Supreme Court. The court’s Chief Justice Kim Myung-soo was appointed by Moon Jae-in. The press is blocking reports of election fraud. There are other things happening that are not normal, like editors not allowing journalists to report on the issue.

A. Korea, where freedom of expression and assembly has disappeared

The Moon Jae-in administration is on the brink due to the failure of his policies on real estate, the economy and national security, incompetence in diplomacy, corruption and the recently revealed election fraud, as well as his submissive posture toward the communist regimes in North Korea and China. The anger among citizens is growing, but the Moon administration is now banning all rallies from being held, citing the danger of infection and transmission of Covid-19. It is putting in every effort to block people from gathering together. As the Moon administration persecutes those who are holding rallies, there are vehicles and bicycles traveling around the country with signs saying “Execute those involved in the April 15 Election Fraud” and “Release the Integrated Voter List.” There also are buses called “Truth Buses” traveling around the country with the signs saying “At least a million mail-in votes were manipulated,” “Use of QR codes is against election law,” “Why are ballot papers in a bread company’s bread boxes?,” “Ghost votes, more votes than the number of voters,” “China is behind Chinagate and the election fraud” and “April 15 election fraud, the 21st general election was rigged.”

[Truth Buses traveling around the country]



On Oct. 3, 2020, Korea’s National Foundation Day holiday, police buses and policemen blockaded Gwanghwamun Square. Ordinary citizens had a hard time getting to the square. There

were more than 90 security checkpoints where personal vehicles and citizens were questioned. Tour buses were not able to enter into Seoul. Subway stations near Gwanghwamun, including Gwanghwamun Station, City Hall Station and Gyeongbokgung Station were closed, and trains didn't stop there.

[Police buses loop around Gwanghwamun Square to stop people from entering on Oct. 3, 2020.]



The Moon Jae-in administration, which knows that the anger among citizens is growing and the truth about election fraud is spreading, blocked people from gathering in the square by using police officers and police buses, citing the danger of infection and transmission of Covid-19, which came from China. On the same day, Korea's amusement parks like Seoul Grand Park and Everland were packed with people lined up to enjoy the holiday. The scene spread through the press and people realized that the government was suppressing freedom of assembly over fake reasons, such as the danger of Covid-19.

B. A junkyard in Siheung, Gyeonggi, and ballot papers found in a dump

Election related documents and mail-in ballot papers were found at a junkyard in Siheung, Gyeonggi, on July 4, 2020. The papers were originally heading from Gyeongju, North Gyeongsang, to Chungyang, South Chungcheong. The junkyard could have been the one responsible for disposing the election-related documents assigned by the National Election Committee (NEC). However, mail-in ballot papers could be found at neither the junkyard nor the NEC. It would make sense if the papers were found at the polling station they were used at or at the local election commission, but they can't be found at the NEC.

[Ballot paper and a hard drive with some 18,000 fake passports stored in it were found in Siheung in July and August.]



The NEC explained that the paper found was supposed to go from a Gyeongju early voting polling station to Chungyang-gun and said that “there were mistakes made in managing them, and we apologize to the people.” “We will be more careful in managing the early voting and securely storing related documents from now on and we will do our best to prevent this from happening again by taking a look at the overall election administrative procedures,” it added. This is significant evidence of election fraud and it can’t be resolved through an apology.

According to a thorough investigation of mail-in voting, two ballot papers that headed from Gyeongju to Chungyang were discovered. One was sent on April 10, and the other was sent on April 11. The tracking number for the April 10 paper was 1068808838824. According to the tracking history, it traveled as follows: Gyeongju post office – Pohang distribution center – Daejeon exchange center – Daejeon distribution center – Gyeongju post office – Pohang distribution center – Daejeon distribution center – Chungyang post office. The route doesn’t make sense. Normally, the route should be as following: Gyeongju post office – Gyeongju post office – Pohang distribution center – Pohang distribution center – Daejeon exchange center – Daejeon exchange center – Daejeon distribution center – Daejeon distribution center – Chungyang post office. The distance between Gyeongju and Pohang is 27.9 kilometers and it normally takes less than 30 minutes. However, the tracking record shows that it took less than 10 minutes, which means that it is fake. This means that it was a fake mail-in ballot paper, and that it was a paper manipulated by the server.

[The tracking history of the April 10 mail-in ballot paper traveling from Gyeongju to Chungyang.]

국내우편(등기/택배)배송조회

홈 > 원클릭 배송조회 > 국내우편(등기/택배) 배송조회

등기 및 택배 우편물의 배송정보를 조회할 수 있습니다.

기본정보

등기번호	보내는곳/발송날짜	받는곳/수신날짜	취급구분	배달결과
T068808838824	신+우편물 2020.04.10	청+군선거관리위령회 2020.04.11		배달완료

배송 진행상황

날짜	시간	발생국	처리현황
2020.04.10	20:03	경주우체국	접수
2020.04.11	01:44	포항우편집중국	발송
2020.04.11	03:19	대전교함센터	도착
2020.04.11	04:33	대전교함센터	발송
2020.04.11	04:48	대전우편집중국	도착
2020.04.11	09:21	경주우체국	발송
2020.04.11	09:31	포항우편집중국	도착
2020.04.11	10:33	대전우편집중국	발송
2020.04.11	11:47	청양우체국	도착
2020.04.11	12:43	청양우체국	배달준비 김백원 이주복
2020.04.11	13:46	청양우체국	배달완료 (배달) (수령인:윤+옥남 - 회사용)

In August, a discarded hard drive was found at a dumping ground near Siheung, where the mail-in ballot paper was discarded. Some 18,000 fake passports were stored in the drive. This might have been a coincidence. However, given the evidence that sophisticated illegal election busing or handling of ballots took place, along with other evidence the suspicion of improper foreign involvement in the electoral process. More votes were cast than the actual number of voters. Mail-in ballot papers took abnormal routes. Significant errors were found in the travel time for mail-in ballots. As noted, this raises the possibility that foreigners, who don't understand or know Korean culture and norms, were involved in manipulating the server and the mail-in voting process. There were early voting ballot papers that were stiff and never folded. It is possible that Chinese, for example, may have been involved in the operation, since they are accustomed to voting without folding their ballot papers.

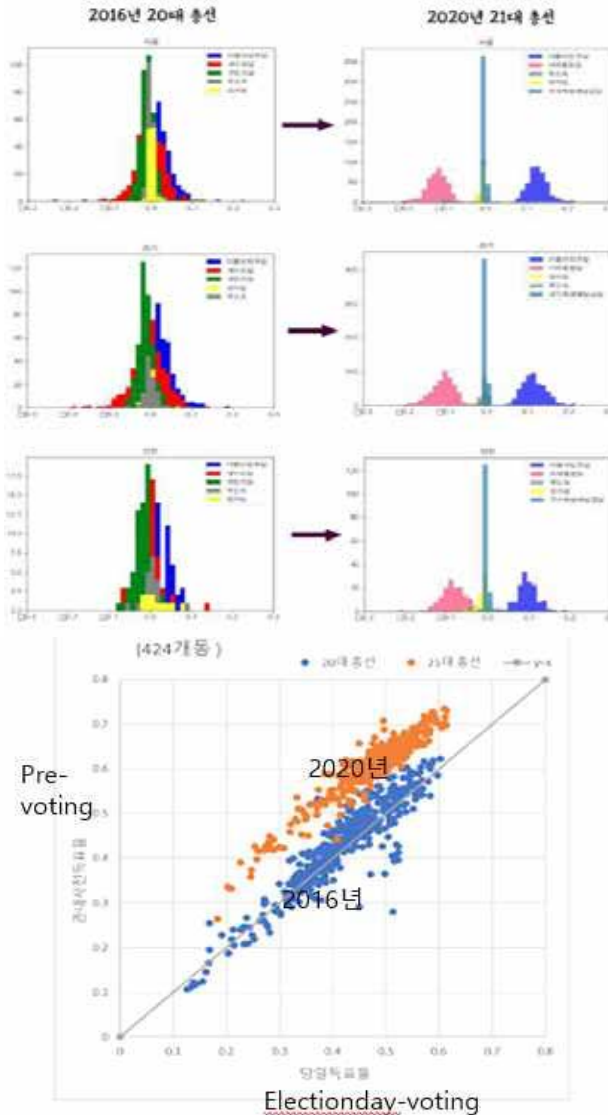
[Chinese vote without folding ballot papers.]



2. Clear irregularities between the votes cast on the official voting day and those from the early voting process, particularly for mail-in voting

A. Abnormal histograms and graphs

When the results for the votes cast on the official voting day and those from the early voting process are drawn in histograms and graphs, one can find graphs that can't exist in the real world. They can be found clearly by comparing them to graphs from the 2016 election. There were clear irregularities between the official voting day's outcomes and the early voting process results. Clear irregularities can be found even after breaking it down into districts. This kind of normal distribution can't exist when considering the fact that a very large number of votes, or a large number of samples, were involved. In particular, in the Seoul, Incheon and Gyeonggi regions, the count for the DP was 63 percent and the figure for the LKP was 36 percent. It is a true mystery as to why all three metropolitan regions' results were the same. "It can't happen unless God has planned it to be so in advance," said Park Sung-hyun, the former president of the Korea Academy of Science and Technology. Professor Park Young-ah, who graduated from Seoul National University with a degree in physics and earned doctorate in physics from the University of Pennsylvania, also said it is a statistical impossibility. "It is like tossing 1,000 coins at once and all of them landing heads up."



SNS에서 제기된 수도권 사전투표 득표율 비교

	서울		인천		경기	
	득표수	비율	득표수	비율	득표수	비율
민주당	1,238,494	63.64%	348,867	63.22%	1,547,957	63.14%
통합당	707,633	36.36%	202,957	36.78%	903,579	36.86%

B. Significant changes in the outcome between early voting and the actual voting day results

The ruling Democratic Party took 180 seats and the main opposition Liberty Korea Party took 103 as a result of the April 15 election fraud. However, when only considering the “Inside Jurisdiction” votes, or just “Inside Jurisdiction” votes and mail-in votes (early voting for “Outside Jurisdiction”), the gap increases significantly. In the former case, the DP would have 198 seats, while the LKP would only get 49 seats. In the latter case, a total of 204 seats would

go to the DP and 44 would go to the LKP. When only considering the results from mail-in voting, the DP would have 210 seats and the LKP would get 37 seats. One can find a significant gap between the parties depending on the scenario, which might have resulted in the LKP winning fewer than 50 seats. The LKP would win more seats than the DP if the results from the actual voting day were the only ones counted.

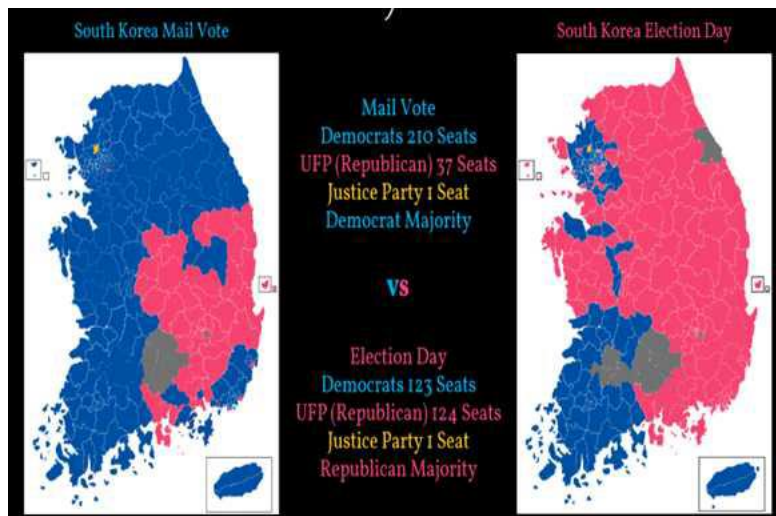
[Scenarios: Actual Result vs. Early Voting vs. Mail-in Voting vs. Official Day Voting]

Party	Actual Result	Inside Jurisdiction Early Voting	Mail-in Voting	Official Day Voting
Democratic Party	180	198	210	123
Liberty Korea Party	103	49	37	124
Justice Party	6	2	-	1
People's Party	3	-	-	-
Independent	5	3	-	5
People's Democratic Party	-	1	-	-

C. Election map showing the results for mail-in voting and the official day voting

Looking at the election map showing the results for the mail-in voting and the official day voting adds to suspicions of potential election fraud. These are the same people living within the same district, and it is physically impossible for their voting patterns, or results, to be significantly different just because they voted early or on the official day.

[Differences in election results based on the voting date]



Gyeonggi

경기도



Busan

부산시



Seoul

서울시



Gangwon



South Chungcheong



Daejeon



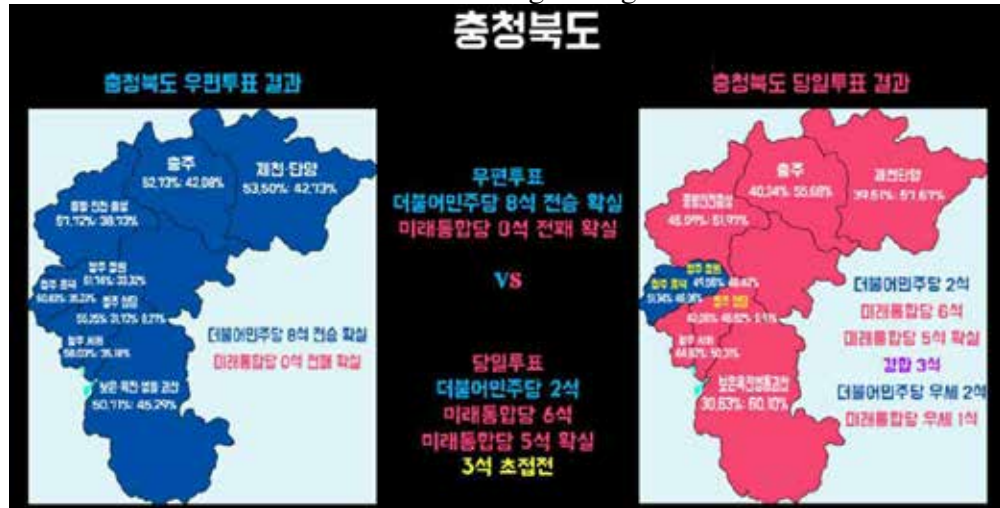
Incheon



Ulsan



North Chungcheong



As you can see in above maps, there were clear differences depending on when people voted. There are clear differences in the results even though they are all living in the same districts.

D. More seniors, who tend to be conservative, participated in early voting

[NEC's data for early voting by age group]

	Total	18~19	20s	30s	40s	50s	60s	70 and over
Number of voters	43,961,157	1,153,662	6,796,623	6,994,134	8,357,423	8,649,821	6,439,959	5,569,535
Early voters	11,742,677	263,505	1,720,002	1,494,267	2,074,663	2,576,527	2,152,575	1,461,138
Turnout (%)	26.71	22.84	25.31	21.36	24.82	29.79	33.43	26.23



According to the NEC's data provided to the National Assembly and elsewhere, the turnout for early voting was highest among those who are in 60s, at 33.43 percent. It was followed by those in their 50s (29.79 percent) and in their 70s and over (26.23 percent). It was lowest for those in their 30s at only 21.36 percent. This means that seniors, who tend to be more conservative, participated more in early voting. It is more logical to believe that votes for the LKP were significantly higher for early voting when looking at turnout data by age group. However, the DP won by a huge margin in early voting, which is totally different from previous voting trends.

3. Moving from suspicion to conviction during the evidence-preservation process and election invalidation lawsuits

A. Ghost votes: Collecting sensitive personal information to create ghost votes

The preservation of evidence process brought out some key findings. A voter who didn't vote during the early voting process was recorded in election notes as voting during early voting. The voter found out about this by visiting a polling station on the official election day. There were multiple cases reported in which people were counted as voting in the early voting process even though they had not. There was an informant who said that people incarcerated in prisons or detention facilities were forced to sign that they voted even though they had not. There are some 40 districts that have more voters than their actual population. This is believed to be because the manipulation tactics only focused on raising the number of votes without considering the actual number of registered voters in those districts. That resulted in the number of voters being larger than the population.

유권자수(선거인수)>인구수 (21대 총선)

지역	선거인수	투표자수	2020.3연구수	2020.4연구수	
서울동작구	노량진2동	12,783	8,575	12,711	12,674
파주시	진동면	201	181	159	159
파주시	군내면	617	513	580	578
연천군	중면	206	161	195	198
광덕시	홍북동	4,353	2,811	4,139	4,163
안성시	고삼면	2,157	1,655	1,930	1,937
하남시	신장1동	6,593	4,190	6,440	6,474
대전중구	유천1동	6,906	4,228	6,754	6,758
세종시	연기면	2,776	1,782	2,605	2,596
충주시	성내.충인동	3,047	2,055	2,803	2,814
대전시	대전2동	7,103	5,200	7,065	7,026
부산중구영도구	광복동	1,175	820	1,117	1,117
부산남구	용호제3동	13,777	10,461	12,768	12,728
대구달성군	하빈면	3,843	2,670	3,752	3,726
경주시	보덕동	2,029	1,582	1,824	1,820
경산시	중앙동	6,976	4,498	6,706	6,708
상주시	회북면	1,474	1,070	1,256	1,250
영주시	영주2동	3,800	2,854	3,653	3,640
구미시	원평1동	3,941	2,098	3,898	3,898
구미시	원평2동	3,879	2,681	3,401	3,387
마산합포구	가포동	923	722	672	672
거창군	남하면	1,758	1,413	1,428	1,426
거창군	마리면	2,048	1,554	1,996	1,988
거창군	주상면	1,580	1,245	1,559	1,560
함안군	산인면	3,015	2,251	2,769	2,756
밀양시	내말동	3,322	2,307	2,900	2,884
사천시	축동면	1,753	1,283	1,681	1,667
통영시	명정동	3,380	2,418	3,128	3,100
철원군	근북면	233	209	111	112
강릉시	중앙동	5,529	3,835	5,116	5,107
강릉시	옥천동	3,700	2,515	3,392	3,387
춘천시	신동면	2,891	2,164	2,584	2,588
원주시	중앙동	3,085	1,846	2,846	2,851
서귀포시	정방동	2,447	1,458	2,243	2,238
여주시	화정면	1,815	1,241	1,334	1,330
군산시	중앙동	3,355	2,410	2,907	2,900

유보 : 3월연구>선거인수 and 4월연구<선거인수

There is a high likelihood that people listed as early voters on the integrated voter list server did not actually vote when considering these examples. There also is a high chance that they manipulated votes or created ghost votes using the private information of people who are incarcerated in detention centers or prisons, hospitalized in nursing homes or the elderly, who have a lower chance of voting. The NEC, in fact, collected sensitive personal information such as criminal records, education level, wealth, medical history, tax information, education level and registered addresses from some 5 million people. It appears that they used the 5 million people’s personal data to create ghost votes through the voting management server. (There are typically no more than 10 candidates per district, and this means that the total number of candidates from 253 districts would certainly be less than 5,000, and not even reach 2,530. There is no reason for the NEC to store the sensitive information of 5 million people in the database). There is a large chance that up to 5 million votes were cast by ghosts.

[Document related to personal information collected by the NEC]

개인정보 열람범위 대상		
시스템명	개인정보파일 처리내역	실시사유
선거관리시스템	<ul style="list-style-type: none"> 수집대상 정보 : 성명, 주민등록번호, 주소, 전화번호, 이메일, 등록기준지, 전파, 별명, 학력, 납세, 교육경력, 재산 보유예정 개인정보 수 : 약 500만명 	<ul style="list-style-type: none"> 개인정보 : 100만 이상 처리 고유식별정보 : 5만 이상 처리
통합영부시스템	<ul style="list-style-type: none"> 수집대상 정보 : 성명, 생년월일, 성별, 주민등록번호, 가족자녀, 관동장 20는 식별, 주소 보유예정 개인정보 수 : 약 4,200만명(한국기준) 	<ul style="list-style-type: none"> 개인정보 : 100만 이상 처리 고유식별정보 : 5만 이상 처리
제외선거관리시스템 (영부영부시스템 포함)	<ul style="list-style-type: none"> 수집대상 정보 : 성명, 주민등록번호, 여권번호, 전화번호, 이메일, 등록기준지, 최종주소지, 국외거주 주소, 선거권결격정보 보유 개인정보 수 : 약 50만명 	<ul style="list-style-type: none"> 고유식별정보 : 5만 이상 처리
제외선거 인터넷 신고·신청시스템 (제외선거 영부영부시스템 포함)	<ul style="list-style-type: none"> 수집대상 정보 : 성명, 주민등록번호, 여권번호, 전화번호, 이메일, 등록기준지, 최종주소지, 국외거주 주소, 선거권결격정보 보유 개인정보 수 : 약 10만명 	<ul style="list-style-type: none"> 고유식별정보 : 5만 이상 처리

It is plausible that the NEC is not releasing the integrated voter list due to this ghost voter issue, even though there are lawsuits against them – requesting the voter list be released. It has been more than five months now since the recount lawsuits were filed in the court. The ghost vote issue is believed to be why the recount is not happening.

B. Stiff ballot papers like new bills and those with different sizes

People were able to take some photos of the ballot papers stored in the ballot box for early voting during the preservation of evidence process in Guri, Gyeonggi. Shocking results were discovered.

[Early voting ballot papers for Guri]



All of the ballot papers at the Guri election commission had ballot 1 (the ruling party) selected, and none of them were ever folded. They were stiff just like new dollar bills. Typically, ballot papers are sorted after the election as either valid or invalid. There is a separate piece of paper that shows, or summarizes, information such as the type of election and the name of the district for each valid and invalid vote. However, stacks of ballot papers, which were never folded, can be seen stored in the box without the separate piece of paper summarizing the total number of valid votes.

[Early voting ballot paper for Cheongju's Sangdang district]



[Early voting ballot paper for Namyangju-si's 2nd district]




According to the vote counting manual for the 21st general election published by the NEC, the officials need to check the name of the district, the type of election and sort the votes as either valid or invalid based on each party and candidate after the election through the separate sheet of paper in the box that summarizes the results of the valid votes. Both valid and invalid votes go into sorting boxes and are sealed with stickers with the commissioner's stamp on them. Information such as the name of the district and the type of the election must also be written on the boxes. Most of the boxes with stacks of stiff ballot papers didn't have the separate paper summarizing the valid vote results.

[NEC's published ballot count management manual for the 21st general election]

7 투표지 등 정리·보관 [정리부]

투표지 정리



- 개표가 완료된 투표지는 유·무효투표집계전 등을 통해 해당 선거(구)명, 투표종류, 투표구명을 확인한 후 정당·후보자별로 유효표를 구분하여 무효표와 함께 투표지 정리상자에 넣고,
- 투표지 정리상자에는 선거(구)명, 투표종류, 투표구명을 기재한 후 봉합테이프로 봉합하고 위원장 도장으로 봉인함

[위원장 도장을 찍을 직원을 사전에 지정].
 ※ 개표상황표 시본을 투표지와 함께 포장가능

Stiff ballot papers that were never folded like new dollar bills were found in many districts, including Namyangju and Cheongju, during the evidence-preservation process. According to Article 157, Section 4, and Article 158, Section 4 of the Public Official Election Act, “An elector, after receiving the ballot paper, shall enter a balloting booth, select one candidate (referring to one political party in the election of the proportional representative National Assembly members and the election of the proportional representative local council members), from among those entered in the ballot paper, make a mark in the corresponding column of the ballot paper, fold the ballot paper on the spot so that other persons cannot see the contents, and then put it in the ballot box in the presence of the voting witnesses,” and “Upon receipt of a ballot paper and an envelope for return, an elector shall enter a balloting booth, choose one candidate (referring to one political party in cases of an election of proportional representative National Assembly members or an election of proportional representative local council members), put a mark in the corresponding column of the balloting paper, fold it on the spot so that no one can see the balloting, put it into the envelope for return, seal it, and then put the envelope into the advance polling box.” This clearly shows that there cannot be any ballot papers that are not folded.

Public Official Election Act

Article 157 (Procedure for Receiving and Recording Ballot Papers),(4)An elector, after receiving the ballot paper, shall enter a balloting booth, select one candidate (referring to one political party in the election of the proportional representative National Assembly members and the election of the proportional representative local council members), from among those entered in the ballot paper, make a mark in the corresponding column of the ballot paper, fold the ballot paper on the spot so that other persons cannot see the contents, and then put it in the ballot box in the presence of the voting witnesses. <Amended by Act No. 6663, Mar. 7, 2002; Act No. 7189, Mar. 12, 2004; Act No. 7681, Aug. 4, 2005>

Article 158(Advance Polling),(4) Upon receipt of a ballot paper and an envelope for return, an elector shall enter a balloting booth, choose one candidate (referring to one political party in cases of an election of proportional representative National Assembly members or an election of proportional representative local council members), put a mark in the corresponding column of the balloting paper, fold it on the spot so that no one can see the balloting, put it into the envelope for return, seal it, and then put the envelope into the advance polling box.

It is even more impossible for ballot papers for proportional representatives to be stiff. In this election, there were a total of 35 parties who ran for proportional representative seats, and the ballot papers for them had to be longer than the envelope they were placed in. Voters had to fold their ballot papers for that reason. This means that the voters had no other option but to physically fold their ballot papers to fit them in the envelopes, not to mention the requirement set by law to do so. However, there were ballot papers for proportional representatives found at the polling station that were not folded.

[Ballot paper for early voting found at the polling station in Namyangju]



It could be possible for one or two unfolded ballot papers to be found at the polling station. However, it is not possible for a stack of unfolded ballot papers to exist. While the alleged perpetrators simply may not have been meticulous enough, it is also possible that people unfamiliar with Korean law, custom and culture were involved in this apparent electoral misconduct. Regardless, the discovery of pristine in such numbers and at many different locations is cause for serious concern.



C. Ballot papers stored in a commercial bread company's bread boxes, ripped off seal stickers and damaged ballot boxes

In its manual for election related supplies for the 2020 election, the NEC gave out specific guidelines that show which type of boxes can be used to store the ballot papers. Boxes that don't meet the requirements cannot be legally used in the election. However, during the evidence-preservation process, it was found out that ballot papers were stored in bread boxes made by a

commercial bread company. Ballot papers for early voting and mail-in voting, in particular, were found in those boxes.

선거용품 매뉴얼 2020

3. 투표지 정리·보관상자

아름다운 선거
행사의 시작입니다

재질 | B골 골판지 규격 | 1호 1,000매용 (가로)345mm X (세로)235mm X (높이)90mm
 2호 2,000매용 (가로)345mm X (세로)235mm X (높이)130mm
 3호 3,000매용 (가로)345mm X (세로)235mm X (높이)180mm
 4호 4,000매용 (가로)345mm X (세로)235mm X (높이)240mm



1. 투표지 정리·보관상자
 2. 투표지 투입구
 3. 투표지 투입구
 4. 투표지 투입구
 5. 투표지 투입구



“After the early voting day, there were cases where we needed more boxes than we had prepared to store ballot papers in advance,” the NEC explained. “It was early in the morning and we were short of the [official] boxes, and that was why we used the boxes [from the bread company] at the polling station, which were there to supply snacks for the vote counting process.” However, the NEC’s explanation is false, as they needed the boxes five days after the election. Also, they knew exactly how many people voted in the early voting process, which makes it hard to believe their explanation that they ran out boxes. Furthermore, it was later found out that the boxes that supposedly contained bread for people participating in the vote counting process were never used

for that specific purpose. There also is no reason to believe that the specific brand's boxes had to be used to store the early-voting ballot papers. It is explained clearly in the NEC's 2020 manual that there is a specific procedure, or system, for checking boxes with "Inside Jurisdiction" early voting ballot papers, "Outside Jurisdiction [mail-in votes]" early voting ballot papers and their dates. The NEC's explanation about the bread box issue is clearly false.

The bread box issue raised the possibility that the company that produces the bread was involved in the election manipulation process. Bread companies tend to have well-structured delivery systems, which allows them to deliver easily to any election commissions around the country, even late at night where not many people are outside. We believe that there is a significant connection between the bread manufacturing company, the factory that produced stiff ballot papers for the early voting and whoever was involved in delivering the boxes.



We found a damaged seal sticker and pin, which was used to lock the ballot box, during the evidence-preservation process. Also, there were cases where the seal paper had the stamp on the wrong place. There also were some signs that these seal papers were detached and attached. Furthermore, we found out that it was even possible to insert ballot papers into the ballot box and take them out again through the hole. We found that areas around the hole were damaged. The evidence-preservation process started at the second district of Incheon's Yeonsu district. We called attention to the fact that 9 of the ballot boxes' seal papers were damaged. However, the NEC provided all ballot boxes without seal papers during the evidence-preservation process.

D. Findings on destroyed envelopes for mail-in voting and ballot papers



There were a number of destroyed ballot papers and envelopes near Yeosu and Guri in Gyeonggi. There were multiple fires at the distribution centers that store election-related items, junkyards and garbage dumps after the April 15 election. It is estimated that there have been more than 77 fires since the election. Findings on the destroyed ballot papers and envelopes mean that there is a high possibility that mail-in ballot envelopes and ballot papers were fabricated and replaced with others.

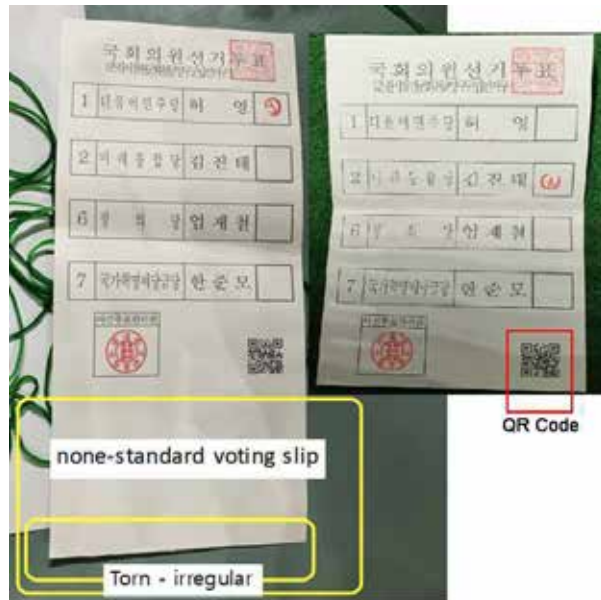
During the beginning of the election-preservation process, many focused on the manipulation through the server using the ballot printing machines or electronic vote counting machines, instead of the offline, or on-site, manipulation. However, more and more circumstantial evidence came out showing the possibility of replacing ballot papers or inserting ballot papers offline as we proceeded with the evidence-preservation process. Around the time of the fourth election-preservation process, we were sure that manipulation happened offline. In other words, some votes were replaced or inserted. We found out that this was done by certain operatives through the aforementioned bread company.

E. Non-standard ballot papers

QR codes were used in all the early voting process, including both “Inside Jurisdiction” voting and mail-in voting. Article 151, Section 6, of the Public Official Election Act says, “the Gu/Si/Gun election commission shall instruct the official in charge of advance polling management to produce ballot papers to be distributed at advance polling stations with a ballot paper printer at advance polling stations. In such cases, the serial numbers printed on the ballot papers shall be marked in the form of bar code (referring to a code marked in the shape of a bar for recognition by computer), and such bar code may contain the name of election, the name of constituency, and the name of the competent election commission.” The law clearly mentions that a “bar code” should be used, not a QR code. Even though the law prohibits them from using QR codes, they were used in the April 15 21st general election. The NEC is not providing the source code for the QR code. There are suspicions that the QR code played a significant role in

manipulating the vote counting process by interlocking with electronic vote counting machines and outside servers.

[Non-standard ballot papers found in Chuncheon]



Multiple ballot papers were found that had too vertical margins that were too large or margins that were too short horizontally in polling stations in Chuncheon, Daejeon, Daegu and Seongbuk in Seoul. There also were cases where the papers themselves were invalid and those where they were attached to each other. The margins of ballot paper are strictly regulated by the rule limiting margins to 0.5 centimeters. Printers are designed to avoid making any mistakes in this regard. However, invalid ballot papers were found in many locations. We believe this was because manipulated ballot papers were printed and inserted later on in order to match the election results set by the electronic data manipulation.

4. Thorough investigation of mail-in voting through the postal office tracking system

A. NEC's ridiculous explanation of mail-in votes found during the evidence-preservation process

The NEC gave a ridiculous statement referring to stiff ballot papers for early voting as “shape memory-like paper.” It lied again when it said it “used boxes that were there to serve snacks due to the shortage of official boxes” when explaining the Samlip bread boxes. There can't be such paper or any non-official boxes, since there are official boxes. The NEC officials continued to give out explanations that were full of lies when asked questions about various things such as seal stickers, stamp, tape and ballot boxes during the evidence-preservation process.

[Registered mail envelopes that were secured during evidence preservation]



We were able to find registered mail envelopes used during early voting during the evidence-preservation process. There were tracking numbers for each envelope, as well as barcodes and numbers containing information such as the polling station and voters' registered voting district. Anyone can check the tracking history of the registered mail by going to the website (<https://service.epost.go.kr/iservice/>). We first entered the tracking number that we acquired. Then we tried different numbers that come before and after the number we have. We found out that there were votes that traveled on routes that make no sense or recorded travel times that aren't possible in the real world. When asked about the issue, the NEC said this was a "simple error," "mistake" and "mismanagement."

The NEC tends to give out these kinds of explanations when they have no other words to say. We suddenly became very curious about the issue. Can it really be just a simple error or mistake, considering that there are so many similar cases? The recount was continuously postponed and the NEC came up with a ridiculous explanation. This is why I have decided to investigate every piece of registered mail used in the early voting. We tracked the history of 2,725,843 pieces of mail and saved all related shipping information such as sender and recipient, delivery date, delivery status, mail origin, date and time, deliveryman and actual recipient. After checking the post office's tracking system, we categorized the irregular activity into 31 categories. A total of 1,110,672 cases were confirmed as irregular votes, and this accounts for 40.4 percent of the total mail-in votes, or 2.72 million. The NEC can no longer dismiss this issue as a "simple error," "mistake" and "mismanagement" after our investigation.

B. Conclusion of the investigation: Suspicious mail-in vote records, and an appeal for help

There is a significant reason why mail-in votes are vulnerable to election fraud. Mail-in votes do not have any CCTVs monitoring them. The votes were not sealed while they were distributed or while they were waiting to be transferred. There were no objective surveillance mechanisms like CCTVs used during the distribution process. Police officers are required to follow their route according to the rules, but they were not there. Sometimes, the votes were delivered by deliverymen working for private shipping companies. In the official notes for the vote counting process, the main server entered the number of votes cast without any records of the number of votes processed per hour. It was also found that the polling workers didn't count them separately

or report the issue to higher-ups. The NEC ordered all polling stations to cover their CCTVs using newspapers. They were setting up preconditions for illegal manipulation.

중앙선거관리위원회 2020년 국회의원 선거관련 IT 분야 사업내역

사 업 명	투찰율	낙찰금액	선정기업	비 고
1. 전산장비 기술지원 및 유지관리 사업	99.925%	200,750,000		
2. 투표지 분류기 기술지원 사업	100%	78,700,000		
3. 투표용지 발급기 기술지원 사업	100%	178,000,000		
4. 정보보호 시스템 기술지원 및 유지관리 사업	99.619%	70,730,000		
5. 21대 선거 정보시스템 운영지원 및 성능관리	99.972%	427,881,730		
6. 2020년 선거정보시스템 통합 위탁운영 사업	100%	2,009,000,000		
7. 사전투표 영부 단말기 등 임차 사업	99.981%	3,310,000,000		
8. 유,무선 통신장비 구매 및 구축 사업	99.991%	372,400,000		
9. 유,무선 통신장비 유지보수 및 보급 사업	99.974%	513,000,000		
10. 국회의원선거용 투표지 심사계수기 임차 사업	99.987%	649,920,000		360mm
11. 국회의원선거용 투표지 심사계수기 임차 사업	99.100%	911,887,200		519mm
12. 제21대 국회의원선거 대비 통신·보안장비 개선 사업	100%	359,000,000		



The NEC even committed corruption in the bidding to prepare for the April 15 election fraud. The NEC recorded 100 percent of the base price, with the lowest number being 99.619 percent, for the bidding process of its 12 projects. Some of the projects are as following: technical support for electronic devices and management (bidding price of 200,750,000 won), ballot printer and technical support (bidding price of 178,000,000 won) and wired and wireless communication devices purchase and installation (bidding price of 372,400,000 won). This is an unbelievable bidding rate. The rate mentioned above refers to the percentage of the final price out of the original base price. The 100 percent figure means that the bid price was exactly the same as the one that the ordering agency put out at first. Normally, it is hard to see a rate over 90 percent since there will be many companies joining in the bidding competition. This suggests that they allowed specific companies to bid for projects illegitimately to achieve the goal of manipulating the electronic data.

■ mail voting

registered voters	votes	valid votes	invalid votes	abstention
2,724,714	2,722,790	2,671,307	51,483	1,924

■ investigation of tracking numbers

number of tracking numbers	number of investigation	missing numbers
2,725,843	2,724,653	1,190

■ results of investigation

	total (investgated)	normal	abnormal	abnormal (accumulated)
votes	2,724,653	1,623,981	1,100,672	2,194,749
percentage	100	59.60	40.40	

[Graph of Mail Census Result]

■ invalid types²⁾

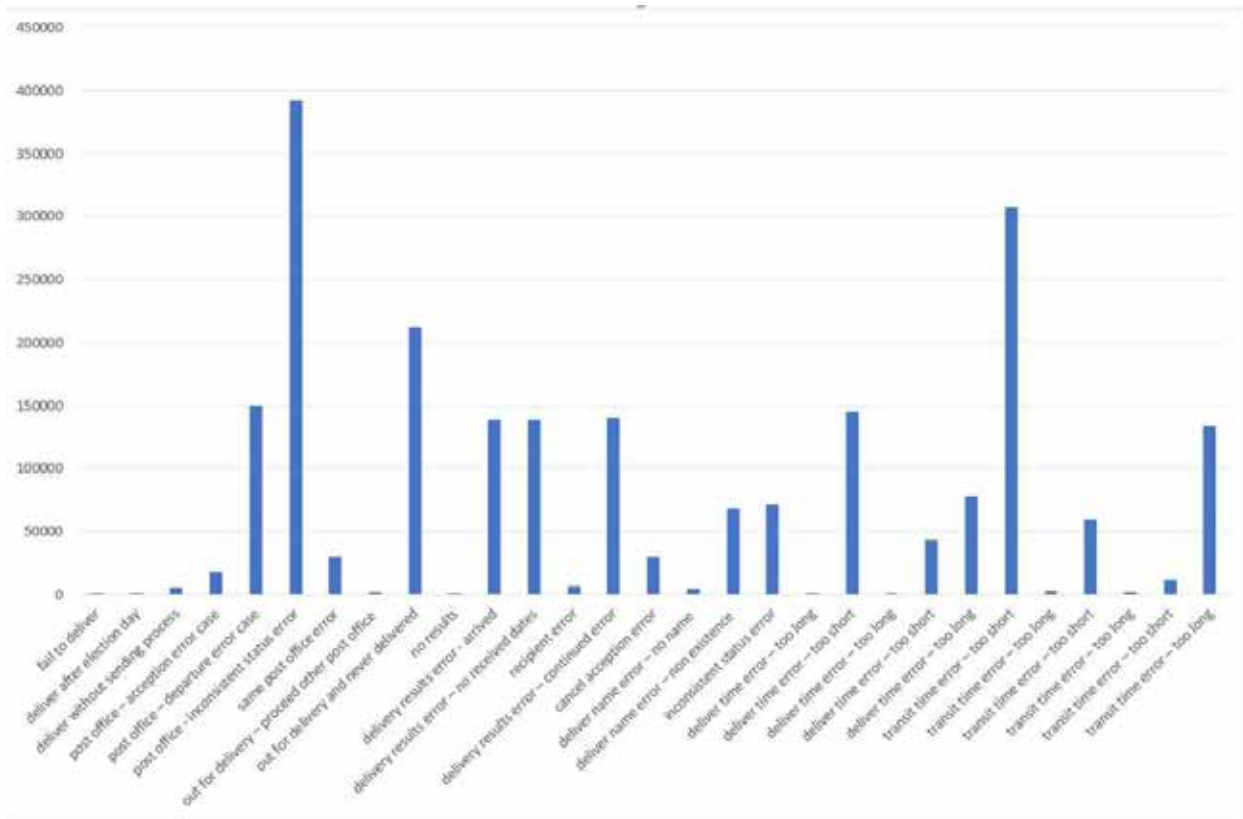
types	number	explanation
fail to deliver	5	fail to deliver(reason: moving)
deliver after election day	4	deliver after election day
deliver without sending process	5,354	deliver without sending process
post office - acception error case	17,683	when mail in ballots accepted at A post office, mail in ballots are should be departed from A post office in the next step. But mail in ballots are

types	number	explanation
		departed from B post office.
post office - departure error case	150,590	when mail in ballots arrived at C post office, mail in ballots are should be departed from C post office in the next step. But mail in ballots are departed from D post office.
post office - inconsistent status error	391,735	when mail in ballots departed from E post office, mail in ballots are should be departed from E post office in the next step. But mail in ballots are departed from F post office.
same post office error	29,688	mail in ballots accepted and delivered at same post office.
out for delivery - proceed other post office	2,105	when mail in ballots status are 'out for delivery from G post office', its next step should be 'delivered by G post office'. But H post office delivered mail in ballots.
out for delivery and never delivered	212,020	when mail in ballots status are 'out for delivery', its next step should be 'delivered'. But arrived or departed process still continued.
no results	2	no delivery results
delivery results error - arrived	138,853	In Korea post office system, delivery results should be 'delivered' when recipients get mails. but 'arrived' showed in next step.
delivery results error - no received dates	138,860	In Korea post office system, date received should be on basic information. but no received dates cases are founded.
recipient error	5,903	Recipients should be electoral officers or delegate- coworker. But there are many suspicious delegates like spouse, housemate, sibling, etc.
delivery results error - continued error	140,515	In Korea post office system, delivery results should be 'delivered' when recipients get mails. but 'arrived' or 'departed' showed in next step.
cancel acceptance error	29,812	acceptation after cancel of acceptation, and repeats acceptation and cancel of acceptation.
deliver name error - no name	4,511	missing deliver name
deliver name error - non existence	68,539	deliver names are not human name, like special duty or communication team or special team or on duty or

types	number	explanation
		something else
inconsistent status error	71,518	not 'arrived-departed' consistent status (ex: arrived-arrived, or departure-departure)
deliver time error - too long	1,421	took 60 hours from acceptance to delivered.
deliver time error - too short	145,370	took less than 10 minutes from arrived to departed at same post office.
deliver time error - too long	413	took more than 30 hours from arrived to departed at same post office.
deliver time error - too short	43,070	took less than 10 minutes from arrived to departed at same mail center ³ .
deliver time error - too long	78,488	took more than 30 hours from arrived to departed at same mail center.
transit time error - too short	307,826	took too short time between mail centers
transit time error - too long	3,256	took too long time between mail centers (more than 2 hours)
transit time error - too short	60,094	took too short time between post office
transit time error - too long	2,202	took too long time between post office (more than 2 hours)
transit time error - too short	11,295	took too short time between post office and district electoral committee(post office and district electoral committee are in same region)
transit time error - too long	133,617	took too long time between post office and district electoral committee(more than 5 hours. post office and district electoral committee are in same region)
total	2,194,749	

The largest number of irregular activities were those with errors in delivery time, delivery route and the delivery process. There were a total of 391,735 instances of mail not being delivered after it was dispatched from the postal office. There were another 212,020 cases where mail was processed without "Delivery Completed." There were 307,826 cases where the travel time from the distribution centers to other distribution centers was shorter than what it really takes according to GPS. Another 150,590 cases included mail processed from different postal offices other than the actual postal office responsible for the destination. There were five cases where the mail was never delivered and another four cases where the mail was delivered after the early voting days. For mail sent to the officials working for government organizations like the NEC, only the recipient can receive the mail. But there were 5,903 cases where the recipient's siblings or partners received it instead. There were 4,511 cases where the name of the deliveryman was missing. There were another 68,539 cases where the name of deliveryman was not an actual name and was recorded as "Special Unit," "Communication Unit," "Special Team," "Chief

Night Duty,” etc. There also were 19,437 cases where the recipients’ last name was not a Korean one.



In 138,860 cases, the date for the delivery was missing, which is the most important information for registered mail. Registered mail must have a delivery date and use the term “Delivery Completed” instead of “Arrived.” There were 138,853 cases with the status of “Arrived” instead of “Delivery Completed.” In 29,812 cases, mails were registered, canceled, then re-registered. There are also 71,518 cases that should have been marked as “Arrived-Dispatched-Arrived-Dispatched,” but were marked as “Arrived-Arrived, Dispatched-Dispatched.”

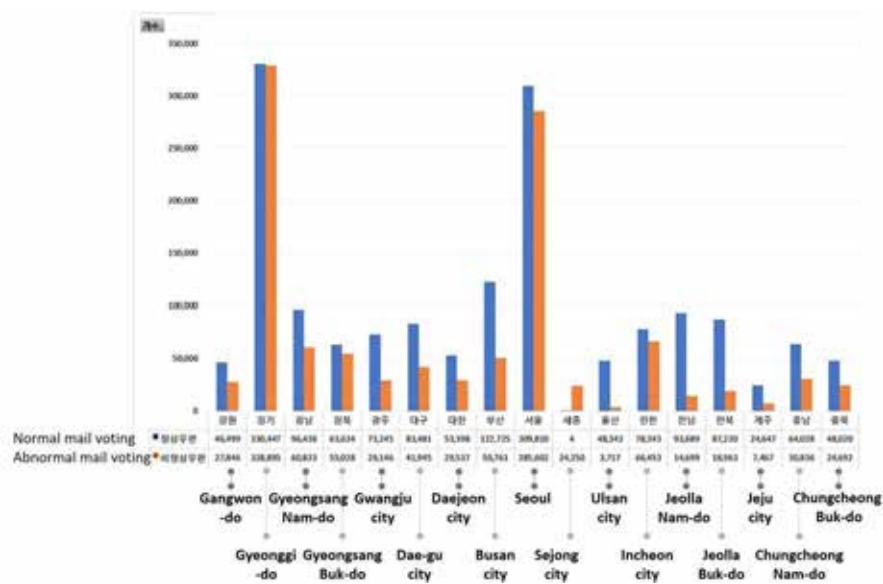
Basic infor

기본정보		Recipient/date received		
sender name/sent date		마스킹 (*)해제조회		
① 제한표시에대한 근거				
동기번호	보내는분/발송날짜	받는분/수신날짜	취급구분	배달결과
Tracking number	선*우편물	강*구선거관리위원회		배달완료
1068809898761	2020.04.10	2020.04.11		

배송 진행상황 Status of item

date		time		Post office (location)		status		처리현황	
2020.04.10		21:20		하남우체국	발생국	검수		accepted	
2020.04.10		21:40		하남우체국		발송		departed	
2020.04.10		22:40		동서울우편집중국		도착		arrived	
2020.04.11		05:02		동서울우편집중국		발송		departed	
2020.04.11		05:50		서울강동우체국		도착		arrived	
2020.04.11		14:20		서울강동우체국		배달준비	김배원:윤희근	out for delivery	
2020.04.11		16:22		서울강동우체국		배달완료 (배달)	(수령인:지*경남 - 대리수령인: -동거인)	delivered (recipient: - delegate - housemate)	

When broken down into regions, there was more irregular activity in Seoul, Gyeonggi, Incheon and Sejong. Seoul, Gyeonggi and Incheon are Korea's key swing states, like Ohio, Iowa and Wisconsin are in the United States. This is why there was more irregular activity in these regions. The rate for irregular votes was near the 50 percent level. The number of irregular votes in Gyeonggi was 328,895, followed by Seoul (285,602) and Incheon (66,453). Ironically, there were only four legitimate votes in Sejong, while 24,250 of them were irregular.





Interestingly, there were many irregular votes in Daegu (41,945) and North Gyeongsang (55,028). One can guess that they were manipulated across the country, including in these regions, to make turnout exceed 15 percent, which is needed for election campaign spending reimbursement. There is only one district where the ruling Democratic Party received less than 15 percent of the vote in the April 15 election. It appears that those who were involved in the manipulation not only worked on getting the 180 seats but also on meeting the requirement to receive reimbursement for each candidate.

When considering the errors found in the mail-in voting and their gravity, including delivery route, delivery time and name of recipient and deliveryman, this cannot be resolved through an explanation that this was a simple error or mistake. We believe this was possible because the manipulation using the server was done by foreigners, who do not understand Korean norms. Additionally, there were some unusual last names used that are not Korean, and the name of the specific team or unit was used for the name of the deliveryman. This is clear evidence that foreigners were involved in manipulating the postal office server.

It becomes obvious which country was involved in the electronic manipulation when taking a look at a few of the facts available. Chinese Huawei network devices were used in the April 15 election. On July 10, 2019, Yang Jung-chul, then head of the ruling Democratic Party's Institute for Democracy think tank, visited the Central Party School of the Communist Party of China to sign a policy agreement to engage in social exchange to build networks in the global politics area. On the next day, he visited the leading Chinese leading IT company Tencent in Shenzhen. The Moon Jae-in administration didn't ban Chinese from entering the country even after the

outbreak of the Chinese Wuhan Corona crisis. We can't erase the suspicions that Chinese Tencent hackers were involved in the April 15 general election.

C. Evidence of fraudulent mail-in voting by type

1) Problems with the recipient and deliveryman

There were 19,437 cases where the names of the recipients for the NEC were something like “Sae, X, Reul,” “Gae, X,” “Hee, X,” “Geul, X,” “Ggae, X.” None of them were listed in the employers’ list and cannot be the name of Korean citizens. In 68,539 cases, the name for the deliveryman was abnormal as well. They didn’t use actual names but terms like “Communication Unit,” “Special Unit” and “Special Team.” The NEC is a governmental organization. There were 5,097 cases where the spouse of the recipient received the mail. Another 800 cases were those received by siblings or partners living together. There were 4,511 cases missing the deliveryman’s name. The reason why there were so many names like these used is because there is a high possibility of Chinese involvement, who don’t know Korean names or systems. This is a significant error would not happen if one understood the meaning of each category correctly.

[Example of a recipient’s non-Korean last name]

기본정보		마스킹(+)해제조회	제한표시에대한근거
등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분
1068808799071	신*우편물 2020.04.10	고*시타양구선거관리위원회 2020.04.11	배달결과
			배달완료

배송 진행상황			
날짜	시간	발생국	처리현황
2020.04.10	21:08	서울서초우체국	접수
2020.04.10	22:20	서울서초우체국	발송
2020.04.10	22:53	동서울우편집중국	도착
2020.04.11	04:19	동서울우편집중국	발송
2020.04.11	05:16	고양우편집중국	도착
2020.04.11	09:39	고양우편집중국	발송
2020.04.11	10:37	고양일산우체국	도착
2020.04.11	10:53	고양일산우체국	배달준비 김배원:이희정
2020.04.11	16:32	고양일산우체국	배달완료 (배달) (수령인:캐*을님 회사동료)

개수		기본정보		마스킹(+해제조회)	제한표시에대한근거	
개*님-회사동료	500	등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분	배달결과
거*시선거관리위원회님-본인	92	1068802790766	안*우편물 2020.04.10	사*동시선거관리위원회 2020.04.13		배달완료
광*시선거관리위원회님-본인	68	배송 진행상황				
글*은님-회사동료	3,852	날짜	시간	발생국	처리현황	
익*화님-본인	299	2020.04.10	21:03	부산우체국	검수	
깨*을님-회사동료	2,597	2020.04.10	21:06	부산우체국	발송	
김*정님-회사동료	36	2020.04.10	21:33			
밤*호님-회사동료	2,000	2020.04.12	00:40			
새*름님-회사동료	861	2020.04.12	03:34			
울*님-본인	300	2020.04.12	04:37			
위*복님-회사동료	13	2020.04.12	14:17			
조*민님-회사동료	1	2020.04.13	06:34			
총*진님-회사동료	3,201	2020.04.13	08:34			
침*영님-회사동료	500	2020.04.13	08:34			
항*희님-회사동료	100	2020.04.13	09:20			
형*희님-회사동료	50	2020.04.13	11:02	서울우체국	배달완료 (배달) (수령인:글*은님 - 회사동료)	
황*경님-회사동료	1,500					
황*군선거관리위원회님-본인	8					
히*로님-회사동료	486					
히*주님-회사동료	2,973					
총합계	19,437					

배달완료 (배달)
(수령인:히*주님 - 회사동료)

배달완료 (배달)
(수령인:글*은님 - 회사동료)

배달완료 (배달)
(수령인:글*은님 - 회사동료)

[Example of a recipient's partner or sibling receiving the mail]

기본정보		마스킹(+해제조회)	제한표시에대한근거	
등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분	배달결과
1068809803015	선*우편물 2020.04.10	유*구선거관리위원회 2020.04.11		배달완료
배송 진행상황		recipient error: 5,903 cases		
날짜	시간	발생국	처리현황	
2020.04.10	20:08	안동우체국	검수	
2020.04.10	20:42	안동우체국	발송	
2020.04.10	20:53	안동우편집중국	도착	
2020.04.10	23:32	안동우편집중국	발송	
2020.04.11	02:14	대전교환센터	도착	
2020.04.11	04:33	대전교환센터	배달완료 (배달) (수령인:허*원님 - 형제자매)	
Recipients should be electoral officers or delegate—coworker.		대전우편집중국	배달완료 (배달) (수령인:지*경님 - 대리수령인 -동거인!)	
But there are many suspicious delegates like spouse, housemate, sibling, etc.		대전유성우체국	도착	
2020.04.11	11:54	대전유성우체국	도착	
2020.04.11	13:50	대전유성우체국	배달완료 (배달) (수령인:안*철님 - 배우자)	

[Example of the missing name of the deliveryman]

기본정보 마스크 (+)복귀조회 ①계정포시제대환 근거

등기번호	보내는분/발송날짜	받는분/수신날짜	최근구분	배달결과
1068810077888	신우영물 2020.04.10	사구선거관리위원회 2020.04.12		배달완료

배송 진행상황

날짜	시간	발행국	처리현황
2020.04.10	19:33	경원우체국	접수
2020.04.10	22:00	경원우체국	발송
2020.04.11	00:26	외경부우편집중국	도착
2020.04.12	00:46	외경부우편집중국	발송
2020.04.12	03:22	대전교환센터	도착
2020.04.12	04:44	대전교환센터	발송
2020.04.12	08:12	부산우편집중국	도착
2020.04.12	12:46	부산우편집중국	발송
2020.04.12	13:28	부산서상우체국	도착
2020.04.12	13:43	부산서상우체국	배달문서 접수함
2020.04.12	15:10	부산서상우체국	배달완료 (배달) (수령인:윤선님 - 회사용포)

deliver name error – no name: 4,511cases

2) Problems with the delivery route and time

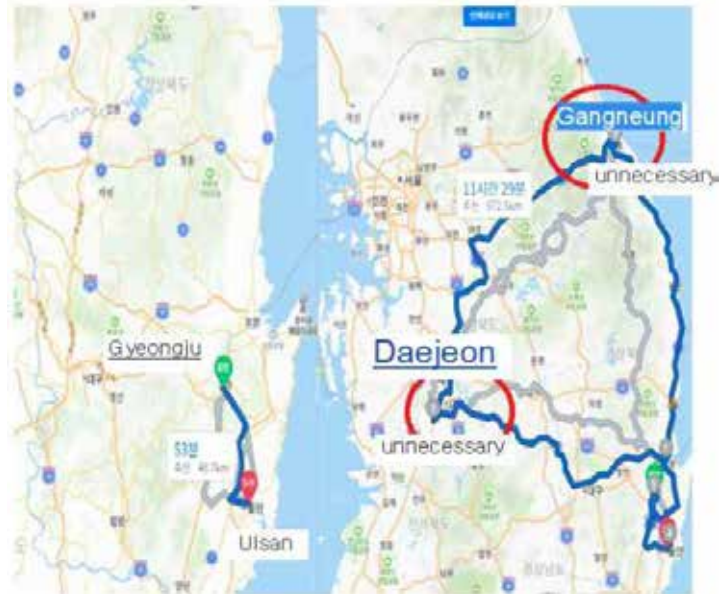
As you can see in the illustration below, the mail-in votes that departed from Gyeongju for South Ulsan took unnecessary and impossible routes, stopping at the Daejeon exchange center and Gangneung distribution center. This can't and shouldn't have happened. It also is a significant error that their tracking history was recorded as following: "Pohang distribution center Dispatched-Dispatched, Daejeon exchange center Arrived-Arrived, Dispatched-Dispatched." One can also find where it says "Gangneung distribution center (Arrived)-Ulsan distribution center (Arrived)." The travel time between them was 08:42-09:08. It normally takes more than 3 hours to travel between them, but it only took them 26 minutes, according to the record. The distance from the Gyeongju post office to the Pohang distribution center is 29.2 kilometers, which normally takes more than 30 minutes. But it says it arrived in 10 minutes. This kind of error was possible because Chinese, who don't understand the Korean postal service system, manipulated the server. They took routes that don't make any sense.

[Unnecessary routes and transit time error]

등기번호	보내는분/발송날짜	받는분/수신날짜	위급구분	배달결과
1068809362832	신*우연물 2020.04.10	물*군선거관리위원회 2020.04.11		배달완료

배송 진행상황

날짜	시간	발생국	처리현황
2020.04.10	19:54	경주우체국	접수
2020.04.11	01:44	포항우편집중국	발송
2020.04.11	01:44	포항우편집중국	발송
2020.04.11	03:19	대전교환센터	도착
2020.04.11	03:19	대전교환센터	도착
2020.04.11	04:50	대전교환센터	발송
2020.04.11	04:54	대전교환센터	발송
2020.04.11	08:42	강릉우편집중국	도착
2020.04.11	09:08	울산우편집중국	도착
2020.04.11	09:21	경주우체국	발송
2020.04.11	09:31	포항우편집중국	도착
2020.04.11	11:49	울산우편집중국	발송
2020.04.11	11:53	남울산우체국	도착
2020.04.11	13:08	남울산우체국	배달준비 집배원·박상일
2020.04.11	14:06	남울산우체국	배달완료 (배달) (수령인·김*경남 - 회사동료)



[Shortened distance]

기본정보			
송기번호	보내는날/보내는시간	받는날/받는시간	배송구분
1068810528675	2020.04.11	2020.04.12	배달완료

배송 진행상황			
날짜	시간	발령국	제차현황
2020.04.11	20:57	부산광역시	접수
2020.04.11	21:14	부산광역시	발송
2020.04.11	21:54	경상남도 창원시	도착
2020.04.12	07:34	경상남도 창원시	발송
2020.04.12	08:55	경상남도 창원시	도착
2020.04.12	12:33	경상남도 창원시	발송
2020.04.12	12:34	경상남도 창원시	도착
2020.04.12	14:25	경상남도 창원시	배달완료 (예상)
2020.04.12	16:30	경상남도 창원시	배달완료 (예상)

transit time error - too short: 307.826



There were 328,723 cases where the delivery route and transit time was manipulated for mail-in voting. The mail sent from Gyeongju to Incheon took the route of Gyeongju-Pohang-Daejeon-Bucheon-Gyeongju-Bucheon-Pohang-Incheon. Some mail traveled 27.8 kilometers within a minute, which normally takes around 30 to 40 minutes, according to GPS. In some cases, the mail arrived in 0 minutes for a distance that normally takes 11 minutes. Those who have just little bit of knowledge of the Korean map would see this as impossible. We can't erase the suspicions that they tried to manipulate the result from the central server without taking the characteristics of the map into account.

[Example of arriving in zero minutes for a distance that normally takes 11 minutes]

기본정보			
송기번호	보내는날/보내는시간	받는날/받는시간	배송구분
1068811292006	2020.04.11	2020.04.12	배달완료

배송 진행상황			
날짜	시간	발령국	제차현황
2020.04.11	20:25	경상남도 창원시	접수
2020.04.11	21:41	경상남도 창원시	발송
2020.04.11	21:41	경상남도 창원시	도착
2020.04.12	01:18	경상남도 창원시	발송
2020.04.12	01:18	경상남도 창원시	도착
2020.04.12	04:10	경상남도 창원시	발송
2020.04.12	04:21	경상남도 창원시	도착
2020.04.12	08:02	경상남도 창원시	발송
2020.04.12	08:09	경상남도 창원시	도착
2020.04.12	10:44	경상남도 창원시	배달완료 (예상)
2020.04.12	13:28	경상남도 창원시	배달완료 (예상)



3) Mail with no delivery date and problems with the delivery status

[Example of no delivery date and problems with delivery status]

기본정보

등기번호	보내는분/발송일자	받는분(주소/과목)	취급구분	배달결과
1068808196402	선거우편물 2020.04.10	도봉구선거관리위원회 수신 날짜 없음		도착

no received dates

배송 진행상황

날짜	시간	발행국	처리현황
2020.04.10	21:12	동두천우체국	결수
2020.04.10	21:53	동두천우체국	발송
2020.04.11	00:24	의정부우편집중국	도착
2020.04.11	11:08	의정부우편집중국	발송
2020.04.11	12:29	서울도봉우체국	배달준비 검역 통과다중 배달일로 (비밀) 배달준비 (신규우편물 - 회사우편물)
2020.04.11	17:47	서울도봉우체국	도착

10시간 44시간소드

delivery results error - arrived

delivery results error - no received dates: 138,860 cases

delivery results error - arrived: 138,853 cases

The delivery date is very important for registered mail. But there were 138,860 cases where the delivery date was missing on the system. In 138,853 cases, the final status is not “Delivery Completed.” There were another 140,515 cases where delivery was processed after it said delivery was completed. In the case of mail-in votes, the status should be “Arrived-Dispatched-Arrived-Dispatched.” But there were 99,772 cases that say “Dispatched-Dispatched, Arrived-Arrived.” In 5,356 cases, the mail was sent without being registered. There were 30,063 cases where the mail was registered once and re-registered. In 17,683 cases, the mail was registered at a certain post office but processed at a different postal office. It can’t be possible to see mail without a delivery date, registered-canceled-reregistered, and duplicated status in normal circumstances. It appears that they made errors while manipulating a large number of shipments through the server.

[Example of Dispatched-Dispatched, Arrived-Arrived and time errors]

배송조회

국내우편(등기/택배)배송조회

기본정보

등기번호	보내는분/발송일자	받는분(주소/과목)	취급구분	배달결과
				도착

배송 진행상황

날짜	시간	발행국	처리현황
2020.04.11	12:29	서울도봉우체국	배달준비
2020.04.11	17:47	서울도봉우체국	도착

not 'arrived-departed' consistent status : 71,518 cases
(ex: arrived-arrived, or departure-departure)

transit time error - too short: 307,826 cases

4) Undelivered mail

The mail sent out to the governmental organizations like the NEC has a low chance of being not delivered. There were some cases where the reason for the failed delivery was because it was sent to the wrong address, the resident moved to another place or there was no one at home. Election-related mail is strictly managed mail. There is a no reason for NEC employees to be away from home or move to other places during the election period. Furthermore, the deliverymen stay alert to election-related mail all the time, so it is hard to imagine mail that was not delivered due to such reasons. There were 5 cases like this and another 4 cases where the mail was sent after the early voting process, according to the tracking history.

[Example of failed delivery]

기본정보		마스킹(*)해제조회	① 제한표시에대한 근거
등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분
1068809343597	선*우편물 2020.04.10	유*구선거관리위원회	미배달 (이시간곳발송)

배송 진행상황			
날짜	시간	발생국	처리현황
2020.04.10	19:49	논산우체국	접수
2020.04.10	22:14	논산우체국	발송
2020.04.10	23:41	대전우편집중국	도착
2020.04.11	10:07	대전우편집중국	발송
2020.04.11	10:14	대전둔산우체국	도착
2020.04.11	10:27	대전둔산우체국	배달준비
2020.04.11	15:55	대전둔산우체국	미배달 * 미배달 사유: 패문부제 (익일(영업일 기준)배달 예정)
2020.04.12	12:30	대전둔산우체국	발송
2020.04.12	13:13	대전유성우체국	도착
2020.04.12	13:14	대전유성우체국	배달준비 김배원:강금구
2020.04.12	13:35	대전유성우체국	배달완료 (배달) (수령인:남 -)
2020.04.17	14:52	대전둔산우체국	미배달 * 미배달 사유: (이시간곳발송)

5) Mail sent without registration, mail sent by different postal office, mail sent on a non-early election day

It is basic common sense that the mail is first registered then sent. It is also quite obvious for the postal office who received the mail to process it. However, there were 8,354 cases of mails being sent without the registration process. In 17,368 cases, mails were sent from post offices other than the one that actually received the registration.

There were 43 cases of mail being sent on April 12, a day after the official early voting days (April 10-11). The mail sent on non-early voting days is illegal and thus invalid. There were many mail-in votes traveling from and to the Incheon post office. The office is responsible for election-related mail from the Incheon Yeonsu district election commission. There is a chance that officials at Yeonsu’s election commission were involved in a plot to manipulate mail-in votes.

All this evidence points to election fraud. If there were just one or two cases like this, it could have been dismissed as a simple mistake, error and mismanagement. (Of course, in the case of Austria, this would make the election invalid and will be ground to call for a reelection) There were tens of thousands of cases that occurred in Korea. This is beyond the margin of error and it is a significant result of the election fraud.

[Example of mail sent from a postal office that is different from where it is registered]

기본정보		마스킹(이)체제교회	☑️ 제한요사제대만 근거
등록번호	보내자는별/발송일시	받는별/수신일시	취급구분
1068808797692	선*우편물 2020.04.10	원*시전기문리우편물 2020.04.12	배달번호

배송 진행상황			
post office – acceptance error case: 17,683			
날짜	시간	발령국	제대번호
2020.04.10	19:38	경기북부우체국	검수
2020.04.10	20:59	양평우체국	발송
2020.04.10	22:27	홍서동우편접수국	도착
2020.04.11	02:01	홍서동우편접수국	발송
2020.04.11	04:14	대건교황센터	도착
2020.04.11	04:49	대건교황센터	발송
2020.04.11	06:51	원주우편접수국	도착
2020.04.12	12:22	원주우편접수국	발송
2020.04.12	12:51	원주우체국	도착
2020.04.12	14:03	원주우체국	배달중이 검배후이상존
2020.04.12	15:47	원주우체국	배달번호 (배달) (수령인)날*발착일 - 회사물류)

[Example of mail sent after the early voting day]

기본정보		마스킹(+) 해제조회	㉠ 제한표시에대한 근거	
등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분	배달결과
1068811244204	선*우편물 2020.04.12	연*구선거관리위원회 2020.04.13		배달완료

배송 진행상황

날짜	시간	발생국	처리현황
2020.04.12	14:06	인천우체국	접수
2020.04.12	14:28	인천우체국	발송
2020.04.12	15:05	부천우편집중국	도착
2020.04.13	15:03	부천우편집중국	발송
2020.04.13	15:58	인천우체국	도착
2020.04.13	16:09	인천우체국	배달준비 집배원:최종성
2020.04.13	16:34	인천우체국	배달완료 (배달) (수령인:오*빈님 - 회사동료)

[Example of mail sent without prior registration]

기본정보		마스킹(+) 해제조회	㉠ 제한표시에대한 근거	
등기번호	보내는분/발송날짜	받는분/수신날짜	취급구분	배달결과
1068809329848	선*우편물 2020.04.10	중*구선거관리위원회 2020.04.12		배달완료

배송 진행상황 deliver without sending process!: 8,354cases

날짜	시간	발생국	처리현황
2020.04.10	19:53	부여우체국	발송
2020.04.10	19:55	부여우체국	접수
2020.04.10	22:38	대전우편집중국	도착
2020.04.11	04:43	대전우편집중국	발송
2020.04.11	04:44	대전교환센터	도착
2020.04.11	04:51	대전교환센터	발송
2020.04.11	08:27	의정부우편집중국	도착
2020.04.11	22:24	의정부우편집중국	발송
2020.04.11	22:39	서울중앙우체국	도착
2020.04.12	09:53	서울중앙우체국	배달준비 집배원:박재열
2020.04.12	13:12	서울중앙우체국	배달완료 (배달) (수령인:김*영님 - 회사동료)

D. Destruction of evidence – changing servers from the post office and the integrated voter list

The NEC has failed to provide the integrated voter list yet and is destroying key evidence that is subject to verification such as the server, ballot paper printers, electronic ballot count machines and voter list. Former assembly member Min Kyung-wook and his lawyers have issued a statement pointing out the fraudulent mail-in voting. Since then, the postal office has been making changes to its digital data that is stored in the server. The NEC shut down the homepage that has data related to the election, from Sept. 29 to Oct. 4, and changed its server ahead of the recount. South Korean company SGS is responsible for changing the server and the company is known for its QR code technology. There are suspicions that they are trying to relocate and change the server to manipulate the QR code and the integrated voter list ahead of the recount. The legal team has filed lawsuits with the prosecution for violating public election law and destruction of evidence. However, many prosecution's offices are headed by those who were appointed by Moon Jae-in, and they are not investigating the cases thoroughly, except for just a few offices. Some offices concluded a disposition not to institute public action without going through a proper investigation. The Supreme Court has not only delayed the recount but also ignored the request for the preservation of evidence that aims to prevent the server from removed. It continues its dereliction of duty on this issue.

Mr. Min's statements were released on Sept. 9 and 16 of this year. Korea Post is manipulating digital records through the server, as you can see in the photos below. We have screen-captured all the tracking history of the election mail sent for this election. We will check with the system to see how they have manipulated the records. But the important thing to note is that the criminals involved in election fraud are destroying the evidence.

[Example of Korea Post manipulating the records]

기본정보

등록번호	발신지/발신일	받는지/수신일	취급구분	배달결과
136800799071	신우면동 2020.04.10	고사리읍구산거리2리10번동 2020.04.11		배달완료

배송 진행상황

날짜	시간	발행국	처리현황
2020.04.10	21:08	서울서초우체국	접수
2020.04.10	22:20	서울서초우체국	발송
2020.04.10	22:53	동서울우편집중국	도착
2020.04.11	04:19	동서울우편집중국	발송
2020.04.11	09:16	고양우편집중국	도착
2020.04.11	09:38	고양우편집중국	발송
2020.04.11	10:37	고양일선우체국	도착
2020.04.11	10:53	고양일선우체국	배달준비 접대원 이희정
2020.04.11	18:33	고양일선우체국	배달완료 (비밀) (수령인 김*영남 - 최사동리)

배송문의

- 연락처 배송 정보제공은 우편물 배달예외(휴일, 피휴일)를 고려해져 신속히 알려주는 것이 목적이며 모든 배송정보가 표시되지는 않으며
- 각종 피해관계의 증거자료로 사용하기 위해서는 배달준영 서비스를 이용하시기 바랍니다.
- 배송완료시간은 고객님이 실제 받으신 시기와 차이가 있을수 있습니다.
- 조회서비스는 1년단위의 우편물만 가능합니다.
- 자세한 사항은 우체국콜센터(1588-1300)로 문의하시기 바랍니다.

인쇄

Recipient manipulation

배송문의

- 연락처 배송 정보제공은 우편물 배달예외(휴일, 피휴일)를 고려해져 신속히 알려주는 것이 목적이며 모든 배송정보가 표시되지는 않으며
- 각종 피해관계의 증거자료로 사용하기 위해서는 배달준영 서비스를 이용하시기 바랍니다.
- 배송완료시간은 고객님이 실제 받으신 시기와 차이가 있을수 있습니다.
- 조회서비스는 1년단위의 우편물만 가능합니다.
- 자세한 사항은 우체국콜센터(1588-1300)로 문의하시기 바랍니다.

인쇄

[NEC's announcement on the temporary shutdown of its website]



[Bidding information for the server relocation]

[입찰 결과]									
입찰광고번호	20200722621-00	광고상태	완료	참조번호	12208185801				
광고명	신규 전산센터 이전 사업	공고기관	조달청 서울지방조달청	수요기관	중앙선거관리위원회	공고담당자	김효석 (070-4056-8996)	입찰관	김효석
실제개찰일시	2020/07/24 12:58	적격심사결과		보수예비가 및 예정가격	평가				
유의사항	□ 시간단절 과정에서 부가격 차등 중 입찰의 부합금액과 부합률은 표시되지 않습니다. 판정관련 문의는 해당 공고의 입찰접합관에게 문의하시기 바랍니다.								
[개찰순위] ※ 사업자등록번호 <input type="text"/> <input type="button" value="검색"/> [참여 업체수: 1 개사]									
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1	1028152385	에스지아이 주식회사	문유진	892,000,000	100.000				
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입찰광고번호	20200816900-00	광고상태	완료	참조번호	12208196301				
광고명	중앙선거시스템 구축 사업(역스)	공고기관	조달청 서울지방조달청	수요기관	중앙선거관리위원회	공고담당자	최태순 (02-2291-1830)	입찰관	최태순
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유의사항	□ 시간단절 과정에서 부가격 차등 중 입찰의 부합금액과 부합률은 표시되지 않습니다. 판정관련 문의는 해당 공고의 입찰접합관에게 문의하시기 바랍니다.								
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The NEC relocated its server at Gwanak Government Complex to Gwancheon Government Complex at 3 am on Sept. 30, which was the first day of the Korean Chuseok holiday. The server had all the information related to the April 15 general election. There are 125 lawsuits filed with the Supreme Court requesting the invalidation of the election and preservation of evidence of the

server. Even with all these efforts, the NEC's server was damaged, with the involvement of a large number of policemen early in the morning on a holiday, like a commando operation.

The legal team submitted a total of 7 documents for the preliminary plea. It has briefed the court in depth that digital manipulation was the key to the April 15 election fraud and on the argument behind invalidating the election. The team also requested the preservation and investigation of evidences at the same time. In June, the legal team requested the appraisal of the server and digital devices used in the election and requested related documents be provided. However, the NEC has not provided anything requested except for a four-page written opinion. The court dismissed the request for the preservation of evidence on the server, the digital devices used in the election and its records. It also dismissed the appeals that the legal team filed. The legal team also requested the preservation of evidence through civil law, but it was dismissed again. The team's appeal was dismissed, and it appealed again to the court. Now the Supreme Court is sitting on the issue.

It was not until mid-September, when the legal deadline was about a month away, that the Supreme Court issued an order to prepare for a further explanation. The NEC announced that it would relocate its digital center and started the bidding process publicly from Sept. 29 to Oct. 4. In its preparatory document sent to the court on Sept. 24, the NEC said that the appraisal process for the server and other related data should take place at the Gwacheon Government Complex once the digital center is relocated and installed completely.

After reviewing the announcement and preparatory document, the legal team immediately submitted a request for the emergency preservation of evidence contained on the actual server to be left untouched, since it has all the election-related records and data for the Supreme Court. As the movement to relocate the server at the Gwankak site became visible, the team repeatedly submitted additional preparatory documents on Sept. 28 and 29 to urge the court to prevent damage to the server and four applications requesting that the court set up a hearing

However, the Supreme Court remained silent and unresponsive to the desperate demands of the legal team. The NEC conducted a shutdown to block access to its website at 6 pm on Sept. 29. Soon after, at around 5:30 am on Sept. 30, it dismantled the server at the Gwacheon Government Complex, which contains all the records of the 21st general election, and moved it to the Gwacheon Government Complex. The company in charge of the data transfer project was the company known for its QR code-related technology. The company was the one the legal team pointed out as being at the core of the illegal manipulation and the key area to be appraised.

For the past five and a half months since the election, the server containing all the election records was under the control of the NEC. It is hard to completely rule out the possibility that the authenticity, integrity and reliability of the records have already been damaged during this period. Furthermore, the NEC, which is responsible for resolving the allegations of illegal damage done to the server, has in fact committed to completely destroy the server's current state. The server had to remain untouched in order to resolve all the allegations.

"Those affected by the relocation of the data center will have nothing to do with the election records," the NEC explained. However, this can only be considered to be false when looking at

its preparatory statement submitted on Sept. 24, which said that the appraisal process needs to be conducted at Gwacheon Government Complex once the relocation of the digital center is completed.

In the 20th general election, 19th presidential election and 2018 regional election, they conducted a project to preserve log files used for devices operating the election information system. However, they haven't done so in this election, so one can't be sure whether the log file has been properly preserved. The legal team requested forensics on the server log records, which could be the key to finding out whether early voting was legitimately processed. The NEC, however, ignored the request for four months and issued a press release saying the "original server will not be relocated" without announcing its plans to move the whole server. This wording in the press release misled the people. They took out the server in a way where it cannot be confidently said that the data is as it was originally.

Currently, the NEC announced that it will hire a contractor to make readjustments to rules and standards regarding the issuance of individual codes from the integrated voter list system. They called the project the "Integrated voter list system data quality control consulting project" and said the project will be carried out until the last day of this year once the contractor is selected. The legal team has called for a verification process to see whether the early voting process was properly conducted by comparing various records such as log files and the history of QR code issuance from the integrated voter list. But the move by the NEC clearly shows that it is dismissing our requests by making all the records not useful for this purpose.

Reasonable concerns are being raised that the election-related records are more vulnerable to manipulation, covering up and destruction of evidence during the period of the NEC's website shutdown from 6 pm on Sept. 2 to Oct. 4. In addition, there are serious concerns that large-scale work under the pretext of the relocation of the data center from the Gwanak office to Gwacheon could actually result in a large number of covert deletions, alterations and omissions of election-related records.

Most of all, the electronic records related to the election, which should have been preserved as they were at the time election ended, were left defenseless for five and a half months. They said they planned for the relocation work in advance, or in January of this year, but they never publicly announced this plan in the past five months when the lawsuits calling the election invalid were filed. Also, it has now become difficult to recover even the traces of the damage done to the integrity of the digital evidence. They also hired a contractor for the project related to the issue that the legal team pointed out as key evidence needed for the verification process. Due to these facts, many are raising reasonable concerns that the Supreme Court is a de facto accomplice abetting the destruction of evidence.

The act of brutally damaging the evidence that was conducted on Sept. 30 is an act that permanently damaged the only method to verify the authenticity, integrity and reliability of the server, which is they key evidence for the election invalidity lawsuit. This is a typical act of obstruction affecting the legal principles of the lawsuit. The NEC itself admitted to the legitimacy behind arguing over the illegal and manipulated election fraud and the existence of reasons to call it an invalid election. The court can consider that the arguments for the

nullification of election are proven just by looking at the acts of destruction of conclusive evidence, obstruction of proof and the effects resulting from these acts. It can call the election invalid once these arguments are proven right by looking at these facts.

Strong protests from the citizens over the NEC's server-damaging measures have been left as physical evidence. During the server relocation process, an NEC employee was spotted scanning a large amount of data, which is thought to have included documents with QR codes. This was done while the network was shut down. Four non-violent citizens were arrested by the police during their desperate protest to block the server relocation with their bare bodies.

The scale of the external pressure on domestic efforts is beyond imagination when considering the fact that the election fraud committed nationwide determines the fate of the ruling party. It also is reasonable to believe that it would not be possible to reveal the truth just through domestic experts' investigation, given the fact that the government is damaging servers and destroying evidence, which fundamentally destroys the principle of legal procedure under the constitution.

Therefore, it becomes more necessary for an international investigation team consisting of international experts to conduct a thorough investigation of election-related electronic devices, such as the server and the electronic records. If the NEC rejects the appraisal by the international investigation team, or the team finds the damage or destruction of election-related electronic devices such as the server and other records, the Supreme Court will have no other choice but to officially declare the April 15 election null and void.

5. Conclusion

Significant fraud and illegal activities in all likelihood were committed in the April 15 election. In Korea, a group called "The April 15 Peoples' Fight Against Rigged Elections Headquarters," headed by Min Kyung-wook, was organized. Effectively working on behalf of all citizens, it is spreading the truth behind the April 15 election fraud through various measures, such as people protesting alone and wearing black clothes in rallies. However, the Moon administration and the ruling party have charged Min with a crime through the police, imprisoned a whistleblower who gave election fraud-related information to a National Assembly member through the prosecution, and is shutting people's mouths by banning rallies, citing the coronavirus.

They are blocking the publication of reports covering the April 15 election fraud. They are issuing arrest warrants for violating the laws on assembly for those who already gained the permission to hold assemblies. This is to stop people from holding further rallies. This also clearly does not even constitute a reason for issuing a warrant. They are taking advantage of judges who are on their side. The persecution against people is becoming more severe.

Article 1, Section 2, of the South Korean Constitution clearly states that "the sovereignty of the Republic of Korea shall reside in the people, and all state authority shall emanate from the people." The sovereignty of the country, sacred and dignified, has been seriously damaged and violated due to the April 15 election fraud. The April 15 election fraud that happened in Korea is not just Korea's problem. We are living in the era of the 2020 pandemic, where the world is

suffering from the coronavirus, which can happen anywhere in the world. The sort of fraud and misconduct that happened in the South Korean can happen anywhere. Please let the world know of the irregularities and likely fraud in the April 15 election in Korea, and please help us protect our electoral system that is the foundation of our democracy.

2020. 10. 5.

Attorney Park Ju-hyun from Korea

**ELECTION
FRAUD**

PRIMARY
DOCUMENTS

DIGITAL GERRYMANDERING
HYPOTHESIS OF SOUTH KOREA'S
21ST GENERAL ELECTION RESULTS

Roy Kim

Synopsis for “Digital Gerrymandering Hypothesis of South Korea’s 21st General Election Results”

This paper covers the topic of digital electoral fraud (so-called ‘digital Gerrymandering’) that the author alleges took place in the 21st General Election in South Korea. The paper begins by introducing the April 15, 2020 general election held in South Korea. The author states up front that the purpose of the report is to “prove that the data for the South Korean 21st General Election was digitally manipulated” and that he concluded that statistical examination of the election results clearly points to manipulation.

The report notes that in order to account for data irregularities and claims of fraud, previous studies have focused on the physical aspects of election fraud (ballot box stuffing, shredded ballots, Chinese-made Huawei communications technology found in the electronic election systems and so on). But as noted, Mr. Roy Kim addresses data irregularities, and specifically cites the pioneering work by the University of Michigan professor, Dr. Walter Mebane. Mr. Kim’s ‘digital Gerrymandering’ hypothesis is a new approach and specifically examines election day and early voting results from South Korea’s 20th and 21st General Elections.

The paper lists six methodologies and detailed background information, supplemented with graphs and illustrations, to explain the ‘digital Gerrymandering’ voting hypothesis alleged to have been reflected in the April 15, 2020 general election. This includes: data graph analysis and a histogram; Calculate Total Shift Value (Target number of seats); simulation data; the least square method for actual shift value (reconciled data); Control Invalid vote; and finally, ASCII Code. According to the author, these new digital methods of fraud are nearly impossible to detect and are only exposed when the voting results are assessed as explained above.

Mr. Kim lays out his case that ‘digital manipulation’ was perpetrated in the most recent South Korean election to alter the results of the election. Importantly, he has put his assessment in the public domain where it can be examined and further assessed.

Gerrymandering digital voting hypothesis for the 21st General Election in South Korea

by Roy Kim

Abstract

The aim of this study is to investigate South Korea's 21st General Election voting results using a new digital gerrymandering hypothesis. In order to account for data irregularities and claims of fraudulence, in which previous studies have focused on the physical aspects of election fraud (ballot box stuffing, shredded ballots, Chinese-made Huawei communications technology found in electronic election systems and so on), this study will address data irregularities initially discovered by Professor Mebane. The digital gerrymandering hypothesis is a new approach that examines election day and early voting results from South Korea's 20th and 21st General Elections. The results of this study showed a target number of seats was made through the application of the gerrymandering hypothesis. It generated a target number of seats through real-time calculations during the vote counting process. The values moved to achieve the required number of seats could be found using the least squares method. Also, this study found an "Easter egg" hidden in the reconciled data by changing the hexadecimal number according to a specific ASCII code rule. Many election research scholars, cyber security experts, journalists, and legal experts may agree that the voting results of South Korea's April 15, 2020 parliamentary elections are consistent with fraudulent and manipulative election practices.

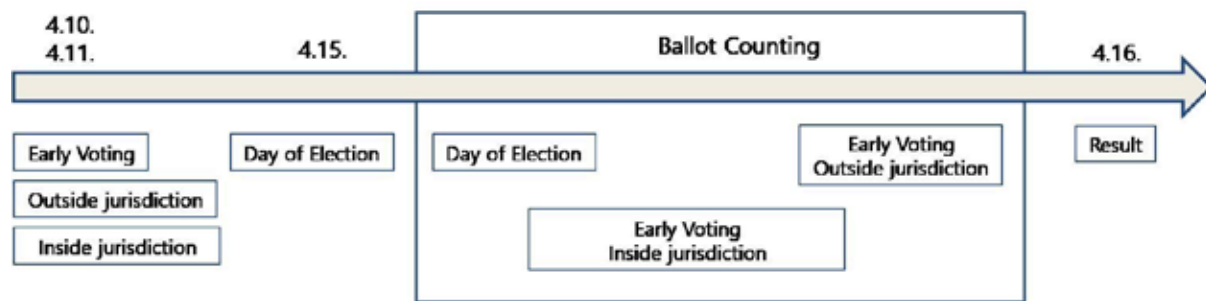
Keywords: Digital Gerrymandering, The least squares method, ASCII Code, Fraudulent election

1. Introduction

The 21st South Korean General Election, held on April 15th, has been riddled with allegations of fraud in the months since the election. Hardware experts point to "supercomputer" specifications made to election electronic systems using Huawei components manufactured in China, while election fraud experts highlight statistical anomalies in the data. They all point to fraud. According to Dr. Mebane's study, "Anomalies and Frauds in the Korea 2020 Parliamentary Election, SMD and PR Voting with Comparison to 2016 SMD," the 2020 election exhibited anomalies that suggest the election data was fraudulently manipulated. This study aims to compare the election results of South Korea's 21st General Election with the 20th General

Elections in order to identify fraudulent “digital gerrymandering” of the electoral districts. In South Korea’s recent 21st General Election I hypothesize that the results have been electronically “gerrymandered” utilizing a simple algorithm that redistributes votes to districts proportionally based on their favorableness. I maintain that this has been achieved nationally and in real time on election day itself.

For any election in South Korea, you have two options to vote: Early Voting and Election Day voting. For the 21st General Election, early voting was held on April 11 and 12, and election day voting was held on April 15. Early Voting was designed for those who may not be able to vote on the day of election, with their votes being counted after the Election Day. In the April 15th, 2020 South Korean 21st General Election, the ruling party earned 10% more votes in early voting, on average, than its opponents. This study utilizes Early Voting data and election day data released by the South Korean National Election Commission (NEC). The data released by the NEC separated the election day vote counts from the other counts (i.e. blank ballots and spoiled ballots), but I combined all the counts for the purpose of this study. The data released by the NEC does identify whether the manipulated votes are from the Early Voting counts or election day voting counts. This study includes manipulated vote counts from Election Day voting. The details of the election timeline are shown below in <Figure 1>, and the data in <Figure 2>.



<Figure 1> Time line of the 21st General Election at S. Korea

Total Population	51,843,268
Total population Voters	43,994,247, (increased 4.5% than 20 th general election)
18years old Voters	548,986, (1.2% out of total population voters)
No vote	14,867,851(33.8%)
Early voting voters	11,742,677(26.69%)

Election day voters	17,385,363(39.51%)
Sum voters	29,126,396(66.2%)

<Figure 2> South Korean 21st General Election data.

1.2 Goal

In this paper I will prove that the data for the South Korean 21st General Election was digitally manipulated. It is impossible for these results to be anything other than manipulation.

1.3 Task

A.) To compare the results of the 21st and 20th General Elections under the same conditions to help understand any abnormal data. To then compare differences between the Early Voting results and Election Day results for these two elections and to look for any anomalies.

B.) To determine the required redistribution of Early Voting counts for a favorable outcome from the Election Day results.

C.) To use 3 types of simulations to confirm that the order and allocation of the votes counted did not change the target result.

D.) To calculate the actual shift value by using the least squares method.

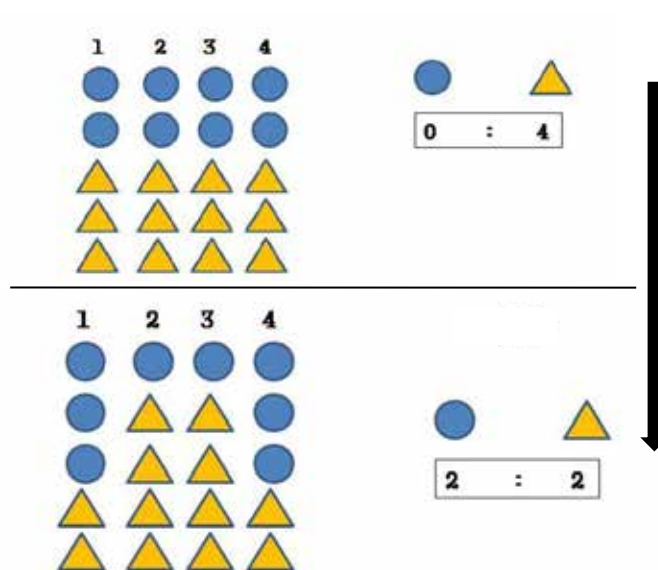
E.) To explain how to accommodate invalid votes in the process of achieving the goal.

F.) Finally, to look for any rules hidden in the order of the corrections that might have been inserted. By applying these rules to the sequencing list, change it to ASCII Code and find “Easter eggs” hidden by malicious programmers.

2.. Gerrymandering Theory

I then applied the Gerrymandering theory to validate my reasoning that the

aforementioned data was fabricated. Gerrymandering is a practice intended to establish an unfair political advantage for less favorable electoral constituencies by grouping more favorable electoral districts together with less favorable electoral districts, when dividing the electoral constituencies. Gerrymandering is the practice of redrawing electoral districts lines in order to obtain an advantage for a political party or candidate. For example, a political party can forcibly divide an electoral district or combine electoral districts according to their favorableness in order to win and maintain political power. Elections are not fair if political parties or candidates have the authority to divide or combine the electoral districts to their advantage. In order to prevent such practices, the electoral constituencies must be set or defined by laws made by the South Korean National Assembly, and this particular principle in South Korea is known as the Legal Principle on Electoral Districts



<Figure 3> The Concept of Gerrymandering method

The concept of gerrymandering, the basis of this hypothesis, is to get a 2:1 result where the outcome is 1:2, win or lose. However, there is a big risk only bringing the opponents' votes. Then, in order to make 1:2 to 2:1, 1:2 should become 4:2 to get a result of 2:1. 1:2 is a total of 3 and 4:2 is a total of 6. In other words, you should have three more votes in one. In that case, the total amount needed must be doubled. In fact, the turnout rate for the early voting of the 21st election was 26.69%, more than twice from the early voting of the 20th

election, which was 12.19%. The 21st early voting turnout rate was the highest ever in the history of South Korea.

In 1812, Massachusetts Governor Elbridge Gerry defined the electoral constituencies in a way that would benefit his political party. When mapped, one of the contorted districts was said to resemble the shape of a mythological salamander. In 1812, Massachusetts Governor Gerry signed the amended Electoral District for Senators Act which benefited his Republican party. At this time, the newly designated constituency was formed in a strange shape, ignoring natural forms, culture, and customs, and a local newspaper reporter compared it to a salamander and synthesized it with Governor Gary's name to create the term "GerryMander." It was said that Republicans won 50,164 votes to 29 winners, while the opposition party won 51,766 votes but only to 11 winners.

In the 21st South Korean General Election, the election system used Chinese Huawei 5G communication equipment. The election system is controlled by a central NEC server that collects and processes data coming in from every electoral district in South Korea. Voting has come a long way since physical ballots. It is now a nationwide connected electronic voting system. The digitization of voting, although convenient and efficient, allows for new avenues of fraud and corruption. In South Korea's recent 21st General Election, I hypothesize that electronic "Gerrymandering" in electoral districts nationwide happened in real-time, utilizing a simple algorithm that redistributes votes to districts proportionally based on their favorableness.

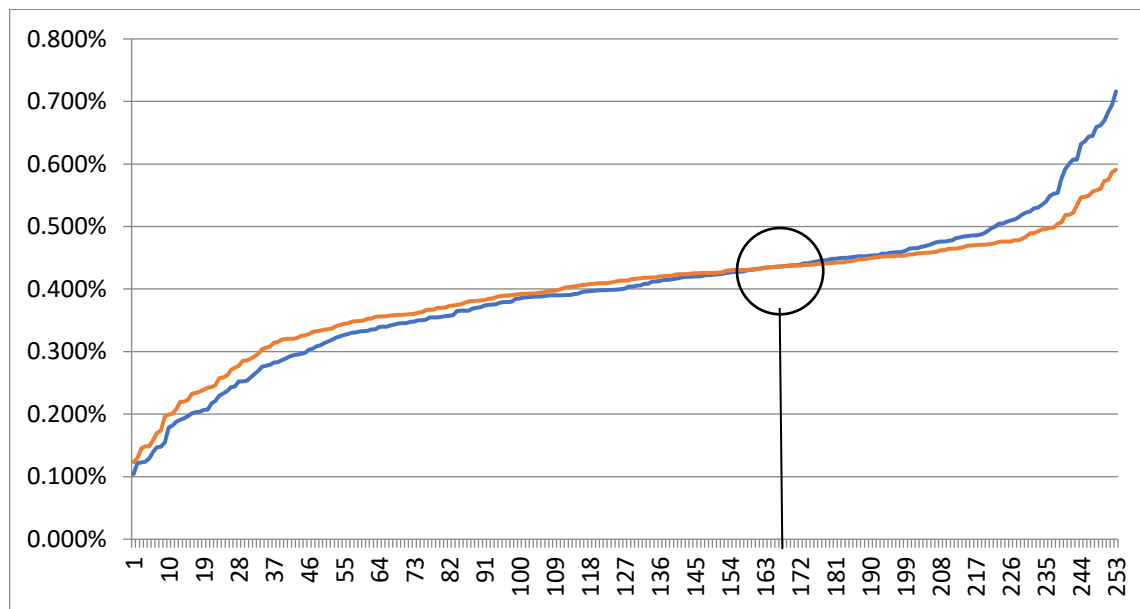
3. Methodology

From a programmer's point of view, the only way the location data can be obtained to produce early voting results is from the NEC's server. This is the data from Election Day voting and previous polls. Most programmers can design the algorithm used through the creation of a simple manipulation value. A program would simply have to calculate the winning and losing rates in every district, but this is too complicated and will create many variables. In the previous analysis, a district of 50% or more is a district that wins regardless of the opponent's polling rate. A very simple program can redistribute the value of the

district that has 50% or more to a district of 50% or less. The program basically redistributes leftover votes from a district, where a preferred candidate achieves over 50% of the vote count, to another preferred candidate who is close to the 50% threshold. This program not only efficiently redistributes surplus votes to districts in need of votes, but it sends them specifically to districts where the preferred candidates are closest to breaking the 50% mark.

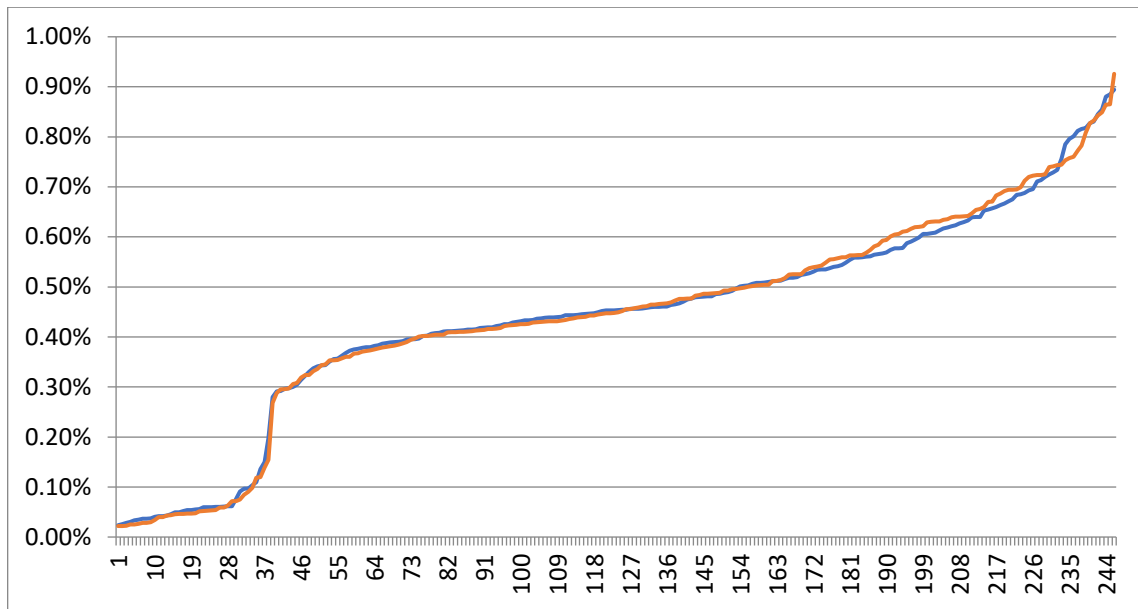
3.1. Methodology 1 – Analysis data graph and a histogram.

Obviously, Early Voting and Election Day voting differed and they yielded different vote counts. I grouped Early Voting and Election Day voting separately, and standardized both the Early Voting and Election Day voting variable in order to understand the measurable differences between Early Voting and Election Day voting. By doing so, I discovered how many votes were cast in each district (on the day of election) and compared this with the total vote count. This method was used to examine the early vote count as well. The figures below show the data derived from the methodology.



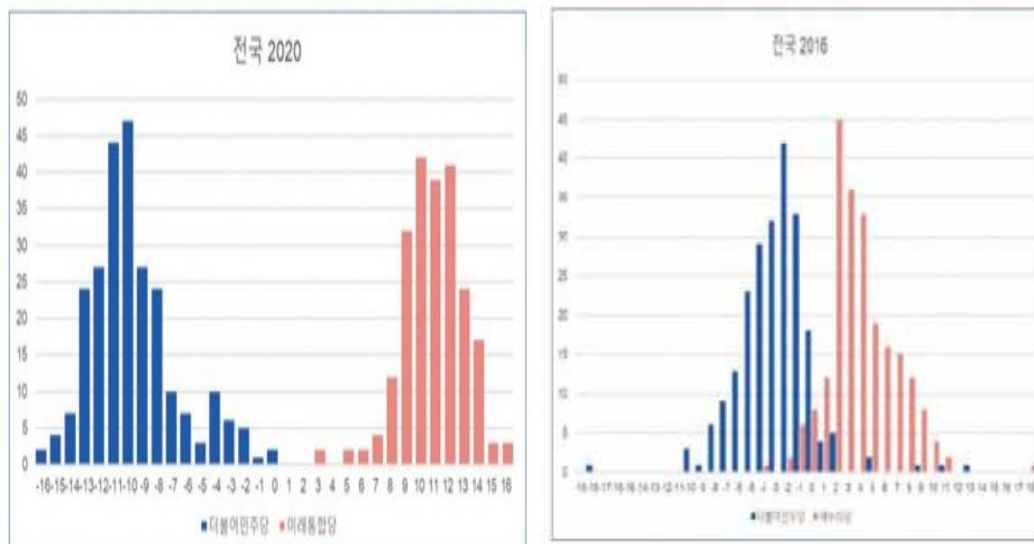
<Figure 4> The blue line represents election day vote counts and the red line represents early voting counts from South Korea's 21st General Election vote counts, and the red line represents the early voting vote counts.

This graph clearly shows an intersection point. This point shows the median (50%) of the vote counts. There are 89 districts above the median and 164 districts below the median. In order to compare the data shown in this graph, I have used the same methodology for the 20th General Election. This comparison graph is shown below.



<Figure 5> The blue line represents the vote counts for election day votes and the red line is for early voting from South Korea's 20th General Election.

This graph (Figure 5) does not show an intersection point for the 20th General Election. It shows that there was not much difference between the results of Early Voting and Election Day voting, which is normal for these two types of voting.



<Figure 6> The standard deviation on left shows the results of the 21st 2020 General Election. The standard deviation on right shows the results of the 20th 2016 General Election.

The two histograms above represent the distribution of the 21st and 20th South Korean General Election vote count by Early Voting and Election Day voting. As clearly shown in the histograms above, the graph for the 21st General Election illustrates an abnormal 10 distribution which doesn't follow the law of large numbers. According to the law of large numbers, the difference between the distributions of two large numbers should approach zero. A normal distribution would be in the shape of a bell, like the graphs on the bottom and a graph with an abnormal distribution would show two bell-shaped bars like the graph on the top. This result indicates the significant possibility that the 21st General Election data is artificial or fabricated in a way that will clearly distort the results.

Continuing the study, I computed the difference in proportions between Early Voting and Election Day voting. When subtracting Election Day voting results from Early Voting results, all the districts which had more than 50% of vote counts on Election Day yielded negative numbers, while all the districts with less than 50% vote counts yielded positive numbers. The sum of the difference between all the districts with higher than 50% vote counts is (-)2.468% while that of all the districts with less than 50% vote counts is (+)2.468%. I was able to confirm that an equal amount of the percentage shifted. This means that the vote count at the 50% point was indeed an intersection point.

3.2. Methodology 2 – Calculate Total Shift Value (Target number of seats)

The number of seats won by more than 50% on the day of election and its percentage is calculated by the number of seats where more than 50% of the votes are earned, regardless of winning or losing. In fact, there are districts where the polling rate is higher than the opponent, even if the number of seats earned is less than 50%.

Results of election day	Less than 50%section	More than 50% section	sum
# of seats	164	89	253
% of seats	64.8%	35.2%	100%

<Figure 7> 21st South Korean General Election Day results, district over and under 50%.

On the day of election, 89 seats were considered safe seats, with more than 50% of the vote earned. In South Korea, there are a total of 253 districts, half of 253 is 126.5 seats. Any party with the majority of seats (127 seats or more), will have the legal authority to carry out their legislation. With 127 seats as the threshold for holding a majority, I created three ratios based on 126 seats, 127 seats, and 128 seats.

Target # of seats	126	127	128
% of seats	49.70%	50.20%	50.70%

<Figure 8> 21st South Korean General Election Day results, target number of seats.

The number of seats required to reach 126 seats from 89 seats is 37 (14.50%); the number required to reach 127 seats is 38 (15.00%), and finally, to reach 128 seats is 39 (15.50%). If the Election Day portion varied and became like (Figure 4), the shift value assigned to the Election Day portion should be the same as the difference between the ratio of the number of seats before and after shifting. In other words, it will shift as many seats as needed. I took a look at the polling rate on the day of election in 89 districts and 164 districts based on 50% polling rate for the day.

Results of election day	Less than 50% section	More than 50% section	sum
# of seats	164	89	253
sum of the polling rate	6350.56%	5140.38%	11490.94%
Election day portion	55.27%	44.73%	100.00%

<Figure 9> 21st South Korean General Election Day results.

The sum of the polling rate of 89 seats, in a district with more than 50% is 5140.38%, and the sum of the polling rate of 164 seats, in a district with less than 50% vote is 6350.56%. The two account for 55.24% versus 44.73%. The differences in the polling rate is about 10.54% (55.27%-44.73%). The equation below expresses the portion of Election Day voting shifted as much as the number of seats required.

Ratio of the seats needed = the difference in the election day portion + shift value

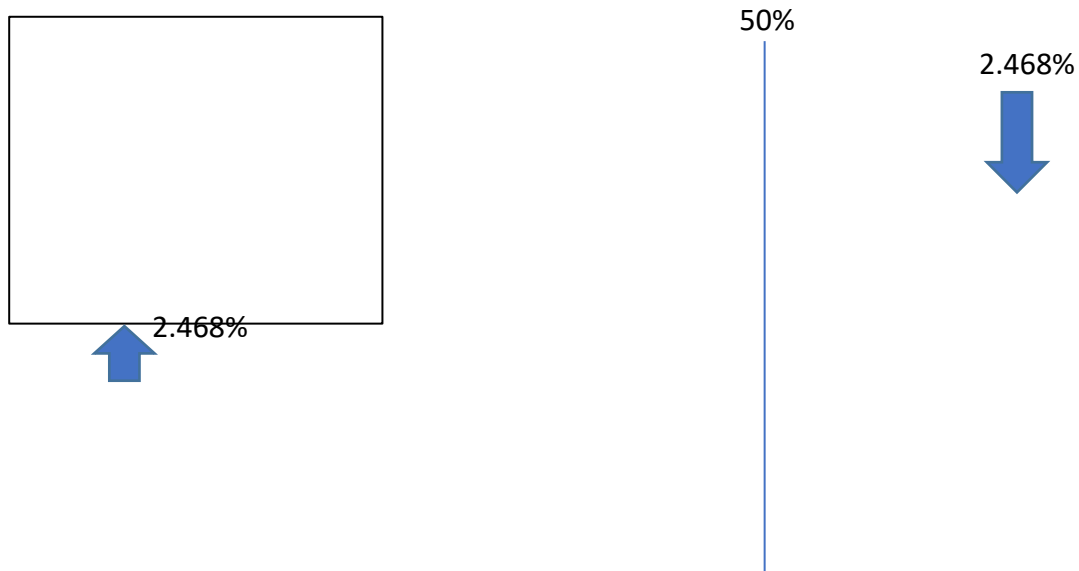
target seat #	126	127	128
# of seats needed	37	38	39
Ratio of the seats needed	14.50%	15.00%	15.50%
value subtracted the difference of the election day portion 10.53% = shift value	3.97%	4.47%	4.97%

<Figure 10> 21st South Korean General Election Day results, calculation of shift value

I calculated the shift value by subtracting the difference of the election day portion from the number of seats required. The shift value required to become 126 seats is 3.97%, 127 seats is 4.47%, and 128 seats is 4.97%. This shift value is the sum of the total shift values in all districts. You can subtract half of this shift value from districts where more than 50% votes were earned and redistribute it to districts below 50%. Analysis of the South Korea's 20th General Election data shows that 2.468%, half of 4.97% of the target seats (128), decreased 13 from districts with more than 50% and was added to districts below 50%. If you check the last decimal point of the shift value, the numerical result is as follow:

$$[(15.50412868172670\% - 10.53165908172670\%) / 2 = 2.4862348000\%]$$

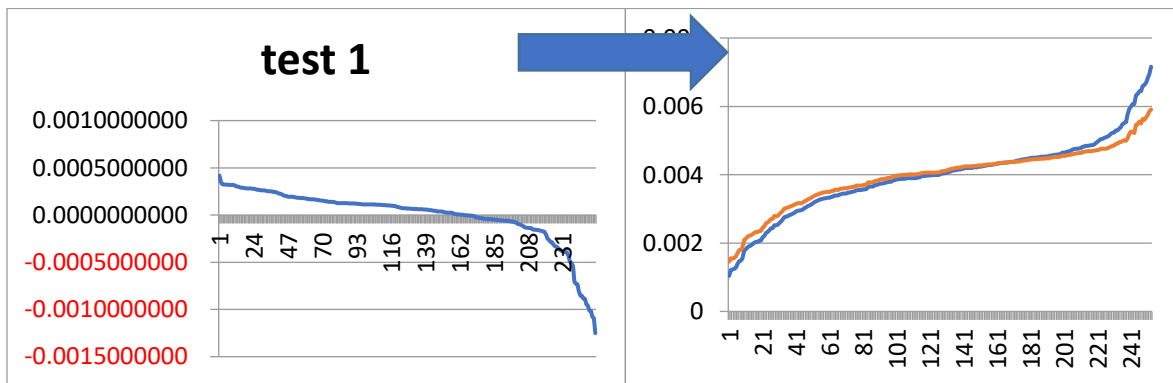
2.4862348000% shift value is 100% consistent with the difference between the portion of the election day and that of early voting.

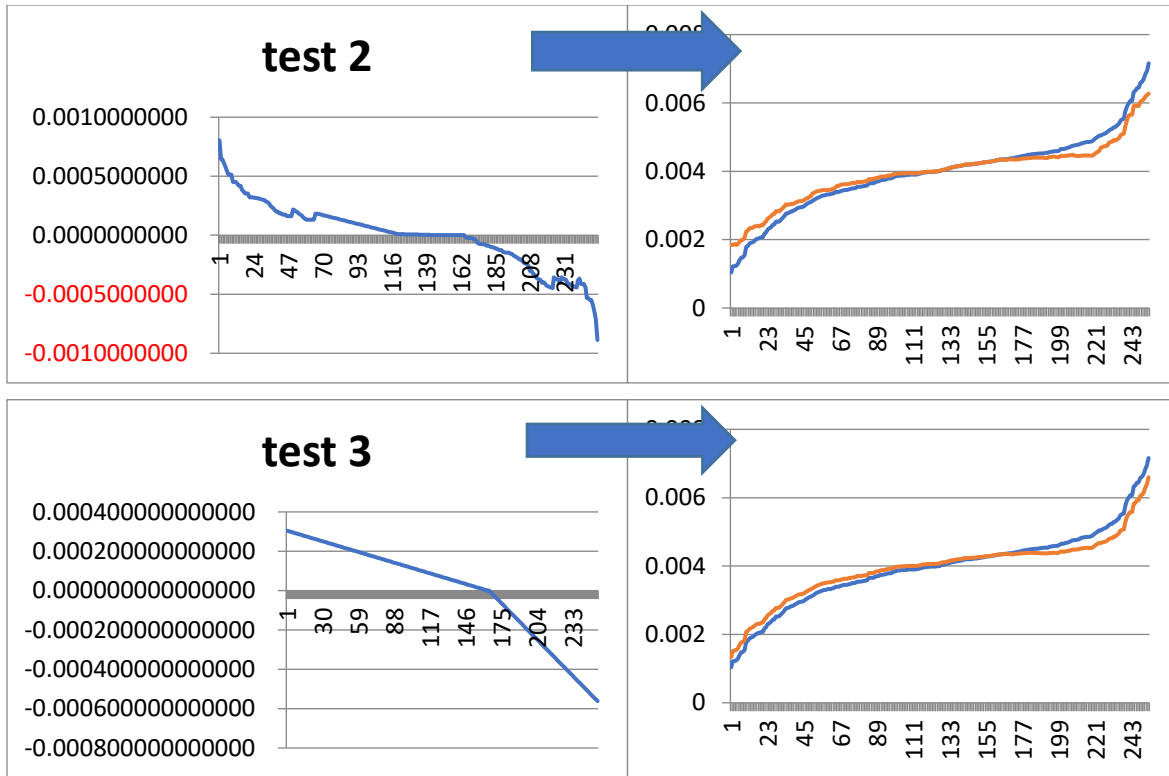


<Figure 11> Election Day in red, Early Voting in blue after applying shift value.

3.3. Methodology 3 - Simulation Data

The graph shows a 2.468% shift. Examining the amount of increase and decrease by 2.468% for each district in detail, I found something very unusual. In order to find out the effect of the 2.468% shift value on the result of the number of seats, I have rearranged the order of the shift value to be different from the real data. In this way we can analyze the actual early voting results and examine whether the results are changed by manipulating the value in different districts. However, the total amount of 2.468% remained unchanged. In the first test, we changed the actual shift values in descending order and shifted the election day portion. The result of the number of seats, 128, remained unchanged.





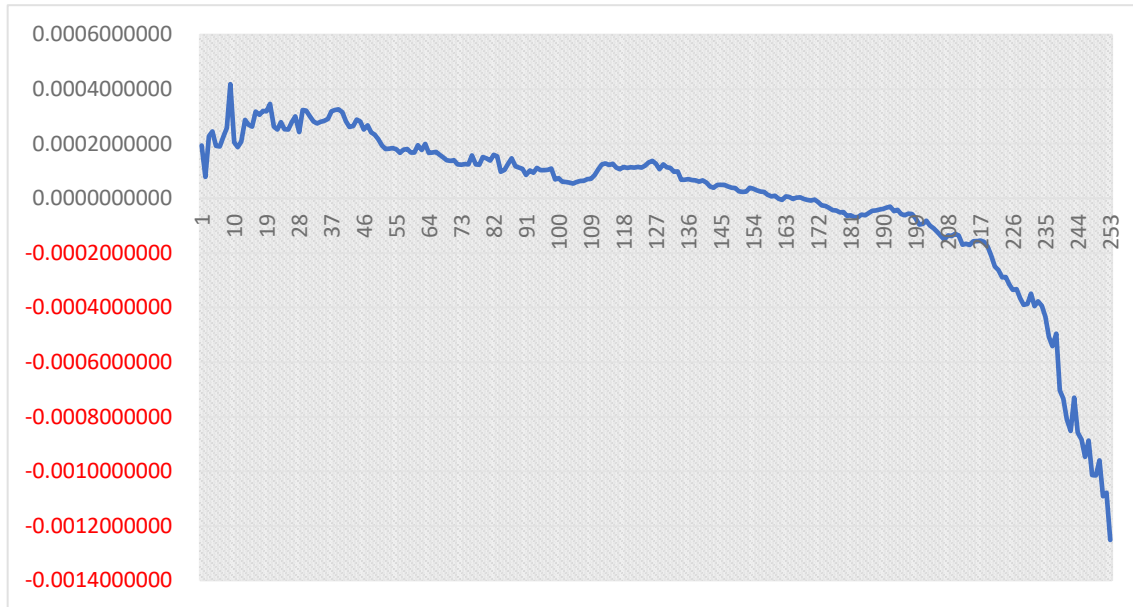
<Figure 12> Test1. Shift value change in descending order / Test2. Shift value atypical form applied. / Test3. Evenly distributed shift values applied.

In tests 1, 2, and 3 all districts increased or decreased by 2.468%, but we could see that 128 seats were obtained, even if artificially different orders or arrangements were applied. In other words, no matter how you chose to allocate 2.486%, you can obtain the target number of seats without affecting the overall results.

3.4. Methodology 4 – The least square method for actual shift value (reconciled data)

By using the least squares method, the algorithm achieves the target number of seats. Using the shift value, the data is analyzed in real time and generates the target number of

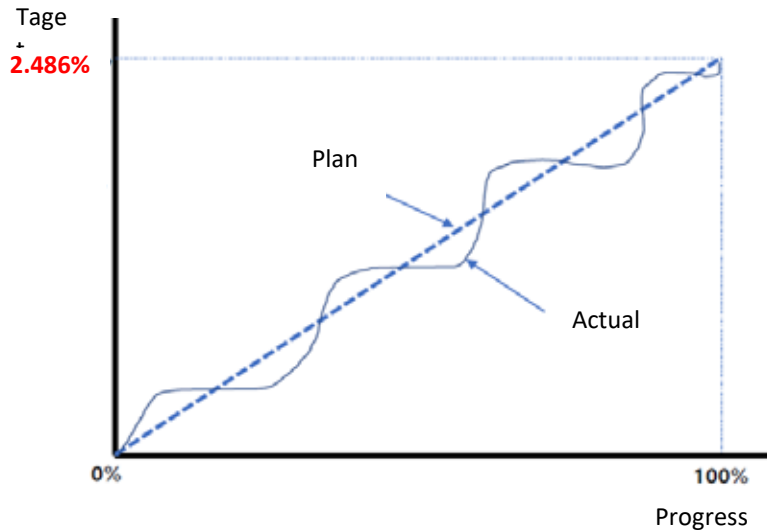
seats during the vote counting process.



<Figure 13> the shift value change as votes are counted.

3.5. Methodology 5 – Control Invalid vote

Vote counting begins on election day and districts with high polling rates can achieve more than 50% of the polling rate, earlier than other districts. The higher the polling rate, the more the shift value will be subtracted, and the lower the polling rate, the more the shift value will be added. This is because the algorithm can calculate and send the shift value until the end of voting on Election Day. Regarding a district near 50%, we don't know whether it will be a winning or losing district, so it becomes the smallest section that brings and receives the shift value. In fact, in the 1% section of 49.3% to 50.3%, the shift value close to 0 was applied. In other words, the shift value is determined according to vote counting time, and the amount and order are distributed according to the flow of time without affecting the result. This method gives the programmer the ability to decide the outcome of each electoral district.



<Figure 14> Target Logic progress

Applying the process of achieving the target to elections can predict how the blank votes are handled. If the performance is lower than planned, one of the parties will receive a blank vote, and if the performance is higher than planned, the blank will be redistributed as an invalid vote. To do this, many invalid votes will have to be issued. In the 21st General Election, the invalid vote was the highest in South Korean recorded history: 4.21 % (1,226,532 out of 29,126,396).

Times	Years	Voters	Invalid vote	Invalid vote%
17 th	2004	21,581,550	295,566	1.37%
18 th	2008	17,415,920	284,383	1.63%
19 th	2012	21,806,798	474,737	1.63%
20 th	2016	24,430,746	669,769	2.74%
21 th	2020	29,126,396	1,226,532	4.21%

<Figure 15> History of invalid votes.

3.6. Methodology 6 – ASCII Code

Malicious programmers often leave behind evidence known as an “Easter egg” in the system they compromised. In this study, evidence was discovered of malicious programmers through an inspection of common “Easter egg” practices in the programmer community.

First, I examined the order of the election data shift value and found it to be jagged. I then investigated the reason for the shift value's jagged nature, but it was difficult to find any regularity on the surface. In order to find out if it was made for any kind of hidden purpose, I divided the districts and made the district's sequence numbers into a printable number (close to 100) and transformed it into letters using the ASCII code and constructed a letters table.

Converted letter	` k f i k m ^ l b _ _ g ` o h n
	a l g j l n _ m c ` ` h a p i o
	b m h k m o ` n d a a i b q j p
	c n i l n p a o e b b j c r k q
	d o j m o q b p f c c k d s l r
	e p k n p r c q g d d l e t m s
	f q l o q s d r h e e m f u n t
	g r m p r t e s i f f n g o u
	n q s u f t j g g o h p v
	o t v g u k h h p i q w
	p u w v l i i q r x
	q v w r s y
	r s t z
	t u {
u v l	
v }	

<Figure 16> letter table.

I searched for a meaningful word or sentence from the letter table. As a result, I found the sentence "Follow the Party." We can assume that the programmer mixed the order of the shift value to insert this "Easter egg" into the data. In other words, we can assume that according to the linear arrangement of the shift value, the programmer planted "Follow the Party" in the sequence number of the Election Day results and mixed the order to hide it. "Follow the Party" is a Chinese communist slogan. Other words such as "Ghost," "Hippo," and "Harpy," were also found. "Ghost" is a specter, and it can be expressed as communism is a specter. Augustine of Hippo's view of history gave a great impression to Karl Marx, and in the West, Mao Zedong was called "Hippo." "Harpy" is a monster with a Greek mythical bird and a human figure that symbolizes Marxism. Just by looking at all the words in the

table, it would not be such a difficult task for a programmer who can freely choose the order and arrangement of the shift values to plant these “Easter eggs.”

4. Conclusion,

As we have shown, the digital age has ushered in new avenues and methods for election fraud: “digital gerrymandering” or “electronic gerrymandering.” These new digital methods of fraud are nearly impossible to detect and only exposed when the voting results are shown as explained above. Before the election, digital election systems afford us the ability to predict the polling rate. If you can predict the number of seats that can be secured 100% by winning more than 50% of the votes, you can know the range of the estimated amount that needs to be manipulated in advance and redistribute the real vote counts (physical ballots) for the desired results. Incidentally, stiff ballots that seemed to come directly from the printing shop were also found at election sites.

Due to the way it is calculated as the target value, surplus ballots that are made meeting the target value or exceeding the population may be found in large quantities as a blank ballot. Finally, because the value of percent is calculated, the decimal point unit will be rounded up, and the result table may show a difference of +1 vote than the number of voters.

In conclusion, the important point of this gerrymandering digital voting hypothesis is that it has shifted the portion of the favorable district to a weak district and made a weak district a strong favorable district in Early Voting. We found that the portion of votes that earned over 50% on Election Day were shifted by 2.468% to the less than 50% districts. We were also surprised to find that the shift value (2.468%) is 100% identical to the 1/2 value of the ratio of the required number of seats, minus the portion of the Election Day.

Appendix A: < Raw data released by the National Election Commission (NEC), Data released by NEC (<http://info.nec.go.kr/>), 2020/4/18 17:00..>

su m	20th the General Election				21th the General Election			
	election day	early Voting	election day / Total	early voting/Total	election day	early Voting	election day / Total	early voting/Total
	9887.71%	8985.01%	100.00%	100.00%	11490.94%	14071.69%	100.00%	100.00%
1	2.00%	1.95%	0.02%	0.02%	11.94%	17.34%	0.10%	0.12%
2	2.00%	2.13%	0.02%	0.02%	13.94%	18.18%	0.12%	0.13%
3	2.06%	2.35%	0.02%	0.03%	14.09%	20.46%	0.12%	0.15%
4	2.26%	2.51%	0.02%	0.03%	14.22%	20.86%	0.12%	0.15%
~								
24 4	78.48%	72.84%	0.79%	0.81%	72.65%	76.89%	0.63%	0.55%
24 5	78.55%	73.21%	0.79%	0.81%	73.07%	77.05%	0.64%	0.55%
24 6	84.06%	73.98%	0.85%	0.82%	74.01%	77.30%	0.64%	0.55%
24 7					74.08%	78.23%	0.64%	0.56%
24 8					75.74%	78.48%	0.66%	0.56%
24 9					76.06%	78.86%	0.66%	0.56%
25 0					76.92%	80.69%	0.67%	0.57%
25 1					78.53%	80.81%	0.68%	0.57%
25 2					79.82%	82.57%	0.69%	0.59%
25 3					82.27%	83.14%	0.72%	0.59%

Appendix B: Moving Shift Values (reconciled data)

Moving Shift Values(reconciled data)			
Less than 50% section 2.486234789227%		More than 50% section -2.486234789227%	
1	0.019297133074%		-0.000245527677%
2	0.007913978943%		0.000226771453%
3	0.022735370801%		0.000394240320%
4	0.024506594216%		-0.000264940001%
~			
161	-0.000063594273%		
162	-0.000602348264%		
163	0.000722280072%		
164	0.000490824941%		

Appendix C: Rules for understanding the ASCII table.

Rule:

1). Selection rule 1,2 for divided 1,2 is based on the first letter “I”. Rule 1 for small or rule 2 for larger or equal.

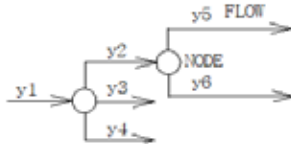
2-1) Rule 1: Divided 1 : TRUNC(sum/100,0) +1 / Divided 2: TRUNC(sum/100,0)

2-2) Rule 2: Divided 1: TRUNC(sum/100,0) / Divided 2: TRUNC(sum/100,0) -1

* Trunc is a function used by IT such as Excel and is a function that throws out a decimal point or lower. For example $924/100=9.24$, trunk = 9.

Appendix D: Calculating Early Voting %

Early Voting(%) = ((election day % / total of election day % + Shift Value(Reconciled Data))* Real time Optimization



$$\text{Object : } \text{Min}_x \left(\frac{(\hat{x}_1 - y_1)^2}{\sigma_1^2} + \frac{(\hat{x}_2 - y_2)^2}{\sigma_2^2} + \frac{(\hat{x}_3 - y_3)^2}{\sigma_3^2} + \frac{(\hat{x}_4 - y_4)^2}{\sigma_4^2} + \frac{(\hat{x}_5 - y_5)^2}{\sigma_5^2} + \frac{(\hat{x}_6 - y_6)^2}{\sigma_6^2} \right)$$

$$\text{Constraint : } \hat{x}_1 - \hat{x}_2 - \hat{x}_3 - \hat{x}_4 = 0$$

$$\hat{x}_2 - \hat{x}_3 - \hat{x}_5 = 0$$

\hat{x}_i ; Reconciled Value of i Stream
 y_i ; Measurement Value of i Stream
 σ_i ; Tolerance of i Stream

<Figure 6> Least Square Method

It is an algorithm that uses the least square method to achieve the target number of seats. Shift value is reconciled data in real time.

Appendix E: 37 groups created by dividing the total number of districts by 7

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
100	217	199	161	14	130	180	197	119	17	9	211	122	166	239	107
99	202	214	205	210	219	215	120	152	13	140	89	85	106	225	178
218	208	94	135	177	156	12	185	30	27	131	141	196	34	209	19
99	96	208	220	172	10	149	88	90	104	28	115	165	86	195	118
99	168	207	92	219	116	139	21	148	87	29	170	24	253	191	125
99	204	216	18	192	11	97	126	252	171	109	15	5	114	212	2
221	194	20	203	158	121	89	155	105	133	32	129	128	250	248	127

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
162	231	177	184	39	236	52	112	102	57	78	238	67	47	82	157
49	71	239	199	16	229	201	45	61	142	237	53	123	76	180	137
8	75	183	251	5	234	187	134	190	7	241	181	156	246	84	245
91	111	35	196	153	69	194	64	56	144	110	248	175	227	147	38
145	138	81	164	160	55	163	66	101	230	189	198	167	70	113	48
34	176	6	25	146	50	43	80	3	72	51	60	26	44	4	244
224	200	33	22	31	188	124	193	37	226	109	173	136	65	46	23

33	34	35	36	37
77	240	151	59	235
68	179	199	247	
48	174	232	54	
182	42	79	222	
228	62	143	73	
243	41	198	74	
242	58	233	63	

Appendix F: Result range table

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Districts No. sum	924	1,247	1,128	845	1,292	826	711	652	855	521	939	700	862	666	711	990
Divided1	10.000	12.000	11.000	8.000	12.000	7.000	7.000	6.000	9.000	6.000	10.000	7.000	9.000	6.000	7.000	9.000
Divided2	9.000	11.000	10.000	7.000	11.000	6.000	6.000	5.000	8.000	5.000	9.000	6.000	8.000	5.000	6.000	8.000
Range from	92	104	103	106	108	118	102	109	95	87	94	100	96	111	102	110
~ end	103	113	113	121	117	138	119	130	107	104	104	117	108	133	119	124
Group	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Districts No. sum	1,230	662	955	768	1,003	1,090	757	1,130	567	598	1,128	721	966	1,025	998	666
Divided1	13.000	6.000	9.000	8.000	10.000	10.000	7.000	10.000	6.000	6.000	12.000	7.000	10.000	10.000	9.000	6.000
Divided2	12.000	5.000	8.000	7.000	9.000	9.000	6.000	9.000	4.000	5.000	11.000	6.000	9.000	9.000	8.000	5.000
Range from	95	110	106	96	100	109	108	113	95	100	94	103	97	103	111	111
~ end	103	132	119	110	111	121	126	126	142	120	103	120	107	114	125	133

**ELECTION
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VERY STRANGE STATISTICS:
APRIL 15TH PRE-VOTE RESULTS
THAT ARE STATISTICALLY
DIFFICULT TO UNDERSTAND

Park Sung Hyun

Synopsis for “Very Strange Statistics: April 15th Pre-Vote Results that are Statistically Difficult to Understand”

This paper written by Park Sung Hyun, Honorary Statistics Professor, Seoul National University, and Dean of the Korean Academy of Science and Technology, discusses various voting irregularities and evidence of statistical anomalies in the April 15, 2020 election. Professor Park particularly examines voter demographics and voter constituencies while comparing pre-voting (early voting) and on-site (election day) voting. According to the South Korean National Election Commission (NEC), over 11.74 million of the total 43.90 million South Korean voters participated in early voting in the past general election on April 15th, an extremely high rate of 26.7%. When observing the voting rates between the incumbent Democratic Party of Korea and the main opposition United Future Party, there is a big – and strangely consistent – difference in early-voting and on-site voting results in all 253 constituencies in South Korea. In all constituencies, the Democratic Party received an average of 10.7% less votes during on-site voting than during pre- or early-voting. The UFP received an average of 11.1% more votes during on-site voting than during pre- or early-voting.

It is possible to think that many more young people (who generally tend towards the Democratic Party) participated in the pre-voting and thus skewed the results heavily in the Democratic Party’s favor. However, official figures for the ratio of voters by age indicates that the elderly population (over 50) also voted in high numbers during pre- or early-voting. This elderly cohort tends to support the United Front Party.

Also, in the case of South Korea’s capital, Seoul, all forty-nine constituencies each have their own candidates that they prefer to support – from both parties. So, it is common for the candidate support rates to differ considerably from constituency to constituency. However, the fact that the percentages of pre-votes and on-site (election day) votes are nearly the same in all constituencies is a phenomenon so strange, according to Professor Park, that it is statistically difficult to comprehend. This paper reaches the conclusion that the hypothesis that Democratic supporters flocked to the pre-elections by the mass is not statistically proven to be true, and that the election outcome itself is hard to understand from a statistical analysis standpoint.

Very Strange Statistics: (April 15th Pre-Vote Results that are Statistically Difficult to Understand)

By: Park Sung Hyun

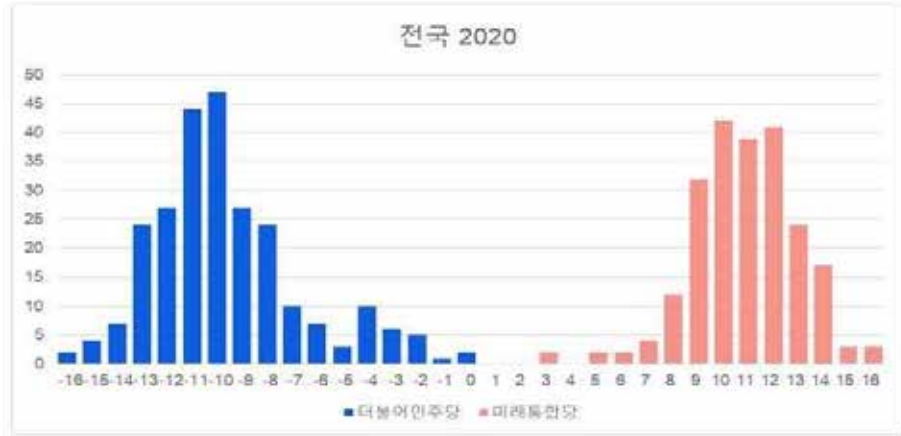
Honorary Statistics Professor, Seoul National University, Dean of Korean Academy of Science and Technology

1. A huge divergence between the results of early-voting and voting on election day.

According to the National Election Commission, over 11.74 million of the total 43.90 million voters pre-voted in the past general elections on April 15th, an extremely high pre-vote rate of 26.7%. Since the on-site voting rate was 39.5%, the voting rate of this election is very high at its 66.2%, making the ratio of the number of pre-votes and the number of on-site votes about 40:60. Looking at the voting rates of the Democratic Party of Korea (hereinafter the Democratic Party) and the United Future Party (hereinafter the UFP), there is a big difference between the results of early-voting and the on-site voting in all 253 constituencies. In the pre-vote, the Democratic Party gained 56.3% and the UFP 34.9%, the Democratic Party winning by a landslide. During the on-site voting, the Democratic Party gained 45.6% and the UFP 46.0%, the UFP winning by a thread. However, as the Democratic Party created a wide gap during the pre-voting, constituency elections ended with a record victory for the Democratic Party.

But what is statistically unusual is that in 253 national constituencies, the Democratic Party received an average of 10.7% less votes than the pre-votes during the on-site voting, and the UFP received an average of 11.1% more votes during the on-site voting than during the pre-voting. <Figure 1> shows the histograms of the difference in votes the two parties gained during the pre-voting and the on-site voting. The fact that the two-party histograms do not overlap at all is evidence that the same pattern occurs in all districts.

On the other hand, the 20th general elections in 2016 shows the histogram shown in <Figure 2>. Because there are overlapping histograms, the Democratic Party could have gotten a better turnout during the on-site vote than the pre-vote, and the UFP (Saenuri Party at the time) also could have gotten a better turnout on the pre-votes than the on-site votes according to the constituencies. It is fully possible because averages between the two parties are not too great, as the average of the Democratic Party's histogram is about -2%, and the average of the UFP about 3%.



2020 Nationwide

<Figure 1> Histogram of 21st General Elections in 2016 showing the difference of voting rates according to constituencies.

Vertical axis (x-axis): (rate of on-site voting - rate of pre-voting)
 Horizontal axis (y-axis): Frequency of constituencies within the section

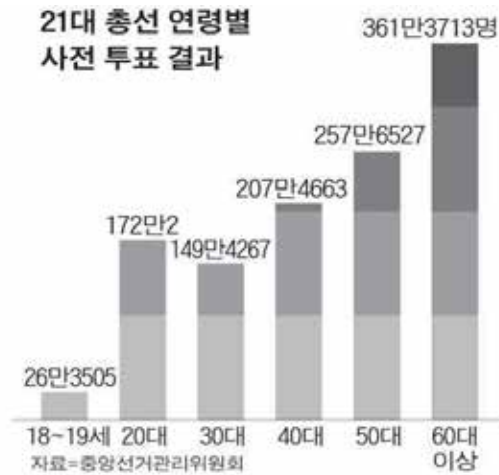


2016 Nationwide

<Figure 2> Histogram of the 2016 20th General Elections showing the difference in the percentage of votes by constituencies

So why did this happen in the 21st elections? In general, it is possible to think that many young people participated in the pre-voting and leaned towards the Democratic Party. However, the age distribution of the voters who participated in the pre-voting (April 10-11) is shown in <Figure 3>. Looking at the ratio of voters by age, those in their 60s and above accounted for highest percentage of 30.8%, followed by 21.9% in their 50s, and 52.7% in their 50s and above combined. In fact, seniors 50 years old or older participated in the pre-voting more than young people in their 20s and 30s. According to the polls, this does not explain why the Democratic Party's support is high in the pre-voting because the elderly has high support for the UFP. Statistically speaking, the entirety of nationwide voters is one population; even when this

population is considered to have voted in two randomly divided groups (pre-voter group and on-site voter group), it is difficult for these groups to have a great difference between them. The huge gap between pre-voting and on-site voting is statistically difficult to understand.



21st General Election Pre-vote Results by Age

263,505 / 1,720,000 / 1,494,267 / 2,070,046 / 2,570,065 / 3,610,037

<Figure 3> Number of voters by age in the 21st General Elections

2. Is the statistical hypothesis that Democratic supporters have flocked to early voting true?

In local pre-elections, the Democratic Party won by a landslide with 56.3% against the UFP's 34.9%, whereas on the day of the vote, the UFP won by narrow margin over the Democratic Party, 46.0% to 45.6%. In order to explain a phenomenon such as this, the hypothesis that Democratic supporters flocked to the pre-elections more than UFP supporters must be formed. Let us statistically verify this hypothesis. In <Figure 4>, the x-axis depicts the total percentage of Democratic votes (pre- and on-site votes) and in the 1,537 neighborhoods, towns, townships, and villages in Seoul, Gyeonggi, Incheon, Gangwon, Daejeon, and Busan (hereinafter referred to as neighborhoods), whereas the y-axis depicts the percentages of pre-votes (total number of pre-votes/total number of votes) by neighborhood. If the hypothesis that many Democratic supporters came out to vote for the pre-elections is true, then the higher the total percentage of Democratic votes in the x-axis, the higher the percentage of Democratic pre-votes should be. In other words, the graph should show a positive correlation as well as a positive slope (+). However, we can see that this is not the case in <Figure 4>. Conclusively speaking, the hypothesis that Democratic supporters flocked to the pre-elections by the mass is not statistically proven to be true.



<그림 4> 민주당 총득표율: 동네별 사전투표율 산점도
(자료: 와세다대학 정치경제학부 정훈교수 제공)

Title: Percentages of Total Democratic Votes and Total Democratic Pre-Election Votes By Neighborhood

(1,537 neighborhoods, towns, townships, villages in Seoul, Gyeonggi, Incheon, Daejeon, and Busan)

Y-Axis: Pre-Election Percentages by Neighborhood (Pre-Election Votes/Total Votes)

X-Axis: Percentages of Total Democratic Votes (Pre- and On-Site)

<Figure 4> Democratic Total Amount of Votes: Scatter Plot of Pre-Election Votes by Neighborhood

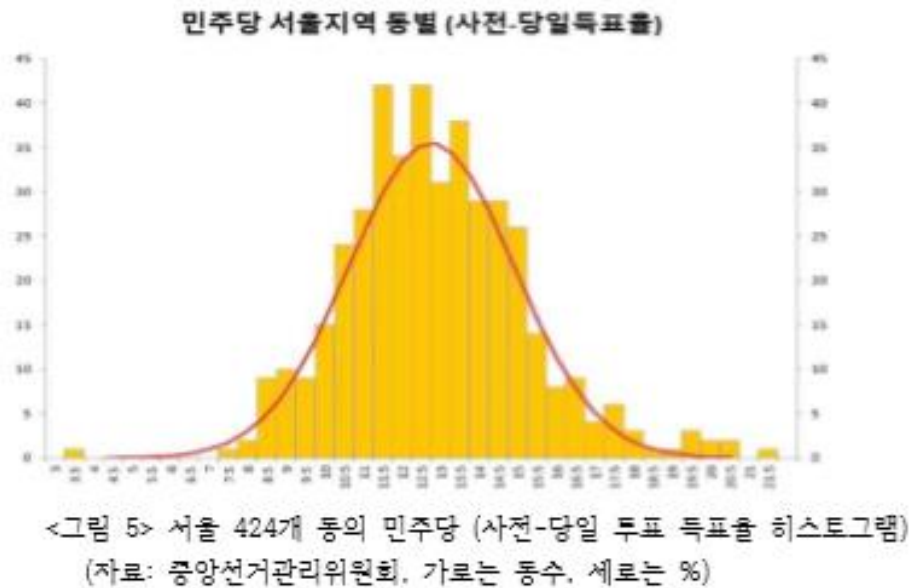
(Source: Provided by Professor Jung Hoon from Waseda University's Department of Economics and Political Science)

3. Highly similar patterns found in 49 constituencies and 424 neighborhoods of Seoul statistically difficult to understand.

As all 49 constituencies of Seoul each have their own candidates they prefer to support, it is common for the rates of candidate support to variously differ. However, the fact that the percentages of pre-votes and on-site votes are nearly the same in all constituencies is a phenomenon so strange that it is statistically hard to believe. The Democratic candidate received a greater percentage of votes in the pre-elections rather than on-site, and the UFP experienced the very opposite. But in the last 2016 general elections, the average difference between pre-election and on-site percentages was but approximately -3% for the Democratic Party and +3% for the then-Saenuri Party, therefore leading to an overall gap of roughly 6% between the two parties.

This is a gap that, statistically speaking, is fully possible. However, this 21st General Elections saw only large negative differences in the Democratic Party (10%~16%), recording an average of 12%. On the other hand, the UFP recorded only big positive differences that amounted to an average of about 12%. The resulting average differences of both parties then becomes the enormous value of 24%. What can especially be a statistically strange phenomenon is that the same pattern was found in all 49 constituencies.

Seoul is comprised of 424 total neighborhoods; the differences between the Democratic pre-votes and on-site votes were plotted as a histogram shown in <Figure 5>. The differences show an average of 12% and has a small standard deviation of 2.4%. It is a statistically odd phenomenon that Democratic pre-vote percentages are higher than on-site percentages in all 424 neighborhoods, coupled with an unusually small standard deviation. Even though each of the 424 neighborhoods should have their own characteristics, to have such a uniform result as this is difficult to understand statistically.



Title: Democratic Votes by Neighborhood in Seoul (Pre- and On-Site Vote Percentages)

<Figure 5> Democratic Votes of Seoul's 424 Neighborhoods (Pre- and on-site voting percentages histogram)

(Source: Central Election Management Committee, vertically the number of neighborhoods, horizontally the percentages)

**ELECTION
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ANOMALIES AND FRAUDS
IN THE KOREA 2020
PARLIAMENTARY ELECTION

Walter R. Mebane, Jr.

Synopsis for “Anomalies and Frauds in the Korea 2020 Parliamentary Election, SMD and PR Voting with Comparison to 2016 SMD”

The April 15th, 2020 general election in South Korea was not without controversy. In this paper, Dr. Mebane examines data from the election using eforensics, tests from the Election Forensics Toolkit (EFT), which is a website developed as part of a USAID-funded project, and the spikes test to determine whether fraudulent votes occurred that may have changed the election outcome. This paper also improves on a previous version with updated information provided by South Korean informants, such as the corrected dataset that includes 50 previously omitted independent candidates.

Dr. Mebane presents evidence and findings that when taken together, the eforensics estimates, EFT and spikes tests exhibit anomalies that strongly suggest the South Korean April 2020 general election SMD data were fraudulently manipulated. Estimates using 2016 SMD data show eforensics estimate frauds that resemble results seen in many other elections and are likely due to normal political considerations.

It is important to keep in mind that “frauds” according to the eforensics model may or may not be results of malfeasance and bad actions. How much of estimated “frauds” may be produced by normal political activity, and in particular by strategic behavior (such as one party successfully drawing its supporters out for early voting in usually large numbers), is an open question that is the focus of current research.

Statistical findings such as reported in Professor Mebane’s report are, of course, just one indicator of potential electoral irregularities. But they do suggest that further inquiry and investigation into the election and the electoral process is warranted in order to resolve the anomalies.

Anomalies and Frauds in the Korea 2020 Parliamentary Election*

Walter R. Mebane, Jr.[†]

May 13, 2020

*Thanks to Hun Chung for highlighting the concerns with the election (as did several others) and for pointing to the dataset originally used in the analysis. Thanks to Won-ho Park for identifying a problem in previous versions of the data in which many Independent candidates were omitted, and thanks to freedomfighter2022@protonmail.com for correcting this issue in the data.

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The 2020 parliamentary election in Korea is controversial, with fraud allegations. I examine data from the election using eforensics, tests from the Election Forensics Toolkit and the spikes test. This paper improves on a previous version (“Frauds in the Korea 2020 Parliamentary Election,” April 29, 2020) by using updated complete data and by adding Election Forensics Toolkit and spikes test results. This paper improves on a previous version (same title, May 9, 2020) by using a corrected dataset that includes 50 previously omitted independent candidates. The estimates and tests all exhibit anomalies that suggest the election data were fraudulently manipulated.

1 eforensics

The statistical model implemented in eforensics¹ offers evidence that fraudulent votes occurred in the election that may have changed some election outcomes. The statistical model operationalizes the idea that “frauds” occur when one party gains votes by a combination of manufacturing votes from abstentions and stealing votes from opposing parties. The Bayesian specification² allows posterior means and credible intervals for counts of “fraudulent” votes to be determined both for the entire election and for observed individual aggregation units.

It is important to keep in mind that “frauds” according to the eforensics model may or may not be results of malfeasance and bad actions. How much estimated “frauds” may be produced by normal political activity, and in particular by strategic behavior, is an open question that is the focus of current research. Statistical findings such as are reported here should be followed up with additional information and further investigation into what happened. The statistical findings alone cannot stand as definitive evidence about what happened in an election.

Figure 1 shows the distribution of turnout and vote proportions across aggregation

¹ https://github.com/UMeforensics/eforensics_public

² Ferrari, McAlister and Mebane (2018) and <http://www.umich.edu/~wmebane/efslides.pdf>

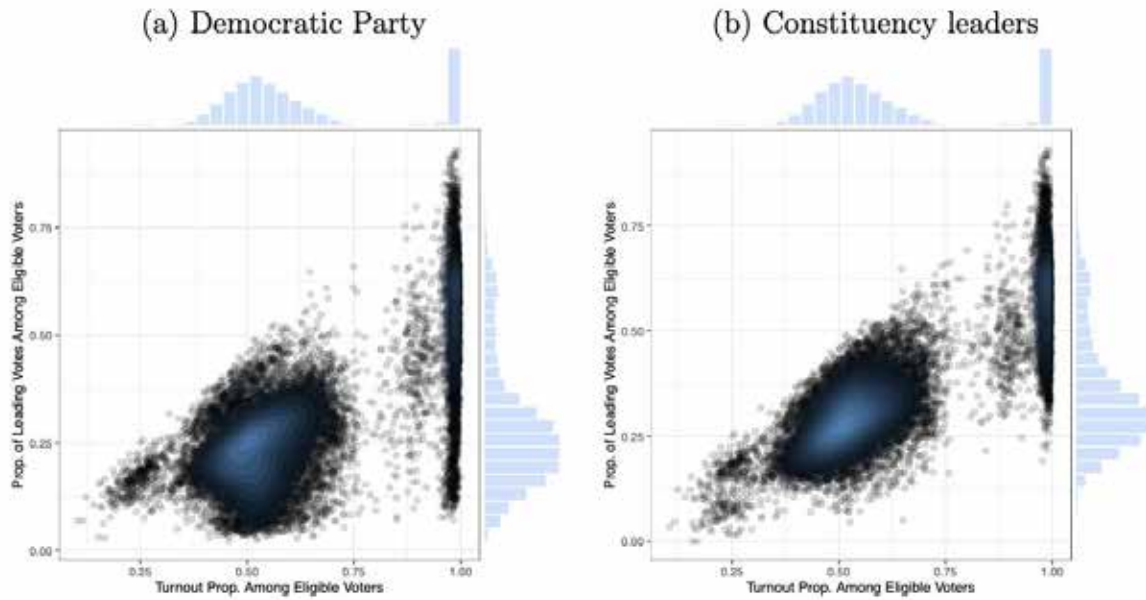
units.³ Each turnout proportion is (Number Valid)/(Number Eligible), and each vote proportion is (Number Voting for Party)/(Number Eligible).⁴ The data include counts for $n = 19131$ units. 329 “abroad office” observations have zero eligible voters but often a small number of votes—the largest number is 23—and are omitted from the plots. One “prevote in” unit with zero voters and zero votes is also omitted. Figure 1(a) uses vote proportions defined based on Democratic Party votes, and Figure 1(b) uses vote proportions defined based on the votes received by the party with the most votes in each constituency. Fraud allegations have focused on the Democratic Party, but a principled way to analyze the single-member district (SMD) election data is to consider that frauds potentially benefited the leading candidate in each constituency. In the figure differences between the two distributions are apparent, but both share a distinctive multimodal pattern. There appear to be clusters of observations that share distinctive levels of turnout and votes, some with low, medium, high and very high turnout. The diagonal edge feature in the plots results from using Number Eligible as the denominator for both proportions: when the party receives nearly all the valid votes, then the observation is near that diagonal.

Figures 2 and 3 show that the different clusters in Figure 1 correspond to observations that are administratively distinctive. Figure 2 displays data for Democratic Party votes, and Figure 3 shows data for constituency leader votes. The four sets of units that have distinctive distributions are district-level, election-day units that are not abroad (Figures

³Vote and eligible voter count data come from the file korea election regional 21 eng.sqlite at <https://github.com/freedomfighter2022/koreaelection2020>, downloaded May 11, 2020 19:48. “The source data (Excel files) of the 21st general election of Korea was pulled from <https://www.nec.go.kr/portal/bbs/view/B0000338/40935.do?menuNo=200185>” (freedomfighter2022@protonmail.com 2020a). I determined constituency information using the tables of “Electoral District and Eupmyeon- dong” at <http://info.nec.go.kr/main/showDocument.xhtml?electionId=0020200415&topMenuId=BI&secondMenuId=BIGI05> and the lists of winners at <http://info.nec.go.kr/main/showDocument.xhtml?electionId=0020200415&topMenuId=EP&secondMenuId=EPEI01>. Google Translate helped me by translating the Korean sources into English in my Chrome browser.

⁴“Number Valid” is the number voting for any candidate, and “Number Eligible” is sum people in korea election regional 21 eng.sqlite. Candidates are mapped from the candidate table of korea election regional 21 eng.sqlite to parties (there are 187 of them, including each independent candidate as a separate party), then votes for any of the parties are summed for each aggregation unit observation to produce “Number Valid” for that unit.

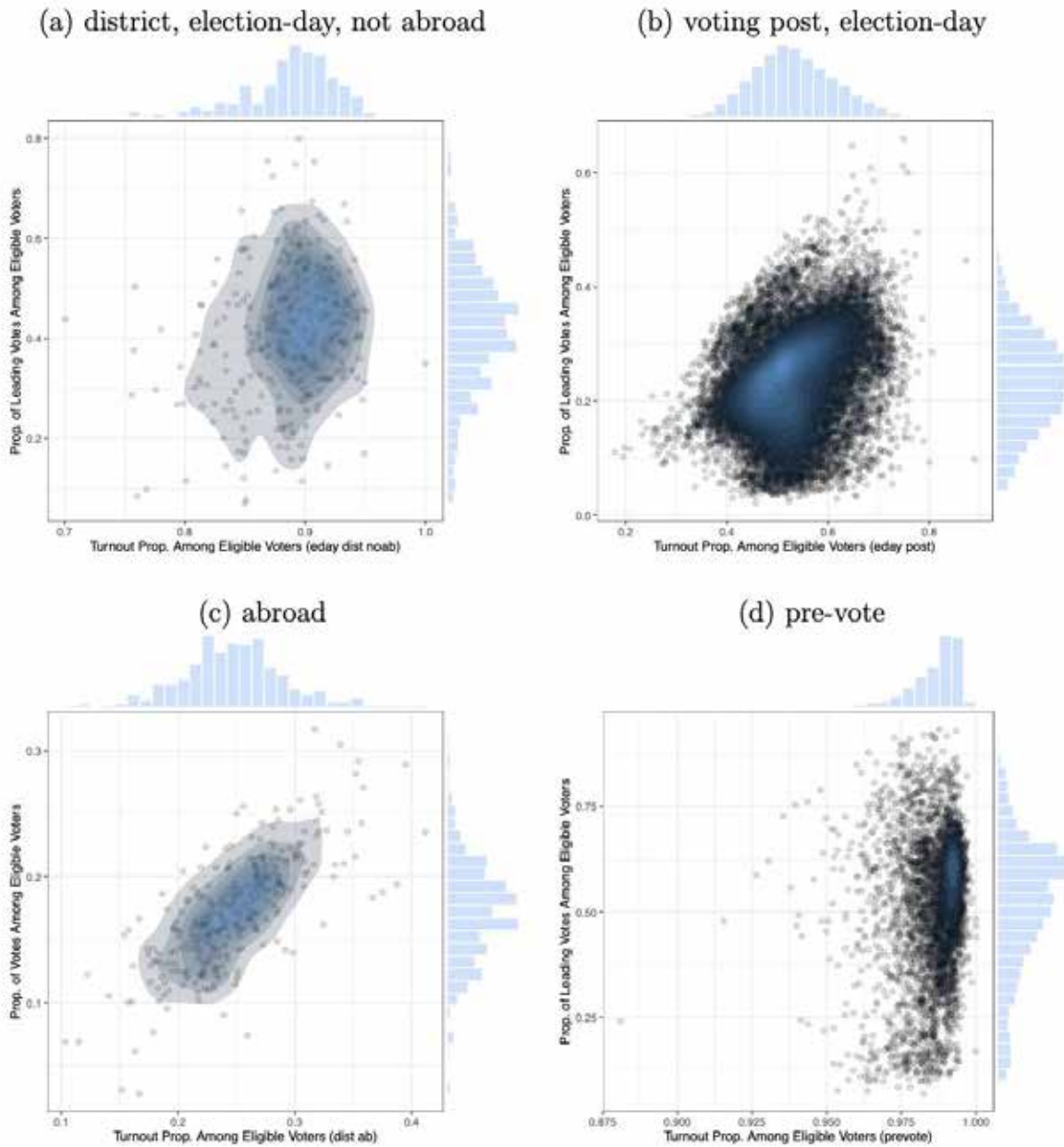
Figure 1: Korea 2020 Parliamentary Election Data Plots



Note: plots show turnout (number voting/number eligible) and vote proportions (number voting for party/number eligible) for (a) the Democratic Party or (b) the party the most votes in each constituency in aggregation units in the Korea 2020 parliamentary election. Plots show scatterplots with estimated bivariate densities overlaid, with histograms along the axes. 329 “abroad office” observations reported with zero eligible voters but often with a positive number of votes are omitted. One “prevote” unit with zero voters and zero votes is also omitted.

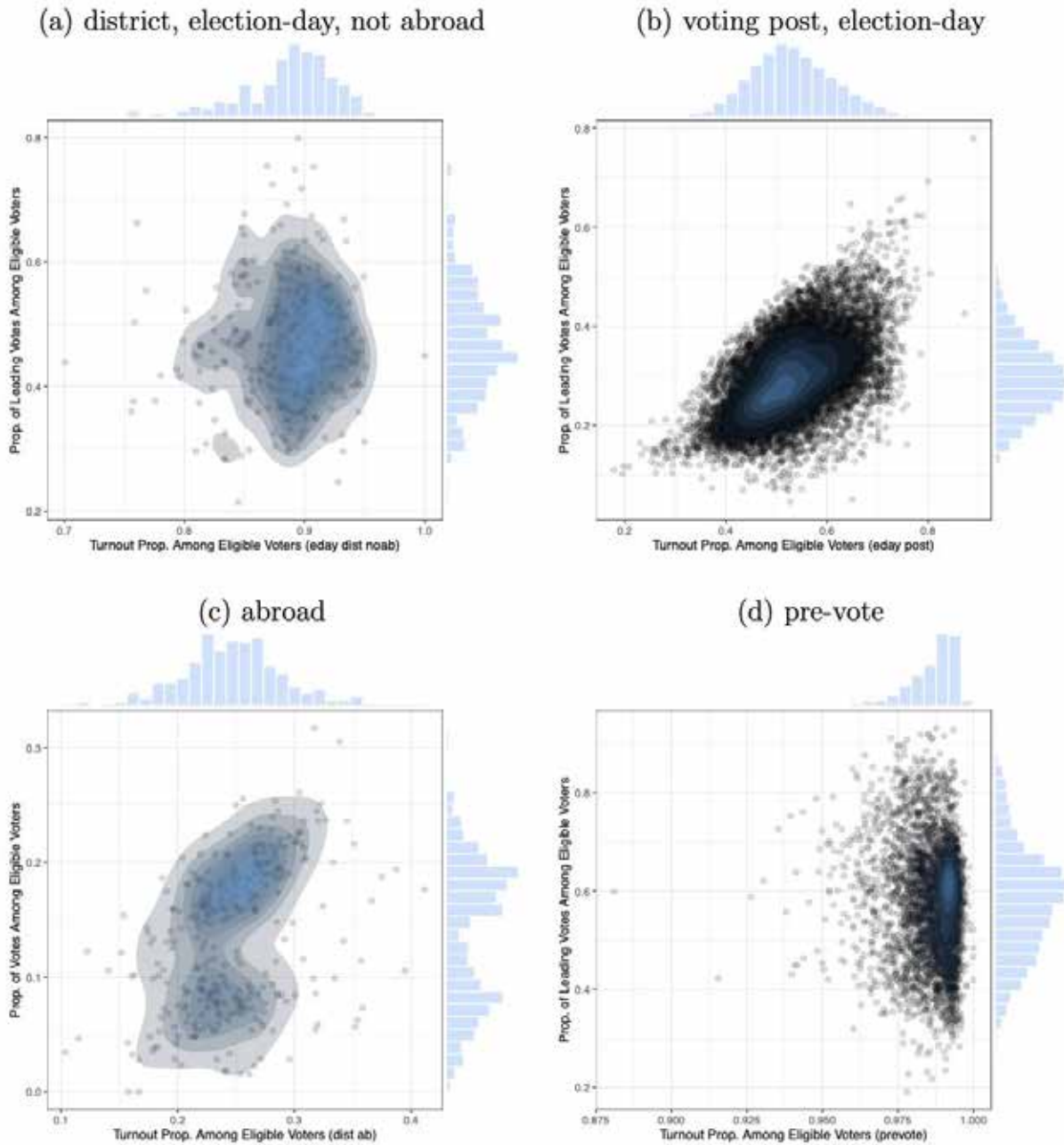
2(a) and 3(a)), voting post, election-day units (Figures 2(b) and 3(b)), abroad units (Figures 2(c) and 3(c)) and pre-vote units (Figures 2(d) and 3(d)). Each subset of units (a), (b) and (d) has a mostly unimodal distribution: the marginal histograms are mostly near symmetric. But exceptional points are evident in each of these subsets. The pre-vote vote distributions are noticeably skewed. Abroad units are more distinctively bimodal when constituency leaders are considered than when the Democratic Party is in focus.

Figure 2: Korea 2020 Parliamentary Election Data Plots, Democratic Party



Note: plots show turnout (number voting/number eligible) and vote proportions (number voting for Democratic party/number eligible) for four subsets of observations: (a) district-level, election-day, not abroad; (b) voting post election-day; (c) abroad; (d) pre-vote. Plots show scatterplots with estimated bivariate densities overlaid, with histograms along the axes. 329 “abroad office” observations reported with zero eligible voters but often with a positive number of votes are omitted. One “prevote” unit with zero voters and zero votes is also omitted.

Figure 3: Korea 2020 Parliamentary Election Data Plots, Constituency Leaders (a) district, election-day, not abroad (b) voting post, election-day



Note: plots show turnout (number voting/number eligible) and vote proportions (number voting for constituency-leading party/number eligible) for four subsets of observations: (a) district-level, election-day, not abroad; (b) voting post election-day; (c) abroad; (d) pre-vote. Plots show scatterplots with estimated bivariate densities overlaid, with histograms along the axes. 329 “abroad office” observations reported with zero eligible voters but often with a positive number of votes are omitted. One “prevote” unit with zero voters and zero votes is also omitted.

I estimate the eforensics model separately for the two definitions of leading party votes.⁵ Covariates for turnout and vote choice include indicators for pre-vote, voting post, abroad and disabled-ship status and fixed effects for the 253 constituencies included in the data. The two specifications agree that 446 aggregation units are fraudulent, but 761 additional units are fraudulent in the Democratic party specification and 807 additional units are fraudulent in the constituency-leading party specification. As Table 1 shows, some parameter estimates differ between the models. Parameters for the probabilities of incremental and extreme frauds (π_2, π_3) are about the same in the two specifications. The coefficients for expected pre-vote turnout ($\gamma_0 + \gamma_1$) are similar between specifications,⁶ and other coefficients in the turnout equation ($\gamma_2 - \gamma_4$) are similar. Coefficients for vote choice ($\beta_0 - \beta_4$) differ, reflecting the differences in vote proportions being modeled.⁷

Figure 4 uses plots by subset of Democratic party focused observations to illustrate which observations are fraudulent according to the eforensics model with the Democratic party focused specification. Nonfraudulent observations are plotted in blue and fraudulent observations appear in red. The frequencies of fraudulent and not fraudulent units appear in the note at the bottom of the figure. Visually and by the numbers, frauds occur most frequently for pre-vote units (28.7% are fraudulent), next most frequently for district-level, election-day, not abroad units (2.43% are fraudulent) then next most frequently for voting post election day units (.67% are fraudulent) then abroad units (.61% are fraudulent).

⁵Parameter estimates reported in Table 1 and in the Appendix are based on four parallel MCMC chains. Due to RAM limitations, observation frauds computations use only the first chain. Parameter estimates do not vary that much over chains.

⁶Notice that the relatively large coefficients for pre-vote in the turnout equations match the high turnout that is observed due to the definition of pre-vote “eligible voters” as those who cast ballots using the pre-vote method. For instance, in the constituency leader specification, expected turnout for pre-vote in constituency Busan 1, which is the reference constituency for the constituency fixed effects, is $1/(1 + \exp(-.757 + 1.11)) = .866$. In contrast expected turnout in non-prevote voting post units in the same constituency is $1/(1 + \exp(-.757 - .0403)) = .672$. “Manufactured” fraudulent votes would add apparent turnout to such baselines.

⁷Constituency fixed effects for the Democratic-Party-focused specification, reported in the Appendix, exemplify how these fixed effects reflect local political variations. The fixed effects in the vote equation for Democratic Party strongholds Jeollabuk and Jeollanam-do (freedomfighter2022@protonmail.com 2020b) are almost all positive (beta.nu[181]–beta.nu[200]), while the fixed effects for Future Integration Party strongholds Gyeongsangbuk-do and Gyeongsangnam-do (freedomfighter2022@protonmail.com 2020b) (beta.nu[136]–beta.nu[164]) are almost all negative.

Figure 5 uses plots by subset of constituency-leader focused observations to illustrate which observations are fraudulent according to the eforensics model with the constituency-leader focused specification. Nonfraudulent observations are plotted in blue and fraudulent observations appear in red. The frequencies of fraudulent and not fraudulent units appear in the note at the bottom of the figure. Visually and by the numbers, frauds occur most frequently for pre-vote units (25.0% are fraudulent), next most frequently for voting post election day units (2.04% are fraudulent) then next most frequently for district-level, election-day, not abroad units (1.52% are fraudulent). None of the abroad units are fraudulent.

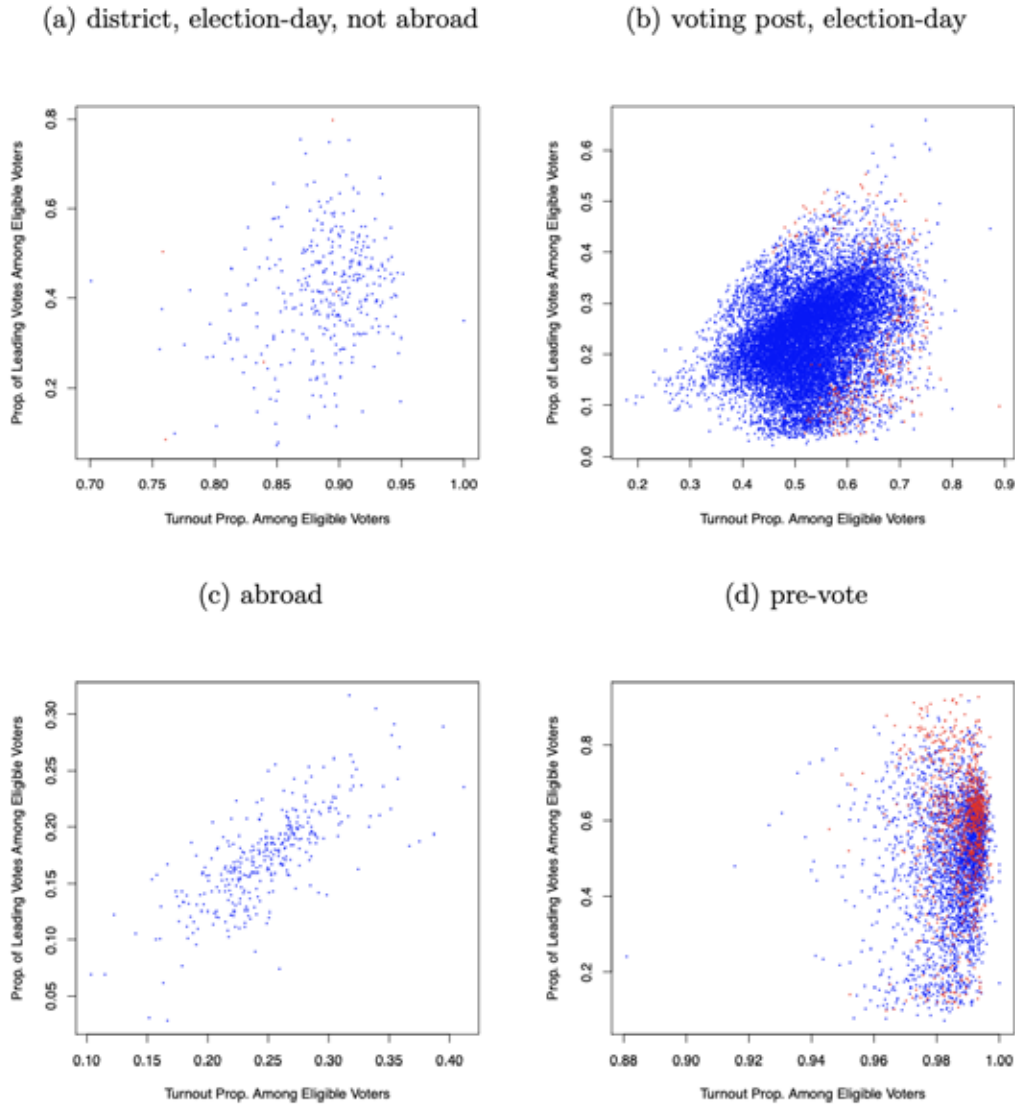
Table 1: Korea 2020 Parliamentary eforensics Estimates

(a) Democratic Party specification				
Parm.	Covariate	Mean	HPD.lo ^a	HPD.up ^b
π_1	No Fraud	.933	.929	.937
π_2	Incremental Fraud	.0615	.0574	.0654
π_3	Extreme Fraud	.00512	.00399	.00621
γ_0	(Intercept)	.766	.723	.813
γ_1	pre-vote	1.10	1.00	1.24
γ_2	voting post	-.0398	-.0708	-.0155
γ_3	abroad	-.0869	-.125	-.0528
γ_4	disabled-ship	.0366	.00614	.0818
β_0	(Intercept)	-.139	-.160	-.0941
β_1	pre-vote	.0399	.0222	.0606
β_2	voting post	-.117	-.157	-.0930
β_3	abroad	.195	.135	.241
β_4	disabled-ship	-.00406	-.0484	.0247
(b) constituency leader specification				
Parm.	Covariate	Mean	HPD.lo ^a	HPD.up ^b
π_1	No Fraud	.927	.919	.933
π_2	Incremental Fraud	.0651	.0588	.0725
π_3	Extreme Fraud	.00783	.00650	.00905
γ_0	(Intercept)	.757	.687	.827
γ_1	pre-vote	1.11	.963	1.24
γ_2	voting post	-.0403	-.0826	.0275
γ_3	abroad	-.0711	-.111	-.00294
γ_4	disabled-ship	.0382	.000400	.0713
β_0	(Intercept)	.168	.133	.216
β_1	pre-vote	-.0857	-.110	-.0656
β_2	voting post	.0724	.0352	.102
β_3	abroad	.0435	-.00614	.0734
β_4	disabled-ship	-.0315	-.0631	-.0155

Note: selected eforensics model parameter estimates (posterior means and highest posterior density credible intervals). All coefficients including constituency fixed effects are reported in the Appendix. For parameter notation see <http://www.umich.edu/~wmebane/efslides.pdf>. n = 18801.

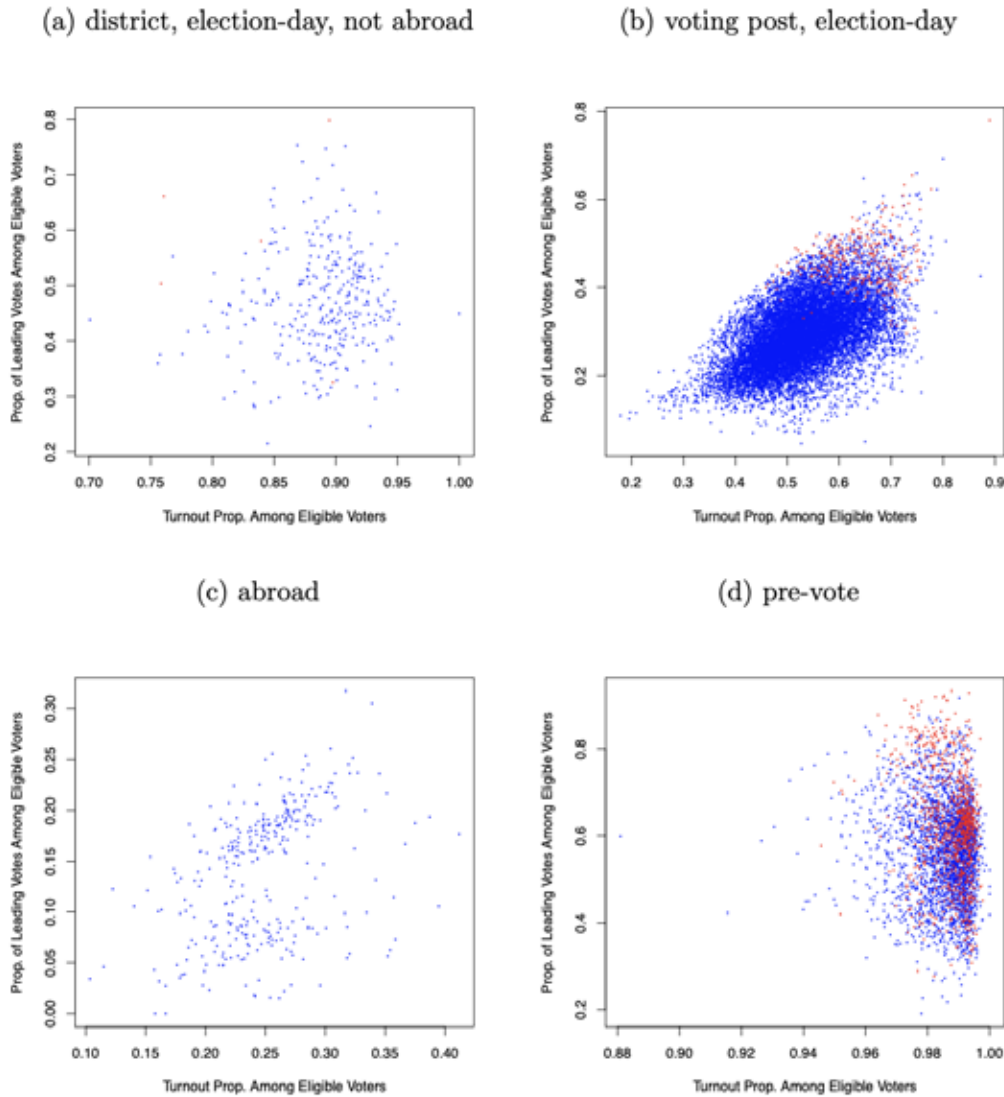
^a 95% highest posterior density credible interval lower bound. ^b 95% highest posterior density credible interval upper bound.

Figure 4: Korea 2020 Fraud Plots , Democratic Party



Note: plots show turnout (number voting/number eligible) and vote proportions (number voting for Democratic Party/number eligible) for four subsets of observations: (a) district-level, election-day, not abroad (8 fraudulent, 321 not); (b) voting post election-day (101 fraudulent, 14877 not); (c) abroad (2 fraudulent, 327 not); (d) pre-vote (1096 fraudulent, 2717 not). Plots show scatterplots with nonfraudulent observations in blue and fraudulent observations in red. 329 “abroad office” observations reported with zero eligible voters but often with a positive number of votes are omitted. One “prevote” unit with zero voters and zero votes is also omitted.

Figure 5: Korea 2020 Fraud Plots , Constituency Leaders



Note: plots show turnout (number voting/number eligible) and vote proportions (number voting for constituency-leading party/number eligible) for four subsets of observations: (a) district-level, election-day, not abroad (5 fraudulent, 324 not); (b) voting post election-day (293 fraudulent, 14037 not); (c) abroad (0 fraudulent, 329 not); (d) pre-vote (955 fraudulent, 2858 not). Plots show scatterplots with nonfraudulent observations in blue and fraudulent observations in red. 329 “abroad office” observations reported with zero eligible voters but often with a positive number of votes are omitted. One “prevote” unit with zero voters and zero votes is also omitted.

I use a counterfactual method to calculate how many votes are fraudulent.⁸ Table 2 reports the observed counts of eligible voters, valid votes and votes for the (a) Democratic party and (b) constituency-leading party totaled over all units in the analysis, along with fraudulent vote count totals. The total of “manufactured” votes is reported separately from the total number of fraudulent votes: manufactured votes are votes that the model estimates should have been abstentions but instead were observed as votes for the (a) Democratic Party or (b) constituency-leading party. Both posterior means and 95% and 99.5% credible intervals are reported. The results show that for the Democratic-Party-focused specification over all about 1,418,079 votes are fraudulent, and of the fraudulent votes about 1,056,462 are manufactured (the remaining 361,617 are stolen—counted for the Democratic Party when they should have been counted for a different party). Overall, according to the eforensics model, about 9.9% of the votes for Democratic Party candidates are fraudulent. The results show that for the constituency-leading-focused specification over all about 1,234,217 votes are fraudulent, and of the fraudulent votes about 961,296 are manufactured (the remaining 272,921 are stolen—counted for the constituency-leading party when they should have been counted for a different party). Overall, according to the eforensics model, about 7.7% of the votes for constituency-leading candidates are fraudulent.

Fraudulent vote occurrence varies over constituencies. Counts of frauds by aggregation unit appear in a supplemental file⁹, but I use the unit-specific fraudulent vote counts from the constituency-leader focused specification to assess whether the number of fraudulent votes is ever large enough apparently to change the winner of a constituency contest. For 231 constituencies it is not, but for 22 constituencies the number of fraudulent votes is large enough apparently to change the winner of the constituency contest. In 15 instances the apparently fraudulently winning party is the “Democratic Party,” and in 7 instances it

⁸For a description of the method see “approach two” described at <http://www.umich.edu/~wmebane/efslides.pdf>.

⁹See the original R output files wrkef4 1 Korea2020dAC 1d.Rout and wrkef4 1 Korea2020daAC 1d.Rout in Korea2020ef2.zip for the numbers of fraudulent votes at each aggregation unit.

Table 2: Korea 2020 eforensics Estimated Fraudulent Vote Counts

(a) Democratic Party specification fraudulent counts

Observed Counts				
Voters	Valid	Votes		
43961157	28738468	14343693		
Manufactured	95% interval		99.5% interval	
	lo	up	lo	up
1056461.9	1026145.6	1095485.7	539139.1	1106749.6
Total	95% interval		99.5% interval	
	lo	up	lo	up
1418079.2	1384391.2	1454150.3	1070337.2	1467822.7

(b) constituency leader specification fraudulent counts

Observed Counts				
Voters	Valid	Votes		
43961157	28738468	16125511		
Manufactured	95% interval		99.5% interval	
	lo	up	lo	up
961296.2	925904.3	996418.2	497655.7	1009922.4
Total	95% interval		99.5% interval	
	lo	up	lo	up
1234217.0	1188138.2	1268770.5	929474.9	1278893.6

Note: observed counts and total fraud posterior means and credible intervals based on

eforensics model estimates. $n = 18801$. is the “Future Integration Party.”¹⁰

¹⁰The particular constituencies that have these conditions can be identified by matching constituencies sequentially in “list of winners” tables available from <http://info.nec.go.kr/main/showDocument.xhtml?electionId=0020200415&topMenuId=EP&secondMenuId=EPEI01> (as of May 9, 2020 17:12 EST). Province constituency-sequence-number (party posterior mean fraudulent): Busan 7 (DP 2466.0899 fraudulent), Busan 12 (DP 1779.2709 fraudulent), Busan 15 (FIP 4884.7443 fraudulent), Chung-cheong bukdo 8 (DP 5645.5870 fraudulent), Chung-cheong bukdo 2 (DP 4749.2379 fraudulent), Chungcheongnam-do 5 (FIP 3319.3754 fraudulent), Chungcheongnam-do 1 (DP 1568.9601 fraudulent), Gyeonggi-do 36 (DP 4885.5827 fraudulent), Gyeonggi-do 8 (FIP 4660.3408 fraudulent), Gyeonggi-do 9 (DP 7990.4613 fraudulent), Gyeonggi-do 27 (DP 5717.1240 fraudulent), Gyeonggi-do 52 (DP 7072.9549 fraudulent), Gyeongsangnam-do 15 (DP 2251.0704 fraudulent), Gyeongsangnam-do 5 (FIP 2961.5911 fraudulent), Incheon Metropolitan City 5 (DP 8599.4068 fraudulent), Seoul 48 (DP 8687.1952 fraudulent), Seoul 6 (DP 4397.1784 fraudulent), Seoul 45 (FIP 5855.9778 fraudulent), Seoul 46 (FIP 9355.8661 fraudulent), Seoul 35 (DP 6209.7094 fraudulent), Seoul 4 (FIP 2849.0302 fraudulent), Ulsan Metropolitan City 5 (DP 7624.0325 fraudulent). In the “list of winners” tables, as translated by Google Translate, the constituency winner is designated as associated with (“Party Name”) “Democratic Party” (DP) or “Future Integration Party” (FIP).

Given two specifications, which one is better? Probably neither model is correct, strictly speaking, even beyond the generality that no model is ever correct, but some are useful. If frauds only ever benefit the Democratic Party, then those frauds may have induced apparent frauds when we constrain frauds to benefit only constituency-leading candidates, because many of these do not affiliate with the Democratic Party. Similarly if only constituency-leading candidates benefit from frauds, then eforensics may be producing misleading results when we constrain frauds to benefit only the Democratic Party. Or perhaps other candidates—or several in each constituency—benefit from frauds and both specifications are producing misleading results. Possibly, of course, there are no frauds and something else is going on.

Caveats are many. The most basic caution is to keep in mind that “frauds” according to the eforensics model may or may not be results of malfeasance and bad actions. If some normal political situation makes the apparently fraudulent aggregation units appear fraudulent to the eforensics model and estimation procedure, then the frauds estimates may be signaling that “frauds” occur where in fact something else is happening. In particular there maybe something benign that leads many of the pre-vote units to have a turnout and vote choice distribution that differs so much especially from the distribution for election-day voting post units, the latter comprising the bulk of the data. Likewise something benign may distinguish the election-day voting post units that the eforensics model identifies as fraudulent. Beyond that general caution, there may something about the particular data used for the analysis that triggers the “fraud” findings. And there may be something about the model specification that should be improved that would produce different results.

2 Election Forensics Toolkit and Spikes

I use the Election Forensics Toolkit (EFT, a website developed as part of a USAID-funded project) (Hicken and Mebane 2015; Mebane 2015) to look at features of the data. The EFT results add to the impression that the election results are manipulated.

Results for five tests (see Hicken and Mebane 2015 for explanations of the tests) computed using the entire set of aggregation units all together appear in Table 3. The DipT statistics for Turnout shows there is significant multimodality, a result that matches what can be seen visually in Figure 1. The P05s statistic for Turnout is significantly below the expected value of .2: this does not match the excessively high value of P05s that occurs in the case of signalling in Russia (Kalinin and Mebane 2011; Kalinin 2017), but it is difficult to think of natural processes that would produce frequencies of percentages that end in 0 or 5 that are too low. The 2BL statistics differ significantly from the expected value of 4.187, but the values that occur for the candidates’ votes match what we observe given strategic turnout and voting with multiparty competition (Mebane 2013a), so these 2BL statistics do not support a diagnosis that there are frauds.

Table 3: Distribution and Digit Tests, Korea 2020

Name	2BL	LastC	P05s	C05s	DipT	Obs
Turnout	4.113	4.496	.173	.204	0	18801
	(4.074, 4.151)	(4.453, 4.536)	(.167, .178)	(.199, .210)	--	
Democratic Party	4.129	4.473	.199	.200	.994	18801
	(4.085, 4.172)	(4.432, 4.473)	(.193, .205)	(.194, .205)	--	
Constituency Leader	4.101	4.513	.199	.202	.997	18801
	(4.056, 4.142)	(4.471, 4.553)	(.193, .204)	(.196, .208)	--	

Note: statistics and tests based on aggregation unit observations. “2BL,” second-digit mean; “LastC,” last-digit mean; “P05s,” mean of variable indicating whether the last digit of the rounded percentage of votes for the referent party or candidate is zero or five; “C05s,” mean of variable indicating whether the last digit of the vote count is zero or five; “DipT,” p-value from test of unimodality; “Obs,” number of aggregation unit observations. Values in parentheses are 95% nonparametric bootstrap confidence intervals. Point estimates in red differ significantly from the values expected if there are no anomalies.

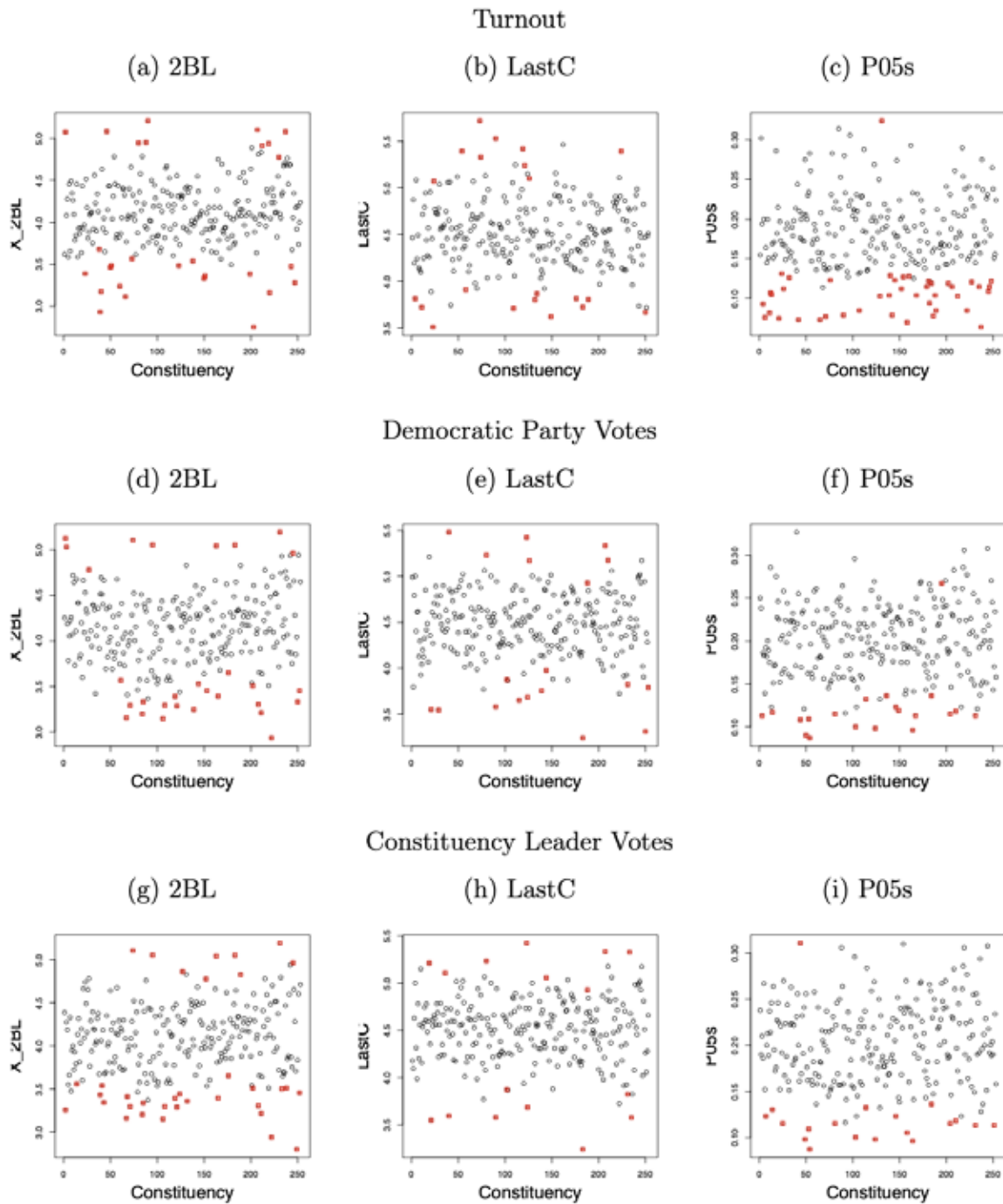
Given the SMD election rules, an approach that potentially produces sharper insights regarding the constituency contests is to compute the EFT statistics separately for each constituency. The counterbalancing concern is statistical power: overall there are $n = 18801$ aggregation unit observations, but the median size of constituencies is 66 aggregation units with sizes ranging from a minimum of 38 units to a maximum of 183 units. In most cases with such sample sizes bootstrap confidence intervals for the EFT statistics (Hicken and Mebane 2015; Mebane 2015) are too wide to support finding significant differences from the values of the statistics that are expected if there are no anomalies.

Nonetheless Figure 6 shows that many constituencies have significantly anomalous values for the 2BL, LastC and P05s statistics.¹¹ The plots of the 2BL statistic show several values that are either too big or too small to explain as results of electors’ strategic behavior (Mebane 2013a). The LastC statistics, motivated by Beber and Scacco (2012), show many too-large or too-small values.¹² The P05s statistics show a few constituencies with excessively high values, in line with the usual understanding of how the percentages are often used to signal, but many more have significantly small values. Moreover both Turnout and the votes for the candidates exhibit many significantly anomalous P05s statistics. The many significant P05s statistics suggest the data are artificial (cf. Mebane 2013b).

¹¹The C05s statistics, not shown, exhibit similar frequencies of significant anomalies. The significance test results used to color points in Figure 6 are obtained by checking whether the nonanomalous expected values are contained in 95% confidence intervals obtained using bootstrap methods. The EFT software is not designed to support finding exact p-values that might be used to implement adjustments for multiple testing.

¹²A qualification to note is that LastC does not exclude aggregation units that have counts less than 100. Beber and Scacco (2012) advocate excluding such counts. In the Democratic-Party-focused data, 1463 units have fewer than 100 votes for the Democratic Party candidate, with a median of one such unit per constituency (max 83). For the constituency-leader-focused data, 601 units have fewer than 100 votes for the constituency leading candidate, with a median of one such unit per constituency (max 22).

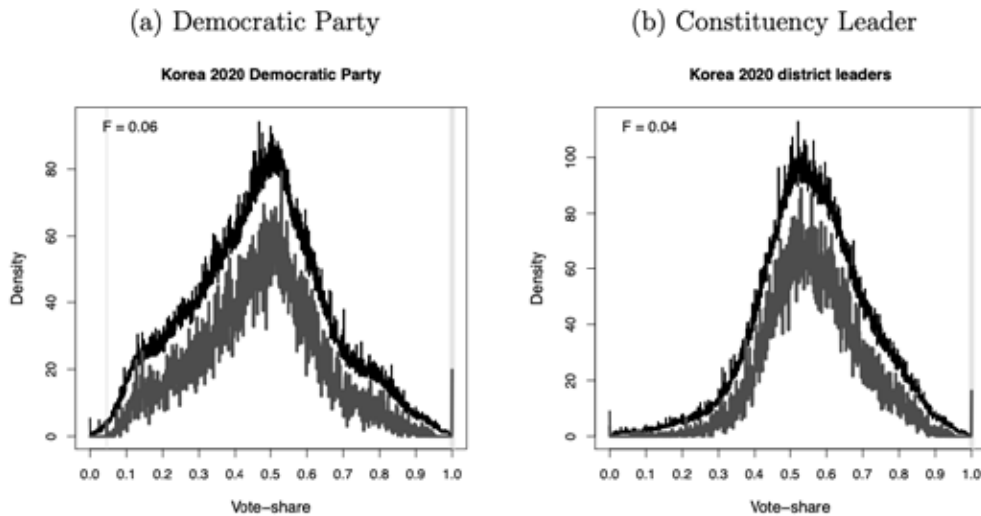
Figure 6: Korea 2020 Election Forensics Toolkit by Constituency Plots Turnout



Note: statistics and tests based on aggregation unit observations, analyzed by constituency. Constituencies are matched to numbers in the Appendix. “2BL,” second-digit mean; “LastC,” last-digit mean; “P05s,” mean of variable indicating whether the last digit of the rounded percentage of votes for the referent party or candidate is zero or five. Red points differ significantly at level $\alpha = .05$ from the values expected if there are no anomalies.

The spikes model tests for deviations in the proportions of votes for candidates in a more general way than does the P05s test, relative to a flexible and empirically grounded null distribution (Rozenas 2017). Figure 7 shows graphics that identify the ranges of polling stations the model estimates are fraudulent. Vertical gray bars in the graph indicate which aggregation units have suspicious votes: the aggregation units with vote proportions for (a) the Democratic Party or (b) the constituency leader that match the highlighted vote shares are suspicious. The results reinforce the findings for P05s in Table 3 and Figure 6 in that Figure 7(a) shows an excess of proportions near .05. The spikes at 1.0 in Figure 7 matches the significantly high values of P05s in Figure 6(f) and 6(i). The spikes test in this case appears to be more sensitive, in that the P05s test is restricted to reporting only a single average value while the spikes test assesses an entire distribution with reference to an empirically grounded null distribution.

Figure 7: Korea 2020 Spikes Tests Plots



Note: vote shares are the proportion of valid votes for all (a) Democratic Party or (b) constituency leading candidates in each aggregation unit. $n = 18801$.

3 Conclusion

Taken together the eforensics estimates and EFT and spikes tests exhibit anomalies that strongly suggest the Korea 2020 legislative election data were fraudulently manipulated. “Such conclusions are always subject to the caveat that apparent frauds may really be consequences of strategic behavior, but that ambiguity can sometimes be mitigated by exploiting a multiplicity of statistics.... An election fraud will not necessarily trigger all of the statistics and tests, but we think a genuine fraud will in general set off many of them” (Hicken and Mebane 2015, 39).

Statistical findings such as are reported here should be followed up with additional information and further investigation into what happened. Most important, and in principle perhaps simplest to do, is to validate the paper ballots, and once they have been validated to count the paper ballots manually. The statistical findings alone cannot stand as definitive evidence about what happened in the election.

4 Appendix

List of constituencies:¹³ 1, Busan 1; 2, Busan 10; 3, Busan 11; 4, Busan 12; 5, Busan 13; 6, Busan 14; 7, Busan 15; 8, Busan 16; 9, Busan 17; 10, Busan 18; 11, Busan 2; 12, Busan 3; 13, Busan 4; 14, Busan 5; 15, Busan 6; 16, Busan 7; 17, Busan 8; 18, Busan 9; 19, Chung-cheong bukdo 1; 20, Chung-cheong bukdo 2; 21, Chung-cheong bukdo 3; 22, Chung-cheong bukdo 4; 23, Chung-cheong bukdo 5; 24, Chung-cheong bukdo 6; 25, Chung-cheong bukdo 7; 26, Chung-cheong bukdo 8; 27, Chungcheongnam-do 1; 28, Chungcheongnam-do 10; 29, Chungcheongnam-do 11; 30, Chungcheongnam-do 2; 31, Chungcheongnam-do 3; 32, Chungcheongnam-do 4; 33, Chungcheongnam-do 5; 34, Chungcheongnam-do 6; 35, Chungcheongnam-do 7; 36, Chungcheongnam-do 8; 37, Chungcheongnam-do 9; 38, Daegu Metropolitan City 1; 39, Daegu Metropolitan City 10; 40, Daegu Metropolitan City 11; 41, Daegu Metropolitan City 12; 42, Daegu Metropolitan City 2; 43, Daegu Metropolitan City 3; 44, Daegu Metropolitan City 4; 45, Daegu Metropolitan City 5; 46, Daegu Metropolitan City 6; 47, Daegu Metropolitan City 7; 48, Daegu Metropolitan City 8; 49, Daegu Metropolitan City 9; 50, Daejeon 1; 51, Daejeon 2; 52, Daejeon 3; 53, Daejeon 4; 54, Daejeon 5; 55, Daejeon 6; 56, Daejeon 7; 57, Gangwon-do 1; 58, Gangwon-do 2; 59, Gangwon-do 3; 60, Gangwon-do 4; 61, Gangwon-do 5; 62, Gangwon-do 6; 63, Gangwon-do 7; 64, Gangwon-do 8; 65, Gwangju 1; 66, Gwangju 2; 67, Gwangju 3; 68, Gwangju 4; 69, Gwangju 5; 70, Gwangju 6; 71, Gwangju 7; 72, Gwangju 8;

73, Gyeonggi-do 1; 74, Gyeonggi-do 10; 75, Gyeonggi-do 11; 76, Gyeonggi-do 12; 77, Gyeonggi-do 13; 78, Gyeonggi-do 14; 79, Gyeonggi-do 15; 80, Gyeonggi-do 16; 81, Gyeonggi-do 17; 82, Gyeonggi-do 18; 83, Gyeonggi-do 19; 84, Gyeonggi-do 2; 85, Gyeonggi-do 20; 86, Gyeonggi-do 21; 87, Gyeonggi-do 22; 88, Gyeonggi-do 23; 89, Gyeonggi-do 24; 90, Gyeonggi-do 25; 91, Gyeonggi-do 26; 92, Gyeonggi-do 27; 93, Gyeonggi-do 28; 94, Gyeonggi-do 29; 95, Gyeonggi-do 3; 96, Gyeonggi-do 30; 97,

¹³Constituencies can be identified fully by matching constituencies sequentially using “list of winners” tables available from <http://info.nec.go.kr/main/showDocument.xhtml?electionId=0020200415&topMenuId=EP&secondMenuId=EPEI01>.

Gyeonggi-do 31; 98, Gyeonggi-do 32; 99, Gyeonggi-do 33; 100, Gyeonggi-do 34; 101, Gyeonggi-do 35; 102, Gyeonggi-do 36; 103, Gyeonggi-do 37; 104, Gyeonggi-do 38; 105, Gyeonggi-do 39; 106, Gyeonggi-do 4; 107, Gyeonggi-do 40; 108, Gyeonggi-do 41; 109, Gyeonggi-do 42; 110, Gyeonggi-do 43; 111, Gyeonggi-do 44; 112, Gyeonggi-do 45; 113, Gyeonggi-do 46; 114, Gyeonggi-do 47; 115, Gyeonggi-do 48; 116, Gyeonggi-do 49; 117, Gyeonggi-do 5; 118, Gyeonggi-do 50; 119, Gyeonggi-do 51; 120, Gyeonggi-do 52; 121, Gyeonggi-do 53; 122, Gyeonggi-do 54; 123, Gyeonggi-do 55; 124, Gyeonggi-do 56; 125, Gyeonggi-do 57; 126, Gyeonggi-do 58; 127, Gyeonggi-do 59; 128, Gyeonggi-do 6; 129, Gyeonggi-do 7; 130, Gyeonggi-do 8; 131, Gyeonggi-do 9; 132, Gyeongsangbuk-do 1; 133, Gyeongsangbuk-do 10; 134, Gyeongsangbuk-do 11; 135, Gyeongsangbuk-do 12; 136, Gyeongsangbuk-do 13; 137, Gyeongsangbuk-do 2; 138, Gyeongsangbuk-do 3; 139, Gyeongsangbuk-do 4; 140, Gyeongsangbuk-do 5; 141, Gyeongsangbuk-do 6; 142, Gyeongsangbuk-do 7; 143, Gyeongsangbuk-do 8; 144, Gyeongsangbuk-do 9; 145, Gyeongsangnam-do 1; 146, Gyeongsangnam-do 10; 147, Gyeongsangnam-do 11; 148, Gyeongsangnam-do 12; 149, Gyeongsangnam-do 13; 150, Gyeongsangnam-do 14; 151, Gyeongsangnam-do 15; 152, Gyeongsangnam-do 16; 153, Gyeongsangnam-do 2; 154, Gyeongsangnam-do 3; 155, Gyeongsangnam-do 4; 156, Gyeongsangnam-do 5; 157, Gyeongsangnam-do 6; 158, Gyeongsangnam-do 7; 159, Gyeongsangnam-do 8; 160, Gyeongsangnam-do 9; 161, Incheon Metropolitan City 1; 162, Incheon Metropolitan City 10; 163, Incheon Metropolitan City 11; 164, Incheon Metropolitan City 12; 165, Incheon Metropolitan City 13; 166, Incheon Metropolitan City 2; 167, Incheon Metropolitan City 3; 168, Incheon Metropolitan City 4; 169, Incheon Metropolitan City 5; 170, Incheon Metropolitan City 6; 171, Incheon Metropolitan City 7; 172, Incheon Metropolitan City 8; 173, Incheon Metropolitan City 9; 174, Jeju Special Self-Governing Province 1; 175, Jeju Special Self-Governing Province 2; 176, Jeju Special Self-Governing Province 3; 177, Jeollabuk do 1; 178, Jeollabuk do 10; 179, Jeollabuk do 2; 180, Jeollabuk do 3; 181, Jeollabuk do 4; 182, Jeollabuk do 5; 183, Jeollabuk do 6; 184, Jeollabuk do 7; 185,

Jeollabuk do 8; 186, Jeollabuk do 9; 187, Jeollanam-do 1; 188, Jeollanam-do 10; 189, Jeollanam-do 2; 190, Jeollanam-do 3; 191, Jeollanam-do 4; 192, Jeollanam-do 5; 193, Jeollanam-do 6; 194, Jeollanam-do 7; 195, Jeollanam-do 8; 196, Jeollanam-do 9; 197, Sejong Special Self-governing City 1; 198, Sejong Special Self-governing City 2; 199, Seoul 1; 200, Seoul 10; 201, Seoul 11; 202, Seoul 12; 203, Seoul 13; 204, Seoul 14; 205, Seoul 15; 206, Seoul 16; 207, Seoul 17; 208, Seoul 18; 209, Seoul 19; 210, Seoul 2; 211, Seoul 20; 212, Seoul 21; 213, Seoul 22; 214, Seoul 23; 215, Seoul 24; 216, Seoul 25; 217, Seoul 26; 218, Seoul 27; 219, Seoul 28; 220, Seoul 29; 221, Seoul 3; 222, Seoul 30; 223, Seoul 31; 224, Seoul 32; 225, Seoul 33; 226, Seoul 34; 227, Seoul 35; 228, Seoul 36; 229, Seoul 37; 230, Seoul 38; 231, Seoul 39; 232, Seoul 4; 233, Seoul 40; 234, Seoul 41; 235, Seoul 42; 236, Seoul 43; 237, Seoul 44; 238, Seoul 45; 239, Seoul 46; 240, Seoul 47; 241, Seoul 48; 242, Seoul 49; 243, Seoul 5; 244, Seoul 6; 245, Seoul 7; 246, Seoul 8; 247, Seoul 9; 248, Ulsan Metropolitan City 1; 249, Ulsan Metropolitan City 2; 250, Ulsan Metropolitan City 3; 251, Ulsan Metropolitan City 4; 252, Ulsan Metropolitan City 5; 253, Ulsan Metropolitan City 6.

eforensics Parameter Posterior Means and 95% HPD Intervals, Democratic Party Specification:

	Parameter	Covariate	Mean	HPD.lower	HPD.upper
1	pi [1]	No Fraud	9.334174e-01	9.28972e-01	0.937325000
2	pi [2]	Incremental Fraud	6.146220e-02	5.74330e-02	0.065445500
3	pi [3]	Extreme Fraud	5.120406e-03	3.99158e-03	0.006212070
4	beta.tau [1]	(Intercept)	7.657118e-01	7.23005e-01	0.813216000
5	beta.tau [2]	isprevoteTRUE	1.102963e+00	1.00074e+00	1.243470000
6	beta.tau [3]	typep	-3.984513e-02	-7.08209e-02	-0.015460700
7	beta.tau [4]	isabroadTRUE	-8.685810e-02	-1.24995e-01	-0.052778200
8	beta.tau [5]	isdisabTRUE	3.661882e-02	6.13867e-03	0.081809000
9	beta.tau [6]	constitBusan_10	-2.490826e-02	-1.10768e-01	0.047370000
10	beta.tau [7]	constitBusan_11	4.758777e-03	-1.96166e-02	0.039620300
11	beta.tau [8]	constitBusan_12	7.793986e-03	-2.99791e-02	0.054374400
12	beta.tau [9]	constitBusan_13	2.046349e-02	-2.47747e-02	0.068248700
13	beta.tau [10]	constitBusan_14	-8.984234e-03	-4.32889e-02	0.025318200
14	beta.tau [11]	constitBusan_15	-1.083961e-02	-7.11953e-02	0.023176500
15	beta.tau [12]	constitBusan_16	-8.934980e-03	-3.23189e-02	0.008175250
16	beta.tau [13]	constitBusan_17	-7.690011e-03	-4.63372e-02	0.032388400
17	beta.tau [14]	constitBusan_18	-1.616151e-02	-4.46721e-02	0.014440400
18	beta.tau [15]	constitBusan_2	1.459468e-02	-1.37764e-02	0.030927900
19	beta.tau [16]	constitBusan_3	-3.834894e-03	-5.63037e-02	0.039518500
20	beta.tau [17]	constitBusan_4	7.439973e-04	-5.21283e-02	0.025082600
21	beta.tau [18]	constitBusan_5	-8.020135e-04	-1.75037e-02	0.015561200
22	beta.tau [19]	constitBusan_6	-1.232057e-02	-4.66536e-02	0.032623200
23	beta.tau [20]	constitBusan_7	-8.384244e-03	-4.33880e-02	0.048554200
24	beta.tau [21]	constitBusan_8	4.370813e-03	-5.30703e-03	0.013064300
25	beta.tau [22]	constitBusan_9	1.206130e-02	-2.59489e-02	0.075402000
26	beta.tau [23]	constitChung-cheong bukdo_1	-2.290752e-03	-4.29807e-02	0.047947900

27	beta.tau[24]	constitChung-cheong bukdo_2	1.881560e-02	-4.06746e-02	0.079822600
28	beta.tau[25]	constitChung-cheong bukdo_3	2.473892e-02	-1.09711e-02	0.056640200
29	beta.tau[26]	constitChung-cheong bukdo_4	3.092233e-03	-1.36276e-02	0.019649700
30	beta.tau[27]	constitChung-cheong bukdo_5	-1.642587e-02	-3.59188e-02	0.018820000
31	beta.tau[28]	constitChung-cheong bukdo_6	7.046252e-04	-2.37114e-02	0.027874900
32	beta.tau[29]	constitChung-cheong bukdo_7	9.707407e-03	-8.29183e-03	0.036830100
33	beta.tau[30]	constitChung-cheong bukdo_8	9.567694e-03	-3.90821e-02	0.032447100
34	beta.tau[31]	constitChungcheongnam-do_1	-1.591910e-02	-4.25184e-02	0.009754640
35	beta.tau[32]	constitChungcheongnam-do_10	-1.392417e-03	-4.57796e-02	0.033715700
36	beta.tau[33]	constitChungcheongnam-do_11	-8.037374e-03	-4.79574e-02	0.028738800
37	beta.tau[34]	constitChungcheongnam-do_2	-1.488603e-02	-2.72973e-02	0.001446620
38	beta.tau[35]	constitChungcheongnam-do_3	-1.313697e-02	-3.07375e-02	0.004393400
39	beta.tau[36]	constitChungcheongnam-do_4	5.077459e-03	-2.44029e-02	0.052558500
40	beta.tau[37]	constitChungcheongnam-do_5	2.516465e-02	-1.96108e-02	0.072950700
41	beta.tau[38]	constitChungcheongnam-do_6	1.339019e-02	-2.25803e-02	0.052540800
42	beta.tau[39]	constitChungcheongnam-do_7	-9.369723e-03	-5.27990e-02	0.024857100
43	beta.tau[40]	constitChungcheongnam-do_8	1.840900e-02	-2.71193e-02	0.002187400
44	beta.tau[41]	constitChungcheongnam-do_9	3.266685e-02	-1.29361e-02	0.062314000
45	beta.tau[42]	constitDaegu Metropolitan City_1	2.130631e-02	-4.28509e-03	0.050792800
46	beta.tau[43]	constitDaegu Metropolitan City_10	-3.505113e-03	-2.24180e-02	0.018876800
47	beta.tau[44]	constitDaegu Metropolitan City_11	-3.109487e-03	-5.85382e-02	0.038349500
48	beta.tau[45]	constitDaegu Metropolitan City_12	3.674500e-03	-4.34302e-02	0.044733700
49	beta.tau[46]	constitDaegu Metropolitan City_2	2.258313e-02	-3.02282e-02	0.067008700
50	beta.tau[47]	constitDaegu Metropolitan City_3	-1.801539e-02	-5.21261e-02	0.035965900
51	beta.tau[48]	constitDaegu Metropolitan City_4	-4.557127e-03	-2.71066e-02	0.008658270
52	beta.tau[49]	constitDaegu Metropolitan City_5	3.293443e-02	8.26135e-03	0.063955900
53	beta.tau[50]	constitDaegu Metropolitan City_6	-3.848999e-03	-2.64156e-02	0.019143500
54	beta.tau[51]	constitDaegu Metropolitan City_7	1.568119e-02	-2.57898e-02	0.042287300
55	beta.tau[52]	constitDaegu Metropolitan City_8	-1.538827e-02	-6.26832e-02	0.021421000
56	beta.tau[53]	constitDaegu Metropolitan City_9	-7.826120e-04	-1.55626e-02	0.015214500
57	beta.tau[54]	constitDaejeon_1	-6.570512e-03	-1.92152e-02	0.006038450
58	beta.tau[55]	constitDaejeon_2	-1.923171e-02	-4.00517e-02	0.002197710
59	beta.tau[56]	constitDaejeon_3	-1.248399e-02	-3.17053e-02	0.005527960
60	beta.tau[57]	constitDaejeon_4	1.059562e-02	-2.35518e-02	0.036576400
61	beta.tau[58]	constitDaejeon_5	1.175370e-02	-2.05266e-02	0.036851500
62	beta.tau[59]	constitDaejeon_6	-6.388179e-03	-4.72156e-02	0.028319800
63	beta.tau[60]	constitDaejeon_7	-1.170862e-02	-3.06207e-02	-0.000337944
64	beta.tau[61]	constitGangwon-do_1	1.565297e-02	-1.88731e-02	0.047111800
65	beta.tau[62]	constitGangwon-do_2	-1.279803e-02	-4.92507e-02	0.047793700
66	beta.tau[63]	constitGangwon-do_3	-3.191431e-03	-4.32403e-02	0.034314900
67	beta.tau[64]	constitGangwon-do_4	2.113934e-02	-8.33543e-03	0.042558200
68	beta.tau[65]	constitGangwon-do_5	4.349605e-03	-2.77497e-02	0.025682400
69	beta.tau[66]	constitGangwon-do_6	-5.559136e-03	-3.95537e-02	0.035441900
70	beta.tau[67]	constitGangwon-do_7	-8.884572e-04	-5.22099e-02	0.089577000
71	beta.tau[68]	constitGangwon-do_8	-5.539408e-03	-3.19181e-02	0.026776200
72	beta.tau[69]	constitGwangju_1	-2.000743e-02	-6.99227e-02	0.010307000
73	beta.tau[70]	constitGwangju_2	9.326260e-03	-3.17892e-02	0.072152600
74	beta.tau[71]	constitGwangju_3	-6.234781e-03	-6.45978e-02	0.076465000
75	beta.tau[72]	constitGwangju_4	1.570045e-02	1.92908e-03	0.034046700
76	beta.tau[73]	constitGwangju_5	-7.997496e-03	-4.99121e-02	0.019440200
77	beta.tau[74]	constitGwangju_6	-7.094260e-03	-4.09668e-02	0.038956800
78	beta.tau[75]	constitGwangju_7	-1.339699e-02	-4.66952e-02	0.028393200
79	beta.tau[76]	constitGwangju_8	-1.736118e-02	-5.90333e-02	0.024726500
80	beta.tau[77]	constitGyeonggi-do_1	4.138106e-03	-3.56468e-02	0.038418100
81	beta.tau[78]	constitGyeonggi-do_10	1.680852e-02	-8.12178e-04	0.033262500
82	beta.tau[79]	constitGyeonggi-do_11	2.516637e-02	1.26606e-02	0.036980900
83	beta.tau[80]	constitGyeonggi-do_12	-7.564284e-03	-3.36414e-02	0.036112900
84	beta.tau[81]	constitGyeonggi-do_13	1.804407e-03	-8.28855e-03	0.010751100
85	beta.tau[82]	constitGyeonggi-do_14	1.436499e-02	-2.57479e-02	0.047626400
86	beta.tau[83]	constitGyeonggi-do_15	-2.558908e-02	-7.24469e-02	0.010137500
87	beta.tau[84]	constitGyeonggi-do_16	4.922766e-03	-2.83147e-02	0.042199800
88	beta.tau[85]	constitGyeonggi-do_17	-5.960784e-03	-3.09868e-02	0.016720800
89	beta.tau[86]	constitGyeonggi-do_18	-3.404241e-03	-3.07183e-02	0.011139800
90	beta.tau[87]	constitGyeonggi-do_19	7.127631e-03	-3.93471e-02	0.042943400
91	beta.tau[88]	constitGyeonggi-do_2	1.150081e-02	-1.21961e-02	0.047078300
92	beta.tau[89]	constitGyeonggi-do_20	-7.520636e-03	-4.80605e-02	0.032747300
93	beta.tau[90]	constitGyeonggi-do_21	9.338456e-04	-3.74002e-02	0.031414400
94	beta.tau[91]	constitGyeonggi-do_22	-1.053825e-02	-4.91715e-02	0.020957600

95	beta.tau[92]	constitGyeonggi-do_23	2.008157e-02	-4.65046e-02	0.089167200
96	beta.tau[93]	constitGyeonggi-do_24	1.195041e-02	-6.38376e-02	0.077617100
97	beta.tau[94]	constitGyeonggi-do_25	2.857034e-02	-7.60116e-03	0.098649300
98	beta.tau[95]	constitGyeonggi-do_26	-2.900446e-02	-5.70296e-02	0.005063980
99	beta.tau[96]	constitGyeonggi-do_27	1.414388e-02	-1.76356e-03	0.034280200
100	beta.tau[97]	constitGyeonggi-do_28	-1.999502e-02	-3.63369e-02	0.006304710
101	beta.tau[98]	constitGyeonggi-do_29	2.929897e-02	-1.48730e-03	0.048060000
102	beta.tau[99]	constitGyeonggi-do_3	1.294162e-02	-1.08661e-02	0.040042900
103	beta.tau[100]	constitGyeonggi-do_30	-3.408694e-03	-2.18064e-02	0.029304000
104	beta.tau[101]	constitGyeonggi-do_31	5.920610e-03	-3.63107e-02	0.049730200
105	beta.tau[102]	constitGyeonggi-do_32	6.918103e-03	-9.18472e-03	0.024329300
106	beta.tau[103]	constitGyeonggi-do_33	-8.035374e-03	-3.61243e-02	0.027515500
107	beta.tau[104]	constitGyeonggi-do_34	-7.736612e-04	-3.60849e-02	0.020005900
108	beta.tau[105]	constitGyeonggi-do_35	-3.867381e-03	-2.01272e-02	0.017842000
109	beta.tau[106]	constitGyeonggi-do_36	3.954989e-03	-2.27546e-02	0.025966900
110	beta.tau[107]	constitGyeonggi-do_37	1.854245e-03	-2.47803e-02	0.022595500
111	beta.tau[108]	constitGyeonggi-do_38	-7.573993e-03	-2.02101e-02	0.010729200
112	beta.tau[109]	constitGyeonggi-do_39	1.282646e-02	-5.23745e-02	0.060229500
113	beta.tau[110]	constitGyeonggi-do_4	3.829031e-03	-4.61082e-02	0.035253100
114	beta.tau[111]	constitGyeonggi-do_40	-2.051345e-03	-3.67957e-02	0.030211500
115	beta.tau[112]	constitGyeonggi-do_41	7.451542e-03	-1.00346e-02	0.024516700
116	beta.tau[113]	constitGyeonggi-do_42	9.273300e-03	-2.40001e-02	0.027669200
117	beta.tau[114]	constitGyeonggi-do_43	7.122253e-03	-2.64972e-02	0.080373600
118	beta.tau[115]	constitGyeonggi-do_44	8.015231e-03	-2.03103e-02	0.038045500
119	beta.tau[116]	constitGyeonggi-do_45	2.251525e-02	-3.97088e-03	0.040670400
120	beta.tau[117]	constitGyeonggi-do_46	5.218842e-03	-5.95696e-02	0.073600700
121	beta.tau[118]	constitGyeonggi-do_47	3.374073e-03	-9.74068e-03	0.021612700
122	beta.tau[119]	constitGyeonggi-do_48	-1.844425e-02	-3.43596e-02	-0.004154490
123	beta.tau[120]	constitGyeonggi-do_49	-7.898870e-03	-5.69319e-02	0.034504500
124	beta.tau[121]	constitGyeonggi-do_5	-4.648258e-03	-3.59810e-02	0.024303800
125	beta.tau[122]	constitGyeonggi-do_50	1.560783e-02	-2.58945e-02	0.035828300
126	beta.tau[123]	constitGyeonggi-do_51	-6.947343e-03	-3.71378e-02	0.027095400
127	beta.tau[124]	constitGyeonggi-do_52	-1.522231e-02	-4.80289e-02	0.007795140
128	beta.tau[125]	constitGyeonggi-do_53	3.516463e-04	-3.62477e-02	0.030546900
129	beta.tau[126]	constitGyeonggi-do_54	-9.166545e-03	-6.68011e-02	0.038710500
130	beta.tau[127]	constitGyeonggi-do_55	9.943430e-03	-1.99794e-02	0.046597200
131	beta.tau[128]	constitGyeonggi-do_56	2.282584e-02	-1.54924e-02	0.066285200
132	beta.tau[129]	constitGyeonggi-do_57	1.022883e-02	-8.25999e-03	0.044007300
133	beta.tau[130]	constitGyeonggi-do_58	-7.929687e-03	-7.12438e-02	0.043111700
134	beta.tau[131]	constitGyeonggi-do_59	2.262812e-02	3.66916e-02	0.060501000
135	beta.tau[132]	constitGyeonggi-do_6	4.373394e-03	-3.41079e-02	0.043175100
136	beta.tau[133]	constitGyeonggi-do_7	1.271864e-02	-3.68873e-02	0.042438400
137	beta.tau[134]	constitGyeonggi-do_8	1.759189e-02	-2.79161e-02	0.081749900
138	beta.tau[135]	constitGyeonggi-do_9	2.732350e-02	-1.97037e-02	0.070914800
139	beta.tau[136]	constitGyeongsangbuk-do_1	-7.496843e-03	-3.24076e-02	0.016393500
140	beta.tau[137]	constitGyeongsangbuk-do_10	2.341850e-02	-3.03887e-02	0.063455000
141	beta.tau[138]	constitGyeongsangbuk-do_11	-5.112409e-03	-5.44707e-02	0.034268200
142	beta.tau[139]	constitGyeongsangbuk-do_12	2.080802e-02	-1.47403e-02	0.044179500
143	beta.tau[140]	constitGyeongsangbuk-do_13	1.601629e-02	-2.75708e-02	0.058498300
144	beta.tau[141]	constitGyeongsangbuk-do_2	-1.337778e-02	-5.93594e-02	0.031151900
145	beta.tau[142]	constitGyeongsangbuk-do_3	1.162081e-02	-2.00787e-02	0.033673200
146	beta.tau[143]	constitGyeongsangbuk-do_4	-1.200737e-02	-3.87984e-02	0.009530350
147	beta.tau[144]	constitGyeongsangbuk-do_5	-8.310542e-03	-6.30155e-02	0.037292200
148	beta.tau[145]	constitGyeongsangbuk-do_6	-2.437083e-02	-8.17835e-02	0.015242600
149	beta.tau[146]	constitGyeongsangbuk-do_7	6.097989e-03	-4.97853e-02	0.032979800
150	beta.tau[147]	constitGyeongsangbuk-do_8	-9.360817e-03	-3.00499e-02	0.026781800
151	beta.tau[148]	constitGyeongsangbuk-do_9	2.637638e-03	-4.31903e-02	0.060226600
152	beta.tau[149]	constitGyeongsangnam-do_1	-3.077797e-02	-6.96188e-02	0.007822200
153	beta.tau[150]	constitGyeongsangnam-do_10	-7.466361e-03	-3.67086e-02	0.032115600
154	beta.tau[151]	constitGyeongsangnam-do_11	-1.045961e-02	-4.37314e-02	0.010679000
155	beta.tau[152]	constitGyeongsangnam-do_12	2.029860e-02	-1.78624e-02	0.062893100
156	beta.tau[153]	constitGyeongsangnam-do_13	1.950382e-02	-5.43407e-03	0.053556400
157	beta.tau[154]	constitGyeongsangnam-do_14	9.889728e-03	-5.76016e-02	0.047857400
158	beta.tau[155]	constitGyeongsangnam-do_15	3.146473e-02	-2.45816e-02	0.074143100
159	beta.tau[156]	constitGyeongsangnam-do_16	4.488924e-03	-2.90327e-02	0.055866000
160	beta.tau[157]	constitGyeongsangnam-do_2	-1.644649e-02	-3.08805e-02	0.007003030
161	beta.tau[158]	constitGyeongsangnam-do_3	1.084316e-02	-1.22759e-02	0.037405600
162	beta.tau[159]	constitGyeongsangnam-do_4	5.790713e-03	-4.51724e-02	0.049926200

163	beta.tau[160]	constitGyeongsangnam-do_5	-8.745066e-03	-2.88628e-02	0.007810690
164	beta.tau[161]	constitGyeongsangnam-do_6	-3.475983e-03	-4.39379e-02	0.036407500
165	beta.tau[162]	constitGyeongsangnam-do_7	1.162609e-02	-2.88864e-02	0.054082800
166	beta.tau[163]	constitGyeongsangnam-do_8	1.692613e-02	-2.11693e-02	0.061637400
167	beta.tau[164]	constitGyeongsangnam-do_9	-1.766260e-02	-5.35182e-02	0.019867800
168	beta.tau[165]	constitIncheon Metropolitan City_1	-6.923753e-03	-4.32599e-02	0.048583800
169	beta.tau[166]	constitIncheon Metropolitan City_10	-1.379261e-02	-3.18778e-02	0.002706800
170	beta.tau[167]	constitIncheon Metropolitan City_11	-2.604590e-02	-6.72301e-02	0.008743250
171	beta.tau[168]	constitIncheon Metropolitan City_12	3.863547e-03	-5.21824e-02	0.047077300
172	beta.tau[169]	constitIncheon Metropolitan City_13	-8.356438e-03	-7.31456e-02	0.035373100
173	beta.tau[170]	constitIncheon Metropolitan City_2	2.210712e-03	-3.88017e-02	0.033194500
174	beta.tau[171]	constitIncheon Metropolitan City_3	3.111231e-02	-2.49711e-03	0.062190300
175	beta.tau[172]	constitIncheon Metropolitan City_4	3.888433e-03	-2.31913e-02	0.047904100
176	beta.tau[173]	constitIncheon Metropolitan City_5	-1.564957e-02	-4.19429e-02	0.023458700
177	beta.tau[174]	constitIncheon Metropolitan City_6	1.713307e-02	-6.13986e-03	0.033961800
178	beta.tau[175]	constitIncheon Metropolitan City_7	9.809409e-03	-2.60376e-02	0.038388900
179	beta.tau[176]	constitIncheon Metropolitan City_8	-1.168904e-02	-6.69012e-02	0.031841500
180	beta.tau[177]	constitIncheon Metropolitan City_9	1.621988e-02	-3.27559e-02	0.045660800
181	beta.tau[178]	constitJeju Special Self-Governing Province_1	-1.053802e-02	-4.85524e-02	0.035269100
182	beta.tau[179]	constitJeju Special Self-Governing Province_2	4.949366e-03	-3.32675e-02	0.025446700
183	beta.tau[180]	constitJeju Special Self-Governing Province_3	6.932106e-03	-5.44960e-02	0.056592400
184	beta.tau[181]	constitJeollabuk do_1	-7.941373e-04	-3.92248e-02	0.032507600
185	beta.tau[182]	constitJeollabuk do_10	-1.236649e-02	-3.17097e-02	0.003429760
186	beta.tau[183]	constitJeollabuk do_2	-1.017705e-02	-3.89014e-02	0.020495600
187	beta.tau[184]	constitJeollabuk do_3	-1.469554e-02	-4.42523e-02	0.043293100
188	beta.tau[185]	constitJeollabuk do_4	-4.049633e-03	-3.82772e-02	0.043281800
189	beta.tau[186]	constitJeollabuk do_5	2.856610e-03	-2.54504e-02	0.026221300
190	beta.tau[187]	constitJeollabuk do_6	-4.176311e-02	-9.08904e-02	0.016776600
191	beta.tau[188]	constitJeollabuk do_7	1.706255e-03	-5.33239e-02	0.054567600
192	beta.tau[189]	constitJeollabuk do_8	1.296285e-02	-4.59002e-02	0.061308400
193	beta.tau[190]	constitJeollabuk do_9	-1.172055e-02	-2.83617e-02	0.007658090
194	beta.tau[191]	constitJeollanam-do_1	-3.313843e-03	-3.15610e-02	0.039065100
195	beta.tau[192]	constitJeollanam-do_10	4.117267e-03	-1.81864e-02	0.029796000
196	beta.tau[193]	constitJeollanam-do_2	-2.681320e-03	-4.77601e-02	0.047604300
197	beta.tau[194]	constitJeollanam-do_3	1.028645e-02	-1.33968e-02	0.043635900
198	beta.tau[195]	constitJeollanam-do_4	2.154479e-02	-1.23264e-02	0.053730500
199	beta.tau[196]	constitJeollanam-do_5	2.510462e-02	-1.09584e-02	0.053442100
200	beta.tau[197]	constitJeollanam-do_6	-1.464941e-02	-4.34371e-02	0.015674000
201	beta.tau[198]	constitJeollanam-do_7	-5.283792e-03	-3.03897e-02	0.023454300
202	beta.tau[199]	constitJeollanam-do_8	-2.992431e-03	-3.66079e-02	0.030024300
203	beta.tau[200]	constitJeollanam-do_9	-1.255728e-02	-5.31706e-02	0.028784000
204	beta.tau[201]	constitSejong Special Self-governing City_1	-2.511815e-02	-7.00808e-02	0.022882400
205	beta.tau[202]	constitSejong Special Self-governing City_2	-1.782565e-02	-6.32269e-02	0.010384200
206	beta.tau[203]	constitSeoul_1	4.741658e-02	1.97239e-02	0.078263200
207	beta.tau[204]	constitSeoul_10	1.489484e-02	-6.85699e-03	0.033509900
208	beta.tau[205]	constitSeoul_11	-1.131851e-02	-6.50608e-02	0.024894200
209	beta.tau[206]	constitSeoul_12	-9.829015e-03	-4.77196e-02	0.021975800
210	beta.tau[207]	constitSeoul_13	-1.642064e-02	-5.07008e-02	0.031902100
211	beta.tau[208]	constitSeoul_14	-4.396050e-03	-5.71004e-02	0.066316600
212	beta.tau[209]	constitSeoul_15	2.793480e-02	1.19498e-02	0.048718600
213	beta.tau[210]	constitSeoul_16	-3.034473e-02	-5.95797e-02	0.003387740
214	beta.tau[211]	constitSeoul_17	-1.168137e-03	-3.52118e-02	0.040133500
215	beta.tau[212]	constitSeoul_18	1.214718e-02	-2.04261e-02	0.068924100
216	beta.tau[213]	constitSeoul_19	-1.363190e-02	-7.27912e-02	0.044722200
217	beta.tau[214]	constitSeoul_2	1.355986e-02	-6.58065e-03	0.034719900
218	beta.tau[215]	constitSeoul_20	-1.299993e-02	-5.38346e-02	0.009196480
219	beta.tau[216]	constitSeoul_21	4.761092e-03	-2.75844e-02	0.062365300
220	beta.tau[217]	constitSeoul_22	-1.694705e-02	-2.90280e-02	-0.006838980
221	beta.tau[218]	constitSeoul_23	-6.123447e-03	-2.87800e-02	0.044695100
222	beta.tau[219]	constitSeoul_24	1.685987e-02	-3.48467e-02	0.063498000
223	beta.tau[220]	constitSeoul_25	1.754464e-03	-2.97330e-02	0.042213200
224	beta.tau[221]	constitSeoul_26	-9.621418e-03	-3.38360e-02	0.032917400
225	beta.tau[222]	constitSeoul_27	-1.133882e-02	-5.57100e-02	0.042013600
226	beta.tau[223]	constitSeoul_28	4.836892e-03	-5.09162e-02	0.052468200
227	beta.tau[224]	constitSeoul_29	-8.416049e-03	-5.52297e-02	0.043727400
228	beta.tau[225]	constitSeoul_3	-6.154779e-03	-5.01964e-02	0.031955600
229	beta.tau[226]	constitSeoul_30	1.818437e-02	-1.91043e-02	0.073377500
230	beta.tau[227]	constitSeoul_31	-1.356743e-02	-6.73862e-02	0.025953400

231	beta.tau[228]	constitSeoul_32	2.076716e-02	-8.12006e-03	0.044358300
232	beta.tau[229]	constitSeoul_33	2.195994e-03	-1.09525e-02	0.013705200
233	beta.tau[230]	constitSeoul_34	-4.331910e-04	-5.72286e-02	0.039343200
234	beta.tau[231]	constitSeoul_35	-3.062620e-03	-4.41380e-02	0.016101400
235	beta.tau[232]	constitSeoul_36	-1.283396e-02	-3.18260e-02	0.007551540
236	beta.tau[233]	constitSeoul_37	2.552670e-03	-4.76326e-02	0.054864900
237	beta.tau[234]	constitSeoul_38	-8.593619e-05	-3.91630e-02	0.042010300
238	beta.tau[235]	constitSeoul_39	-1.787710e-05	-4.04534e-02	0.040018100
239	beta.tau[236]	constitSeoul_4	5.664741e-03	-2.61087e-02	0.035695900
240	beta.tau[237]	constitSeoul_40	2.690174e-04	-1.41500e-02	0.016552500
241	beta.tau[238]	constitSeoul_41	7.663800e-04	-4.75245e-02	0.051427500
242	beta.tau[239]	constitSeoul_42	1.505571e-03	-4.49365e-02	0.042305700
243	beta.tau[240]	constitSeoul_43	1.441671e-02	-4.93744e-02	0.078512800
244	beta.tau[241]	constitSeoul_44	1.629193e-02	-2.50390e-03	0.031977000
245	beta.tau[242]	constitSeoul_45	-1.795146e-02	-6.38331e-02	0.020531300
246	beta.tau[243]	constitSeoul_46	-4.890692e-03	-3.03233e-02	0.018904800
247	beta.tau[244]	constitSeoul_47	2.729847e-04	-4.51510e-02	0.041996900
248	beta.tau[245]	constitSeoul_48	-9.468887e-03	-3.67583e-02	0.014667700
249	beta.tau[246]	constitSeoul_49	-4.040106e-03	-4.13987e-02	0.042082700
250	beta.tau[247]	constitSeoul_5	1.534965e-02	-2.82366e-02	0.059460900
251	beta.tau[248]	constitSeoul_6	-1.258447e-02	-4.39793e-02	0.020126100
252	beta.tau[249]	constitSeoul_7	-1.109435e-02	-2.13424e-02	0.011367600
253	beta.tau[250]	constitSeoul_8	8.638211e-03	-3.20291e-02	0.040899100
254	beta.tau[251]	constitSeoul_9	2.484153e-02	-4.70391e-03	0.054369800
255	beta.tau[252]	constitUlsan Metropolitan City_1	-8.251727e-03	-6.54115e-02	0.027580300
256	beta.tau[253]	constitUlsan Metropolitan City_2	-1.572446e-03	-3.80219e-02	0.044070900
257	beta.tau[254]	constitUlsan Metropolitan City_3	6.883517e-03	-4.38087e-02	0.041555700
258	beta.tau[255]	constitUlsan Metropolitan City_4	-1.563481e-02	-5.64927e-02	0.022963700
259	beta.tau[256]	constitUlsan Metropolitan City_5	1.767745e-02	-4.01182e-02	0.054715500
260	beta.tau[257]	constitUlsan Metropolitan City_6	6.272002e-03	-2.46507e-02	0.085109500
261	beta.nu[1]	(Intercept)	-1.386590e-01	-1.60094e-01	-0.094112700
262	beta.nu[2]	isprevoteTRUE	3.992636e-02	2.22225e-02	0.060560600
263	beta.nu[3]	typep	-1.166660e-01	-1.56555e-01	-0.093016500
264	beta.nu[4]	isabroadTRUE	1.952829e-01	1.34631e-01	0.240647000
265	beta.nu[5]	isdisabTRUE	-4.062244e-03	-4.84356e-02	0.024682000
266	beta.nu[6]	constitBusan_10	-2.396759e-02	-8.06072e-02	0.030144300
267	beta.nu[7]	constitBusan_11	1.288582e-02	-3.73763e-02	0.058231300
268	beta.nu[8]	constitBusan_12	-1.447528e-02	-4.96076e-02	0.004171800
269	beta.nu[9]	constitBusan_13	-2.210144e-02	-4.04771e-02	0.003118180
270	beta.nu[10]	constitBusan_14	-4.663285e-02	-7.88618e-02	-0.010323800
271	beta.nu[11]	constitBusan_15	-1.604527e-02	-6.13448e-02	0.022174500
272	beta.nu[12]	constitBusan_16	-1.267072e-02	-4.53226e-02	0.011717300
273	beta.nu[13]	constitBusan_17	1.113196e-02	-1.28986e-02	0.039455800
274	beta.nu[14]	constitBusan_18	-1.421638e-02	-5.19371e-02	0.011931900
275	beta.nu[15]	constitBusan_2	-2.618055e-03	-1.89739e-02	0.020498700
276	beta.nu[16]	constitBusan_3	1.208042e-02	-4.46692e-02	0.043275600
277	beta.nu[17]	constitBusan_4	-2.535588e-02	-5.27518e-02	0.013246600
278	beta.nu[18]	constitBusan_5	-3.374686e-02	-8.09311e-02	0.006686500
279	beta.nu[19]	constitBusan_6	-2.840163e-02	-7.92388e-02	0.021184600
280	beta.nu[20]	constitBusan_7	6.807720e-03	-3.37791e-02	0.054811000
281	beta.nu[21]	constitBusan_8	-1.131090e-03	-2.80265e-02	0.026498000
282	beta.nu[22]	constitBusan_9	1.807469e-02	-6.76205e-03	0.039634100
283	beta.nu[23]	constitChung-cheong bukdo_1	-1.860058e-03	-3.37688e-02	0.038920600
284	beta.nu[24]	constitChung-cheong bukdo_2	-2.372896e-02	-4.85531e-02	0.001395630
285	beta.nu[25]	constitChung-cheong bukdo_3	3.809221e-02	2.43333e-03	0.105819000
286	beta.nu[26]	constitChung-cheong bukdo_4	-1.567360e-02	-5.15484e-02	0.025018600
287	beta.nu[27]	constitChung-cheong bukdo_5	-2.556069e-02	-1.00549e-01	0.011822100
288	beta.nu[28]	constitChung-cheong bukdo_6	-1.180163e-02	-2.99759e-02	0.025719100
289	beta.nu[29]	constitChung-cheong bukdo_7	-2.121383e-02	-7.42707e-02	0.010985600
290	beta.nu[30]	constitChung-cheong bukdo_8	7.427703e-03	-2.85794e-02	0.073751100
291	beta.nu[31]	constitChungcheongnam-do_1	2.827267e-02	-3.09264e-03	0.079500300
292	beta.nu[32]	constitChungcheongnam-do_10	-2.783369e-02	-6.24646e-02	0.009777190
293	beta.nu[33]	constitChungcheongnam-do_11	-1.988135e-02	-5.77783e-02	0.025692300
294	beta.nu[34]	constitChungcheongnam-do_2	1.388000e-02	-2.32215e-02	0.053610800
295	beta.nu[35]	constitChungcheongnam-do_3	-1.686492e-02	-6.03868e-02	0.019409100
296	beta.nu[36]	constitChungcheongnam-do_4	-4.348343e-02	-7.67160e-02	-0.003029260
297	beta.nu[37]	constitChungcheongnam-do_5	2.378152e-02	-1.09110e-02	0.065455200
298	beta.nu[38]	constitChungcheongnam-do_6	-3.556063e-02	-6.58824e-02	0.003076000

299	beta.nu[39]	constitChungcheongnam-do_7	6.459469e-02	2.82509e-02	0.093267700
300	beta.nu[40]	constitChungcheongnam-do_8	-2.016506e-02	-9.27264e-02	0.027971200
301	beta.nu[41]	constitChungcheongnam-do_9	1.165095e-02	-1.44614e-02	0.038711900
302	beta.nu[42]	constitDaegu Metropolitan City_1	-9.497267e-02	-1.33786e-01	-0.058065300
303	beta.nu[43]	constitDaegu Metropolitan City_10	-3.994219e-02	-7.28868e-02	0.020194600
304	beta.nu[44]	constitDaegu Metropolitan City_11	-3.185379e-02	-9.74931e-02	0.007954690
305	beta.nu[45]	constitDaegu Metropolitan City_12	-8.171600e-02	-1.15590e-01	-0.014737000
306	beta.nu[46]	constitDaegu Metropolitan City_2	-1.709376e-02	-5.69937e-02	0.016660900
307	beta.nu[47]	constitDaegu Metropolitan City_3	-5.252669e-02	-7.58346e-02	-0.035788300
308	beta.nu[48]	constitDaegu Metropolitan City_4	-1.021789e-01	-1.23592e-01	-0.085909900
309	beta.nu[49]	constitDaegu Metropolitan City_5	-5.671582e-02	-8.54843e-02	-0.033678600
310	beta.nu[50]	constitDaegu Metropolitan City_6	-2.809544e-02	-6.21058e-02	0.030030200
311	beta.nu[51]	constitDaegu Metropolitan City_7	-1.701409e-02	-1.30916e-01	0.058897700
312	beta.nu[52]	constitDaegu Metropolitan City_8	-3.784507e-02	-9.92307e-02	0.037877000
313	beta.nu[53]	constitDaegu Metropolitan City_9	-4.497600e-02	-6.15756e-02	-0.024241300
314	beta.nu[54]	constitDaejeon_1	-1.141505e-02	-6.82308e-02	0.031500500
315	beta.nu[55]	constitDaejeon_2	2.926666e-02	-1.11562e-02	0.061211500
316	beta.nu[56]	constitDaejeon_3	2.264070e-02	-2.83885e-03	0.048831800
317	beta.nu[57]	constitDaejeon_4	-7.223300e-03	-4.86748e-02	0.029650900
318	beta.nu[58]	constitDaejeon_5	3.186484e-02	-1.29964e-02	0.092715600
319	beta.nu[59]	constitDaejeon_6	-9.107268e-03	-4.30984e-02	0.030415900
320	beta.nu[60]	constitDaejeon_7	8.331922e-03	-1.12055e-02	0.034938100
321	beta.nu[61]	constitGangwon-do_1	-8.085247e-03	-2.81035e-02	0.026429500
322	beta.nu[62]	constitGangwon-do_2	-3.226631e-02	-7.22661e-02	0.001843920
323	beta.nu[63]	constitGangwon-do_3	-2.644392e-02	-6.84672e-02	0.010157900
324	beta.nu[64]	constitGangwon-do_4	8.057034e-04	-2.32297e-02	0.017848500
325	beta.nu[65]	constitGangwon-do_5	-4.801712e-02	-6.88171e-02	-0.034983000
326	beta.nu[66]	constitGangwon-do_6	-3.441637e-02	-1.07129e-01	0.011081400
327	beta.nu[67]	constitGangwon-do_7	-5.575952e-03	-4.38521e-02	0.012327400
328	beta.nu[68]	constitGangwon-do_8	-6.529924e-02	-9.65781e-02	-0.020207000
329	beta.nu[69]	constitGwangju_1	4.559616e-02	-9.75185e-03	0.125017000
330	beta.nu[70]	constitGwangju_2	4.755439e-02	-8.84942e-03	0.093620400
331	beta.nu[71]	constitGwangju_3	6.127028e-02	2.34897e-02	0.082849500
332	beta.nu[72]	constitGwangju_4	3.907446e-02	-2.50495e-03	0.078114300
333	beta.nu[73]	constitGwangju_5	-3.398958e-03	-1.48270e-02	0.010088100
334	beta.nu[74]	constitGwangju_6	4.774467e-02	2.35357e-02	0.097760800
335	beta.nu[75]	constitGwangju_7	6.040816e-02	2.89310e-02	0.086306200
336	beta.nu[76]	constitGwangju_8	5.272259e-02	6.07034e-03	0.098049500
337	beta.nu[77]	constitGyeonggi-do_1	5.139544e-03	-2.87662e-02	0.031060800
338	beta.nu[78]	constitGyeonggi-do_10	2.381917e-03	-5.22682e-02	0.052622100
339	beta.nu[79]	constitGyeonggi-do_11	-2.275719e-03	-4.14138e-02	0.060851000
340	beta.nu[80]	constitGyeonggi-do_12	1.686936e-02	-2.01494e-02	0.050796800
341	beta.nu[81]	constitGyeonggi-do_13	3.317595e-02	-3.60568e-02	0.080321400
342	beta.nu[82]	constitGyeonggi-do_14	6.560083e-03	-1.50111e-02	0.038754600
343	beta.nu[83]	constitGyeonggi-do_15	1.602272e-02	-3.29942e-02	0.062105000
344	beta.nu[84]	constitGyeonggi-do_16	3.756044e-03	-4.96788e-02	0.052635100
345	beta.nu[85]	constitGyeonggi-do_17	4.223174e-02	1.04449e-02	0.065956700
346	beta.nu[86]	constitGyeonggi-do_18	5.055655e-03	-2.74568e-02	0.056173600
347	beta.nu[87]	constitGyeonggi-do_19	-3.090386e-03	-4.75426e-02	0.054741100
348	beta.nu[88]	constitGyeonggi-do_2	5.094466e-02	9.98520e-03	0.116748000
349	beta.nu[89]	constitGyeonggi-do_20	3.579959e-03	-2.19838e-02	0.047111400
350	beta.nu[90]	constitGyeonggi-do_21	5.448367e-03	-3.02520e-02	0.033361100
351	beta.nu[91]	constitGyeonggi-do_22	3.827635e-03	-1.59135e-02	0.032992900
352	beta.nu[92]	constitGyeonggi-do_23	-2.019367e-02	-7.58505e-02	0.029197000
353	beta.nu[93]	constitGyeonggi-do_24	9.614338e-03	-7.57140e-03	0.045007300
354	beta.nu[94]	constitGyeonggi-do_25	1.942442e-02	-2.64888e-03	0.040806800
355	beta.nu[95]	constitGyeonggi-do_26	-7.399023e-03	-4.01391e-02	0.017614300
356	beta.nu[96]	constitGyeonggi-do_27	2.492146e-03	-2.21987e-02	0.027355700
357	beta.nu[97]	constitGyeonggi-do_28	-3.646202e-02	-8.45377e-02	0.007266820
358	beta.nu[98]	constitGyeonggi-do_29	3.426315e-03	-3.65836e-02	0.050307500
359	beta.nu[99]	constitGyeonggi-do_3	1.529054e-02	-1.37775e-03	0.033808600
360	beta.nu[100]	constitGyeonggi-do_30	1.392598e-02	-4.93022e-03	0.028339900
361	beta.nu[101]	constitGyeonggi-do_31	1.582700e-03	-4.19324e-02	0.038998000
362	beta.nu[102]	constitGyeonggi-do_32	-1.803697e-02	-3.99038e-02	0.005968040
363	beta.nu[103]	constitGyeonggi-do_33	1.092497e-02	-8.19036e-03	0.050502400
364	beta.nu[104]	constitGyeonggi-do_34	1.689111e-02	-3.81957e-02	0.048961600
365	beta.nu[105]	constitGyeonggi-do_35	2.826528e-03	-3.09690e-02	0.058679200
366	beta.nu[106]	constitGyeonggi-do_36	-8.983242e-04	-2.59568e-02	0.022624100

367	beta.nu[107]	constitGyeonggi-do_37	3.157923e-02	-2.37092e-03	0.059984200
368	beta.nu[108]	constitGyeonggi-do_38	1.201451e-02	-1.96231e-02	0.028925600
369	beta.nu[109]	constitGyeonggi-do_39	3.595676e-02	1.00197e-02	0.061293500
370	beta.nu[110]	constitGyeonggi-do_4	5.122321e-02	-1.60646e-04	0.094222200
371	beta.nu[111]	constitGyeonggi-do_40	3.417469e-02	9.04188e-03	0.053337500
372	beta.nu[112]	constitGyeonggi-do_41	-1.468867e-02	-4.96725e-02	0.019483200
373	beta.nu[113]	constitGyeonggi-do_42	-3.202764e-03	-6.99502e-02	0.034136000
374	beta.nu[114]	constitGyeonggi-do_43	3.373678e-02	7.04676e-03	0.084860700
375	beta.nu[115]	constitGyeonggi-do_44	1.199048e-02	-1.61294e-02	0.044832600
376	beta.nu[116]	constitGyeonggi-do_45	1.490202e-02	-2.08067e-02	0.032565700
377	beta.nu[117]	constitGyeonggi-do_46	4.601422e-02	1.24185e-02	0.079114000
378	beta.nu[118]	constitGyeonggi-do_47	1.478202e-02	-2.04274e-02	0.054983100
379	beta.nu[119]	constitGyeonggi-do_48	-1.480379e-03	-4.14769e-02	0.043791800
380	beta.nu[120]	constitGyeonggi-do_49	2.262804e-02	-3.68132e-02	0.082223600
381	beta.nu[121]	constitGyeonggi-do_5	3.569289e-03	-4.43824e-02	0.060672600
382	beta.nu[122]	constitGyeonggi-do_50	4.495987e-03	-5.18175e-02	0.052172000
383	beta.nu[123]	constitGyeonggi-do_51	1.273976e-02	-2.29634e-02	0.047217200
384	beta.nu[124]	constitGyeonggi-do_52	-7.660167e-03	-5.72537e-02	0.027754400
385	beta.nu[125]	constitGyeonggi-do_53	1.223730e-02	-7.80026e-03	0.025145300
386	beta.nu[126]	constitGyeonggi-do_54	4.175679e-02	9.97039e-03	0.086634100
387	beta.nu[127]	constitGyeonggi-do_55	1.665972e-02	-5.52364e-02	0.067910400
388	beta.nu[128]	constitGyeonggi-do_56	1.256101e-02	-1.03423e-02	0.039716900
389	beta.nu[129]	constitGyeonggi-do_57	3.481517e-02	-2.21462e-03	0.071247400
390	beta.nu[130]	constitGyeonggi-do_58	6.148690e-03	-3.57994e-02	0.045898000
391	beta.nu[131]	constitGyeonggi-do_59	-3.882570e-02	-8.26645e-02	0.000518154
392	beta.nu[132]	constitGyeonggi-do_6	1.526464e-02	-1.67364e-02	0.068717000
393	beta.nu[133]	constitGyeonggi-do_7	2.067839e-02	-1.49383e-02	0.063750400
394	beta.nu[134]	constitGyeonggi-do_8	-1.135210e-03	-2.03763e-02	0.019918500
395	beta.nu[135]	constitGyeonggi-do_9	-5.466908e-03	-3.69987e-02	0.034985800
396	beta.nu[136]	constitGyeongsangbuk-do_1	-4.511183e-02	-9.49172e-02	0.003773300
397	beta.nu[137]	constitGyeongsangbuk-do_10	-1.648393e-01	-2.08726e-01	-0.120049000
398	beta.nu[138]	constitGyeongsangbuk-do_11	-7.123100e-02	-1.19772e-01	-0.033303500
399	beta.nu[139]	constitGyeongsangbuk-do_12	-1.264529e-01	-1.42563e-01	-0.109562000
400	beta.nu[140]	constitGyeongsangbuk-do_13	-1.145388e-01	-1.55131e-01	-0.082646400
401	beta.nu[141]	constitGyeongsangbuk-do_2	-6.566048e-02	-1.04968e-01	-0.036622700
402	beta.nu[142]	constitGyeongsangbuk-do_3	-1.306058e-01	-1.62615e-01	-0.096974600
403	beta.nu[143]	constitGyeongsangbuk-do_4	-1.179407e-01	-1.55511e-01	-0.088444800
404	beta.nu[144]	constitGyeongsangbuk-do_5	-1.368821e-01	-1.94742e-01	-0.088170800
405	beta.nu[145]	constitGyeongsangbuk-do_6	-4.429770e-02	-9.27151e-02	-0.011667600
406	beta.nu[146]	constitGyeongsangbuk-do_7	-3.890825e-02	-6.51108e-02	-0.023188100
407	beta.nu[147]	constitGyeongsangbuk-do_8	-1.312220e-01	-1.70050e-01	-0.086746300
408	beta.nu[148]	constitGyeongsangbuk-do_9	-1.345534e-01	-1.58907e-01	-0.107488000
409	beta.nu[149]	constitGyeongsangnam-do_1	-1.623827e-02	-7.46289e-02	0.067244700
410	beta.nu[150]	constitGyeongsangnam-do_10	-2.210032e-04	-2.61725e-02	0.034309600
411	beta.nu[151]	constitGyeongsangnam-do_11	1.715109e-03	-3.49656e-02	0.048475600
412	beta.nu[152]	constitGyeongsangnam-do_12	-9.209428e-02	-1.22765e-01	-0.055984500
413	beta.nu[153]	constitGyeongsangnam-do_13	-4.817255e-02	-7.44185e-02	-0.017359100
414	beta.nu[154]	constitGyeongsangnam-do_14	-3.366192e-02	-7.22256e-02	0.008924030
415	beta.nu[155]	constitGyeongsangnam-do_15	4.340542e-03	-2.08294e-02	0.034124200
416	beta.nu[156]	constitGyeongsangnam-do_16	-1.726094e-01	-1.92081e-01	-0.132313000
417	beta.nu[157]	constitGyeongsangnam-do_2	-7.916252e-02	-1.34087e-01	-0.042251900
418	beta.nu[158]	constitGyeongsangnam-do_3	-2.745438e-02	-5.55536e-02	0.007556320
419	beta.nu[159]	constitGyeongsangnam-do_4	-2.143503e-02	-5.04984e-02	0.002303660
420	beta.nu[160]	constitGyeongsangnam-do_5	8.360083e-03	-1.29891e-02	0.032523300
421	beta.nu[161]	constitGyeongsangnam-do_6	-3.198232e-02	-5.29903e-02	-0.007503070
422	beta.nu[162]	constitGyeongsangnam-do_7	-3.545879e-02	-8.22399e-02	-0.000508799
423	beta.nu[163]	constitGyeongsangnam-do_8	-3.274956e-02	-6.94991e-02	0.005908400
424	beta.nu[164]	constitGyeongsangnam-do_9	-5.930907e-02	-7.51198e-02	-0.039163600
425	beta.nu[165]	constitIncheon Metropolitan City_1	-3.846063e-02	-6.80477e-02	-0.005112530
426	beta.nu[166]	constitIncheon Metropolitan City_10	2.246646e-02	-1.89099e-02	0.052131300
427	beta.nu[167]	constitIncheon Metropolitan City_11	2.462554e-02	-3.91584e-02	0.126415000
428	beta.nu[168]	constitIncheon Metropolitan City_12	2.024345e-02	6.97428e-03	0.032261200
429	beta.nu[169]	constitIncheon Metropolitan City_13	1.632624e-02	-2.41264e-02	0.050887100
430	beta.nu[170]	constitIncheon Metropolitan City_2	-1.209341e-02	-3.88931e-02	0.012867100
431	beta.nu[171]	constitIncheon Metropolitan City_3	2.436053e-03	-4.08623e-02	0.044849300
432	beta.nu[172]	constitIncheon Metropolitan City_4	2.136421e-02	-1.32677e-02	0.040780600
433	beta.nu[173]	constitIncheon Metropolitan City_5	8.284714e-03	-9.99209e-03	0.021508500
434	beta.nu[174]	constitIncheon Metropolitan City_6	4.696951e-02	7.12229e-03	0.077645800

435	beta.nu[175]	constitIncheon Metropolitan City_7	7.950318e-03	-6.78884e-02	0.075359800
436	beta.nu[176]	constitIncheon Metropolitan City_8	3.620810e-02	1.02643e-02	0.051147300
437	beta.nu[177]	constitIncheon Metropolitan City_9	2.093957e-02	-1.32757e-02	0.048101000
438	beta.nu[178]	constitJeju Special Self-Governing Province_1	1.109966e-02	-4.10915e-02	0.069275700
439	beta.nu[179]	constitJeju Special Self-Governing Province_2	2.160756e-02	-1.33943e-02	0.047448200
440	beta.nu[180]	constitJeju Special Self-Governing Province_3	1.132546e-02	-9.60364e-03	0.039722900
441	beta.nu[181]	constitJeollabuk do_1	4.715731e-02	1.75541e-02	0.074192000
442	beta.nu[182]	constitJeollabuk do_10	4.618689e-02	-1.45098e-02	0.099162800
443	beta.nu[183]	constitJeollabuk do_2	8.612420e-03	-7.84122e-03	0.026735100
444	beta.nu[184]	constitJeollabuk do_3	2.970241e-02	-3.46461e-02	0.060227700
445	beta.nu[185]	constitJeollabuk do_4	5.044462e-02	2.29597e-02	0.082882500
446	beta.nu[186]	constitJeollabuk do_5	9.043281e-02	4.78051e-02	0.124889000
447	beta.nu[187]	constitJeollabuk do_6	5.524757e-02	2.92272e-02	0.082867000
448	beta.nu[188]	constitJeollabuk do_7	9.874115e-02	7.97717e-02	0.115292000
449	beta.nu[189]	constitJeollabuk do_8	1.225282e-02	-1.49949e-02	0.039186500
450	beta.nu[190]	constitJeollabuk do_9	6.433559e-02	5.47372e-02	0.077502800
451	beta.nu[191]	constitJeollanam-do_1	-1.677924e-02	-3.48470e-02	0.006603320
452	beta.nu[192]	constitJeollanam-do_10	1.032763e-01	6.98852e-02	0.137932000
453	beta.nu[193]	constitJeollanam-do_2	3.768772e-02	-2.29197e-02	0.087773600
454	beta.nu[194]	constitJeollanam-do_3	4.617241e-02	1.70868e-02	0.072900800
455	beta.nu[195]	constitJeollanam-do_4	5.230320e-02	8.35421e-03	0.081400700
456	beta.nu[196]	constitJeollanam-do_5	9.275326e-02	5.51105e-02	0.142827000
457	beta.nu[197]	constitJeollanam-do_6	1.193202e-01	8.99066e-02	0.143002000
458	beta.nu[198]	constitJeollanam-do_7	1.308495e-01	9.10217e-02	0.214713000
459	beta.nu[199]	constitJeollanam-do_8	9.194356e-02	6.11647e-02	0.126277000
460	beta.nu[200]	constitJeollanam-do_9	8.336669e-02	5.13615e-02	0.118787000
461	beta.nu[201]	constitSejong Special Self-governing City_1	3.525586e-02	-3.24093e-02	0.078943700
462	beta.nu[202]	constitSejong Special Self-governing City_2	3.306272e-02	-6.18604e-03	0.063749300
463	beta.nu[203]	constitSeoul_1	1.566973e-02	-1.85709e-02	0.040519400
464	beta.nu[204]	constitSeoul_10	4.251546e-02	-8.10562e-05	0.069487800
465	beta.nu[205]	constitSeoul_11	4.878269e-02	-4.24518e-03	0.109027000
466	beta.nu[206]	constitSeoul_12	3.380435e-02	-8.47596e-03	0.074774600
467	beta.nu[207]	constitSeoul_13	1.233820e-02	-6.86004e-02	0.078000000
468	beta.nu[208]	constitSeoul_14	5.534220e-03	-7.52230e-02	0.068089800
469	beta.nu[209]	constitSeoul_15	3.366127e-02	1.18332e-02	0.060831600
470	beta.nu[210]	constitSeoul_16	1.677213e-02	-1.48120e-02	0.054449400
471	beta.nu[211]	constitSeoul_17	2.265649e-02	-2.22301e-03	0.046767800
472	beta.nu[212]	constitSeoul_18	2.357859e-02	-1.59199e-02	0.057693300
473	beta.nu[213]	constitSeoul_19	5.511135e-03	-1.86128e-02	0.021141200
474	beta.nu[214]	constitSeoul_2	-3.202944e-03	-3.89070e-02	0.042560000
475	beta.nu[215]	constitSeoul_20	2.269914e-02	3.34738e-03	0.060192500
476	beta.nu[216]	constitSeoul_21	3.511210e-02	1.85991e-03	0.058140500
477	beta.nu[217]	constitSeoul_22	1.250349e-02	-1.38382e-02	0.041130000
478	beta.nu[218]	constitSeoul_23	3.059908e-02	-3.73561e-02	0.071194600
479	beta.nu[219]	constitSeoul_24	9.399392e-03	-3.65921e-02	0.046926000
480	beta.nu[220]	constitSeoul_25	1.009803e-03	-3.86501e-02	0.059791200
481	beta.nu[221]	constitSeoul_26	7.948540e-03	-7.06570e-02	0.042625200
482	beta.nu[222]	constitSeoul_27	1.984169e-02	-4.78218e-02	0.076744600
483	beta.nu[223]	constitSeoul_28	-2.082102e-02	-7.68947e-02	0.030544800
484	beta.nu[224]	constitSeoul_29	-3.964410e-03	-2.39737e-02	0.027639000
485	beta.nu[225]	constitSeoul_3	2.748223e-02	2.66589e-04	0.049347200
486	beta.nu[226]	constitSeoul_30	4.760445e-02	7.13862e-03	0.080503700
487	beta.nu[227]	constitSeoul_31	1.402547e-02	-6.21663e-03	0.035839100
488	beta.nu[228]	constitSeoul_32	3.273837e-02	1.27163e-02	0.050971100
489	beta.nu[229]	constitSeoul_33	-1.589971e-02	-5.41734e-02	0.015458000
490	beta.nu[230]	constitSeoul_34	6.416645e-03	-2.58301e-02	0.036655600
491	beta.nu[231]	constitSeoul_35	-1.938904e-04	-2.83491e-02	0.031656300
492	beta.nu[232]	constitSeoul_36	2.887748e-02	6.30988e-03	0.053647000
493	beta.nu[233]	constitSeoul_37	2.297925e-02	-3.31719e-02	0.072516600
494	beta.nu[234]	constitSeoul_38	2.359042e-02	4.52493e-03	0.038082200
495	beta.nu[235]	constitSeoul_39	3.434784e-02	7.39497e-03	0.062647800
496	beta.nu[236]	constitSeoul_4	-1.442003e-02	-5.95701e-02	0.049249500
497	beta.nu[237]	constitSeoul_40	9.940007e-03	-2.08616e-02	0.038565100
498	beta.nu[238]	constitSeoul_41	1.770026e-02	-3.81874e-02	0.103851000
499	beta.nu[239]	constitSeoul_42	-2.345831e-02	-8.13629e-02	0.008855650
500	beta.nu[240]	constitSeoul_43	1.517378e-02	-3.54200e-02	0.066681600
501	beta.nu[241]	constitSeoul_44	-1.885208e-02	-3.82479e-02	0.006596350
502	beta.nu[242]	constitSeoul_45	1.724652e-03	-1.92025e-02	0.028171700

503	beta.nu[243]	constitSeoul_46	-1.196656e-02	-5.60875e-02	0.043107700
504	beta.nu[244]	constitSeoul_47	2.261815e-02	-3.87323e-02	0.086170000
505	beta.nu[245]	constitSeoul_48	1.080411e-02	-4.45726e-02	0.050963600
506	beta.nu[246]	constitSeoul_49	-1.864706e-02	-3.50981e-02	0.003567860
507	beta.nu[247]	constitSeoul_5	3.603643e-02	-5.18292e-02	0.095784000
508	beta.nu[248]	constitSeoul_6	1.456662e-02	-1.07082e-02	0.041542200
509	beta.nu[249]	constitSeoul_7	3.247191e-02	-1.34924e-03	0.072513400
510	beta.nu[250]	constitSeoul_8	1.827916e-02	-1.59508e-02	0.073122900
511	beta.nu[251]	constitSeoul_9	3.308920e-02	-1.64147e-02	0.078986600
512	beta.nu[252]	constitUlsan Metropolitan City_1	-3.786219e-02	-5.87979e-02	-0.002012490
513	beta.nu[253]	constitUlsan Metropolitan City_2	-8.276909e-03	-4.37611e-02	0.030517100
514	beta.nu[254]	constitUlsan Metropolitan City_3	1.263516e-02	-2.62159e-02	0.032278500
515	beta.nu[255]	constitUlsan Metropolitan City_4	-3.601950e-02	-6.18623e-02	-0.019550000
516	beta.nu[256]	constitUlsan Metropolitan City_5	-2.226917e-02	-6.04889e-02	0.009650900
517	beta.nu[257]	constitUlsan Metropolitan City_6	-2.065407e-02	-6.23667e-02	0.038065000
518	beta.iota.m	(Intercept)	2.951485e-01	2.16284e-01	0.339614000
519	beta.iota.s	(Intercept)	-4.588055e-01	-5.05951e-01	-0.410698000
520	beta.chi.m	(Intercept)	-1.452836e-01	-2.35488e-01	-0.046219000
521	beta.chi.s	(Intercept)	-5.791656e-01	-6.90371e-01	-0.420073000

eforensics Parameter Posterior Means and 95% HPD Intervals, Constituency Leader Specification:

	Parameter	Covariate	Mean	HPD.lower	HPD.upper
1	pi[1]	No Fraud	9.270384e-01	9.19241e-01	9.33267e-01
2	pi[2]	Incremental Fraud	6.512788e-02	5.88438e-02	7.24786e-02
3	pi[3]	Extreme Fraud	7.833748e-03	6.50419e-03	9.05366e-03
4	beta.tau[1]	(Intercept)	7.568751e-01	6.87372e-01	8.27337e-01
5	beta.tau[2]	isprevoteTRUE	1.108130e+00	9.62600e-01	1.23914e+00
6	beta.tau[3]	typep	-4.033252e-02	-8.26054e-02	2.74751e-02
7	beta.tau[4]	isabroadTRUE	-7.109992e-02	-1.11289e-01	-2.94186e-03
8	beta.tau[5]	isdisabTRUE	3.821377e-02	3.99922e-04	7.12939e-02
9	beta.tau[6]	constitBusan_10	2.374025e-02	4.04847e-03	4.23252e-02
10	beta.tau[7]	constitBusan_11	-5.099162e-03	-2.95894e-02	2.99276e-02
11	beta.tau[8]	constitBusan_12	5.971536e-03	-2.00513e-02	2.53246e-02
12	beta.tau[9]	constitBusan_13	-1.601258e-02	-4.61268e-02	2.81555e-02
13	beta.tau[10]	constitBusan_14	8.956976e-03	-5.37386e-02	3.54746e-02
14	beta.tau[11]	constitBusan_15	-1.058801e-02	-5.00068e-02	4.96155e-02
15	beta.tau[12]	constitBusan_16	-1.335161e-02	-5.47815e-02	4.31133e-02
16	beta.tau[13]	constitBusan_17	8.930746e-03	-1.69128e-02	2.39643e-02
17	beta.tau[14]	constitBusan_18	4.841590e-03	-3.73091e-02	3.12827e-02
18	beta.tau[15]	constitBusan_2	1.882562e-02	3.53366e-03	4.48288e-02
19	beta.tau[16]	constitBusan_3	4.095276e-02	8.90009e-03	8.15721e-02
20	beta.tau[17]	constitBusan_4	-1.483410e-02	-3.36497e-02	-3.11300e-03
21	beta.tau[18]	constitBusan_5	1.567616e-02	-2.95204e-03	3.38301e-02
22	beta.tau[19]	constitBusan_6	-7.318027e-03	-4.11041e-02	1.37410e-02
23	beta.tau[20]	constitBusan_7	-6.570729e-03	-2.33949e-02	1.78108e-02
24	beta.tau[21]	constitBusan_8	5.993937e-03	-6.20754e-02	6.50334e-02
25	beta.tau[22]	constitBusan_9	9.290129e-03	-3.29076e-02	5.19879e-02
26	beta.tau[23]	constitChung-cheong bukdo_1	1.196187e-02	-3.30348e-02	4.96451e-02
27	beta.tau[24]	constitChung-cheong bukdo_2	-7.572350e-03	-4.32137e-02	2.52742e-02
28	beta.tau[25]	constitChung-cheong bukdo_3	-3.023872e-02	-6.16645e-02	-8.24562e-03
29	beta.tau[26]	constitChung-cheong bukdo_4	-5.141638e-03	-5.60276e-02	2.85081e-02
30	beta.tau[27]	constitChung-cheong bukdo_5	-1.355573e-02	-2.99277e-02	6.89464e-03
31	beta.tau[28]	constitChung-cheong bukdo_6	2.874208e-03	-2.01981e-02	3.82237e-02
32	beta.tau[29]	constitChung-cheong bukdo_7	-9.935217e-03	-3.64412e-02	2.16020e-02
33	beta.tau[30]	constitChung-cheong bukdo_8	5.580535e-03	-2.13786e-02	3.65362e-02
34	beta.tau[31]	constitChungcheongnam-do_1	6.133656e-03	-5.49225e-02	6.01042e-02
35	beta.tau[32]	constitChungcheongnam-do_10	9.575699e-03	-5.10625e-02	6.81655e-02
36	beta.tau[33]	constitChungcheongnam-do_11	8.773262e-03	-3.30789e-02	3.76462e-02
37	beta.tau[34]	constitChungcheongnam-do_2	-9.588676e-04	-2.61093e-02	1.98530e-02
38	beta.tau[35]	constitChungcheongnam-do_3	1.943231e-02	-3.18927e-02	7.14147e-02
39	beta.tau[36]	constitChungcheongnam-do_4	6.655159e-03	-2.94314e-02	3.81748e-02
40	beta.tau[37]	constitChungcheongnam-do_5	9.992877e-04	-5.58853e-02	3.85915e-02
41	beta.tau[38]	constitChungcheongnam-do_6	-2.127085e-03	-5.27542e-02	3.67143e-02

42	beta.tau[39]	constitChungcheongnam-do_7	-3.743384e-03	-4.51756e-02	2.27133e-02
43	beta.tau[40]	constitChungcheongnam-do_8	2.859301e-02	-6.06247e-03	5.63894e-02
44	beta.tau[41]	constitChungcheongnam-do_9	6.012535e-03	-5.07698e-02	3.82828e-02
45	beta.tau[42]	constitDaegu Metropolitan City_1	2.210305e-03	-3.65302e-02	4.22373e-02
46	beta.tau[43]	constitDaegu Metropolitan City_10	9.699808e-03	-1.49103e-02	5.00044e-02
47	beta.tau[44]	constitDaegu Metropolitan City_11	-2.781636e-03	-2.53982e-02	3.38146e-02
48	beta.tau[45]	constitDaegu Metropolitan City_12	-2.112588e-02	-3.95629e-02	-6.50934e-04
49	beta.tau[46]	constitDaegu Metropolitan City_2	1.060608e-02	-3.65281e-02	4.17911e-02
50	beta.tau[47]	constitDaegu Metropolitan City_3	-1.377238e-02	-5.70548e-02	3.13068e-02
51	beta.tau[48]	constitDaegu Metropolitan City_4	-1.015958e-02	-5.67364e-02	4.54932e-02
52	beta.tau[49]	constitDaegu Metropolitan City_5	7.178420e-03	-3.43613e-02	2.61157e-02
53	beta.tau[50]	constitDaegu Metropolitan City_6	-8.948794e-03	-5.63607e-02	4.18658e-02
54	beta.tau[51]	constitDaegu Metropolitan City_7	2.113316e-03	-3.39196e-02	3.44561e-02
55	beta.tau[52]	constitDaegu Metropolitan City_8	8.275740e-03	-2.12859e-02	6.22350e-02
56	beta.tau[53]	constitDaegu Metropolitan City_9	1.193235e-03	-3.53451e-02	5.81250e-02
57	beta.tau[54]	constitDaejeon_1	-2.215701e-02	-5.49963e-02	2.20877e-02
58	beta.tau[55]	constitDaejeon_2	-1.063725e-02	-4.81010e-02	3.96391e-02
59	beta.tau[56]	constitDaejeon_3	-3.355762e-03	-2.18662e-02	1.07853e-02
60	beta.tau[57]	constitDaejeon_4	-1.046844e-02	-4.22916e-02	3.43713e-02
61	beta.tau[58]	constitDaejeon_5	3.758236e-03	-1.76448e-02	3.79505e-02
62	beta.tau[59]	constitDaejeon_6	1.362136e-02	-3.25453e-02	3.74886e-02
63	beta.tau[60]	constitDaejeon_7	-1.766235e-02	-8.35607e-02	3.70345e-02
64	beta.tau[61]	constitGangwon-do_1	3.755472e-03	-2.11176e-02	2.20706e-02
65	beta.tau[62]	constitGangwon-do_2	3.586138e-02	-1.93523e-02	1.02102e-01
66	beta.tau[63]	constitGangwon-do_3	1.173836e-02	-4.48471e-02	4.70775e-02
67	beta.tau[64]	constitGangwon-do_4	7.854659e-03	-2.94539e-02	4.61422e-02
68	beta.tau[65]	constitGangwon-do_5	-4.929073e-03	-4.43420e-02	3.66884e-02
69	beta.tau[66]	constitGangwon-do_6	2.283254e-02	-2.76767e-03	4.97622e-02
70	beta.tau[67]	constitGangwon-do_7	7.442457e-03	-2.71191e-02	2.80262e-02
71	beta.tau[68]	constitGangwon-do_8	2.104728e-02	1.50518e-03	4.81142e-02
72	beta.tau[69]	constitGwangju_1	-2.233480e-02	-3.85769e-02	5.42576e-04
73	beta.tau[70]	constitGwangju_2	-1.895228e-02	-5.53105e-02	2.33349e-03
74	beta.tau[71]	constitGwangju_3	-5.227977e-03	-3.16830e-02	2.42300e-02
75	beta.tau[72]	constitGwangju_4	-9.577827e-03	-5.61790e-02	2.60773e-02
76	beta.tau[73]	constitGwangju_5	-3.532445e-02	-6.60497e-02	6.90881e-03
77	beta.tau[74]	constitGwangju_6	1.973110e-03	-4.70816e-02	3.54872e-02
78	beta.tau[75]	constitGwangju_7	-1.482739e-02	-2.93619e-02	6.94313e-03
79	beta.tau[76]	constitGwangju_8	-1.198226e-02	-6.77050e-02	4.30592e-02
80	beta.tau[77]	constitGyeonggi-do_1	6.061398e-03	-1.34487e-02	2.58319e-02
81	beta.tau[78]	constitGyeonggi-do_10	-6.462539e-04	-3.92478e-02	4.87731e-02
82	beta.tau[79]	constitGyeonggi-do_11	-1.167486e-02	-3.52417e-02	3.02597e-02
83	beta.tau[80]	constitGyeonggi-do_12	8.625132e-03	-3.25706e-02	4.09282e-02
84	beta.tau[81]	constitGyeonggi-do_13	-6.549035e-03	-4.36567e-02	3.23508e-02
85	beta.tau[82]	constitGyeonggi-do_14	-1.925429e-02	-4.59281e-02	5.66467e-03
86	beta.tau[83]	constitGyeonggi-do_15	-3.566996e-02	-6.49770e-02	-5.03411e-03
87	beta.tau[84]	constitGyeonggi-do_16	-1.368191e-02	-5.09530e-02	2.06548e-02
88	beta.tau[85]	constitGyeonggi-do_17	1.002780e-03	-3.17570e-02	3.64245e-02
89	beta.tau[86]	constitGyeonggi-do_18	2.085623e-02	-2.33909e-02	7.06325e-02
90	beta.tau[87]	constitGyeonggi-do_19	9.377473e-03	-5.67031e-02	4.58343e-02
91	beta.tau[88]	constitGyeonggi-do_2	4.100132e-03	-1.61308e-02	3.24467e-02
92	beta.tau[89]	constitGyeonggi-do_20	-4.822073e-03	-3.78440e-02	1.42331e-02
93	beta.tau[90]	constitGyeonggi-do_21	8.443300e-03	-2.40262e-02	3.78768e-02
94	beta.tau[91]	constitGyeonggi-do_22	1.536706e-03	-4.71694e-02	2.34769e-02
95	beta.tau[92]	constitGyeonggi-do_23	-2.082446e-02	-4.86044e-02	9.57457e-03
96	beta.tau[93]	constitGyeonggi-do_24	2.203648e-03	-3.19061e-02	5.27686e-02
97	beta.tau[94]	constitGyeonggi-do_25	2.010503e-02	-1.95119e-02	5.06804e-02
98	beta.tau[95]	constitGyeonggi-do_26	-5.575544e-03	-4.63036e-02	1.74661e-02
99	beta.tau[96]	constitGyeonggi-do_27	4.680222e-03	-1.73943e-02	3.46610e-02
100	beta.tau[97]	constitGyeonggi-do_28	-1.348153e-02	-5.34841e-02	2.28265e-02
101	beta.tau[98]	constitGyeonggi-do_29	4.666144e-03	-2.68788e-02	2.34122e-02
102	beta.tau[99]	constitGyeonggi-do_3	1.045142e-02	-5.27772e-02	4.37975e-02
103	beta.tau[100]	constitGyeonggi-do_30	4.366304e-03	-2.44151e-02	3.51785e-02
104	beta.tau[101]	constitGyeonggi-do_31	1.870142e-02	-8.94581e-05	4.66857e-02
105	beta.tau[102]	constitGyeonggi-do_32	7.422263e-03	-2.31449e-02	4.79118e-02
106	beta.tau[103]	constitGyeonggi-do_33	-1.227990e-02	-3.55603e-02	1.83731e-02
107	beta.tau[104]	constitGyeonggi-do_34	-2.973248e-02	-5.55045e-02	-9.80195e-03
108	beta.tau[105]	constitGyeonggi-do_35	4.219637e-04	-3.66226e-02	3.51454e-02
109	beta.tau[106]	constitGyeonggi-do_36	9.983727e-03	-4.26313e-02	3.99465e-02

110	beta.tau[107]	constitGyeonggi-do_37	1.854643e-02	-2.31619e-02	7.49449e-02
111	beta.tau[108]	constitGyeonggi-do_38	-1.939871e-04	-1.75332e-02	1.47246e-02
112	beta.tau[109]	constitGyeonggi-do_39	-2.907119e-02	-4.00770e-02	-1.23790e-02
113	beta.tau[110]	constitGyeonggi-do_4	-9.475195e-03	-6.23315e-02	2.21252e-02
114	beta.tau[111]	constitGyeonggi-do_40	1.054695e-02	-2.17229e-02	4.09083e-02
115	beta.tau[112]	constitGyeonggi-do_41	-1.061787e-02	-4.74677e-02	1.46268e-02
116	beta.tau[113]	constitGyeonggi-do_42	9.334576e-03	-4.31532e-02	4.29186e-02
117	beta.tau[114]	constitGyeonggi-do_43	1.015340e-02	-5.09002e-02	4.47469e-02
118	beta.tau[115]	constitGyeonggi-do_44	3.180646e-03	-1.19353e-02	1.98352e-02
119	beta.tau[116]	constitGyeonggi-do_45	2.145437e-03	-5.42315e-02	6.96960e-02
120	beta.tau[117]	constitGyeonggi-do_46	9.441733e-03	-4.88795e-02	7.19274e-02
121	beta.tau[118]	constitGyeonggi-do_47	-2.679196e-02	-6.92319e-02	4.40226e-02
122	beta.tau[119]	constitGyeonggi-do_48	4.422445e-03	-1.99732e-02	5.31659e-02
123	beta.tau[120]	constitGyeonggi-do_49	-1.315381e-02	-3.56692e-02	1.38990e-02
124	beta.tau[121]	constitGyeonggi-do_5	-1.963138e-02	-5.49262e-02	3.20433e-02
125	beta.tau[122]	constitGyeonggi-do_50	-2.555811e-02	-6.22060e-02	1.29873e-02
126	beta.tau[123]	constitGyeonggi-do_51	-1.916648e-03	-1.00937e-01	4.27985e-02
127	beta.tau[124]	constitGyeonggi-do_52	2.276642e-02	-1.05700e-02	5.53464e-02
128	beta.tau[125]	constitGyeonggi-do_53	-3.755005e-02	-6.96805e-02	-1.71216e-02
129	beta.tau[126]	constitGyeonggi-do_54	1.616718e-02	-2.55631e-02	5.19689e-02
130	beta.tau[127]	constitGyeonggi-do_55	-2.704244e-03	-3.59459e-02	4.47547e-02
131	beta.tau[128]	constitGyeonggi-do_56	-5.586351e-03	-4.16835e-02	3.26549e-02
132	beta.tau[129]	constitGyeonggi-do_57	-9.075667e-03	-6.82729e-02	6.10263e-02
133	beta.tau[130]	constitGyeonggi-do_58	-7.528206e-03	-3.65104e-02	1.95632e-02
134	beta.tau[131]	constitGyeonggi-do_59	-5.678322e-03	-2.72577e-02	3.16175e-02
135	beta.tau[132]	constitGyeonggi-do_6	6.898014e-03	-1.06942e-02	3.04385e-02
136	beta.tau[133]	constitGyeonggi-do_7	1.373470e-02	-2.05640e-02	5.24969e-02
137	beta.tau[134]	constitGyeonggi-do_8	9.493852e-03	-2.17817e-02	4.45211e-02
138	beta.tau[135]	constitGyeonggi-do_9	9.482252e-03	-2.26062e-02	4.04329e-02
139	beta.tau[136]	constitGyeongsangbuk-do_1	-1.233880e-02	-2.71361e-02	7.60731e-03
140	beta.tau[137]	constitGyeongsangbuk-do_10	-1.086439e-02	-5.13365e-02	3.00749e-02
141	beta.tau[138]	constitGyeongsangbuk-do_11	2.216221e-02	5.13521e-03	4.06696e-02
142	beta.tau[139]	constitGyeongsangbuk-do_12	1.741307e-02	-4.30837e-03	3.69104e-02
143	beta.tau[140]	constitGyeongsangbuk-do_13	-1.059349e-03	-4.46040e-02	4.97282e-02
144	beta.tau[141]	constitGyeongsangbuk-do_2	1.407578e-02	-4.56775e-02	6.24084e-02
145	beta.tau[142]	constitGyeongsangbuk-do_3	7.228348e-03	-3.49380e-02	3.43844e-02
146	beta.tau[143]	constitGyeongsangbuk-do_4	-9.430854e-03	-8.05861e-02	3.20106e-02
147	beta.tau[144]	constitGyeongsangbuk-do_5	1.581889e-02	-3.53408e-02	8.00022e-02
148	beta.tau[145]	constitGyeongsangbuk-do_6	2.341684e-02	4.40800e-04	4.20885e-02
149	beta.tau[146]	constitGyeongsangbuk-do_7	3.015460e-03	-2.17394e-02	1.91985e-02
150	beta.tau[147]	constitGyeongsangbuk-do_8	1.314012e-02	-2.06569e-02	4.89476e-02
151	beta.tau[148]	constitGyeongsangbuk-do_9	1.098961e-02	-3.52840e-02	5.69756e-02
152	beta.tau[149]	constitGyeongsangnam-do_1	-2.122809e-03	-4.27146e-02	2.87217e-02
153	beta.tau[150]	constitGyeongsangnam-do_10	-1.150929e-02	-5.59908e-02	3.12643e-02
154	beta.tau[151]	constitGyeongsangnam-do_11	1.627752e-03	-4.83027e-02	7.14513e-02
155	beta.tau[152]	constitGyeongsangnam-do_12	-2.188836e-02	-4.72595e-02	2.65694e-03
156	beta.tau[153]	constitGyeongsangnam-do_13	-2.539694e-02	-3.94026e-02	9.15912e-04
157	beta.tau[154]	constitGyeongsangnam-do_14	1.437624e-02	-1.27612e-02	3.05460e-02
158	beta.tau[155]	constitGyeongsangnam-do_15	2.581729e-02	-1.26424e-02	5.55972e-02
159	beta.tau[156]	constitGyeongsangnam-do_16	2.733944e-02	3.32382e-03	4.50853e-02
160	beta.tau[157]	constitGyeongsangnam-do_2	5.576393e-03	-4.17174e-02	4.70294e-02
161	beta.tau[158]	constitGyeongsangnam-do_3	1.692904e-03	-1.37300e-02	1.61743e-02
162	beta.tau[159]	constitGyeongsangnam-do_4	4.322945e-03	-1.89761e-02	2.74414e-02
163	beta.tau[160]	constitGyeongsangnam-do_5	-2.103066e-02	-4.46456e-02	8.35530e-03
164	beta.tau[161]	constitGyeongsangnam-do_6	1.219717e-02	-2.12220e-02	3.56963e-02
165	beta.tau[162]	constitGyeongsangnam-do_7	-4.917161e-03	-2.88309e-02	1.62912e-02
166	beta.tau[163]	constitGyeongsangnam-do_8	9.188118e-03	-1.58760e-02	2.59592e-02
167	beta.tau[164]	constitGyeongsangnam-do_9	6.891651e-03	-3.67969e-02	5.52329e-02
168	beta.tau[165]	constitIncheon Metropolitan City_1	-1.582212e-02	-3.81863e-02	1.81012e-02
169	beta.tau[166]	constitIncheon Metropolitan City_10	1.800158e-02	-4.09490e-03	4.52585e-02
170	beta.tau[167]	constitIncheon Metropolitan City_11	9.968581e-03	-2.22480e-02	5.45095e-02
171	beta.tau[168]	constitIncheon Metropolitan City_12	2.807590e-02	-1.79114e-02	7.76103e-02
172	beta.tau[169]	constitIncheon Metropolitan City_13	-1.915971e-02	-6.10361e-02	5.64197e-03
173	beta.tau[170]	constitIncheon Metropolitan City_2	-5.043936e-03	-4.16328e-02	3.91481e-02
174	beta.tau[171]	constitIncheon Metropolitan City_3	2.476375e-03	-9.66964e-03	2.08941e-02
175	beta.tau[172]	constitIncheon Metropolitan City_4	7.650806e-03	-4.64142e-03	1.54191e-02
176	beta.tau[173]	constitIncheon Metropolitan City_5	9.734586e-03	-1.78059e-02	3.18403e-02
177	beta.tau[174]	constitIncheon Metropolitan City_6	-1.566674e-03	-2.47065e-02	2.62215e-02

178	beta.tau[175]	constitIncheon Metropolitan City_7	-2.324138e-02	-5.16037e-02	3.72518e-03
179	beta.tau[176]	constitIncheon Metropolitan City_8	-2.906535e-03	-6.04970e-02	3.30882e-02
180	beta.tau[177]	constitIncheon Metropolitan City_9	7.899124e-03	-3.95640e-02	5.70027e-02
181	beta.tau[178]	constitJeju Special Self-Governing Province_1	1.877301e-02	-4.36660e-02	7.76056e-02
182	beta.tau[179]	constitJeju Special Self-Governing Province_2	3.536613e-02	9.62115e-04	7.37587e-02
183	beta.tau[180]	constitJeju Special Self-Governing Province_3	-1.895092e-02	-4.99673e-02	1.04245e-02
184	beta.tau[181]	constitJeollabuk do_1	2.454548e-02	-2.39828e-02	6.20828e-02
185	beta.tau[182]	constitJeollabuk do_10	5.274122e-03	-3.23988e-02	3.98474e-02
186	beta.tau[183]	constitJeollabuk do_2	-6.885828e-03	-2.36124e-02	1.16281e-02
187	beta.tau[184]	constitJeollabuk do_3	2.310662e-03	-1.82071e-02	2.79968e-02
188	beta.tau[185]	constitJeollabuk do_4	7.226887e-03	-4.85863e-02	4.76814e-02
189	beta.tau[186]	constitJeollabuk do_5	2.952723e-02	-1.11787e-02	6.40182e-02
190	beta.tau[187]	constitJeollabuk do_6	-2.211773e-03	-2.34601e-02	2.16488e-02
191	beta.tau[188]	constitJeollabuk do_7	-5.447187e-03	-3.83039e-02	1.56200e-02
192	beta.tau[189]	constitJeollabuk do_8	-9.982373e-03	-7.41420e-02	2.69613e-02
193	beta.tau[190]	constitJeollabuk do_9	-6.430423e-03	-2.90020e-02	1.25319e-02
194	beta.tau[191]	constitJeollanam-do_1	1.023497e-02	-1.72637e-02	4.27680e-02
195	beta.tau[192]	constitJeollanam-do_10	-9.746387e-03	-5.75848e-02	3.30385e-02
196	beta.tau[193]	constitJeollanam-do_2	-1.023794e-02	-3.67769e-02	4.97255e-02
197	beta.tau[194]	constitJeollanam-do_3	-2.607076e-03	-3.92471e-02	2.79149e-02
198	beta.tau[195]	constitJeollanam-do_4	2.842865e-02	-4.35043e-03	8.01496e-02
199	beta.tau[196]	constitJeollanam-do_5	1.061078e-02	-1.15049e-02	4.29221e-02
200	beta.tau[197]	constitJeollanam-do_6	2.883613e-05	-5.19086e-02	5.73881e-02
201	beta.tau[198]	constitJeollanam-do_7	9.131525e-03	-3.45622e-02	5.26614e-02
202	beta.tau[199]	constitJeollanam-do_8	1.227957e-02	-8.39519e-03	4.08374e-02
203	beta.tau[200]	constitJeollanam-do_9	-1.201277e-02	-5.09939e-02	2.03581e-02
204	beta.tau[201]	constitSejong Special Self-governing City_1	8.112612e-03	-1.56224e-02	6.19497e-02
205	beta.tau[202]	constitSejong Special Self-governing City_2	-1.386338e-02	-6.54264e-02	2.69048e-02
206	beta.tau[203]	constitSeoul_1	7.840123e-03	-3.97228e-02	5.42876e-02
207	beta.tau[204]	constitSeoul_10	1.365651e-02	-5.80946e-03	3.25377e-02
208	beta.tau[205]	constitSeoul_11	1.004808e-02	-1.92786e-02	3.03650e-02
209	beta.tau[206]	constitSeoul_12	-1.410137e-02	-5.54218e-02	2.13481e-02
210	beta.tau[207]	constitSeoul_13	-1.491933e-02	-3.50238e-02	3.27519e-03
211	beta.tau[208]	constitSeoul_14	-3.829512e-03	-2.49948e-02	1.20808e-02
212	beta.tau[209]	constitSeoul_15	4.907227e-03	-1.95518e-02	3.02553e-02
213	beta.tau[210]	constitSeoul_16	-1.592033e-02	-3.42337e-02	4.06825e-02
214	beta.tau[211]	constitSeoul_17	1.389843e-02	-2.08165e-02	5.51941e-03
215	beta.tau[212]	constitSeoul_18	-9.447253e-03	-3.32038e-02	1.51128e-02
216	beta.tau[213]	constitSeoul_19	-2.652570e-02	-5.03005e-02	-1.10917e-02
217	beta.tau[214]	constitSeoul_2	6.438721e-03	-7.67726e-03	2.27915e-02
218	beta.tau[215]	constitSeoul_20	-1.585133e-02	-4.22507e-02	2.12075e-02
219	beta.tau[216]	constitSeoul_21	-1.285772e-02	-6.19655e-02	5.85846e-02
220	beta.tau[217]	constitSeoul_22	1.879862e-02	-1.78289e-02	5.80530e-02
221	beta.tau[218]	constitSeoul_23	-8.109548e-03	-2.52532e-02	1.63289e-02
222	beta.tau[219]	constitSeoul_24	1.742329e-02	-6.07156e-03	3.22451e-02
223	beta.tau[220]	constitSeoul_25	2.523176e-02	-1.44237e-02	5.29518e-02
224	beta.tau[221]	constitSeoul_26	1.922694e-03	-2.45089e-02	2.75814e-02
225	beta.tau[222]	constitSeoul_27	6.436693e-03	-9.69834e-03	3.83889e-02
226	beta.tau[223]	constitSeoul_28	4.737983e-03	-1.87084e-02	3.20191e-02
227	beta.tau[224]	constitSeoul_29	-2.987078e-03	-2.34167e-02	2.02747e-02
228	beta.tau[225]	constitSeoul_3	9.015328e-03	-8.65826e-03	3.67871e-02
229	beta.tau[226]	constitSeoul_30	-2.629452e-03	-6.27648e-02	4.19931e-02
230	beta.tau[227]	constitSeoul_31	3.631332e-02	1.73743e-02	4.91313e-02
231	beta.tau[228]	constitSeoul_32	-7.167614e-03	-3.09991e-02	9.60454e-03
232	beta.tau[229]	constitSeoul_33	2.064093e-02	-1.47493e-02	4.49653e-02
233	beta.tau[230]	constitSeoul_34	-1.567855e-02	-5.26811e-02	1.68983e-02
234	beta.tau[231]	constitSeoul_35	2.414358e-03	-1.19863e-02	2.26728e-02
235	beta.tau[232]	constitSeoul_36	1.111562e-02	-1.19583e-02	2.52640e-02
236	beta.tau[233]	constitSeoul_37	-8.598372e-03	-3.02612e-02	2.60333e-02
237	beta.tau[234]	constitSeoul_38	7.139551e-03	-5.60859e-02	4.47938e-02
238	beta.tau[235]	constitSeoul_39	-1.562905e-03	-4.05242e-02	2.75912e-02
239	beta.tau[236]	constitSeoul_4	-3.949755e-04	-4.75440e-02	2.17586e-02
240	beta.tau[237]	constitSeoul_40	-2.606726e-02	-4.69451e-02	-2.03356e-03
241	beta.tau[238]	constitSeoul_41	1.159530e-03	-5.16656e-02	3.90317e-02
242	beta.tau[239]	constitSeoul_42	-1.892637e-02	-5.07005e-02	2.23828e-02
243	beta.tau[240]	constitSeoul_43	1.709340e-02	-2.62307e-02	7.17712e-02
244	beta.tau[241]	constitSeoul_44	5.059034e-03	-6.38379e-02	5.46631e-02
245	beta.tau[242]	constitSeoul_45	7.005253e-03	-2.85057e-02	4.20023e-02

246	beta.tau[243]	constitSeoul_46	-1.206020e-02	-3.93204e-02	2.33984e-02
247	beta.tau[244]	constitSeoul_47	2.423343e-03	-2.11166e-02	2.38637e-02
248	beta.tau[245]	constitSeoul_48	3.349105e-03	-2.88412e-02	3.77878e-02
249	beta.tau[246]	constitSeoul_49	1.777039e-02	-6.97247e-03	3.42981e-02
250	beta.tau[247]	constitSeoul_5	1.071520e-02	-2.07581e-02	4.38871e-02
251	beta.tau[248]	constitSeoul_6	-1.233667e-02	-5.13304e-02	1.79986e-02
252	beta.tau[249]	constitSeoul_7	2.097981e-02	-3.67637e-02	6.11602e-02
253	beta.tau[250]	constitSeoul_8	-2.157599e-02	-8.86218e-02	2.87314e-02
254	beta.tau[251]	constitSeoul_9	-1.450472e-02	-4.36920e-02	2.41285e-02
255	beta.tau[252]	constitUlsan Metropolitan City_1	-2.229577e-02	-7.25222e-02	5.36436e-02
256	beta.tau[253]	constitUlsan Metropolitan City_2	2.309874e-02	-1.56260e-02	4.53324e-02
257	beta.tau[254]	constitUlsan Metropolitan City_3	1.841368e-02	-3.60125e-03	3.99523e-02
258	beta.tau[255]	constitUlsan Metropolitan City_4	2.138851e-03	-2.58752e-02	4.66853e-02
259	beta.tau[256]	constitUlsan Metropolitan City_5	-2.580451e-02	-5.50288e-02	2.38552e-02
260	beta.tau[257]	constitUlsan Metropolitan City_6	3.338898e-03	-2.96868e-02	4.07384e-02
261	beta.nu[1]	(Intercept)	1.675155e-01	1.33258e-01	2.15809e-01
262	beta.nu[2]	isprevoteTRUE	-8.567802e-02	-1.09989e-01	-6.56105e-02
263	beta.nu[3]	typep	7.235227e-02	3.51995e-02	1.02222e-01
264	beta.nu[4]	isabroadTRUE	4.347746e-02	-6.13811e-03	7.34138e-02
265	beta.nu[5]	isdisabTRUE	-3.148516e-02	-6.31322e-02	-1.55131e-02
266	beta.nu[6]	constitBusan_10	9.261502e-03	-2.58032e-02	5.74937e-02
267	beta.nu[7]	constitBusan_11	-1.599676e-02	-8.49941e-02	2.14467e-02
268	beta.nu[8]	constitBusan_12	-5.444268e-02	-8.49755e-02	7.93246e-03
269	beta.nu[9]	constitBusan_13	3.113802e-02	9.30641e-03	6.00524e-02
270	beta.nu[10]	constitBusan_14	-1.121396e-02	-4.33094e-02	1.44190e-02
271	beta.nu[11]	constitBusan_15	-1.769313e-02	-4.22473e-02	-7.22021e-04
272	beta.nu[12]	constitBusan_16	-1.796974e-02	-4.40018e-02	1.28033e-02
273	beta.nu[13]	constitBusan_17	-9.072033e-05	-3.91154e-02	4.15324e-02
274	beta.nu[14]	constitBusan_18	8.106642e-03	-2.34010e-02	4.23585e-02
275	beta.nu[15]	constitBusan_2	-3.453033e-03	-2.47304e-02	3.41036e-02
276	beta.nu[16]	constitBusan_3	-1.771982e-02	-4.25751e-02	3.96942e-03
277	beta.nu[17]	constitBusan_4	-1.436411e-02	-5.10465e-02	1.46984e-02
278	beta.nu[18]	constitBusan_5	5.793218e-04	-3.28340e-02	2.92231e-02
279	beta.nu[19]	constitBusan_6	-4.629764e-03	-3.52440e-02	3.05302e-02
280	beta.nu[20]	constitBusan_7	-1.324307e-02	-5.31814e-02	3.11224e-02
281	beta.nu[21]	constitBusan_8	-4.495728e-02	-5.48459e-02	-3.22916e-02
282	beta.nu[22]	constitBusan_9	1.308738e-02	-3.12250e-03	4.26822e-02
283	beta.nu[23]	constitChung-cheong bukdo_1	-4.375227e-02	-5.54863e-02	-2.48381e-02
284	beta.nu[24]	constitChung-cheong bukdo_2	-4.462243e-02	-8.49639e-02	-5.94213e-04
285	beta.nu[25]	constitChung-cheong bukdo_3	2.595704e-02	-3.09895e-02	9.23124e-02
286	beta.nu[26]	constitChung-cheong bukdo_4	-3.702723e-02	-6.93514e-02	-3.44490e-03
287	beta.nu[27]	constitChung-cheong bukdo_5	1.131436e-02	-2.48358e-02	4.92549e-02
288	beta.nu[28]	constitChung-cheong bukdo_6	-2.402925e-02	-5.81731e-02	8.77399e-03
289	beta.nu[29]	constitChung-cheong bukdo_7	4.421142e-02	-8.79796e-03	1.05557e-01
290	beta.nu[30]	constitChung-cheong bukdo_8	-3.166132e-02	-6.37641e-02	2.98061e-02
291	beta.nu[31]	constitChungcheongnam-do_1	-7.330407e-02	-1.17465e-01	-4.25489e-02
292	beta.nu[32]	constitChungcheongnam-do_10	-3.084240e-02	-5.87625e-02	-7.44493e-03
293	beta.nu[33]	constitChungcheongnam-do_11	1.595038e-02	-2.78830e-02	5.07697e-02
294	beta.nu[34]	constitChungcheongnam-do_2	-1.521817e-02	-2.39636e-02	-2.89815e-03
295	beta.nu[35]	constitChungcheongnam-do_3	-6.083014e-02	-1.15606e-01	8.58683e-03
296	beta.nu[36]	constitChungcheongnam-do_4	-5.619697e-02	-1.13258e-01	-1.46084e-02
297	beta.nu[37]	constitChungcheongnam-do_5	9.043211e-03	-2.09704e-02	3.29245e-02
298	beta.nu[38]	constitChungcheongnam-do_6	-1.251965e-02	-3.76901e-02	3.59926e-02
299	beta.nu[39]	constitChungcheongnam-do_7	7.329939e-03	-3.51051e-02	5.76433e-02
300	beta.nu[40]	constitChungcheongnam-do_8	-6.101820e-04	-1.55913e-02	3.15777e-02
301	beta.nu[41]	constitChungcheongnam-do_9	-5.001232e-02	-7.10432e-02	-3.04357e-02
302	beta.nu[42]	constitDaegu Metropolitan City_1	7.266308e-02	4.66527e-02	1.02915e-01
303	beta.nu[43]	constitDaegu Metropolitan City_10	6.599090e-02	3.65831e-02	1.10722e-01
304	beta.nu[44]	constitDaegu Metropolitan City_11	-8.606916e-03	-1.62564e-02	1.44135e-03
305	beta.nu[45]	constitDaegu Metropolitan City_12	8.554630e-02	4.89470e-02	1.16053e-01
306	beta.nu[46]	constitDaegu Metropolitan City_2	3.812529e-02	-1.73840e-02	1.14713e-01
307	beta.nu[47]	constitDaegu Metropolitan City_3	1.516528e-03	-6.12511e-02	3.51628e-02
308	beta.nu[48]	constitDaegu Metropolitan City_4	7.531832e-02	4.73589e-02	1.09510e-01
309	beta.nu[49]	constitDaegu Metropolitan City_5	-1.589027e-01	-2.04303e-01	-1.26570e-01
310	beta.nu[50]	constitDaegu Metropolitan City_6	-1.003320e-01	-1.46816e-01	-6.37212e-02
311	beta.nu[51]	constitDaegu Metropolitan City_7	1.532286e-02	-1.37685e-02	5.39312e-02
312	beta.nu[52]	constitDaegu Metropolitan City_8	-6.420370e-02	-1.25195e-01	-2.08432e-03
313	beta.nu[53]	constitDaegu Metropolitan City_9	-4.110179e-03	-4.55096e-02	1.98236e-02

314	beta.nu[54]	constitDaejeon_1	-2.963649e-02	-6.21889e-02	6.77089e-03
315	beta.nu[55]	constitDaejeon_2	-2.178269e-02	-4.11062e-02	7.16968e-03
316	beta.nu[56]	constitDaejeon_3	-4.598807e-02	-6.72369e-02	-2.67272e-02
317	beta.nu[57]	constitDaejeon_4	6.661704e-03	-1.87981e-02	4.80027e-02
318	beta.nu[58]	constitDaejeon_5	-1.309739e-02	-6.30109e-02	2.41747e-02
319	beta.nu[59]	constitDaejeon_6	-3.374732e-03	-2.29525e-02	1.31964e-02
320	beta.nu[60]	constitDaejeon_7	-4.570114e-02	-8.32833e-02	6.08863e-03
321	beta.nu[61]	constitGangwon-do_1	-5.869690e-02	-8.44532e-02	-2.91322e-02
322	beta.nu[62]	constitGangwon-do_2	-1.015410e-02	-4.40863e-02	3.27665e-02
323	beta.nu[63]	constitGangwon-do_3	-3.987465e-02	-7.97919e-02	8.02125e-03
324	beta.nu[64]	constitGangwon-do_4	-4.967384e-02	-7.39209e-02	-2.50957e-02
325	beta.nu[65]	constitGangwon-do_5	-5.751137e-02	-1.03355e-01	-2.80429e-02
326	beta.nu[66]	constitGangwon-do_6	1.886710e-02	-1.66816e-02	5.13271e-02
327	beta.nu[67]	constitGangwon-do_7	8.396711e-03	-2.48760e-02	6.62693e-02
328	beta.nu[68]	constitGangwon-do_8	-1.745275e-02	-4.97652e-02	1.15958e-02
329	beta.nu[69]	constitGwangju_1	5.154580e-02	2.51363e-02	6.66098e-02
330	beta.nu[70]	constitGwangju_2	7.195234e-02	3.39826e-02	1.26284e-01
331	beta.nu[71]	constitGwangju_3	8.020334e-02	2.16031e-02	1.16531e-01
332	beta.nu[72]	constitGwangju_4	4.447365e-02	8.29871e-03	7.33270e-02
333	beta.nu[73]	constitGwangju_5	7.557110e-03	-1.79313e-02	4.23346e-02
334	beta.nu[74]	constitGwangju_6	9.055553e-02	5.15674e-02	1.16666e-01
335	beta.nu[75]	constitGwangju_7	5.620031e-02	2.42616e-02	1.00782e-01
336	beta.nu[76]	constitGwangju_8	8.267575e-02	3.94867e-02	1.15848e-01
337	beta.nu[77]	constitGyeonggi-do_1	-1.269112e-02	-2.69376e-02	-4.09311e-03
338	beta.nu[78]	constitGyeonggi-do_10	-2.405134e-02	-6.31406e-02	1.47499e-02
339	beta.nu[79]	constitGyeonggi-do_11	-3.632682e-02	-4.91893e-02	-2.73041e-02
340	beta.nu[80]	constitGyeonggi-do_12	-2.561560e-02	-6.05858e-02	-4.20184e-04
341	beta.nu[81]	constitGyeonggi-do_13	4.405379e-03	-4.84524e-02	3.70387e-02
342	beta.nu[82]	constitGyeonggi-do_14	-3.508184e-02	-8.68324e-02	1.03344e-02
343	beta.nu[83]	constitGyeonggi-do_15	9.498093e-03	-1.96567e-02	3.42218e-02
344	beta.nu[84]	constitGyeonggi-do_16	-2.488662e-02	-7.64040e-02	2.14509e-02
345	beta.nu[85]	constitGyeonggi-do_17	2.749627e-02	6.44262e-03	5.22445e-02
346	beta.nu[86]	constitGyeonggi-do_18	1.519972e-03	-2.22820e-02	4.70589e-02
347	beta.nu[87]	constitGyeonggi-do_19	-1.290469e-02	-4.78572e-02	1.05922e-02
348	beta.nu[88]	constitGyeonggi-do_2	-3.396447e-03	-2.31034e-02	3.02296e-02
349	beta.nu[89]	constitGyeonggi-do_20	3.284233e-02	-4.83318e-03	6.82786e-02
350	beta.nu[90]	constitGyeonggi-do_21	-4.491160e-02	-9.03877e-02	-4.51496e-03
351	beta.nu[91]	constitGyeonggi-do_22	-1.267204e-02	-8.43605e-02	2.62866e-02
352	beta.nu[92]	constitGyeonggi-do_23	1.129988e-02	-2.62869e-02	6.76563e-02
353	beta.nu[93]	constitGyeonggi-do_24	5.029911e-03	-3.79680e-02	6.30244e-02
354	beta.nu[94]	constitGyeonggi-do_25	-1.064332e-02	-4.17484e-02	1.84632e-02
355	beta.nu[95]	constitGyeonggi-do_26	1.093132e-02	-2.18808e-02	3.79823e-02
356	beta.nu[96]	constitGyeonggi-do_27	-1.145428e-02	-4.00723e-02	1.70917e-02
357	beta.nu[97]	constitGyeonggi-do_28	-8.557886e-02	-1.49949e-01	-3.66939e-02
358	beta.nu[98]	constitGyeonggi-do_29	-2.017152e-02	-4.73819e-02	1.67507e-02
359	beta.nu[99]	constitGyeonggi-do_3	1.630271e-02	-8.50907e-03	4.08979e-02
360	beta.nu[100]	constitGyeonggi-do_30	1.199694e-02	-2.38381e-02	4.67324e-02
361	beta.nu[101]	constitGyeonggi-do_31	-1.740106e-02	-4.49221e-02	2.27790e-03
362	beta.nu[102]	constitGyeonggi-do_32	-3.281967e-02	-5.19524e-02	-1.07114e-02
363	beta.nu[103]	constitGyeonggi-do_33	-2.988829e-02	-7.46130e-02	-2.34540e-03
364	beta.nu[104]	constitGyeonggi-do_34	-1.118523e-02	-3.35703e-02	9.25815e-03
365	beta.nu[105]	constitGyeonggi-do_35	-5.268889e-04	-2.12973e-02	1.97798e-02
366	beta.nu[106]	constitGyeonggi-do_36	-6.512091e-02	-7.94317e-02	-4.95695e-02
367	beta.nu[107]	constitGyeonggi-do_37	-1.013481e-02	-3.33535e-02	1.29826e-02
368	beta.nu[108]	constitGyeonggi-do_38	-1.311004e-02	-4.44138e-02	2.35254e-02
369	beta.nu[109]	constitGyeonggi-do_39	2.908625e-02	-3.28131e-02	7.56528e-02
370	beta.nu[110]	constitGyeonggi-do_4	3.972597e-03	-5.02822e-02	3.67748e-02
371	beta.nu[111]	constitGyeonggi-do_40	1.031122e-02	-5.15785e-02	6.84827e-02
372	beta.nu[112]	constitGyeonggi-do_41	-2.991433e-02	-8.01816e-02	7.48092e-03
373	beta.nu[113]	constitGyeonggi-do_42	7.923458e-03	-3.91490e-02	6.49981e-02
374	beta.nu[114]	constitGyeonggi-do_43	1.467813e-02	-2.87268e-02	6.04285e-02
375	beta.nu[115]	constitGyeonggi-do_44	-6.173588e-02	-1.02960e-01	-1.10307e-02
376	beta.nu[116]	constitGyeonggi-do_45	2.015242e-03	-4.11836e-02	6.10541e-02
377	beta.nu[117]	constitGyeonggi-do_46	1.582019e-02	-6.62797e-03	4.22834e-02
378	beta.nu[118]	constitGyeonggi-do_47	-2.392652e-02	-5.66814e-02	-3.02578e-05
379	beta.nu[119]	constitGyeonggi-do_48	1.856893e-02	-7.98733e-03	6.16846e-02
380	beta.nu[120]	constitGyeonggi-do_49	-4.726852e-02	-6.28301e-02	-3.06776e-02
381	beta.nu[121]	constitGyeonggi-do_5	-1.857788e-02	-5.76875e-02	2.55932e-02

382	beta.nu[122]	constitGyeonggi-do_50	-3.387572e-03	-3.61564e-02	2.67689e-02
383	beta.nu[123]	constitGyeonggi-do_51	-3.716175e-02	-5.95466e-02	7.84369e-04
384	beta.nu[124]	constitGyeonggi-do_52	-7.827373e-02	-1.20613e-01	-4.21738e-02
385	beta.nu[125]	constitGyeonggi-do_53	3.517722e-02	8.15768e-03	6.98541e-02
386	beta.nu[126]	constitGyeonggi-do_54	4.770783e-02	1.73914e-02	9.11487e-02
387	beta.nu[127]	constitGyeonggi-do_55	-1.986257e-03	-5.78179e-02	4.17459e-02
388	beta.nu[128]	constitGyeonggi-do_56	-1.299428e-02	-5.25104e-02	3.23031e-02
389	beta.nu[129]	constitGyeonggi-do_57	-1.086511e-03	-4.84736e-02	4.21375e-02
390	beta.nu[130]	constitGyeonggi-do_58	-2.511220e-02	-7.15856e-02	1.47450e-02
391	beta.nu[131]	constitGyeonggi-do_59	1.236483e-02	-2.79358e-02	4.71419e-02
392	beta.nu[132]	constitGyeonggi-do_6	2.174868e-02	-4.83256e-03	5.54856e-02
393	beta.nu[133]	constitGyeonggi-do_7	-6.585683e-03	-4.16040e-02	2.78773e-02
394	beta.nu[134]	constitGyeonggi-do_8	-6.657616e-02	-9.84250e-02	-3.74189e-02
395	beta.nu[135]	constitGyeonggi-do_9	-6.694656e-02	-9.03126e-02	-3.73129e-02
396	beta.nu[136]	constitGyeongsangbuk-do_1	7.709960e-02	3.36746e-02	1.14576e-01
397	beta.nu[137]	constitGyeongsangbuk-do_10	1.194407e-01	6.68855e-02	1.83636e-01
398	beta.nu[138]	constitGyeongsangbuk-do_11	5.825227e-02	3.98315e-02	7.62187e-02
399	beta.nu[139]	constitGyeongsangbuk-do_12	9.163560e-02	4.66548e-02	1.54216e-01
400	beta.nu[140]	constitGyeongsangbuk-do_13	5.696472e-02	1.08677e-02	9.36591e-02
401	beta.nu[141]	constitGyeongsangbuk-do_2	1.971922e-02	4.41488e-03	4.39421e-02
402	beta.nu[142]	constitGyeongsangbuk-do_3	-1.650679e-02	-6.39469e-02	7.46592e-03
403	beta.nu[143]	constitGyeongsangbuk-do_4	1.197284e-01	7.68418e-02	1.68785e-01
404	beta.nu[144]	constitGyeongsangbuk-do_5	-5.063688e-02	-8.64957e-02	-1.15936e-03
405	beta.nu[145]	constitGyeongsangbuk-do_6	3.200972e-02	1.13410e-03	5.67172e-02
406	beta.nu[146]	constitGyeongsangbuk-do_7	2.363788e-02	1.68925e-02	3.14841e-02
407	beta.nu[147]	constitGyeongsangbuk-do_8	6.199773e-02	2.04943e-02	1.15358e-01
408	beta.nu[148]	constitGyeongsangbuk-do_9	-4.280539e-03	-2.39541e-02	2.73040e-02
409	beta.nu[149]	constitGyeongsangnam-do_1	2.877247e-02	-8.28323e-03	6.16170e-02
410	beta.nu[150]	constitGyeongsangnam-do_10	-5.982249e-02	-8.53117e-02	-1.90669e-02
411	beta.nu[151]	constitGyeongsangnam-do_11	-4.785871e-02	-9.56216e-02	-7.51710e-03
412	beta.nu[152]	constitGyeongsangnam-do_12	9.706279e-02	5.04325e-02	1.33211e-01
413	beta.nu[153]	constitGyeongsangnam-do_13	-1.066070e-02	-4.69949e-02	3.70321e-02
414	beta.nu[154]	constitGyeongsangnam-do_14	-7.876891e-03	-2.61933e-02	1.37641e-02
415	beta.nu[155]	constitGyeongsangnam-do_15	-1.891241e-02	-4.07853e-02	3.25540e-02
416	beta.nu[156]	constitGyeongsangnam-do_16	-6.187460e-02	-1.11820e-01	-2.50053e-02
417	beta.nu[157]	constitGyeongsangnam-do_2	-3.049883e-02	-4.83281e-02	2.79031e-02
418	beta.nu[158]	constitGyeongsangnam-do_3	3.520247e-02	-2.38061e-02	8.90563e-03
419	beta.nu[159]	constitGyeongsangnam-do_4	2.911893e-02	-1.21934e-02	8.13287e-02
420	beta.nu[160]	constitGyeongsangnam-do_5	-6.931396e-03	-4.92218e-02	3.42774e-02
421	beta.nu[161]	constitGyeongsangnam-do_6	1.169849e-02	-4.42288e-02	5.46381e-02
422	beta.nu[162]	constitGyeongsangnam-do_7	6.846953e-03	-4.51385e-02	5.36597e-02
423	beta.nu[163]	constitGyeongsangnam-do_8	4.792947e-02	2.59034e-02	7.72278e-02
424	beta.nu[164]	constitGyeongsangnam-do_9	5.720905e-02	1.59897e-02	9.71515e-02
425	beta.nu[165]	constitIncheon Metropolitan City_1	1.513114e-02	-5.98341e-03	3.36534e-02
426	beta.nu[166]	constitIncheon Metropolitan City_10	-6.133194e-03	-3.63662e-02	2.01795e-02
427	beta.nu[167]	constitIncheon Metropolitan City_11	-3.622099e-03	-2.81398e-02	2.87279e-02
428	beta.nu[168]	constitIncheon Metropolitan City_12	-3.086026e-02	-4.34409e-02	-1.69587e-02
429	beta.nu[169]	constitIncheon Metropolitan City_13	5.048966e-03	-1.51000e-02	2.15037e-02
430	beta.nu[170]	constitIncheon Metropolitan City_2	-4.538345e-02	-8.01857e-02	-6.58651e-04
431	beta.nu[171]	constitIncheon Metropolitan City_3	-6.172087e-02	-7.94985e-02	-3.31405e-02
432	beta.nu[172]	constitIncheon Metropolitan City_4	-1.158965e-04	-3.75042e-02	3.56943e-02
433	beta.nu[173]	constitIncheon Metropolitan City_5	-5.227938e-02	-6.75536e-02	-3.06834e-02
434	beta.nu[174]	constitIncheon Metropolitan City_6	-6.738353e-03	-4.61820e-02	2.77373e-02
435	beta.nu[175]	constitIncheon Metropolitan City_7	-2.078813e-02	-4.58787e-02	1.24450e-02
436	beta.nu[176]	constitIncheon Metropolitan City_8	-9.606471e-03	-2.93855e-02	5.56965e-03
437	beta.nu[177]	constitIncheon Metropolitan City_9	-2.025554e-02	-4.63579e-02	5.09793e-03
438	beta.nu[178]	constitJeju Special Self-Governing Province_1	-5.306791e-02	-7.12520e-02	-1.71410e-02
439	beta.nu[179]	constitJeju Special Self-Governing Province_2	-3.235247e-03	-5.13605e-02	5.35385e-02
440	beta.nu[180]	constitJeju Special Self-Governing Province_3	-3.846599e-03	-6.09279e-02	3.27643e-02
441	beta.nu[181]	constitJeollabuk do_1	4.272891e-02	1.61660e-02	5.81131e-02
442	beta.nu[182]	constitJeollabuk do_10	-2.403459e-02	-4.82563e-02	4.41456e-03
443	beta.nu[183]	constitJeollabuk do_2	1.640660e-02	-8.05930e-03	5.39247e-02
444	beta.nu[184]	constitJeollabuk do_3	5.563594e-02	3.81125e-02	8.01852e-02
445	beta.nu[185]	constitJeollabuk do_4	-1.079099e-02	-4.99806e-02	6.20713e-02
446	beta.nu[186]	constitJeollabuk do_5	7.143177e-02	3.31554e-02	1.14097e-01
447	beta.nu[187]	constitJeollabuk do_6	5.869442e-02	4.14325e-02	8.14037e-02
448	beta.nu[188]	constitJeollabuk do_7	1.025150e-01	6.00192e-02	1.59457e-01
449	beta.nu[189]	constitJeollabuk do_8	6.473647e-03	-2.73698e-02	3.43804e-02

450	beta.nu[190]	constitJeollabuk do_9	4.854676e-02	2.28911e-02	9.76077e-02
451	beta.nu[191]	constitJeollanam-do_1	-5.373250e-02	-7.12880e-02	-3.63504e-02
452	beta.nu[192]	constitJeollanam-do_10	1.385623e-01	1.14996e-01	1.76779e-01
453	beta.nu[193]	constitJeollanam-do_2	-4.321762e-03	-4.42665e-02	5.10809e-02
454	beta.nu[194]	constitJeollanam-do_3	4.805035e-02	3.32350e-02	7.97912e-02
455	beta.nu[195]	constitJeollanam-do_4	-4.612758e-03	-5.46246e-02	6.76322e-02
456	beta.nu[196]	constitJeollanam-do_5	6.252639e-02	7.04321e-03	9.35783e-02
457	beta.nu[197]	constitJeollanam-do_6	8.006886e-02	4.66334e-02	1.09175e-01
458	beta.nu[198]	constitJeollanam-do_7	1.820555e-01	1.31909e-01	2.20372e-01
459	beta.nu[199]	constitJeollanam-do_8	5.283040e-02	2.66497e-02	8.63898e-02
460	beta.nu[200]	constitJeollanam-do_9	5.728314e-02	2.10233e-02	7.78754e-02
461	beta.nu[201]	constitSejong Special Self-governing City_1	-1.718673e-02	-5.34258e-02	1.75282e-02
462	beta.nu[202]	constitSejong Special Self-governing City_2	-2.159412e-02	-5.28376e-02	2.59561e-02
463	beta.nu[203]	constitSeoul_1	6.860546e-03	-4.01228e-02	4.94055e-02
464	beta.nu[204]	constitSeoul_10	-2.909696e-03	-2.47947e-02	1.35916e-02
465	beta.nu[205]	constitSeoul_11	-7.872327e-03	-4.41355e-02	1.83985e-02
466	beta.nu[206]	constitSeoul_12	-6.349827e-03	-2.51559e-02	1.55595e-02
467	beta.nu[207]	constitSeoul_13	-1.211447e-02	-6.59507e-02	2.78765e-02
468	beta.nu[208]	constitSeoul_14	2.529949e-02	-8.27760e-03	5.83186e-02
469	beta.nu[209]	constitSeoul_15	-8.146849e-03	-4.99776e-02	1.39582e-02
470	beta.nu[210]	constitSeoul_16	-2.158319e-02	-4.70794e-02	3.48366e-02
471	beta.nu[211]	constitSeoul_17	-1.880210e-02	-2.56534e-02	-1.29733e-02
472	beta.nu[212]	constitSeoul_18	1.520841e-02	-7.61591e-03	3.73244e-02
473	beta.nu[213]	constitSeoul_19	1.076287e-02	-2.39918e-02	8.69314e-02
474	beta.nu[214]	constitSeoul_2	-1.629637e-02	-5.44633e-02	2.49861e-02
475	beta.nu[215]	constitSeoul_20	2.356910e-02	-3.52111e-03	4.04774e-02
476	beta.nu[216]	constitSeoul_21	9.889683e-04	-2.75047e-02	3.83965e-02
477	beta.nu[217]	constitSeoul_22	-1.331746e-02	-3.23920e-02	6.52668e-03
478	beta.nu[218]	constitSeoul_23	1.072714e-02	-9.76979e-03	2.22357e-02
479	beta.nu[219]	constitSeoul_24	-1.787584e-02	-6.05867e-02	3.31181e-02
480	beta.nu[220]	constitSeoul_25	-1.500131e-02	-4.81826e-02	1.69077e-02
481	beta.nu[221]	constitSeoul_26	-2.868826e-02	-6.95090e-02	-2.73144e-03
482	beta.nu[222]	constitSeoul_27	-1.009155e-02	-7.05643e-02	6.24284e-02
483	beta.nu[223]	constitSeoul_28	-4.929046e-03	-3.77296e-02	3.65183e-02
484	beta.nu[224]	constitSeoul_29	-1.018873e-02	-6.04820e-02	2.83424e-02
485	beta.nu[225]	constitSeoul_3	-1.477541e-02	-5.41279e-02	8.32188e-03
486	beta.nu[226]	constitSeoul_30	-3.788150e-02	-7.40158e-02	-6.18334e-03
487	beta.nu[227]	constitSeoul_31	-1.534847e-02	-7.07631e-02	4.33913e-02
488	beta.nu[228]	constitSeoul_32	-9.719155e-03	-3.68096e-02	1.82280e-02
489	beta.nu[229]	constitSeoul_33	-2.921042e-02	-8.12880e-02	8.01932e-03
490	beta.nu[230]	constitSeoul_34	-2.008221e-02	-3.92418e-02	-4.78141e-03
491	beta.nu[231]	constitSeoul_35	-2.801026e-02	-7.66810e-02	4.61246e-02
492	beta.nu[232]	constitSeoul_36	-2.964309e-02	-1.06122e-01	2.45258e-02
493	beta.nu[233]	constitSeoul_37	-2.750080e-02	-7.02642e-02	1.47963e-02
494	beta.nu[234]	constitSeoul_38	-1.752420e-02	-6.08371e-02	1.12728e-02
495	beta.nu[235]	constitSeoul_39	-3.083663e-02	-6.01302e-02	-1.54101e-03
496	beta.nu[236]	constitSeoul_4	-3.458996e-02	-9.85479e-02	1.34943e-02
497	beta.nu[237]	constitSeoul_40	2.434083e-02	-1.60543e-02	6.38106e-02
498	beta.nu[238]	constitSeoul_41	9.425761e-03	-3.76876e-02	6.01606e-02
499	beta.nu[239]	constitSeoul_42	-7.886287e-03	-5.16371e-02	3.34753e-02
500	beta.nu[240]	constitSeoul_43	-5.099703e-03	-4.94660e-02	4.17927e-02
501	beta.nu[241]	constitSeoul_44	1.103074e-02	-3.88779e-02	4.98031e-02
502	beta.nu[242]	constitSeoul_45	-6.713044e-03	-2.95299e-02	9.38430e-03
503	beta.nu[243]	constitSeoul_46	-2.836999e-02	-8.55225e-02	3.44873e-02
504	beta.nu[244]	constitSeoul_47	-3.428739e-02	-9.91914e-02	1.52484e-02
505	beta.nu[245]	constitSeoul_48	-5.152996e-02	-7.74537e-02	-3.26412e-02
506	beta.nu[246]	constitSeoul_49	-4.434332e-02	-7.72019e-02	-2.42234e-02
507	beta.nu[247]	constitSeoul_5	-1.131655e-02	-5.96006e-02	2.41517e-02
508	beta.nu[248]	constitSeoul_6	-3.482140e-02	-6.97856e-02	6.77051e-03
509	beta.nu[249]	constitSeoul_7	-2.007616e-02	-3.14014e-02	-9.62450e-03
510	beta.nu[250]	constitSeoul_8	-5.383768e-03	-3.02820e-02	2.70291e-02
511	beta.nu[251]	constitSeoul_9	-8.546156e-03	-3.57467e-02	1.82757e-02
512	beta.nu[252]	constitUlsan Metropolitan City_1	9.351479e-03	-4.44259e-02	5.93673e-02
513	beta.nu[253]	constitUlsan Metropolitan City_2	4.019833e-03	-2.75262e-02	2.54996e-02
514	beta.nu[254]	constitUlsan Metropolitan City_3	2.145210e-02	-1.18057e-02	4.95828e-02
515	beta.nu[255]	constitUlsan Metropolitan City_4	-7.055998e-02	-9.95224e-02	-2.59660e-02
516	beta.nu[256]	constitUlsan Metropolitan City_5	-3.497198e-02	-7.99640e-02	1.67927e-02
517	beta.nu[257]	constitUlsan Metropolitan City_6	1.069686e-02	-8.74206e-03	3.43474e-02

518	beta.iota.m	(Intercept)	1.744052e-01	1.40994e-01	1.98129e-01
519	beta.iota.s	(Intercept)	-8.591155e-01	-9.37079e-01	-8.02521e-01
520	beta.chi.m	(Intercept)	-2.870988e-01	-3.25324e-01	-2.30152e-01
521	beta.chi.s	(Intercept)	-8.173870e-01	-1.08694e+00	-6.04918e-01

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ELECTION FRAUD – ELECTION
HARDWARE OF THE BALLOT SORTER

Benjamin Wilkerson

Synopsis for “Election Fraud *Election Hardware of the Ballot Sorter*”

Numerous subject matter experts have investigated the issue of the ballot sorting machines that were used for the April 15th South Korean general election, and some of them have concluded that there were vulnerabilities and irregularities with the ballot sorters. Notably, the experts have not been allowed to conduct detailed or forensic examinations of the ballot sorting machines. This lack of transparency on the part of electoral officials has raised suspicions regarding the results of South Korea’s 21st general election.

Mr. Benjamin Wilkerson is one of the aforementioned experts. He was able to examine a ballot machine in enough detail to raise concerns over the capabilities of the ballot sorting machines.

Mr. Wilkerson’s detailed report describes three major issues with the ballot sorters used in the April 15th election: First, Article 5 of the Supplementary Provision of the Public Official Election Law states that the ballot sorter should be a simple sorter and operate as a stand-alone without being connected to any other external devices. However, the ballot sorter used has five built-in USB ports which make it possible to send the internal data to the outside and to receive and store/implement firmware or data from the outside.

Second, the Field Programmable Gate Array (FPGA) was used as a H/W component, and this means that the firmware can be changed at any time to perform certain tasks.

Third, QR codes were used in violation of the existing election law, which states that only barcodes can be used on the ballot paper. Furthermore, the ballot sorter was designed to read and decipher even confidential information that may not be read by an ordinary QR code reader.

The technical issues discovered with the ballot sorting machines used in the general election are problematic, according to Mr. Wilkerson. As configured, tampering and manipulation of the machines was possible. And the suspicions of such activity alone call into question the integrity of the entire 21st South Korean general election.

Introduction

Many subject matter experts in South Korea have investigated the hardware of the ballot sorting machines (hereinafter referred to as ‘ballot sorter’) and concluded that there were three major and critical problems with the ballot sorter which would invalidate the outcome of South Korea’s 21st General Election held on April 15, 2020.

Benjamin Wilkerson, former Technical System Engineer of IBM’s semiconductor design, released a picture of a printed circuit board (PCB) in the ballot counting machine. His picture of the motherboard clearly shows 2 built-in CPUs, so that the ballot counting machines function as a powerful computer. Benjamin Wilkerson explained, “This is a supercomputer specification higher than a normal laptop specification. Due to the nature of a simple counting system, such a high-performance system is not required.” Huawei communications devices were also discovered in system hardware and other devices of the National Election Commission (NEC) platform.



<Figure 1> Circuit board of the ballot sorter

This report discusses the three major problems with the hardware of the ballot sorter, investigated and concluded by many subject matter experts in South Korea.

Please be advised that most investigation and analysis were done based on a few available photos and recollection of what has been seen since the NEC of South Korea has decided not to release the specifications of the hardware and software source code and has refused to preserve the evidence related to the ballot sorters and laptop computers used in the election.

Three major problems with the ballot sorters used in this election

First, Article 5 of the Supplementary Provision of the Public Official Election Law states that the ballot sorter should be a simple sorter and operate standalone without being connected to any other external devices. However, as you can see in the picture shown below, the ballot sorter has 5 built-in USB ports which makes it possible to send the internal data to the outside and to receive and store/implement firmware or data from the outside. And, if you look at the mainboard inside the ballot sorter as shown below, there is a reset button and a boot button which infer that there is an operating system. In short, the ballot sorter is a high-performance computer system. Furthermore, the problem is that it has a backdoor that can be connected to an external device to perform necessary operations to manipulate the counting process.



<Figure 2> USB ports in the ballot sorter

Second, the Field Programmable Gate Array (FPGA) was used as a hardware component, and this means that the firmware can be changed at any time to perform certain tasks.

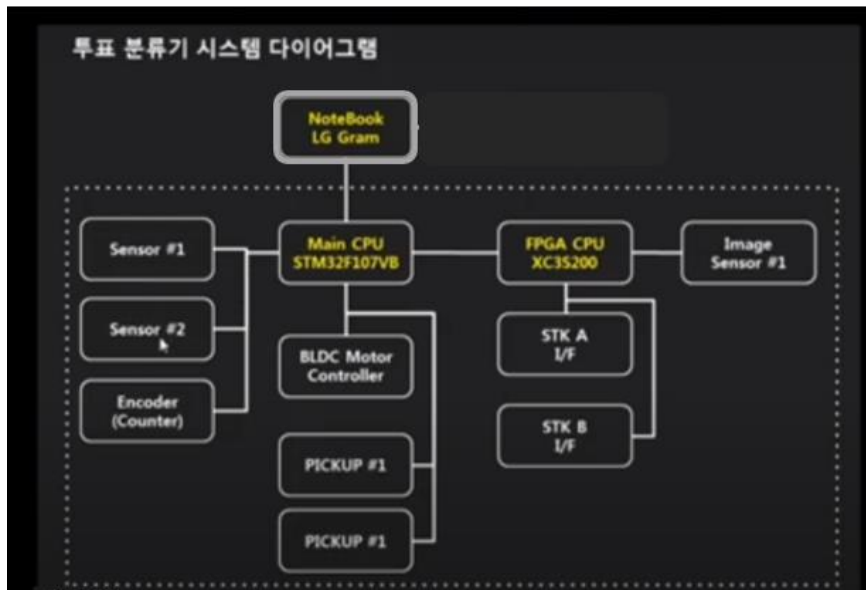
Third, QR codes were used in violation of Article 151, Paragraph 6 of the Public Official Election Law, which states that only barcodes can be used on the ballot paper. Furthermore, the ballot sorter was designed to read and decipher even confidential information which may not be read by an ordinary QR code reader.



<Figure 3> QR code on ballot

Details

The laptop (LG Gram) used in connection with a sorter is known to have a Wi-Fi module mounted directly on the PCB and cannot be removed by a user. Looking at the hardware configuration of the sorter, they are the main CPU (STM3 chip from ST Micro) and FPGA (SPARTAN3 family chip from XILINX). Nevertheless, considering that all functions of the ballot sorter are performed only when connected to the controlling laptop, it seems that the controlling laptop acts as a master and the ballot sorter plays the role of slave. As discussed here, the controlling laptop playing the role of master means the operations of the ballot sorter can be arbitrarily controlled through the laptop. This is in violation of the definition of a ballot sorter as a simple sorting machine which must operate independently as stipulated by law.



<Figure 4> System diagram of the ballot sorter

Through an incident that occurred in a local electoral district (Buyeo district), it was confirmed that there was a built-in wireless LAN card in a laptop (LG Gram) connected to the ballot sorter, and an unidentified entity/person downloaded certain codes (an indication of possible manipulation) for different electoral districts after being connected to the central server once the laptop was booted. In addition, the ballot sorter printed out the counting status which included the number of electors, number of distributed ballots, number of voters and number of votes for different candidates, and this was impossible without having some type of communication capabilities. Furthermore, the circuit diagram of the ballot sorter submitted for patent shows the term, 'communication unit'. These findings led many experts to believe that the ballot sorter used in this election was more than a mere sorter as required by law. As a matter of fact, it is highly suspected that the sorter had functions of a computer which could communicate with external devices/entities.

The following briefly describes what had happened in the electoral district. One of the official observers, a member of the opposition party, complained about the frequent malfunction of a ballot sorter on site, and a member of the National Election Commission reluctantly restarted the

ballot sorter by pressing the reset button. Once reset, the ballot sorter started working fine and very interestingly, a candidate from the opposition party ended up winning the district. This led the experts to suspect that there might have been an effort to modify software, firmware and/or coefficients in order for someone or an entity to manipulate the ballot sorting process using the controlling laptop or an external device connected to the ballot sorter through one of the USB ports.

The ballot sorter used in this election is intentionally designed as a high-performance computer system to remotely control the process on the network. In addition, there is a 'Good Software 1st Grade' certification mark on the ballot sorter. This means the ballot sorter has a built-in software and is capable of executing various manipulations. This also proves that the ballot sorter used in the election was not a mere sorter as claimed by the NEC, but rather a computer-like device equipped with a CPU and communication functions which is a violation of Article 5 of the Supplementary Provision of the Public Official Election Act (Act No. 4793).

The ballot sorter used in this election was a complete joke with absolutely no security and 100% possibility of manipulation. This ballot sorter should have not been used at all.

Initially, the observers thought that the laptop was there simply to upgrade the firmware of the embedded system and to conduct simple 'monitoring'. The observers had been fooled when the NEC said that the ballot sorter was a mere sorting device. The observers somehow came to the conclusion that the laptop would enhance security.

Many experts, however, concluded that the laptop played a role of master by processing images and transmitting the 'sorting' command. The laptop also had a function to display all the processes on the screen. Based on these findings, the experts claim that the ballot sorter's real job was to confirm and assure that the ballots that were cast are carefully manipulated, so as to satisfy the predetermined ballot count.

The ballot sorter must have counted the number of ballots cast and then sent the results to a manipulator(s) in advance, and intentionally readjust the ballot count to favor a pre-selected candidate(s). To manipulate the ballot itself, a massive number of fake ballots were placed in the early voting boxes. The reason for this scheme is that the electronic list of voters was used for the early voting and each voter was not manually counted. During early voting, the ballot count was manipulated in real-time, and the fake ballots were entered in the box(es) to satisfy the manipulated number. The massive number of fake ballots were used for this purpose.

These fake ballots were generated in the names of individuals considered as non-voters according to the electronic list of voters and confirmed by the QR code. Through this, the fake ballots were counted as valid ballots. When compared with the electronic list of voters, the fake ballots would be confirmed as valid ballots.

Conclusion

As briefly shown above, a great number of subject matter experts believe that the ballot sorters used in the 21st General Election held on April 15, 2020 were in violation of the Public Official Election Act in three main areas. Each ballot sorter was designed to act as a computer, had gate array components which could be connected to an external central server, and was equipped with a QR code reader. The experts concluded that their assessments led to the conclusion that the ballot sorter was designed and manufactured to do only one job: manipulation.

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PROBLEMS WITH BALLOT COUNTING DEVICE

Cho Chung-yeol

Synopsis for “Problems with Ballot Counting Device”

A ballot paper sorting machine, which is an electronic ballot counting machine, was used in the April 15th general election in South Korea. The ballot paper sorter system is composed of a sorter, a control computer, and a printer. A number of problems have been reported related to this type of system. Among these problems are alleged vulnerabilities owing to the specific chipsets that are integrated inside the electronic ballot counting machine, and a communication device that connects externally. Also, in a certain district during the April 15, 2020 election, a computer showed evidence of malfunction.

Also, Korean-made ballot counting machines have a certain reputation owing their use overseas in elections that have been marred by claims of electoral irregularities.

To address such concerns that raised doubts about the South Korean electoral process, the National Election Commission (NEC) held a press conference on May 28, 2020. Although the National Election Commission made an effort to explain the system that includes the ballot sorter the control computer, and the attached printer, some observers claimed the event was staged for the media – rather than an effort for real transparency.

This paper closely examines the varied issues of concerns with the ballot paper sorting machines, to include the potential for manipulation and other questionable performance during the April 15, 2020 election that would raise concerns over the election outcome and the electoral process.

The completion of this paper would not have been made possible without the invaluable expertise of Seok Dong-hyun, K.T. McFarland, Sandra Fahy, Professor Park Young-ah, Professor Park Sung-hyun, Fred Fleitz, General Kim Hyung-cheol, Dr. Tara O, Park Sung-hyun (Co-President of the Free Citizens Alliance), Kim Miyoung, Professor Jo Sung Hwan, Dr. Maeng Joo-sung, Park Ju-hyun, Benjamin Wilkerson, Kim Jung-hyun, Professor Yong-sik Lee, Doe Tae-woo, former Ambassador Byung-hwa Lee, Jang Yong-hu and Kim Eun-koo.

Problems with the Ballot Paper Sorting System¹


(Electronic Ballot Counting Machines)

1. A ballot paper sorting machine is an electronic ballot counting machine.

The term ‘ballot paper sorter’ is one used by the National Election Commission (NEC) of the Republic of Korea; this system is comprised of a sorter, a control computer, and a printer – this makes up one set of the ballot paper sorter system. As a system (the ballot paper sorter machine) that supports the manual counting of ballots, classifying or calculating the ballots into valid, invalid ballots or by the candidate, the ballot paper that comes out of the ballot box is first divided by each candidate’s vote as either valid or unclassified, and this system plays the role of allowing a convenient way to carry out the next level of manual counting of ballots such the examination, aggregation etc. of the ballots.² However, there are allegations now that this system is not just a simple sorting machine, but rather an ‘electronic ballot counting machine’, and therefore, it is what would be termed a ‘suspicion of the ballot sorter machine’s diversion’, which will be described in detail.



2. Set-up/configuration of an electronic ballot counting machine.

The electronic ballot counting machine system is comprised of a sorter, a control computer, and a printer – this makes up one set of the system and operates on a set-level configuration.

Classification	Photo	Configuration and Function
Ballot paper sorting machine	 <p>(From L to R) * Main unit; Image recognition * Connections; Sort slot 1; Sort slot 2, Sort slot 3 * Ballot paper insert slot; Power switch, ballot length adjuster</p>	<ul style="list-style-type: none"> * Composed of image recognition, connections, and classifications (loads); * Sorting and/or calculating ballots by validity or by candidate (party); * Load sorted ballots into specified sort boxes.

¹ There are some doubts regarding the official term for the ballot paper sorting machine; henceforth the term ‘electronic ballot counting machine’ will be used to describe the system.

² “Regarding the ballot sorting machine”, National Election Commission, November 2012

<p>Control computer</p>		<p>* Configured with a monitor and main body with computing components; * ‘Reads’ the image of the ballot paper sent by the sorter, and orders classification of the ballot paper by the candidate (party).</p>
<p>Printer</p>		<p>* Printing of the sorting results by ballot box or town, township, and county/neighborhood (provisional ballot count status table)</p>

3. Problems with the electronic ballot counting machines.

3.1 The problem with the chipset integrated inside the electronic ballot counting machine.

Professor Benjamin Wilkerson appeared on the YouTube channel called the Lee Bong Gyu TV, where he explained that the Xilinx ARM chipset integrated inside the electronic ballot counting machine is far superior than the CPU installed in an average household-use PC – a high-performance semiconductor that is fully able to control the counting machine externally with other various functions that can be implemented.³

In particular, whether it is an ARM chip or a Xilinx chip, just having either one of these chips is more than enough to carry out the task of sorting ballot papers as explained by the NEC, yet the intentional inclusion of two high-performance chips in a ballot counting machine allows the machine to use one chip to carry the processing work (counting of ballot papers) done by the other chip to be manipulated via firmware by using an external communication source or a USB. In other words, this means that a dual operating system is possible. Two programs can be run concurrently in order to manipulate in any way possible, the data collection that is carried out by the electronic ballot counting machine. Furthermore, with the additional, second chip installed, when the power is turned off to the machine, a reset can be initiated in order to destroy any evidence.

3.2 An electronic ballot counting machine with a communication device that connects externally.

Article 278 of the Public Official Election Act refers to Voting and Counting of Votes by Computer Systems “in order to swiftly and correctly manage such election affairs as the voting, ballot-counting and others.” However, Article 5 of the Act stipulates that an electronic ballot counting machine can only be used in by-elections and smaller scale elections and is illegal for use in general and presidential elections. Regarding this, the NEC has not used the term, ‘electronic ballot counting machine’, but rather a ‘ballot sorter’ to simply help with the sorting of

³ <https://www.youtube.com/watch?v=6HE0n47koeM&feature=youtu.be>) Lee Bong Kyu TV

ballots and has stated that there are no communications devices to allow for external connection.

However, on May 11, 2020, then-National Assemblyman Min, Kyung Wook said in a press conference at the National Assembly meeting hall that an internal whistleblower revealed that what the NEC called a simple ‘ballot sorter’, indeed had a DNS server address inputted into the machine, and had the testimony and evidence to back up this claim, which in effect means that the machine is indeed connected to a network to allow for remote control.

In response to this, the NEC claimed that since there is no connection via Wi-Fi, no outside intervention or hacking can be possible, but communications and IT experts have said that even without a Wi-Fi connection, the internal database of a public institution’s computer room can be easily accessed from the outside if there is only just one inside collaborator. This implies that it is possible that with the aid of China and its Central Election Commission, hacking and manipulation can be carried out with a small number of people.⁴

3.3 Computer function shown by the ballot sorter in the Seongbuk-Gu district election ballot counting process.

3.3.1. The process of downloading basic code No. 2905 when replacing a ballot paper sorting machine at the Seongbuk-Gu National Election Commission office.

A YouTuber who goes by the name GIT4K posted a videoclip on May 19th titled, “[Exclusive] Confirmation of connection saved screen between an electronic ballot counting machine and an NEC server” and uploaded his analysis. GIT4K is an acronym for Global issue Tracker for Korea, and GIT4K was able to confirm this using video footage taken at a ballot counting office in the Seongbuk-Gu district in Seoul, as shown on the YouTube channel ‘Gong-sun-gam TV’, run by the civic group the ‘National People’s Monitoring Group for Fair Elections’.

3.3.2. Evidence of miscellaneous, other computer specification introduced to the system.

Prior to this, the inside of the electronic ballot counting machine, which is being stored at the Guri city NEC office, was discovered to have the ARM CPU chip and the Xilinx company’s FPGA memory array chip, and there is analysis by experts such as Prof. Benjamin Wilkerson that there may have been manipulation of the sorting machines by hackers, due to the presence of these chips.

3.4 Truth revealed during the National Election Commission demonstration (press conference) on May 28, 2020.

3.4.1. Details of admitting during the demonstration, the voluntary removal of the laptop computer’s LAN card.

The laptop computer shown during the demonstration (presumed to be an LG Electronics product) is a 2014 model, as announced by the male NEC employee. However, the laptop is an older 2014 model, and the laptops used for the April 15 general elections is a model that cannot have parts separated from the integrated body. That is to say, the LG Gram model laptops

⁴ <https://youtu.be/V86G2Joudf4> Park Hoon Tak TV

starting from model year 2018 have the LAN card and the power switch as one integrated design, so the LAN card cannot be removed separately.⁵ As a result, the NEC employee stated as if the voluntarily removed LAN card laptop was a model that never had a LAN card installed in the first place.

3.4.2. Professor Benjamin Wilkerson’s command computer testimony.⁶

The control computer can be checked (the circuit board was confirmed to be built on December 14, 2017). The NEC came up with an excuse that they used 2 laptops to increase the control speed of the motor sensor. However, this was far from reality, and even though the surface is weathered down, it is quite certain that there was computer logic via the ARM CPU, and manipulation via the FPGA.

3.5 Instrumentation errors with the electronic vote counting machines.

There is a video footage that captured a scene in a ballot sorting machine whereby ballot papers that clearly had votes for candidate number 2, or were not marked at all, going over to the candidate number 1 sorter slot. In the city of Buyeo voting district, the ruling party candidate had more votes when counted via the ballot sorter; however, when a manual count was done, the ruling party candidate trailed by over 100 votes. There was even a case in the Seongbuk district, Seoul ballot counting office where the electronic vote counting machine read 1810 votes as 1680 votes.

4. The National Election Commission’s explanations, and problems.

4.1. Explanations

In the afternoon of May 28, the Gyeonggi Province, Gwachun City National Election Commission large conference room, the “Open demonstration of the elimination of allegations of rigged elections was held. The NEC’s Election Bureau employees began to take apart a ballot sorting machine. The employees showed those gathered, the motors and other parts that are in a ballot sorting machine. Through this action, they were trying to confirm that there were no communication devices in these machines. Furthermore, they detached the command computer laptop and opened the cover. The LAN card that would normally be inside a notebook, was nowhere to be seen in this laptop. The NEC official said, “to take as many pictures as you want,” and further stated that “it is impossible to use wireless communication to manipulate the ballot sorting machine to change the votes.”⁷

⁵ <The White Paper on the April 15 Rigged Elections>, WoonamWiki, see details on the 5.2 LG Gram laptop.

⁶ “Fully Refuting the NEC Demonstration/Press Conference,” Lee Bong Gyu TV, May 28, 2020

⁷ Dong-A Ilbo; dongA.com – Contents from article (May 29, 2020, Reporter Yoon, Dabin)

4.2. Problems

There must be answers regarding the NEC's bidding announcement containing the communication function in machines, the question that laptops were not used during the April 15 general elections, the problem of using high-performance computer chips as mentioned earlier in this report, and whether this is cause for votes to be invalidated according to the Public Official Election Act.

5. The domestic, South Korean electronic ballot counting machines at the heart of international rigged election scandals.

The Association of World Election Bodies (A-WEB)) is an international civic organization founded in 2013 under the leadership of the National Election Commission to support the establishment of democratic electoral systems in developing countries. The National Election Commission supports the entire budget of the Association, and the NEC chairman is required by law to supervise the A-WEB overseas cooperation projects and manage and supervise the A-WEB. In this A-WEB overseas cooperation project, the fact that the National Election Commission has largely guaranteed the quality of the domestically made electronic ballot counting machine, which has recently been involved in election fraud scandal internationally, is putting more weight on the possibility of the manipulation of electronic voting machines introduced in domestic elections.

There is the well-known case of the May 2018 Iraqi parliamentary elections which used the A-WEB guaranteed electronic ballot counting machines and led to the entire election being embroiled in a shocking controversy over illegality and fraud. According to media outlets reporting on this, reports showed that the results of the electronic ballot counting, and the results of the manual balloting were up to 12 times the difference. As the allegations of fraud increased, the government of Iraq cancelled the results of the electronic counting and carried out a manual recount, and furthermore the Iraqi Parliament pushed through reforms of elections laws to prohibit the usage of electronic voting equipment in all future elections.

Also, in December of the same year, the Democratic Republic of the Congo (DRC) held presidential elections in which yet again, A-WEB-guaranteed electronic ballot counting machines were to be used; then-US Ambassador to the UN, Nikki Haley, said in an interview with the Washington Post upon hearing this news that, "trusted, tested, transparent and easy-to-use voting method," i.e., paper ballots, must be used for the elections. Furthermore, in late 2017, the Republic of Korea Ambassador to the DRC sent a private communique to Seoul regarding the introduction of electronic ballot counting machines and said, "Western nations including the US, and the UN, have this perception of electronic voting equipment being a vast, corrupt, and rigged project."⁸

6. Potential for manipulation and mixed-bundle ballot papers, due to electronic ballot counting machines.

⁸ <http://www.newdaily.co.kr/site/data/html/2018/11/09/2018110900177.html>

6.1. The problem with mixed-bundle ballot papers.

The NEC provided electronic ballot counting machines to developing countries to help with their democratic elections, and in the case of Iraq and its Parliamentary elections, there were 12 times the amount of mixed-bundle ballot paper situation that happened between two candidates in a voting district, leading to outright canceling of the ballot count; in the most recent general election on April 15 in South Korea, here too there were clear instances of mixed-bundle ballot papers.

The issue of this happening is not just a controversy in the most recent 21st general elections; in the past, the Deoburominjoondang, or the Democrat Party and its supporters strongly took the position of outlawing electronic ballot counting machines, claiming the potential manipulation and fraud that could happen; when actual verification resulted in mixed-bundle ballot papers to occur, such as in the case of the Yeonsugu-Eul district voting area for the 21st general elections to elect lawmakers for the National Assembly, where nothing was done to resolve the allegations, it is still the same problem, and the same allegations.

The National Election Commission claims that the ballot sorting system is not an electronic ballot counting machine, but a simple ballot counting system, and that the ballot sorting is accurate, and proven through the Supreme Court's verification of election lawsuits; however, there have not been any real satisfactory explanations regarding the mixed bundle ballot papers that have been discovered going back to the past to now. And the same position is repeated verbally by the NEC in that there is complete integrity in electronic ballot counting machines, that mixed bundle ballot papers and manipulation are impossible, and never once has the NEC provided a clear-cut answer or solution to the mixed bundle ballot paper situation occurring.

Looking at past cases, the 18th presidential elections that pitted Park Geun-hye against Moon Jae-in, in the 'Mok-Dong 4th Voting District' ballot counting, the Saenuri Party candidate Park Geun-hye received 2629 votes with ballots that passed through the electronic ballot counting machines, and were automatically sorted, to Moon Jae-in's 1530 votes. The results of the examination of the vote tally and aggregation confirmed through the inspection resulted in Park getting 1169 votes, as opposed to Moon's 1445 votes. Furthermore, in Mok-1-Dong, Shinjung-2, 3, 4, and 6-Dong, in Shinwol-1, 4, 5-Dong – in the Yangcheon-Gu district alone there were 14 voting areas (out of the entire Yangcheon-Gu district's 107 voting areas) that had a clear difference between the tally done by the electronic ballot counting machines, and by manual inspection and examination. This was a situation that called for a clear explanation, but the NEC at that time claimed that it was not an error function of the machines, but rather an operational mistake; the matter was closed up in this manner, and to this day there still remains a national-level suspicion regarding the electronic ballot counting machines.⁹

6.2. The possibility of vote count manipulation.

In this regard, the documentary <The Plan> by Kim Eo-jun, a progressive figure who made the film to prove the operation of the electronic ballot counting machine, shows the results of

⁹ https://newsis.com/ar_detail/view.html?ar_id=NISX20131028_0012468338&cID=10301&pID=10300

experiments that were carried out that show that the operation of the counting machine can be done so easily as soon as the software is accessed. And it strongly raises suspicions about the manipulation of the problem of unclassified votes that the ballot counting machine failed to recognize, and the download of a program that confirms the completion of the ballot counting by connecting the ballot counting machine to the network just before the ballot counting commences. In this way, from the past there have been problems of mistrust due to electronic counting machines and manipulation through software, but the NEC only repeats the same statement that manipulation is impossible, instead of trying to find out why it is impossible, and it is not even trying to persuade the citizens of South Korea from a technical perspective and thus, the NEC itself has fostered the growth of distrust between the people and the NEC.

These kinds of examples from the past, and of allegations that have been raised so far, we know that the possibility of manipulation through the electronic ballot counting machines is not one that does not have any basis or merit, nor is it a false claim without any grounds, and that this most recent 21st general elections were carried out without any solution or a fix to the issue of mixed bundle ballots that arises from the use of electronic ballot counting machines.¹⁰

7. Conclusion

7.1. The questions that need to be raised.

In addition to the above-mentioned points, the electronic ballot counting machine (ballot paper sorting machine) which has a wireless communication capability existing in the system (LAN card, etc.) to allow for communication with an external source; the manipulation of vote counting due to the electronic ballot counting machine (the machine sorting a ballot to a different sorting slot in the machine, e.g. a ballot that is not for candidate 1, going to candidate 2); the ballot paper screening equipment that has data transfer and printing ability in order to leak data and information; election equipment that are supposed to use business-only lines and not Internet lines/cables by law, but instead are connected via an Internet line or wireless communication line; Chinese nationals working on early voting equipment and potentially manipulating the voting results; the mixed bundle ballot paper situation occurring while the ballots were sorted, leading to confusion in the Buyeo city vote counting office; appointing Chinese nationals as vote counting office employees; problems with Hantle System's election equipment; finally we can see the importance and need for preserving all the parts that are associated with the electronic ballot counting machine such as the server, communication repeater, computerized equipment, etc.

7.2. Sub-conclusion

This past May 28th, the National Election Commission (NEC) invited only members of the media and put on what can easily be called a 'show-off' show in putting together a demonstration in a one-time event, without addressing the allegations of election fraud, and then two days later on May 30th, the 21st National Assembly went into session.

The NEC held an on-site demonstration event to show that the electronic ballot counting

¹⁰ <https://www.youtube.com/watch?v=aGGikPMNn2w#action=share> <The Plan>YouTube clip

machines (the NEC uses the term, 'ballot counting machine') have no issues or problems, and regarding the 40 or so allegations that were raised before May 28, the NEC feels that it has sufficiently addressed those issues and provided materials as well, so the NEC's position is that they fully explained and clarified that the general elections were not rigged.

However, after May 28, there continues to be a steady stream of evidence (in the form of pictures of video clips) and circumstances that confirm that the April 15 general elections were fraudulent.

Just because there were similar cases in past presidential and general elections (such as statistical figures, etc.), does not mean that this most recent election on April 15 is without problems. Rather, even the past presidential or general elections may have been fraudulent ones as well.

Therefore, the National Election Commission has a duty and obligation to address each and every allegation that is coming out of places all over the country, and to thoroughly argue each point and explain that the general elections were not a fraudulent one. And should it be revealed that the elections were indeed fraudulent, the rigged elections need to be declared void and null, and a re-election should be carried out as soon as possible.

**ELECTION
FRAUD**

PRIMARY
DOCUMENTS

QR CODE USED IN EARLY VOTING

Cho Chung-yeol

Synopsis for “QR Code Used in Early Voting”

South Korea’s electoral system allows for ‘early voting’ on two days starting five days before the actual ‘election day.’ Complaints were raised during the April 15th, 2020 election over the fact that QR codes were affixed to ‘early voting’ ballots. Besides arguments that the use of QR codes on ballots is illegal under South Korean law, suspicions were further raised owing to the fact the QR Codes were only attached to ‘early voting’ ballots – and not to ‘election day’ ballots.

The Central Election Management Commission (CEMC) used QR codes on early voting papers instead of barcodes prescribed by the Public Official Election Act, which mandates the use of barcodes on early voting ballots in elections. QR codes and barcodes are similar, yet very different. However, the crucial difference between the two is the amount of information stored. QR code refers to a code in the form of a matrix that represents information in a patterned pattern while barcode is collectively referred to as the medium for visual recognition using various patterns and colors, including one-dimensional barcodes.

This paper closely examines the risks of QR codes in early voting and provides a detailed review of each defined and associated risk, and the types of manipulations that can occur in ballot counting.

By allegedly illegally incorporating the use of QR codes in the South Korean general election, the constitutional principle of secret voting was potentially violated. Also, it is alleged that privacy rights to individuals’ personal information were also infringed upon.

This paper argues that given the illegality of using a QR code with early voting ballots, a more thorough examination of the issue is required. The author also calls for broader investigations into the South Korean electoral system owing to suspicions and allegations of Chinese interference in the electoral process – to include electronic manipulation.

The completion of this paper would not have been made possible without the invaluable expertise of Seok Dong-hyun, K.T. McFarland, Sandra Fahy, Professor Park Young-ah, Professor Park Sung-hyun, Fred Fleitz, General Kim Hyung-cheol, Dr. Tara O, Park Sung-hyun (Co-President of the Free Citizens Alliance), Kim Miyoung, Professor Jo Sung Hwan, Dr. Maeng Joo-sung, Park Ju-hyun, Benjamin Wilkerson, Kim Jung-hyun, Professor Yong-sik Lee, Doe Tae-woo, former Ambassador Byung-hwa Lee, Jang Yong-hu and Kim Eun-koo.

A Comment on the problem of the QR code used in pre-voting¹¹

1. Preface

Controversy continues over the pre-voting of the April 15th general election, which recorded the highest turnout ever. It was controversial that the Central Election Management Commission used QR codes on pre-voting papers instead of barcodes prescribed by the Election Act. The Public Official Election Act mandates the use of barcodes on pre-voting paper. Hereinafter, we will look at the definition of the QR code and related issues.

2. Barcode and QR code

I would like to explain in detail the “QR Code” that violates the Public Official Election Act compared to a “Bar Code”.

2.1 Barcode definition

Barcode is collectively referred to as the medium for visual recognition using various patterns and colors, including one-dimensional barcodes (UPC/EAN, Code128, Code39, Codabar, etc.) and two-dimensional barcodes (InterCode, Data Matrix, PDF417, color code, QR Code, etc.). The type and standardization of barcodes are not specified here.¹²

2.2 Definition of QR Code (Quick Response Code, QR Code)¹³

QR Code refers to a code in the form of a matrix that represents information in a patterned pattern. 'QR' is an acronym for 'Quick Response'. It can contain 1700 Korean characters or 8000 numbers, and is used by reading it with a digital camera or a dedicated scanner. It can be used for free due to being adopted as an international standard (ISO/IEC 18004). QR Code is a registered trademark of DENSO WAVE company. It was developed by Denso Wave in Japan in 1994, and it is widely used in various fields as Denso Wave declared that it would not exercise its patent rights.

2.3 QR code definition in ISO/IEC 18004: 2015

QR Code is a matrix symbology. The symbols consist of an array of nominally square modules arranged in an overall square pattern, including a unique finder pattern located at three corners of the symbol (in Micro QR Code symbols, at a single corner) and intended to assist in easy location of its position, size, and inclination.

2.4 Difference between barcodes and QR codes¹⁴

① Similarities

Barcodes and QR codes are both code numbering systems used to display electronic goods management indicating the product type, country name, and manufacturer name of an item or product.

¹¹ 21st General Election of National Assembly Members of the Republic of Korea, held on April 15, 2020, hereinafter referred to as “April 15th Fraudulent Pre-voting”

¹² Mobile Barcode System configured for compatibility with group standard TTAS.KO-06.0179 mobile RFID system

¹³ https://www.doopedia.co.kr/doopedia/master/master.do?_method=view&MAS_IDX=101230001172183, Doosan Encyclopedia QR code

¹⁴ https://en.wikipedia.org/wiki/QR_%EC%BD%94%EB%93%9C, QR code definition from Wikipedia

② Differences

“Barcode” is a one-dimensional code system whereas “QR (Quick Response) code” contains information in two dimensions, and the storage capacity increases exponentially.

While conventional 1-dimensional barcodes can only store numeric information of around 20 characters, QR codes can store up to 7,089 numbers, up to 4,296 characters (ASCII), up to 2,953 bytes in binary (8 bits), and up to 1,817 Chinese characters. Recognition speed, recognition rate, and resilience are also better than general barcodes. If barcodes are mainly used for calculation, inventory management, and product verification, QR codes are often used as a means of marketing, promotion, and PR. **The crucial difference between the two is the amount of information stored.** This will be explained later.



Barcode

Code for Country Name / Code for Manufacturer name / Code for Product name / for checking purposes / the numbers are shown through line thickness / the machine reads these lines

Symbol for finding location / Data Area / Cell

<Figure 1> A two-dimensional QR code whose storage capacity increases exponentially unlike a one-dimensional barcode

3. Risk of “QR Code” used in pre-voting

3.1 The decisive difference between barcode and QR code (distinguishing profit)

Existing barcodes are basically one-dimensional configurations that can only contain numeric information of up to 20 characters in a horizontal arrangement. However, the QR code is **a two-dimensional structure that can record up to 7,089 numbers, 4,296 characters, and 1,817 Chinese characters using both horizontal and vertical arrangements.**

At best, barcodes can only record information like specific product names or manufacturers, but QR codes can contain long sentences of internet addresses (URL), photo and video information, map information, and business card information.¹⁵

3.2 Benjamin Wilkerson's Opinion¹⁶

Benjamin Wilkerson also pointed out the dangers of QR codes as follows from an expert perspective.

① A Program can be inserted

¹⁵ <http://www.hwangryong.com/news/articleView.html?idxno=2472>, Hwangryong.com

¹⁶ <https://www.youtube.com/watch?v=WG5Uz9ZP7eM>, [Shin Eui Hansu/Touch of God] “Benjamin Wilkerson, Sure of Rigged Election” Special Interview 2020.6.2.

- ② The configuration of Xilinx chip can also be changed.
- ③ It is possible to change the circuit inside the classifier

3.3 Controversy about “QR code type” according to the number of digits (controversy about length of QR code)

QR codes also come in various forms depending on the number of digits. The processing range of information varies depending on whether there are 31 digits, 52 digits, or 77 digits. This is linked to a series of processes that include ① controversy over personal information infringement, ② inputting some kind of information in the QR code, and ③ manipulating the count. There is a controversy about this, so I want to explain it in detail.

3.3.1 31-digit claim

The figure (below) presented by the Central Election Management Commission as explanatory data revealed that it consists of 12 digits for the election name, 8 digits for the name of the constituency, 4 digits for the name of the responsible CEMC, and 7 digits for the serial number.¹⁷



Election name/
name of the

constituency/ name of the responsible CEMC/ serial number
<Figure 2> The 31 QR Code digits revealed by the CEMC (Election name, name of the constituency, name of the responsible CEMC, serial number)

3.3.2 52-digit claim¹⁸

The 31-digit claim has even spread to the existence of a “QR code sensor” in the ballot classifier. Min Kyung-wook, a former member of the Future Integration Party, said on May 19th, "We found out that communication equipment and a spectrum sensor that can read QR codes exists in the ballot classifier used in the general election through a report from a computer expert familiar with the internal affairs of the CEMC."

“▶ After putting some kind of information in the QR code (Step 1) ▶ They read it with the ballot classifier sensor (Step 2) ▶ and the counting manipulation through the main server

¹⁷ <https://www.CEMC.go.kr/portal/bbs/list/B0000226.do?menuNo=200036>, Explanation of the National Election Commission

¹⁸ <https://news.joins.com/article/23780922>, [JoongAng Ilbo] This time,'QR code' election manipulation theory...CEMC "confused with the counting table"

communication (Step 3) took place. This is the essence of the QR code controversy.”



QR Code Shape according to the number of Digits

42 Digit QR Code 31 Digits +11 Digits/ Actual Ballot QR Code/ 77 Digit QR Code

31Digit+46Digit / 78 Digit QR Code 31 Digit+47Digit

Contents of controversy over the number of digits of the QR code claimed by the conservative opposition that raised the controversy over the manipulation of the 4.15 general election pre-voting. [Provided by the Republic of Korea's Guardian Reserve Generals]

<Figure 3> Different QR Code Shapes according to the number of Digits

3.4 Contents of the illegality of QR codes pointed out by the National Assembly in the past¹⁹

In October 2018, the National Assembly Administrative Safety Committee's report on “Settlement of revenue and expenditure account and approval of reserve expenditure under the Central Election Management Commission for fiscal year 2017” said, “The QR code on the pre-voting ballot differs from the definition of the barcode prescribed to use by the Public Official Election Act.



¹⁹ <http://www.newdaily.co.kr/site/data/html/2020/04/13/2020041300146.html>, [New Daily] Election Act decided that "Pre-voting paper is barcode"... The CEMC insisting on 'QR Code'

However, the Central Election Management Commission prints QR codes rather than bar-shaped barcodes on pre-voting papers for various elections to contain information such as election names, which seems to be inconsistent with the definition of barcodes stipulated by the [Public Official Election Act].

<Figure 4> In the report of the National Assembly in April 2018, it was pointed out that the display of the pre-voting QR code is against the law

In particular, the report said, "At the time of the 7th June 13th local election, when a netizen posted a question about the use of the QR code on the pre-voting paper, the CEMC accused the publisher of obstructing freedom of election and deleted the post."

Unfortunately, this was re-enacted at the April 15th general election pre-voting. On the 2nd, the CEMC accused four YouTubers who claimed that "the QR code printed on the pre-voting paper contains the electoral personal information, so that you can check who you voted for" to the prosecution.

3.5 Amendment to the QR Code under the Public Official Election Act requested by the CEMC to the National Assembly

Before the general election, the Central Election Management Commission urged the revision of the Public Officials Election Act on 2020.1.10. The CEMC had made a request to prepare the basis for using the QR code on the pre-voting paper. This also means that there is currently no lawful basis for using QR codes. In other words, they submitted an amendment because they realized that there was no basis for using the QR code on the pre-voting paper.

3.6 Public Inquiry Form to the Central Election Management Commission (National Professors' Meeting)²⁰

A civic group made the following public inquiries regarding the illegal and extralegal use of the QR code for the April 15th general election.

Therefore, We strongly condemn the use of QR codes while violating the prestigious regulations of the law, and openly inquire about the following matters as the Central Election Management Commission used QR Codes despite being fully aware that the use of QR codes other than barcodes on the pre-voting paper in the 4.15 general election had no basis for use and that the reliability of the election process cannot be secured without revision of the law.

(1) The Central Election Management Commission will disclose whether any opinions have been received from the National Assembly regarding the use of QR codes in relation to the official document on January 10, 2020, and, if so, the contents (full text of the CEMC's advisory and official on January 10, 2020).

(2) When was the first election committee-level decision made to use a QR code instead of a barcode during the pre-voting of the 4.15 general election even though the Public Official Election Act was not revised for the basis of using the QR code, and who was the first drafter, interim approver, and final approver of this decision?

(3) Whether the use of the QR code has been dealt with at a full session of the Central Election Management Commission, and if so, a disclosure of the date and time of the meeting, the

²⁰<http://www.forjustice.kr/69/?q=YToyOntzOjEyOiJrZXI3b3JkX3R5cGUiO3M6MzoiYWxsJjtzOjQ6InBhZ2UiO2k6MTt9&bmode=view&idx=4050280&t=board> , from Professors Wanting Justice in Society

participants, the person who initiated or agreed to the agenda, and the decision-making process that led to the final decision to use it must be provided (disclose the minutes).

(4) Since there has already been “a lot of questions and complaints” due to the use of the QR code after the 2018 local elections, in this regard, the number, date and time of complaints received by the Central Election Management Commission as well as the status of processing should be disclosed

(5) Regarding Paragraph 4, whether the Central Election Management Commission has held a full session meeting etc. to deal with legal and technical issues related to the use of QR codes, and if so, the minutes of the meeting should be disclosed.

4. A Detailed Review of the Risks of QR Codes

4.1 Risk of Personal Data Leakage through QR Codes

1) LG U+, the company that provided the communications equipment used in the elections, makes use of Huawei equipment, a company that is currently the subject of some international controversy. The current general advisor at Huawei, Lee Sang-cheol (1948), was the advisor of LG U+ from December 2015 to March 2017 after serving as the CEO and Vice Chairman at LG U+ beginning in 2010. He also served as the Minister of Information and Communication from 2002 to 2003 under Kim Dae-jung’s administration.

2) By saying that a QR code will be generated before the pre-voting ballots are issued means that the individual will each be assigned a ballot serial number.

3) When counting, the ballots are sorted by scanning the QR codes; however, this means that one will be able to know whose ballot voted for what, which violates the secrecy of the ballots.

4) All servers used China’s Huawei equipment for communications.

4.2 Possibility of Ballot Count Manipulation using QR Codes

This is about the fact that manipulation would have been easy at the counter by using the QR codes to distinguish between pre-voting and on-site ballots.

1) Not only do the ballot papers for the pre-elections and the on-site elections need to be different, but there is also the need for a way to distinguish which votes are from the pre-elections at the counter. This was done by making the QR codes able to sort out the ballots. In other words, even if the ballots are mixed, the ballots sorted out by scanning the QR codes are recognized as pre-election ballots, therefore making it easy to distinguish between the ballots.

2) The data transmitted from scanning a QR code a. goes through the semiconductor backdoor of Huawei communications equipment; but b. by facilitating access from an intermediate server, c. the algorithm can be run by a hacker or a program that wants to manipulate the data.

3) The counter used to scan the QR code is also important; in order to use the counter from Hantle System, which is the joint partner of the company that holds the copyright to Korea’s Huawei smartphones and communications equipment, Chungho Comnet, the Central Election Management Commission (CEMC) filed for joint patent with Hantle in September and October of 2017.

4.3 The Risk of Qshing (QR+phishing)²¹

²¹ <https://www.boannews.com/media/view.asp?idx=81734>, [Security news] Zero Pay and Other Increases in QR Code Users: The Expected Security Issues

1) ‘Qshing’ (QR+phishing) is a criminal method in which the QR code is counterfeited to steal personal information. Practically the partner of SMiShing (SMS+phishing), the individual is baited by a text promising to give free coupons upon scanning the included QR code and thus induces the installation of a malicious code. At times, it directs victims to fake financial sites and requests money transfer or payments as well.

2) It is also possible to alter the QR code to adjust the frequency at which the malicious links are executed to bypass filtering. They can make it so that if one pays 100 times, the malicious code will be installed only 2 times so that they can pass through control networks. The risk of physical extortion of QR codes is yet another problem. 2017 saw a number of accidents in which citizens in China suffered financial damage after scanning a counterfeit QR code on a shared bicycle. Someone had physically changed the real QR code to the counterfeit one.

4.4 The Risk of ‘QRLjacking’²²

1) “QRLjacking,” the act of stealing online accounts through QR codes, is yet another risk factor. In 2016, the information security researcher Mohamed Elnubi, from the Egyptian security company Seekurity, succeeded in hacking an account in WhatsApp, an instant messenger in the United States that supports QR code login. The hacker initializes the attack target's QR session then proceeds to copy and paste the login QR code into the phishing site created in advance. The phishing site is then sent to the target to induce a QR code scan. When the scan is over, the hacker logs into the target’s account.

5. Violations of law in the 21st National Assembly Election

5.1 About the Violation of Constitutional requirement for Secret Ballots (Article 31, Paragraph 1 of the Constitution)

The constitutional principle of secret voting is violated, and the infringement of personal information using the QR codes is problematic.

5.2 About the Violation of Article 151, Paragraph 6 of the Public Official Election Act (Using QR Codes)

Article 151 (Preparation of Ballot Papers and Boxes) Notwithstanding paragraphs (1) and (5), the Gu/Si/Gun election commission shall instruct the official in charge of advance polling management to produce ballot papers to be distributed at advance polling stations with a ballot paper printer at advance polling stations. In such cases, the serial numbers printed on the ballot papers shall be marked in the form of bar code (referring to a code marked in the shape of a bar for recognition by computer), and such bar code may contain the name of election, the name of constituency, and the name of the competent election commission.

As can be found in Articles 11, 38, and 151 of the Public Official Election Act, the pre-voting system is stipulated and new barcode regulations²³ have been inserted. The barcode contains the serial number of the ballot, and it is prescribed to be printed not on the return envelope but on the pre-voting paper. It contains only the information of the election name, constituency name, and the name of the election committee.

²² *ibid.*

²³ Public Official Election Act Article 151 (Preparation of Ballot Papers and Boxes)

5.3 Reasons for using the QR Codes Differently from Legal Regulations²⁴

The Public Official Election Act only stipulates barcodes and has no mention of “QR codes.” Nevertheless, if one thinks about “why CEMC used QR codes,” the following reasons can be put together.²⁵

- (1) The need to include large amounts of information.
- (2) The need to plant Chinese characters in QR codes according to the current administration’s pro-China policy.
- (3) The need for QR code images that apply the steganography technology.
 - As one technology among data concealment technologies, steganography is a technology/research that inserts data into other data.²⁶
 - Many security experts warned about the risks of steganography.
 - During the 9.11 terrorist attacks of 2001, steganography was the technology used by Osama bin Laden to exchange messages with the terrorists.
 - Steganography is able to transmit data while hiding the fact that the data is being transmitted, using a method different from data encryption.²⁷
 - Steganography allows cyber-spy attackers to remain on infected systems for long periods of time without being suspected.²⁸

5.4 Georgia Tech’s Dr. Richard DeMillo²⁹

Dr. Richard DeMillo from Georgia Tech has also expressed serious interest in Korea’s election fraud. The following introduces his opinion.

5.4.1 The Problem Of Using QR Codes

- ① Humans cannot read QR codes.
- ② When scanning the ballots, we cannot know what information is included.
- ③ The QR code scanner is vulnerable to hacking.

5.4.2 Dr. Richard DeMillo’s Thesis

- ① Title of Paper: Ballot-Marking Device (BMDs) Cannot Assure the Will of the Voters
- ② Co-Writers
 - Andrew W. Appel / Princeton University
 - Philip. B. Stark / Univ. of California. Berkeley
- ③ Content
 - i) The purpose of the thesis is that strict regulations should be placed in regard to the composition of voting machines for electronic voting.
 - ii) An election conducted by paper ballots is safer than through electronic ballots.
 - iii) As e-voting machines can be easily hacked, the ballots should be checked for hacking by counting the numbers.

²⁴ <https://ieeexplore.ieee.org/document/7509529>

²⁵ <4.15 Problem of Election Fraud>, Lawyer Kwon Woo-hyun 2020.5.23

²⁶ <https://www.dailysecu.com/news/articleView.html?idxno=60528>

²⁷ <https://www.dailysecu.com/news/articleView.html?idxno=52638>

²⁸ From Professor Yoo Gi-young from Kyungpook National University Department of Computer Engineering, who wrote a thesis on a subject related to QR codes and steganography

²⁹ https://youtu.be/f697XrmA_po, [Scott 인간과 자유이야기]

(As long as the ballot box remains securely sealed, checking the numbers by hand is effective.)

iv) Even when voting with paper ballots and not electronically, hacking can occur at any time if the voting classifier and electronic counter are connected to the Internet.

v) Using foreign-made parts is very dangerous because malware or backdoors hiding within the parts is undetectable.

6. The Discovery of the Same QR Code in Off-Site Pre-Elections and Its Resulting Problems

I will now examine and theorize the meaning behind the discovery of the same QR code found in pre-elections held outside of the jurisdiction of the Cheongyang County of Buyeo.

6.1 Summary of Its Occurrence

○ On July 4, 2020, an off-site pre-voting ballot paper with the same QR code as another original is found in the waste from the CEMC (first aired on Media A).

○ When JoongAng Ilbo reports this on July 21, 2020, the CEMC releases an explanation.

- Ballots with same QR codes including serial number and pre-voting officer, etc. that have not been marked had been discarded.

- CEMC explained that “As the result of the Cheongyang County Election Commission verifying off-site pre-voting ballots in the presence of the Nominations Commission, the existence of the off-site pre-voting ballots with the same serial number as reported in the media article has been confirmed.”

○ Andong Daily News (On July 23, 2020, reported by reporter Jo Choong-yeol) inquired about the transpiration of these ballots with same QR codes, but both the CEMC and the Cheongyang County Election Commission referred to the other and continues to refuse to answer.

6.2 The Explanation Provided by the CEMC

“Explanation of the July 22nd Ballot Issuance and Loss” is as follows.

○ The ballots were issued due to the jamming that occurred during the Cheongyang County pre-elections, and the original ballots that came out first were torn and stored in a sealed envelope marked for destroying.

○ An employee from CEMC had gone to provide support due to a lack of manpower, and he was to bring this material to CEMC and then to Gyeongju Election Commission (since they were ballots for off-site pre-voting) once his work was finished, but the envelope was lost—the process during which, they answered, they judge the envelope to have been treated as waste.

○ On July 21, 2020 (Tue), CEMC released the clarification that, after verifying the off-site pre-election ballot papers in the presence of the Party Nomination Commission, the Cheongyang County Election Commission confirmed that the amount of issued ballots matched the number of votes (1,778), and that from the valid votes, they confirmed the presence of the off-site pre-voting ballots with the identical serial number from the media article.

○ Though they apologized for the negligence of management, they have not explained the initial cause for the identical QR codes.

6.3 CEMC’s Avoidance of Andong Daily News reporter Cho Choong-yeol’s Question (reported July 23, 2020)

Reporter Cho Chung-yeol from Andong Daily asked the following questions around July 21st after recognizing the importance of the case of the same issued QR codes during the reprinting of pre-voting ballots, but the fact stands that CEMC acted confused and each avoided answering the reporter.

① What was the situation and who from CEMC participated during the verification of the ballots? ② When confirming the off-site pre-election ballots, who was the one who attended from the Party Nomination Commission? ③ Which member from CEMC was present? ④ In what way were the ballots verified? ⑤ When asked if the '31-digit QR code' for the serial number from the media article matched the unique serial number of the actual ballot, the CEMC and Cheongyang County Election Commission both answered by referring the question to the other party, as if they had already decided to answer the such together.

6.4 Existing Claims by CEMC and Revealed Truths

1) Unique QR codes are not assigned to the individual, and the printer generates it in a sequence (False)

-> The truth was that when a specific person's identity is confirmed, a unique QR code is generated for that individual, and if a jamming problem occurs during the printing process, then the given QR code is used as is and is reprinted.

2) CEMC says that the QR codes are not matched to specific individuals (False)

-> The truth was that once a unique QR code is given to a specific individual, a Matching Data is generated for the Entity.

3) When an Entity and its own Matching Code in the form of a QR code is generated, it is estimated that this information is transmitted and stored at a third, external place (or directly stored by the CEMC) using the network at the polling station.

6.5 The Illegality of the Pre-Election Ballot with Identical QR Codes

○ By scanning the QR code and the ballot's image file, it is possible to find which candidate a specific individual voted for. (As an illegal act violating the important principle of secret voting, this disproves the validity of the 21st General Election.)

○ It is presumed that using the identities of the people who had already taken part of the pre-elections, duplicate ballots (ghost ballots) were created and put into the ballot box, thusly manipulating the number of votes.

○ Since they are using legally eligible voters who completed pre-elections, their votes will not overlap at the on-site elections, thereby removing the risk of being discovered at the on-site elections.

7. The need for QR code verification

Below, we will look at the necessity of QR code verification from various angles.

7.1 Simple hand-counting ballots (recounts) are not enough

-Comparison of pre-voting records and actual pre-voting numbers

-You must check the QR code number in addition to hand-counting the ballots.

(Not only must the constituency QR code and the proportional representative QR code be the same, but the image file of the constituency must have the same QR code, and the contents of the Central Election Management Commission server must be the same)

-You need to check how many types of QR code reader programs exist.

-After receiving the program from the CEMC, you need to create a QR code from it.

7.2 The serial number of the QR code should be analyzed

-The QR code contains 4 types of information through 31 digits.

-12 digits are the name of the election, 8 digits are the name of the constituency, 4 digits are the name of the responsible CEMC, and 7 digits are the serial number.

-If a peculiarity is found in the serial number, for example, if there is an empty number or a repetitive number, or if a number greater than the total number of ballots voted is identified, it is evidence of a crime that the ballot has been manipulated.

-If the CEMC or the court does not allow QR code analysis, it is like saying they will not analyze the fingerprint from a crime scene.

-It is natural to check the well-preserved computerized system and the ballot's QR code to resolve public suspicion.

-The cost of lawsuit will not reach even 1% of the cost from national suspicion and division.

7.3 Verification of Ballot Sorters and Notebooks

By verifying the ballot sorter, it is possible to check whether a spectrum sensor device that can read the contents of the QR code stamped on the pre-voting paper exists. By checking the laptop, it is possible to verify and confirm whether unofficial program has been installed and whether or not WIFI was used for wireless communication with Huawei repeater.

8. Conclusion

Using a QR code for the pre-voting is not only illegal, but the considerable analysis done on this issue by a number of experts raises serious possibilities of misuse, indeed electoral fraud, arising from the employment of QR codes in the April 15, 2020 election. This is potential threat to the entire South Korean electoral process and calls for further examination and review both domestically and by international organizations.

**ELECTION
FRAUD**

PRIMARY
DOCUMENTS

PROBLEMS SURROUNDING EARLY VOTING

Cho Chung-yeol

Synopsis for “Problems Surrounding Early Voting”

The early voting system in South Korea was originally developed to help absentee voters and other citizens unable to vote in person to cast their votes. However, the system has expanded some would say it has been abused, to the point nearly every citizen can participate in ‘early voting’ and according to critics, the opportunities for electoral fraud have also been expanded as well. Such fraud is alleged to have occurred during the April 15, 2020 election.

Early voting is a system whereby a voter can vote during the early voting period without going through a separate pre-registration or notification process. A voter just has to appear at one of the early voting locations throughout South Korea.

There are two different classifications for early voting: inside-jurisdiction voting and outside-jurisdiction voting. Inside-jurisdiction voting is for voters who have their residence address in the relevant ‘gu’, ‘shi’, or ‘gun’ voting district where they are voting. Outside-jurisdiction voting is for voters who have addresses outside the voting district where the polling place is located. However, there are many loopholes in the outside-jurisdiction early voting system.

This paper examines the problems of early voting by focusing on the issues of 1) the early voting ballot “paper” – which is materially different than ‘election day’ ballots owing to a QR code being affixed to the early voting ballot; 2) the problems raised by difference between inside-jurisdiction and outside-jurisdiction voting; 3) the actual ‘management’ of the early voting system. Upon examining each point in detail, the paper examines the possible scenarios of how various potential manipulation of the voting process could have occurred. It also discusses how alleged destruction of evidence occurred to conceal evidence of electoral improprieties.

The completion of this paper would not have been made possible without the invaluable expertise of Seok Dong-hyun, K.T. McFarland, Sandra Fahy, Professor Park Young-ah, Professor Park Sung-hyun, Fred Fleitz, General Kim Hyung-cheol, Dr. Tara O, Park Sung-hyun (Co-President of the Free Citizens Alliance), Kim Miyoung, Professor Jo Sung Hwan, Dr. Maeng Joo-sung, Park Ju-hyun, Benjamin Wilkerson, Kim Jung-hyun, Professor Yong-sik Lee, Doe Tae-woo, former Ambassador Byung-hwa Lee, Jang Yong-hu and Kim Eun-koo.

The Problems with Early Voting (Advance Voting)

With the Focus on the Issue of Mailing Outside-Jurisdiction Early Voting Ballots to the Post Office

1. On This Topic

The original purpose of the early-voting system was for absentee voters, but it has now gone beyond its original intent, and the system is now being abused. Especially, there are many "loopholes in the outside-jurisdiction early voting system", so I would like to describe it by focusing on the problem.

This study is to examine the problems of early-voting by focusing on the issues of 1) the early voting ballot "paper" (material problem); 2) the problems raised in the inside-jurisdiction and outside-jurisdiction voting (substantial problem); 3) and the 'management' of the early voting system (operation problem); and after examining this area, this study will examine the current 4) possible scenario for manipulation; and finally 5) the situation of the destruction of evidence.

1.1 The Definition of Early Voting

Early voting (or, advance voting)³⁰ is a system whereby a voter can vote during the early voting period without going through a separate registration or notification of authorities, to cast a vote in any 'eup', 'myeon', or 'dong' level voting areas, in the early voting booth locations. This system was enacted in 2013 to increase the voters' participation by reforming the voters' voting rights; it was first carried out in the latter half of 2013 in the by-elections, and in 2014, during the 6th national simultaneous local elections, thus it was carried out nationwide in South Korea.

1.2 Distinguishing between Outside-and-Inside Jurisdiction Early Voting

The early voting system is distinguished by inside-jurisdiction voting, and outside-jurisdiction voting³¹ and accordingly, the voting method is different between the two. Inside-jurisdiction voting is for voters who have their residence address in the relevant 'gu', 'shi', or 'gun' voting district. Outside-jurisdiction voting is for voters who have addresses outside the voting district.

The practical benefit of the distinction between the two types of jurisdictional voting is first of all, the difference in how the votes are stored. For the inside-jurisdiction early voting ballot papers, the ballots are stored and sealed in the ballot box and under the watchful eye of the police and/or civil servants, the boxes are then transported to each 'shi', 'gun', or 'gu' district's NEC office, and stored in locations with closed circuit security cameras. On the other hand, the outside-jurisdiction early voting ballot papers are put in mailing envelopes and sent via mail using the postal service to each district's NEC office. Especially for the outside-jurisdiction ballot papers, they are stored in locations without security cameras, and with weak security, and so there are many problems associated with this, which we will cover later.

³⁰ Public Official Election Act, Article 148 (Establishment of Advance Polling Stations), Article 158 (Advance/Early Voting)

³¹ Public Official Election Act, Article 158, Chapter 5, Rules on the Management of Public Official Election, Article 86 (Early Voting)

2. The Problem with the Early Voting Ballot ‘Paper’ (Material Problem)

2.1 Revised and Enforced – The Public Official Election Act – January 17, 2014

As seen in Articles 11, 38, and 151 of the Public Official Election Act, the early voting system was put into effect as law, and a new regulation regarding bar codes was included.³² The barcodes contain the serial number of the ballot paper, and it is stipulated that the barcode is printed on the early voting ballot paper, not on the envelope for mailing. This barcode contains only the following information – the election name, the election voting district, and the relevant NEC office information.

2.2 The Difference between a Barcode and a QR Code

A basic barcode basically has horizontal lines whereby up to 20-spaces of numbered information can be included, thus, a one-dimensional format. Compared to this, a QR code can use both the horizontal and vertical axes and up to 7,089 numbers, or 4,296 letters, and 1,817 Chinese pictographs, can be included, thus it is a two-dimensional format. That is, a barcode can only contain a product name or the manufacturer’s name, but a QR code can contain a longform Internet address (URL) and also photo and video information, map information, or a business card information.³³

2.3 The Reason for Using QR Codes on the Early Voting Ballot Papers, In Violation of Regulations

The Public Official Election Act only stipulates the usage of barcodes and does not mention ‘QR codes’ at all in the Act. Despite that, we must think, “Why the National Election Commission (NEC) used QR codes?”, and we can come up with the following reasons:³⁴

- (1) The need to contain a lot of information.
- (2) The need for the current administration, which is seeking a pro-China policy, to insert QR codes with ‘hanja’ (Chinese pictograph) information.
- (3) The need for steganographic methods in the QR code images.
 - Steganographic technology is one way to hide data, and involves hiding data within other data, or research thereof.³⁵
 - Many security experts have warned about the dangers of steganography.
 - Osama bin Laden and his associates were known to use messaging techniques that used steganography during the 9/11 attacks in 2001.
 - Steganography also allows for hiding the transmission of data, so it is different from encryption.³⁶

³² The Public Official Election Act, Article 151 (Preparation of Ballot Papers and Boxes)

³³ <http://www.hwangryong.com/news/articleView.html?idxno=2472>

³⁴ <The Problem of the April 15 Fraudulent Elections>, Woo-Hyung Kwon, Esq., May 23, 2020

³⁵ <https://www.dailysecu.com/news/articleView.html?idxno=60528>

³⁶ <https://www.dailysecu.com/news/articleView.html?idxno=52638>

- Using steganography allows a cyber spy and attacker to stay hidden and undetected for a long time within a system.³⁷

2.4 Dr. Richard DeMillo of Georgia Tech.³⁸

Dr. DeMillo of Georgia Tech has expressed grave concerns regarding the fraudulent elections held in South Korea. His opinions can be described as follows:

2.4.1 The Problems with QR Codes

- ① A human being cannot read a QR code.
- ② When a ballot paper is scanned, what kind of information is contained in the QR code is unknown.
- ③ A QR code scanner is prone to easy hacking.

2.4.2 Dr. Richard DeMillo's Thesis

- ① Thesis Title: Ballot-Marking Device(BMDs) Cannot Assure the Will of the Voters
- ② Thesis Co-Authors
 - Andrew W. Appel / Princeton University
 - Philip. B. Stark / Univ. of California, Berkeley
- ③ Thesis Content
 - i) The purpose of the paper is to call for the strict regulation of the composition of voting machines for electronic voting
 - ii) The safest method of voting is using paper ballots, not electronic voting machines.
 - iii) Electronic voting machines can be easily hacked, and can be verified by hand counting the ballots. (As long as the ballot box is safely secured, hand counting is effective)
 - iv) Even if paper ballots are used instead of electronic voting machines, if the ballot sorters and the counters are connected to the Internet, hacking can occur any time.
 - v) When foreign-made parts are used, hidden malware can be inside the parts with backdoors installed.

3. The Problems that Arise from Outside-and-Inside-Jurisdiction Voting (Substantial Problem)

Early voting is divided into outside and inside jurisdiction voting – 1) “outside” is the problem whereby the early voting ballot papers are delivered to the post office; 2) “inside” is the problem of ‘supervision of the ballot box’. We will discuss both problems.

3.1 The Problem with Outside Jurisdiction Early Voting

3.1.2 The Problem with the ‘Return/Mailing Envelope’ in Outside Jurisdiction Early Voting.

³⁷ Thesis by Prof. Yoo, Ki-Young, Computer Science Dept., Kyungbuk Univ., on QR codes and steganography.

³⁸ https://youtu.be/f697Xrma_po , [Scott Humans and Freedom Story channel]

There is the issue of the adhesive on the ‘return/ mailing envelope’ that is very weak, so that when the envelope is closed and opened, the paper is not damaged and cleanly attaches and detaches. If it gets too sticky, applying heat can open the envelope. This signifies that if the contents are switched inside the envelope, this can be very easily accomplished.

3.1.3 The Problem of the ‘Mail Delivery’ of the Return/Mailing Envelope

“After the close of early voting, the return envelopes containing the ballots were transferred to the post office under the supervision of the police and the election official, but someone witnessed the NEC official taking that envelope and working on it. During the process of bringing back the envelope, there was no election official or monitor, and no police was present either. Everything was just delivered as if they were normal delivery items. Normally, I thought that these ballot papers with seals on them would be delivered to the relevant NEC offices under tight security, but what I saw was unbelievable. It is highly suspect what was done to the envelopes in that closed off office space. I suspect there must have been a switching of votes and other abnormal activities. Furthermore, the abnormal activities were done from Saturday night to the following day, staying up all night, with the computer printer running all day, and garbage bags filled with shredded paper being thrown out 2 or 3 bags at a time at a similar time from the NEC offices, and so there were many suspicious activities. From a regular citizen’s point of view, these things are extremely hard to accept or understand, and the NEC officials can’t be trusted.” It can be said that the citizens’ right to know has been interfered with through total control.³⁹

3.1.4 The Problem with the Outside-Jurisdiction Early Voting’s Ballot Box Storage ‘Location’

There are no security cameras in the outside-jurisdiction early voting ballot paper storage locations. These places are not even locked up. During the annual National Assembly auditing hearings, this issue was raised, and the NEC said that “everyday the ballot papers are delivered two to three times a day, and in the case that the ballot boxes are opened and closed many times and caught on camera, this can cause other misunderstanding.” Many voters fear the switching of votes with the ballot boxes, but according to the NEC officials, each political party’s monitors can visit and monitor, so the situation has no problems at all.⁴⁰

3.1.5 A Specific Instance

“At the Daejeon city, Jung-Gu NEC vote counting office, among the ballot papers there was one bunch of ballot papers from Sejong City, and another one bunch of ballot papers from Gongju City; when the monitor was notified of this, the NEC official snatched the batches of ballot papers and the naïve ballot counters got the help of the local administrative office workers to find the Sejong City and Gongju City envelopes containing the early voting ballot papers, but they ended up not being able to find anything. Afterwards, those votes were known to be treated as invalidated votes, but how are we to explain this? I surmise that this was a mistake that occurred

³⁹ <The White Paper on the 21st General Elections of April 15> Hakmin Kim, Esq. June 6, 2020.

⁴⁰ http://news.tvchosun.com/site/data/html_dir/2020/04/11/2020041190047.html

during the process of switching of votes, but what do you all think? If there is an NEC official who can provide an explanation, please do so!”⁴¹

3.2 The Problem with the Inside-Jurisdiction Early Voting

3.2.1 The Problem of Mismanagement of Supervision of Inside-Jurisdiction Early Voting Ballot Paper Storage Box

The NEC has stated that the storage room/facilities where the inside-jurisdiction early voting ballot boxes are stored have security cameras, and anytime a request is made, the security tape can be viewed, and this is how they promoted the openness of the management of the early voting system. However, communications and IT experts have stated that even security camera footage can be fully manipulated.

According to a whistleblower from the Dongjak NEC office, a log-in record showed that the screen was fixed in one position, and the connection to the camera was disconnected. If it were not for this information, everyone would have been completely fooled. And there are stories that the fee to apply for viewing the security camera footage is exorbitantly high, prevent regular citizens from easily approaching the issue. Considering these points, it is highly suspicious regarding what happened in the NEC offices throughout the country.

4. The Problem with the ‘Management’ of the Early Votes (Problems with Running the System)

4.1 The Lax Self-Identification Process

Accepting a student ID card as a substitute for a national registration card is dangerous, because Chinese and international students in South Korea may maximize the abuse of the student ID card, and they have to check their identity with the face mask off, but some polling stations have followed this regulation closely.

4.2 The Problem with the Seal

After the vote is taken, the inside-jurisdiction ballot box seal and the seal on the computerized equipment have vinyl material seals affixed, but these seals do not leave a mark when taken off, so if a fake seal with a counterfeit signature is applied, no one will know the difference. In addition, even if the observer signs it, there is a problem that it is only a formality because the observer practically is never there to check and monitor who signs the seal when it is opened or when it is sealed off.

4.3 The Absence of a Stamp/Seal of Confirmation by The NEC's Administrative Officer (The Problem of the Violation of Election Law)

Article 158, Chapter 3 of the Public Official Election Act lists the procedure for: “The official in charge of advance polling management shall print ballot papers for the relevant election with a

⁴¹ <https://newstapa.org/article/OQoGq>

ballot paper printer, affix his/her seal on the blank for “official in charge of advance polling management”, and give a ballot paper to an elector without cutting off the serial number, along with an envelope for return.” However, the stamp was printed and distributed on the ballot, of the supervisor – thus violating election law.⁴²

4.4 The Case of the Discovery of the Damaged Ballot Box at the Daejon Dong-Gu NEC Vote Counting Office ⁴³

This case was one discovered by the vote counting monitor from the Christian Liberty Unification Party, at the Daejon Dong-Gu NEC’s vote counting office, named Kim XX. This monitor witnessed ballot boxes being sent into the office after voting ended, and the Pam-am 2-dong ballot boxes were severely damaged, and upon further, closer inspection, there was evidence of the seal having been adhered and then taken off, and the locking mechanism on the box was off, that is, the pin was removed so that the lid was in an open position; after all these were confirmed with an NEC official, they too determined that it was a serious situation.

In addition, the Pan-am 1-dong, and Gayang-dong ballot boxes also had traces of the seal having been affixed and taken off. The monitor, Kim XX videotaped the situation to preserve as evidence, and afterwards the NEC counted these problem ballot boxes together with other ballot boxes, according to the monitor.

We consider this a serious breach and raise this as an issue regarding the NEC solution. This situation clearly shows that someone touched the ballot boxes and committed an act that violated the fairness of the elections, and if the NEC is not complicit in this, they should have proactively sought out the police and try to find the criminal, and the common sense thing would be for them to secure the problem ballot boxes as evidence, but the NEC has just buried the issue and has moved on, causing many to wonder about the identity of the NEC, and we declare that the ballot counting for the Dong-gu District of Daejeon is invalid.

4.5 The Early Voting Results from Bongdam-Eup Disappears ⁴⁴

There was truly something strange that happened at the Bongdam-eup voting location, which is a combination of the Hwasungjae 1 and 2 voting locations (Bongdam-eup was originally in the Hwasungbyung voting district, and in early March, it was redistricted to the Hwasunggap voting district.) According to the NEC data, the entire Bongdam-eup inside-jurisdiction early voting results disappeared. The NEC data collected the Hwasung city’s entire inside-jurisdiction early voting tally as 8,665 votes (from 18 voting locations). Meaning, 8,665 people voted. However, the inside-jurisdiction early voting numbers for Hwhsungbyung, which excludes Bongdam-eup, has the same number of inside-jurisdiction early voters, at 8,665 votes. The Bongdam-eup early voting results just totally disappeared.

⁴² <http://www.andongdaily.com/news/articleView.html?idxno=23702>

⁴³ <April 15 Fraudulent Elections White Paper>, Free Citizen Coalition

⁴⁴ <The White Paper on the 21st General Elections of April 15> Hakmin Kim, Esq. June 6, 2020.

4.6 Other Problems.

In addition to the above-mentioned problems, there were also problems with: 1) the discovery of destroyed, mutilated ballot related materials at the Namyangju incineration plant; 2) the seals were different for the early voting and the day of the ballot counting; 3) mutilated/damaged seals and ballot papers that were stiff like brand new currency; 4) problems with damaged/defaced ballot boxes, seals and ballot papers holding boxes, etc.⁴⁵

5. A Possible Scenario for Manipulation

5.1 Possibility of Offline Operational Manipulation

5.1.1 Category

- Piling up of votes.

5.1.2 Direct Evidence

① The discovery of ballot papers during counting, where the ballot papers were connected from the top and bottom together.

② In this case, this type of occurrence happens when the ballot papers are printed in large quantities.⁴⁶

5.1.3 Circumstantial Evidence

① The outside-jurisdictional early voting ballots were not even sealed up.

② Ballots were delivered in baskets without lids to post offices.

③ Ballot papers left for days without being monitored.

④ Disturbed/broken seals on ballot boxes.

⑤ Ballot boxes stored in a health gym.

⑥ Ballot papers with more votes than actual number of voters.

- In the NEC office of the Jeonju City, Wansan-Gu district, 10 more ballots were counted than the actual number of voters.⁴⁷

⑦ The ballot counting official was a Chinese citizen.

⑧ During the process of cleaning up of trash in the vote counting office, the articles that came out were not related to election day materials, but the materials were from an early voting polling place.⁴⁸

5.2 The Possibility of Online Manipulation and Fraud

5.2.1 Category

⁴⁵ List of allegations of fraudulent elections raised by former National Assemblyman, Min Kyung Wook. (Contents of a Press Conference) <https://www.facebook.com/minkyungwook/videos/3856550791052744/>

⁴⁶ <https://youtu.be/JwHrpvZwpr8>

⁴⁷ <http://www.andongdaily.com/news/articleView.html?idxno=23569>

⁴⁸ <https://youtu.be/ZNzaJeT3TIE> , Gong Byong Ho TV

① Stealing of votes (plagiarizing of votes)

② Switching of votes.

- Given that the same phenomenon has occurred nationwide, the "20% vote-taking formula" seems to have been used.⁴⁹

6. The Destruction of Evidence in Progress.⁵⁰

6.1 Fires That Broke Out After the General Elections

After the general elections, the following were cases of fires that broke out centered on logistics warehouses and waste disposal sites across the country.

- 4. 16. Seongju recycling business fire.

- 4. 21. Busan, Daejuh-dong logistics warehouse fire.

- 4. 21. Gyeonggi Province Gunpo logistics warehouse fire.

- 4. 23. Anseong, Juksan-myeon recycling business fire.

- 4. 28. Yichun, Seolsung-myeon junkyard fire.

- 4. 29. Gyeonggi Province, Hwasung junkyard and Yichung logistics warehouse fires.

- 4. 30. Gyeongnam, Kimhae junkyard fire.

- 4. 30. Gyeongnam, Hamam-gun wastepaper facility fire.

- 5. 2. Gyeongbuk, Youngchun, Geumho-eup, junkyard fire.

- 5. 7. Kimpo junkyard fire.

- 5. 12. Goyang logistics warehouse fire.

6.2 Gunpo City Logistics Warehouse Fire

① Former National Assemblyman Min Kyung Wook presented the electronic ballot counting machines as the evidence needed to shine a light on allegations of election fraud, and has stated that these electronic ballot counting machines were stored in the Gunpo city warehouse in the F-dong block.

② The fire in the Gunpo city warehouse started in the incinerator located inside the warehouse, and then spread to the F-dong block.

⁴⁹ <https://youtu.be/bYnUnPTcR3k> , Gong Byong Ho TV

⁵⁰ https://www.youtube.com/watch?v=mKBziHenV_8 , Jin Jayu TV

6.3 SPC Samlip Brand Bread Boxes and Fraudulent Elections

- ① The Dobong-Gu NEC office stored ballots in Samlip corporation's bread boxes.
- ② The CEO of SPC Samlip, Huh Young In, is connected to President Moon Jae In's network.
- ③ The SPC Samlip's logistical warehouse in Gunpo city is in M-dong, right next to the NEC office which is located in F-dong ('dong' -> neighborhood block) (The warehouse used by the NEC office is right next to the warehouse used by the SPC Samlip bakery company.)

7. Conclusion

The problems of early-voting, with the issues of 1) the early voting ballot "paper" (material problem); 2) the problems raised in the inside-jurisdiction and outside-jurisdiction voting (substantial problem); 3) and the 'management' of the early voting system (operation problem) have been discussed so far. The early voting system was started in order to help with absentee voting, but the system has been abused in many ways and has resulted in fraudulent elections. Like a chimney that has not been lit will not produce smoke, likewise the experts and domestic and international scholars have raised the issue of allegations of fraud in this general election held in April, and in light of this, serious consideration must be taken regarding what has happened. Especially, it is an important turning point in the settlement of the 'Manchurian' electoral system of this land, and it seems to be important to reveal the substantive truth in a situation where there is a problem with the transparency of the election system as a whole.

**ELECTION
FRAUD**

LEGAL
DOCUMENTS

THE ILLEGALITY OF
THE APRIL 15 GENERAL ELECTIONS
AND THE PROGRESS OF
INVALIDITY LAWSUITS

Seok Dong Hyun

Synopsis for “The Illegality of the April 15 General Elections and the Progress of Invalidation Lawsuits”

In South Korea’s last general election held on April 15th, 2020, the incumbent Democrat Party won 163 seats and the United Future Party won 84 seats out of the 300 seats in the National Assembly. Many lawsuits have been filed claiming election mismanagement and other improprieties in the electoral process owing to acts or omissions on the part of the National Election Commission (NEC). The South Korean system of ‘early voting’ has also been challenged as being unconstitutional.

Legal process is the method for challenging the electoral process and electoral results in South Korea. In this way, election lawsuits are divided into two categories: (1) an election invalidity lawsuit (challenging the entire election) and (2) ‘election win invalidity’ lawsuit (challenging the outcome of a specific electoral district).

Both lawsuits must be filed with the Supreme Court within one month after the election. Following the April 15th, 2020 election, a record high of 137 election invalidation lawsuits have been filed. This compares to the single case filed after the 1992 South Korean election that led to a recount of votes that confirmed errors in the vote counting process.

This paper outlines South Korea’s electoral litigation system, the present status of the ongoing litigation process, and the call for a recount of votes based on serious misconduct centered on the early voting part of the electoral process. In particular, allegations have been made claiming a sophisticated effort to manipulate ballot counting equipment.

Of particular note, the South Korean Supreme Court's response to the many cases is delayed compared to its prompt handling of past cases. At the time this report was written, the author stated that it was too early to determine the reason for the delays. However, he noted that if judicial responses were not made by September 2020, it would be prudent to question whether political considerations and a desire to prevent exposure of illegal activities were the reason for the delay in handling electoral challenge cases.

The Illegality of the April 15 General Elections and the Progress of Invalidity Lawsuits

(Presented by: Seok, Dong Hyun, Esq.)

(Results of the April 15 General Elections, and Outline of Problems)

In the last general elections held on April 15, of the 300 seats in the National Assembly of South Korea, 253 seats are voted in from 253 voting districts throughout the country (meaning, 1 candidate from each district is picked through the election), and the results of the votes were that the Democrat Party, which became the ruling party, got 163 seats, and the minority party (the United Future Party, or the UFP) received 84 seats.

The entirety of votes that the Democrat Party candidates received in the 253 voting districts, and the entirety of votes that the UFP candidates received only has a total difference of 8.4%, but the number of seats won by the Democrat party is almost double.

Especially in Seoul, and in other capital region areas where the set number of seats are many, the Democrat Party candidates won by not that big of a margin, and from a statistical point of view, a unique reality happened, as was described by the previous speaker.

If there was no problem with the voting process, it means that the Democratic Party played an effective game at a very sophisticated rate to climb the Guinness Book of World Records in the election system. However, in the case of the April 15 general election, there were too many problems in terms of election management, and in terms of the operation of the election-related system.

Some of those issues have already been addressed many times in national elections, such as past parliamentary and presidential elections, and even in court trials, and some have been first or newly highlighted in this most recent April 15 general elections.

For example, the ballot sorter (externally also called electronic ballot counting machine) first introduced by the National Election Commission (NEC) in the 2012 presidential election has been controversial not only because of operational errors, but also because of the possibility of digital manipulation, and as the early-voting system was introduced in 2014, the QR code used in the early-voting ballot paper is not in line with current law regulations and may be used illegally, and thus this issue has reached its peak during this most recent elections in April.

(South Korea's electoral litigation system)

There are two main procedures in which the effect of the election in the South Korean parliamentary or presidential election system is a problem and the results can be changed. One is that the candidate is convicted by the prosecution for violating the election law, and if the penalty of more than 1 million won is confirmed, the election will be nullified. Another is for candidates, political parties, and voters who have lost the election to file an election lawsuit in the court and go through a trial, and in doing so question the effectiveness of the election.

In this way, the election lawsuit is divided into two categories: an election invalidity suit and an elected win invalidity suit. The former is a lawsuit that takes the position that the election law and other regulations are violated in the election process and the election itself cannot be recognized; the latter is a lawsuit that the election itself is not invalid but that the candidate who won cannot be recognized. If the election invalidity suit is carried forth, then a re-election (election do-over) is held, and in the case of the elected win invalidity suit, there is no election do-over but the next runner-up wins the seat.

Both lawsuits must be filed with the Supreme Court, the highest court within one month after the election, and the Supreme Court is supposed to go to trial within 180 days from the filing date and cannot object to the Supreme Court's trial decision. It is intended to quickly and definitively judge any controversy surrounding the election results.

Before the April 15 general elections this year, there were 0 to 2 election lawsuits every time the National Assembly elections were held, and almost all of them were invalidation of election return lawsuits. It was a lawsuit filed by the runner-up loser in the voting district where the margin of victory and defeat was very minute, in order to confirm the vote counting fraud or the vote counting error through the recount, so the recount that was called for in the suit that would entail the plaintiff paying the labor cost and other expenses, was the key procedure of the trial.

In the past 30 years, there has been only one case, in the 14th general elections held in 1992 whereby the elected candidate and the defeated candidate's fortunes were reversed in a invalidation of election return lawsuit whereby a recount of the votes confirmed errors in the vote counting process.

(The Present Status of Election Litigation in the April 15 General Election and Reasons for Calls for a Recount)

However, in the April 15 general elections held this year, there have been 137 election invalidation lawsuits, which is half of the number of voting districts in the entire country (253), and 2 invalidation of election return lawsuit were filed, which, when compared to the past, is an avalanche of election related lawsuits that have been filed in one election.

Even though there is still a strong negative sentiment in South Korea regarding a defeated candidate questioning the effectiveness of an election after the fact, with this most recent April 15 elections, there are too many serious defects in the election management by the NEC officials that have illegal and unconstitutional elements. The 'defect' here is mainly focused on early voting.

26 out of the 137 election invalidation lawsuits are waiting on the Supreme Court's recount process, and the preservation of ballots and ballot boxes etc., but this time, it is not aimed at simply checking the miscount as in past cases. The main purpose is to find traces of manipulation of the results of the ballot counting using digital methods such as forgery of ballots, and manipulation of the ballot sorting program.

(The Illegal and Unconstitutional Elements of Early Voting in the April 15 General Elections)

For this general election that happened on April 15, a total of 29.12 million voters went to the polls in 253 voting districts throughout the country (66.2% vote participation); from this around 40% participated in the early voting period that occurred 4 to 5 days before on April 10 and 11, during two days of early voting. The early voting system was set up so that people who could not vote on election day (in this case, on April 15), could still vote.

However, there was a psychological desire to avoid congestion at the polling place with the COVID-19 pandemic, and so a record-breaking early voting ratio (26.6%) was reached with the voters' sentiment that they will enjoy the April 15 election day designated as a temporary holiday, as well as encouragement from the President to participate in early voting, from the leader of the ruling party.

However, the results of the April 15 general election in which about 40% of all voters participated in each district for early voting, and 60% of the candidates voted for the same candidate after 4-5 days on election day, showed very different patterns and the Democrat Party candidates were elected with a lot of votes in the early voting period.

Therefore, it is extremely natural to think about the possibility that there would be enough digital manipulation to transform election statistics in the process of early voting and counting of votes, and the probability has already been variously confirmed and partially proved by various data or circumstantial evidence revealed after the election.

In addition to such individual and fragmentary circumstances, the ruling party has illegally used big data that corresponds to the personal information of voters before the general election. About 40% of voters voted in advance based on information for a period of 4-5 days shorter than other voters during the election period of only two weeks, which is also a violation of the constitutional spirit because the government and the election management authorities undermine the equivalence of voting rights.

In addition, the QR code, which was illegally used in the early voting ballot paper, is absolutely denied by the election authorities, but there is a high possibility that there is a hidden number of personal information such as the resident registration number that allows one to know who voted on the ballot, that is contained in the 31-number code that have been disclosed. If these unconstitutional elements are confirmed, the Supreme Court should declare the general elections results as invalid.

(The Tasks and Prospects of the Current Election Litigations)

The Public Official Election Act of South Korea (Article 224) stipulates that even if there is a violation of election-related regulations, the violation is "only when it is recognized that it has influenced the election results". So, it is important for the Supreme Court justices to recognize violations of election regulations in order to declare the election invalidation, but the key is to recognize that the violation of the regulations has "impacted the election results."

However, in the past, the Supreme Court has tended to recount the existing ballots and if there is no difference in the ballot count, they have shown a tendency to not accept invalidation of election results. There is a high probability that the same will happen this time around, if things progress.

However, if the attempt to manipulate the result of systematic and intentional voting is confirmed by digital manipulation, regardless of the number of votes, even if only one vote is known to have been gained fraudulently for the election of a specific candidate, the Supreme Court must take the position that it is urgent to have an active and forward-looking attitude to declare the election invalid, by judging that the fairness of the electoral system, which is a constitutional value, has been broken and influenced the election results.

In particular, the suspicion of illegal election in the April 15 general elections is suspected of being a very sophisticated digital ballot counting equipment manipulation, and the manipulation of ballot papers themselves to disguise the digital manipulation, so recounting should be made after confirming whether there is a change in the ballot in the recount process.

The Supreme Court's recount process is now somewhat delayed compared to past cases, but it is too early to determine why. However, if the recount is not made until September, it may be doubtful whether it is avoiding recounts to prevent political considerations and to stop the exposure of the illegal activities.

If you recount only 3-4 electoral districts, you can confirm the important part of the algorithm of illegal elections using digital information and statistical manipulation in the April 15 general elections, and the overall outline of illegal election is expected to be fully revealed.

(End)

1) In the past 30 years, elections for the National Assembly have been mainly called for recounting due to negative votes or miscounting, but the presidential election has been largely dismissed because of negative public opinion or huge recount costs, rather than invalid election, poor election management, or violation of legal regulations. The only case where the recount was carried out was for the 16th presidential election in 2002, when the Grand National Party candidate Lee Hoi-chang and Democratic Party candidate Roh Moo-hyun ran against each other. At that time, the 244 polling stations nationwide recounted about 10 million ballots of 80 polling stations designated by the GNP, and the GNP, which was then the plaintiff, was reported to have paid about 500 million won for the lawsuit, including the cost of recounting.

2) Candidate Lim Chae-jung won 32 votes, and two batches of 100 votes were found to be missing, and 172 votes were won back.

3) Article 224 of the Public Official Election Act of Korea states that "the election invalidation is only ruled when it is deemed that it has affected the election results even if there is a violation of the election regulations."

4) While it is unlikely that the court will accept the claim if a defeated candidate raises an election invalidation lawsuit, it is common to worry that the image of disobeying the election

results, in addition to the defeat in the election itself of the candidate, that the position and the image of the loser or his party will be subject to a huge negative impact on political activities and for future elections.

**ELECTION
FRAUD**

**LEGAL
DOCUMENTS**

**COMPLAINT FILING
(MAY 2020)**

Min Kyung-wook

Synopsis for “Complaint Filing May 2020”

This complaint alleging electoral misconduct in the April 15, 2020 election was filed with the South Korean Supreme Court by plaintiff Min Kyung Wook, candidate of the United Future Party in the Yeonsu-gu district. The defendants are Kwon Soon Il, Chairman of the National Election Commission, and Seo Bomin, Chairman of the Election Commission of Yeonsu-gu, Incheon. The relief sought is to invalidate the results of the 21st National Assembly election for the district of Yeonsu-gu, Incheon City.

The complaint alleges the electoral process was fatally flawed and cites violations of the Public Official Election Act that include: 1) irregularities involving the ballot counting machines used in the election; 2) illegal use of QR codes in the voting process; 3) use of invalid ballot papers; 4) other specific violations as described in the lawsuit.

Plaintiff argues that the Defendants are responsible, either by negligence or intentional acts for the aforementioned irregularities that tainted the April 15th, 2020 election. It is argued that the alleged misconduct poses a risk to South Korea’s democratic electoral system both now and into the future.

Complaint

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Confirmation of Invalidity in the National Assembly elections

DEMANDS OF THE COMPLAINT

We seek judgment for the following:

1. The 21st National Assembly election for the district of Yeonsu-gu of Incheon City that was administered on April 15, 2020 be confirmed invalid.
2. Legal costs shall be borne by the defendant(s).

REASONS FOR THE COMPLAINT

1. The Status of the Involved Parties

The plaintiff was a candidate of the United Future Party during the 21st general election that was conducted on April 15, 2020 in the Yeonsu-gu district and won the most votes in the district on election day.

Defendant Kwon, Soon-il was the chairman of the National Election Commission for the 21st National Assembly election on April 15, 2020.

Defendant Seo, Bomin was the chairman of the election commission of the Yeonsu-gu district, Incheon who oversaw the 21st general election on April 15, 2020. On the basis of Clause 1 of Article 222 of the Public Official Election Act, he befits the status of a defendant of this election litigation case.

2. Summary of the Reasons Why the 21st General Election Should Be Found Invalid

The summary of reasons why the 21st general election is invalid in all districts including the Yeonsu-gu district is as follows:

3. **The result of the 21st general election was tainted due to outside influences.**
4. **There was fraud in the ballot counting of the 21st general election where the ballot counting machines made by the company that were contracted had supplied ballot counting machines to the Congo's fraudulent election.**
5. **QR code that played a major role in the Congo's fraudulent election was also used in the 21st general election, but QR code is a means not allowed by law.**
6. **Also, the invalid ballot papers that were used in the 21st general election should**

invalidate the 21st general election by the Public Official Election Act.

I would like to change the terms below and described them in order:

7. The result of the 21st general election was tainted by outside influences, which was confirmed by Korea's top statistician and statistical physicist, and a world's top expert in detecting fraudulent elections.

As seen below, the result of the 21st general election was manipulated and the suspicion that it was tainted was raised even as the results were coming in the following day. The contributing factors are: (1) the fact that, in many voting districts including Yeonsu-gu district, the rate of Outside Jurisdiction early votes and Inside Jurisdiction early votes are the same, and (2) the early voting rate for Democratic Party of Korea candidates was about 12% higher than election day vote in almost all regions (Seoul, Gyeonggi, Incheon, Daejeon, Chungcheong, Gyeongnam, Busan, with the exception for Gwangju and Jeonnam) but the rate was about 12% lower for United Future Party candidates including the plaintiff, which are accurately computed results.

The fact that 253 districts with different trends and different issues have shown results of a computationally regular pattern implies that the election result was artificially manipulated.

8. Within the Yeonsu-gu district the early vote rates for the Outside Jurisdiction votes and Inside Jurisdiction votes are the same down to the 2nd decimal place, which is a rare phenomenon.

As it was mentioned before, there is a correlation among the candidates' vote gain rates in both the Outside Jurisdiction and Inside Jurisdiction early votes in the Yeonsu-gu district, and the same is shown in the figures above for the 3 candidates for the Yeonsu-gu district.

Party Name Candidate Name	United Future Party Min, Kyung- wook (Plaintiff)	Democratic Party of Korea Chung, Il-yung	Justice Party Lee, Jung-mee
Outside Jurisdiction early votes	4,460	6,185	2,073
Inside Jurisdiction early votes	11,335	15,797	5,296
Outside Jurisdiction early	<u>0.393471</u>	<u>0.391530</u>	<u>0.391427</u>

votes/Inside Jurisdiction early votes			
Vote gain rate among the Inside Jurisdiction early votes	<u>34.86%</u>	<u>48.58%</u>	<u>16.28%</u>
Vote gain rate among the Outside Jurisdiction early votes	<u>34.86%</u>	<u>48.35%</u>	<u>16.2%</u>

(Excerpt from Exhibit No. 1 The 21st general election results table from Yeonsu-gu district in Incheon)

What it means for the number 0.39 which was found by Outside Jurisdiction early votes divided by the Inside Jurisdiction early votes, if the plaintiff received 100 votes in the Inside Jurisdiction early voting, would receive 39 votes in the Outside Jurisdiction early voting.

But according to the result table above, candidate Chung Il-yung would also get 39 Outside Jurisdiction early votes if 100 Inside Jurisdiction votes are received, as well as candidate Lee Jung-mee would receive 39 Outside Jurisdiction early votes if 100 Inside Jurisdiction early votes are counted.

Also, the plaintiff's vote gain rates for both Inside Jurisdiction early votes and Outside Jurisdiction early votes are the same at 34.86%. If all three candidates' Inside Jurisdiction early votes and Outside Jurisdiction early votes are counted and compared, no matter what, the plaintiff is always at 34.68%. **As shown above, the same can be applied for candidates Chung and Lee that the same rate of Outside Jurisdiction early votes divided by Inside Jurisdiction early votes is at the same fixed rate.** That is, for all three candidates, the Inside Jurisdiction early votes and the Outside Jurisdiction early vote rates are the same. Such phenomenon can hardly happen without outside interference.

Party Name Candidate Name	Saenuri Party Min, Kyung-wook (Plaintiff)	Democratic Party of Korea Yoon, Jong-gi	People's Party Han, Kwang-won
Outside Jurisdiction early votes	2,207	2,218	1,018
Inside Jurisdiction early votes	3,853	3,602	1,577

Outside Jurisdiction early votes/Inside Jurisdiction early votes	0.44999	0.362422	0.187588
vote gain rate among the Inside Jurisdiction early voters	42.65%	39.88%	17.46%
vote gain rate among the Outside Jurisdiction early voters	40.54%	40.74%	18.7%

Such numerical results are not natural and is a result of applying some mechanical formula, which becomes clearly obvious when compared to the election results of the 20th general election of the same district, Yeonsu-gu, shown in the table above.

(Excerpt from Exhibit No. 2 The 20th general election results table from Yeonsu-gu district in Incheon)

9. Not only in the Yeonsu-gu district but nationally in other districts there is a trend that the Inside Jurisdiction early votes vs. the Outside Jurisdiction early vote gain rates are the same.

The Inside Jurisdiction early votes being the same compared to the Outside Jurisdiction early vote gain rates is not just an occurrence limited to the Yeonsu-gu district, but it's been found to have happened in various districts like Seoul, Incheon, and Gyeonggi. This fact supports the argument that this is not an isolated event in just the Yeonsu-gu district.

Jongro District	UFP Hwang Kyo-ahn	DPK Lee Nak-yeon
Outside Jurisdiction Early Votes	3,169	6,472
Inside Jurisdiction Early Votes	11,777	24,093
Outside/Inside Jurisdiction Votes Ratio	<u>0.26</u>	<u>0.26</u>
Seoul Songpa district	UFP Kim Keun-shik	DPK Nam Insoon
Outside Jurisdiction Early Votes	4,992	8,377

Inside Jurisdiction Early Votes	15,684	26,646
Outside/Inside Jurisdiction Votes Ratio	<u>0.31</u>	<u>0.31</u>
Seong-nam Boondang Eul district	UFP Kim Minsoo	DPK Kim Byung-wook
Outside Jurisdiction Early Votes	4,488	7,008
Inside Jurisdiction Early Votes	15,208	23,826
Outside/Inside Jurisdiction Votes Ratio	<u>0.29</u>	<u>0.29</u>
Seong-nam Boondang Gab district	UFP Kim Eunhae	DPK Kim Byung-gwan
Outside Jurisdiction Early Votes	5,360	7,530
Inside Jurisdiction Early Votes	19,087	26,790
Outside/Inside Jurisdiction Votes Ratio	<u>0.28</u>	<u>0.28</u>
Incheon Seo-gu Gab district	UFP Lee Hakjae	DPK Kim Kyo-heung
Outside Jurisdiction Early Votes	4,069	6,625
Inside Jurisdiction Early Votes	16,177	25,722
Outside/Inside Jurisdiction Votes Ratio	<u>0.25</u>	<u>0.25</u>
Incheon Namdong-Gab district	UFP Yoo Jungbok	DPK Maeng Sung-gyu
Outside Jurisdiction Early Votes	4,966	8,059
Inside Jurisdiction Early Votes	13,959	22,911
Outside/Inside Jurisdiction Votes Ratio	<u>0.35</u>	<u>0.35</u>

Also, as can be seen in the table below, there are at least 80 candidates with the same Inside Jurisdiction and Outside Jurisdiction early voting rates being at 99.00% or more, which is as if a calculator was used to create abnormally identical rates for the Inside and Outside Jurisdiction early votes within the 21st general election.

District	Party	Candidate	Early In Votes	Early Out Votes	Early In Votes Rate	Early Out Votes Rate	Sync Rate
성남시분당구갑	DPK	김병관	26790	7530	0.583952743	0.584173778	99.96%
성남시분당구갑	UFP	김은혜	19087	5360	0.416047257	0.415826222	99.95%
종로구	DPK	이낙연	24093	6472	0.671675495	0.671299658	99.94%
안산시단원구갑	DPK	고영인	12703	3533	0.629952889	0.630555506	99.90%
종로구	UFP	황교안	11777	3169	0.328324505	0.328700342	99.89%
성남시분당구을	DPK	김병욱	23826	7008	0.610390941	0.60960334	99.87%
담양함평영광장성-영광	DPK	이개호	9833	2625	0.936922344	0.938170122	99.87%
안산시단원구갑	UFP	김명연	7462	2070	0.370047111	0.369444494	99.84%
전주시병	DPK	김성주	40736	11771	0.71344005	0.714823587	99.81%
성남시분당구을	UFP	김민수	15208	4488	0.389609059	0.39039666	99.80%
Yeonsoo-gu Eul	DPK	Jung Il-Yung	15797	6185	0.582227628	0.581023955	99.79%
수원시을	DPK	백혜련	23073	9728	0.675360028	0.676777515	99.79%
서구을	DPK	신동근	26671	7833	0.677978596	0.679770893	99.74%
Yeonsoo-gu Eul	UFP	Min Kyung-wook	11335	4460	0.417772372	0.418976045	99.71%
김포시갑	DPK	김주영	15444	5374	0.642723376	0.640600787	99.67%
남동구갑	DPK	맹성규	22911	8059	0.621399512	0.618733205	99.57%
광산구을	DPK	민형배	29475	12163	0.918338734	0.922347767	99.57%
수원시을	UFP	정미경	11091	4646	0.324639972	0.323222485	99.56%
부천시정	DPK	서영석	10815	5128	0.696080324	0.699209163	99.55%
구로구을	DPK	윤건영	19884	6247	0.675728947	0.678800391	99.55%
송파구병	DPK	남인순	26646	8377	0.629482636	0.626598848	99.54%
전주시병	Minsaeng	정동영	16362	4696	0.28655995	0.285176413	99.52%
중구성동구을	DPK	박성준	23498	7310	0.60191091	0.604982206	99.49%
서구을	UFP	박종진	12668	3690	0.322021404	0.320229107	99.44%
김포시갑	UFP	박진호	8585	3015	0.357276624	0.359399213	99.41%
양천구갑	DPK	황희	27221	8563	0.618870069	0.62317153	99.31%
남동구갑	UFP	유정복	13959	4966	0.378600488	0.381266795	99.30%
서귀포시	DPK	위성곤	19403	5304	0.6224097	0.618037753	99.30%
관악구갑	DPK	유기홍	28990	10803	0.972035944	0.964898178	99.27%
천안시병	DPK	이정운	11411	5188	0.617645467	0.613093831	99.26%
중구성동구을	UFP	지상욱	15541	4773	0.39808909	0.395017794	99.23%
송파구병	UFP	김근식	15684	4992	0.370517364	0.373401152	99.23%
중구성동구갑	DPK	홍익표	25989	7648	0.640296632	0.645400844	99.21%
서구갑	DPK	김교홍	25722	6625	0.613904866	0.619506265	99.10%
청주시흥덕구	DPK	도종환	23666	7445	0.627362617	0.633239772	99.07%
구로구을	UFP	김용태	9542	2956	0.324271053	0.321199609	99.05%
춘천화천철원양구을-양구	DPK	정만호	2437	637	0.566349059	0.571813285	99.04%
정읍고창-고창	DPK	윤준병	10935	2260	0.762392805	0.769754768	99.04%
용산구	DPK	강태웅	24432	7555	0.579905533	0.585613518	99.03%
기장군	DPK	최택용	9707	3912	0.535558621	0.540854417	99.02%

(Excerpt from Exhibit No. 3 The list of candidates with Inside and Outside Jurisdiction rates are 99% or more identical in the 21st general election)

As can be seen above, there are 80 candidates whose Inside Jurisdiction and Outside Jurisdiction

early voting rates are 99% or more identical, which is very difficult to happen statistically. **This is a glaring example that this is not a natural election result and is a result of artificial manipulation.**

10. The discrepancy between each Yeonsu-gu district candidate's election day votes and early votes cannot be explained by a normal situation.

The plaintiff won regarding the election day votes in terms of the number of votes and percentage of votes as shown in the table below. (The percentages are the result of rounding up to the first decimal place.) And such results were consistent with the 3 main broadcasting station's exit poll and opinion poll within the margin of error.

Candidate Name	UFP Min Kyung-wook (Plaintiff)	DPK Chung Il-yung	Justice Party Lee Jungmee
Election day votes	33,932	30,575	15,798
Election day votes Rate	42.11%	37.94%	19.6%
3-broadcasting station's combined Exit Poll	40.0%	38.9%	20.7%
Final Opinion Poll	39.0%	36.7%	18.5%

But the result of the early votes was different as above, and the results are shown below. (The percentages are rounded up to the first decimal place.)

UFP Min Kyung-wook (Plaintiff)	DPK Chung Il-yung	Justice Party Lee Jungmee
15,795	21,982	7,369
34.9%	48.5%	16.2%

The age group that most actively participated in early voting of ages 50s and 60s were the ones who most actively support the plaintiff. From the last day of early voting until the day before Election Day, the United Future Party (UFP) had a problem of removing a candidate from the party due to the candidate's statement, which put the UFP candidates, including the plaintiff, at a disadvantage for election day votes.

Yet, against the expectation that the Election Day votes was going to be lower than the early voting, they received conflicting results of receiving more votes from the Election Day than early voting.

In addition, candidate Chung received 13.6% more votes than the plaintiff through early voting, but really on Election Day there were no unfavorable factors for the Democratic Party yet received a 10.6% reduction to his early voting results.

This shows a discrepancy with the results of the same district in the 20th general election. As shown in the table below, during the 20th general election, each candidate's difference between the Election Day votes and the early votes was at most at 4.06% and the difference among the prominent candidates' early votes was at about 1.5%.

Candidate Name	Saenuri Party Min Kyung-wook (Plaintiff)	DPK Yoon Jong-gi	The People's Party Han Kwang-won
Election day votes	26,706	21,509	11,133
Election day votes Rate	45%	36.24%	18.76%
Early Votes	6,256	6,031	2,677
Early Votes Rate	41.8%	40.3%	17.88%

(Excerpt from Exhibit No. 2 The results from the 20th general election in the Yeonsu-gu district)

11. Not only in the Yeonsu-gu district but also in Seoul, Gyeonggi, Incheon regions, there is a serious discrepancy between the early votes percentage and the election day votes percentage.

Not only is there the aforementioned problem of Inside Jurisdiction vs. Outside Jurisdiction early vote rates but in regions of Seoul, Gyeonggi and Incheon, which includes the plaintiff's district of Yeonsu-gu), which are known as fierce battlegrounds, the early voting rates between the Democratic Party of Korea and United Future Party were fixed to 63:36, causing a huge controversy.

Incheon region							
Party	Early In Votes	Early Out Votes	Early Votes	Rate	Election Day Votes	Rate	Difference
DPK	262,629	86,238	348,867	63.22	447,157	54.06	-9.16
UFP	156,158	46,799	202,957	36.78	380,000	45.94	9.16
㉞	418,787	133,037	551,824	26.44	827,157	8.12	

Kyung-gi region							
Party	Early In Votes	Early Out Votes	Early Votes	Rate	Election Day Votes	Rate	Difference
DPK	1,142,185	405,772	1,547,957	63.14	2,249,417	52.66	-10.48
UFP	676,204	227,375	903,579	36.86	2,021,985	47.34	10.48
㉞	1,818,389	633,147	2,451,536	26.28	4,271,402	5.32	

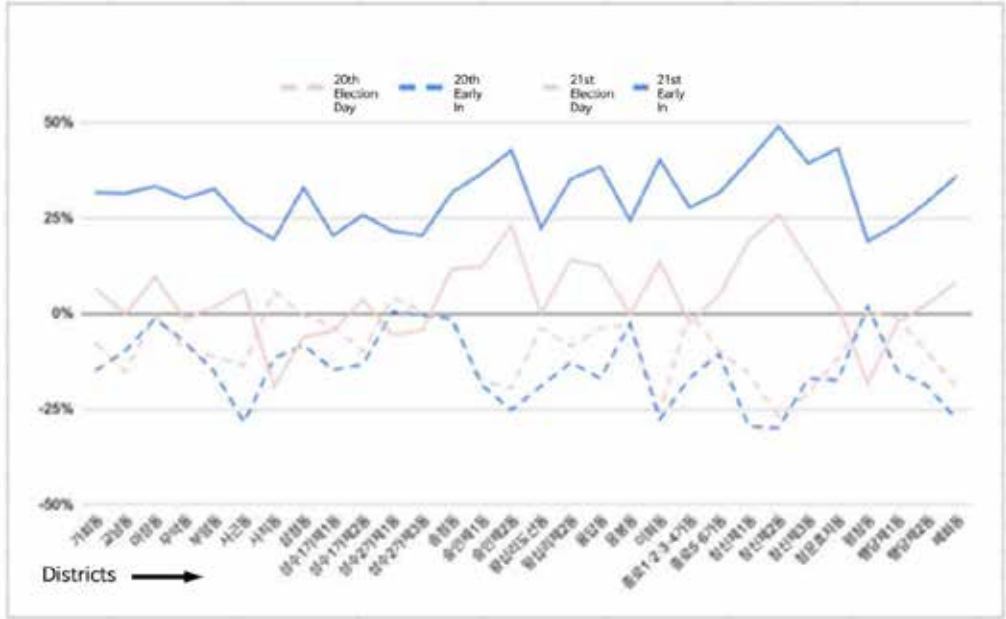
Seoul region							
Party	Early In Votes	Early Out Votes	Early Votes	Rate	Election Day Votes	Rate	Difference
DPK	1,036,106	203,368	1,239,474	63.64	1,627,796	50.72	-12.92
UFP	693,664	113,945	807,609	36.36	1,581,821	49.28	12.92
㉞	1,629,790	317,313	1,947,103	27.28	3,209,617	1.43	

Such unexpected results between the Democratic Party of Korea and United Future Party was as if they were fixed in advance. (In the Yeonsu-gu district, the ratio of the Democratic Party of Korea + the Justice Party vs. the United Future Party is about the same, i.e., 64.7 to 34.9.)

As for such election results, the National Election Commission clearly confirmed in a press release that, "The average early votes ratio between the Democratic Party of Korea and the United Future Party candidates in the Seoul, Incheon and Gyeonggi regions are Seoul 63.95 : 36.05, Incheon 63.43 : 36.57 and Gyeonggi 63.58 : 36.42."

In the 21st legislative election, such an occurrence emerged overall in the capital and regions like Daejeon where the competition between the United Future Party (UFP) and Democratic Party of Korea (DPK) candidates were fierce.

In the case of the Jongno-gu district, candidate Lee, Nak-yeon of DPK, who received 65.55% of the early votes, received 49.87% of the election day votes. On the other hand, candidate Hwang, Kyo-an received 32.01% of early votes and 46.81% of the election day votes. In the Kwangjin district, candidate Oh, Sehoon received 40.65% of early votes and 52.53% of the election day votes; and candidate Koh, Minjung received 57.51% of early votes and 44.38% of the election day votes. In Seong-dong of the Junggu district, candidate Ji, Sang-wook received 39.18% of early votes and 52.29% of the election day votes.



(Excerpt from Exhibit No. 4 The results of Jongno-gu votes of 21st general election and from Exhibit No. 5 The results of Jongno-gu votes of 20th general election)

As confirmed in the graph above, the early vote percentage and the election day vote percentage were similar or there was not much difference in the 20th general election. However, in the 21st general election, the early vote percentage and the election day vote percentage were not similar from any polling station.



The table above shows the difference between the early votes rate and the election day votes rate for each candidate for the 20th and the 21 legislative elections in each district of Seoul.

The difference in the 20th general election ranges between 0 to 7%, while in the 21st general election, the difference is almost always more than 10%, an occurrence that defies common sense. In almost all other districts where the United Future Party competed with Democratic Party of Korea, similar patterns emerged.

As mentioned before, the United Future Party candidates had an issue of removing a candidate from the party in the media the day before the election, which was a disadvantage for their election day votes. On the other hand, the Democratic Party of Korea candidates had no unfavorable factors to make their election day votes much more advantageous. Yet, when this kind of result happened, it is clearly against the rule of experience.

12. The top statistics professor in Korea confirmed that such a result cannot happen statistically.

Park, Sung-hyeon, a former president of the Korean Statistical Society and former president of the Korean Academy of Science and Technology, and now professor emeritus of Seoul National University's Department of Statistics, who established the foundation of statistics in Korea, stated in an interview with a newspaper that such a discrepancy between the early votes and the election day votes cannot be explained without an artificial intervention.

-- This is a very sensitive matter. You could lose the authority and reputation you have accumulated so far as a statistician.

"I cannot say they are definitely evidence of manipulation, but **from a statistician's perspective, it is very strange.** One may argue it happened by chance, but statistically such a coincidence is very difficult to happen. Let me put it this way: **'Unless God really was determined to make it so in advance, this cannot happen.'**"

-- Even though it is not statistically understandable, it can happen in reality. Reality does not always follow the statistical theory. Doesn't the results of this election in fact tell us so?

"Statistics is the reflection of reality. **For example, Seoul has the regional characteristics between the north and south of the Han River, and each candidate's competitiveness is different, so it's normal that the support they receive is varied. Yet, in 49 polling stations in Seoul, the early voting rate of the Democratic Party of Korea was higher than the election day voting rate by an average of 12%. Also, the standard deviation among the 49 districts is 2.4%, which shows a similar pattern.**"

(Excerpt from Exhibit No. 6 May 4, 2020 Chosun Ilbo news article "Early voting result not understood statistically ... NEC has responsibility to clear suspicions")

13. Professor Walter Mebane, an international authority in fraudulent election research, said that the 21st general election is a "fraud" and the fraud lies heavily in the area of the early votes.

Professor Walter Mebane, one of the top authorities internationally in fraudulent election research, published a paper titled "Frauds in the Korea 2020 Parliamentary Election" on April 29, 2020 (U.S. time) about the results of the 21st general election. In the paper, he confirmed that fraud was committed overall in the 21st general election and the fraud happened heavily in the early votes.

Figure 4 uses plots by subset of Democratic party focused observations to illustrate which observations are fraudulent according to the eforensics model with the Democratic party focused specification. Nonfraudulent observations are plotted in blue and fraudulent observations appear in red. The frequencies of fraudulent and not fraudulent units appear in the note at the bottom of the figure. Visually and by the numbers, frauds occur most frequently for pre-vote units (43.1% are fraudulent), next most frequently for for district-level, election-day, not abroad units (3.14% fraudulent) then next most frequently postal election day units (.925% are fraudulent). None of the abroad units are fraudulent.

Figure 5 uses plots by subset of constituency-leader focused observations to illustrate which observations are fraudulent according to the `eforensics` model with the constituency-leader focused specification. Nonfraudulent observations are plotted in blue and fraudulent observations appear in red. The frequencies of fraudulent and not fraudulent units appear in the note at the bottom of the figure. Visually and by the numbers, frauds occur most frequently for pre-vote units (22.6% are fraudulent), next most frequently for postal election day units (2.09% are fraudulent) then next most frequently for district-level, election-day, not abroad units (.920% fraudulent). None of the abroad units are fraudulent.

party. Both posterior means and 95% and 99.5% credible intervals are reported. The results show that for the Democratic Party focused specification over all about 1,491,548 votes are fraudulent, and of the fraudulent votes about 1,122,169 are manufactured (the remaining 369,379 are stolen—counted for the leading party when they should have been counted for a different party). Overall, according to the `eforensics` model, about 10.43% of the votes for the Democratic Party candidates are fraudulent. The results show that for the constituency-leading focused specification over all about 1,171,734 votes are fraudulent, and of the fraudulent votes about 910,444 are manufactured (the remaining 261,290 are stolen—counted for the leading party when they should have been counted for a different party). Overall, according to the `eforensics` model, about 7.26% of the votes for the constituency-leading candidates are fraudulent.

(Excerpts from Exhibit No. 7-1 "Frauds in the Korea 2020 Legislative election" by Walter Mebane, and Exhibit No. 7-2 The Korean translation of "Frauds in the Korea 2020 Legislative election" by Walter Mebane)

14. Subconclusion

As a result, even though the plaintiff gained more election day votes than early votes in the 21st

general election, due to the totally opposite pattern of the early voting results, which even the academic world calls the early votes either impossible without some external intervention or "fraud", the plaintiff's fortune changed. It was the same result for other United Future Party candidates.

As was mentioned before, the deviation **is significantly beyond the margin of error and by the fact that the differences in the early votes and election day votes between the leading candidates was at least by 23.4% means it could have a profound effect on the election results.**

In relation to this, we will make additional verification through recounts of the votes and such, but this is a very extraordinary situation where everything related to the early voting process should be closely examined and analyzed, like the QR code, early voting ballot program, from the verification of the related computer system to the manual counting of the ballots.

15. In the 21st general election, there were illegality and fraud in not just the election procedure, but also in the counting process, so the results cannot be reliable.

16. The overall procedure of the 21st general election, including problems in moving of the early voting ballot boxes and inadequate management of the early voting ballots, cannot be trusted and this aspect has affected the election results.

The inadequate management of the early voting ballot boxes has been criticized for a long time, yet all levels of elections commission including the NEC did not correct the problem. As a result, owing to the development of social media such as YouTube, the inadequate management of the early voting ballots in the 21st general election was clearly revealed. Especially, the Outside Jurisdiction early voting ballots were placed into a yellow plastic bin and transferred without any monitoring of security personnel. (See picture below.)





Especially in case of the Outside Jurisdiction early voting ballot boxes, there were management blind spots from transferring to storage. **The fact that Outside Jurisdiction ballots were recently found to be stored in fitness clubs without any security measures** makes the results totally untrustworthy.



(Shows Outside Jurisdiction ballots stored in a fitness club and being taken away for counting)

17. Also, the concerns for invasion of privacy due to the use of QR code was already raised by both the U.S. and members of the Security Council, and election fraud using QR code has been already committed in Congo.

The former U.S. ambassador to the United Nations, Nikki Haley, had forewarned that the election results could be tainted by using the QR code in the electronic voting machine that was manufactured by Korea-based Miru Systems, whose electronic voting machine was used in the Congo's presidential election.

The plan to use an electronic voting machine manufactured by a Korean company in the Democratic Republic of Congo's year-end presidential election has raised controversy in the UN Security Council. The U.S. has even demanded the cancellation of use.

U.S. and members of the Security Council expresses concerns: "Can be manipulated, as privacy is not guaranteed"

(Excerpt from Exhibit No. 8 March 4, 2018 Joongang Sunday article "Electronic voting machine exported from Korea may pose great danger to Democratic Republic of Congo")

Besides former U.S. ambassador Nikki Hayley, Joseph Lorenzo Hall, an election technology expert, also stated that since QR codes can hold a variety of information, the Congo election using this should not be proceeded with using this.

A report issued in May by the Consortium for Elections and Political Process Strengthening stated that Congolese voters would insert a paper ballot in an electronic voting machine, choose a candidate on a touch screen, and the machine would then print the paper ballot to be inserted in a ballot box. However, Hall said the ballots that Congo intends to use feature unique QR codes that could jeopardize ballot secrecy. He identified other potential vulnerabilities in the machines such as wireless connectivity, unprotected USB ports and an outdated operating system.

(Excerpt from Exhibit No. 9 September 10, 2018 The Washington Post article The Cybersecurity 202: The U.S. is warning Congo that using electronic voting machines could backfire)

The Congolese citizens protested against the use of the electronic voting machine, but the Congolese government decided to use the machine made by Miru Systems as planned, and the election results became tainted.

As will be described later about QR codes, it violates the current law and despite the fact that the possibility of manipulation cannot be ruled out, it enforced violating the current law by the use of QR codes in early voting. As it was mentioned above, a statistically impossible early voting result came out, there would be also a significantly tainted result in the ballot counts.

18. Misclassification of votes due to the use of electronic ballot counting machines and the possibility of manipulation cannot be excluded, misclassification of votes due to the use of electronic ballot counting machines has already happened repeatedly.

Misclassification of votes means a vote for a candidate being counted as a vote for another candidate, which can be simply called as "vote mixing."

The National Election Commission provided ballot sorters to assist in democratic elections in developing countries, and thus in regard to the electronic ballot counting machines, there were misclassified votes up to 12 times as normal on both camps in Iraq's general election that caused the cancellation of ballot counting. And an obvious misclassification of votes happened during this April 15th general election.

The issue of misclassified votes is not just controversial to the 21st general election, but in the past, the Democratic Party of Korea and its supporters strongly argued for the abolishment of electronic ballot counting machines and for the possibility of manipulation, and there were actual data that verified misclassification of votes through an examination. Thus, the 21st general election in the Yeonsu-gu district was conducted without resolving the long-standing issue of misclassified votes, which also cannot escape the same problems, the same suspicion.

Misclassified Ballots Status Table

- ◆ Election District:
- ◆ Total No. of Ballots:

No.	District	Misclassification	Misclassification location
1	상동 제5선거구	간짜 무효권 2권 / 1권만	10 무효권 3번째
2	부계동 4선거구	야당 무효권 1권 / 1권만	32 무효권 1번째 (명목 순서대로)
3	상동 제5선거구	간짜 무효권 2권 / 1권만	10 무효권 5번째
4	상동 제5선거구	1 No Moo-hyun ballot in Lee Hoi-chang ballot bundle	In the 2nd bundle out of 100 bundles
5	상동 제5선거구	1 No Moo-hyun ballot in Lee Hoi-chang ballot bundle	In the 68th bundle out of 100 bundles
6	"	야당 무효권 1권 / 1권만	" 69번째
7	"	야당 무효권 1권 / 1권만	" 60번째
8	상동 제5선거구	야당 무효권 1권 / 1권만	100 무효권 65번째

(Excerpt from Exhibit No. 10 Misclassified votes of the 16th presidential election, where candidate Lee, Hoi-chang of the Grand National Party demanded recount of the ballots that resulted in a table that summarized the occurrences of misclassified votes)

The National Election Commission as well as all levels of the commission are arguing that the ballot sorter is not an electronic voting machine but simply an aid to ballot counts and its accuracy has been already proved through a verification led by the Supreme Court from past election suits. Yet, there has never been a proof that resolves the issue of misclassified votes.



(Captured from May 3, 2020 JTBC News where an election official is not checking the ballots individually but cursorily in a rush)

19. In foreign countries with a long history of elections, when there is a procedural violation the election results are voided, and there is a ruling that use of an electronic device in the

ballot counts is in violation of the constitution.

20. Austria

In the case of Austria, in the 1st round of the presidential election held on April 24, 2016, candidate Hofer placed 1st with 36% of the votes and candidate Van der Bellen placed 2nd with votes at around 20%.

In the run-off held at around May 22, 2016, **candidate Hofer who was in the lead in the beginning lost to candidate Van der Bellen as the early votes (mail-in votes) of almost 700,000 ballots were counted,** where the difference was **30,863 votes.**

However, when it was found out that the early votes were opened without observers, Austria's Ministry of Home Affairs investigated the matter and reported that **as much as 23,000 votes could have been affected** by the premature opening of the early votes and that 2,000 votes made by youths under the legal age of voting, a serious violation, was excluded from the count.

In response, **Gerhart Holzinger, the chief justice of the Austrian Constitutional Court** ruled that "the illegitimacy of more than 700,000 votes constitutes a reasonable cause for a recall," to vacate the elected candidate, **seeing that the illegitimacy was not only in the 23,000 prematurely opened early votes but fraud was committed in the entire early voting process.** (Exhibit No. 11 July 1, 2016 Yonhap News article "Austria holding presidential election again...Constitutional court vacates election results for foul play in absentee votes")

The chief justice of the Austrian Constitutional Court announced that influenced by the Ministry of Home Affairs' release on violation of premature opening of the early votes, **annulled the presidential election results based on the fairness issue of the overall early votes, when candidate Hofer would not win even if all 23,000 votes went to him.**

21. Germany

The 2009 precedent by Germany's Federal Constitutional Court addresses all parts of an election that can be manipulated through hacking by using computers (electronic machine).

In accordance **Germany banned even the use of counting machines that counts the ballots and ruled that voting machines can be used only when general citizens can clearly confirm, even without any special technological knowledge, their use involves no defect or possibility of manipulation.**

In March 2009, Germany's Federal Constitutional Court ruled that the electronic votes of the 16th German Federal Legislative Election of 2005 were unconstitutional. The bases of the ruling were that electronic votes are against public nature of elections and that **it would be difficult for a general constituent to know of the software's defect or an intentional manipulation using it.**

At the time the Constitutional Court emphasized the point that general

constituents should be able to verify how their votes would be processed. This is an argument that electronic voting shall be allowed only when even a constituent without special expert knowledge can verify how their vote is processed. Also, the Constitutional Court pointed out the fact that specific procedures and method of publicly checking whether there was manipulation of electronic votes is not yet legislated and that electronic voting has to be complete and flawless, as it is vulnerable of errors and risk of manipulation.

(Excerpted from Exhibit No. 12 October 8, 2019 Sky Daily news article "Only Election commission knows the essential info of controversial and problem-fraught early votes.")

22. The results of the 21st general election has reached a point where they cannot be trusted due to the aforementioned use of QR code which can change the election results at will, misclassified votes due to electronic ballot counting machines, and violation of the secret ballots. Now is the time to correct them.

The principle of the secret ballot is one of the very fundamental election principles and aligns with the freedom of conscience secured by the constitution.

Article 278, Clause 2 of the Public Official Election Act clearly stipulates that the secret ballot principle should be maintained in voting and ballot counting done by a computer network.

In addition, the Public Official Election Act also stipulates in the same article's clauses 2 and 3 that to ensure the accuracy of the vote, the ballot count per candidate should be accurate and the election results should be verifiable.

Article 278 of the Public Official Election Act (voting and counting done by a computer network)

② The computerization of the vote management should ensure the secrecy of the voting, voting made easy for constituents, ensure the observation of the parties or candidates, and should make correction of errors, exclusion of invalid votes and accuracy of other votes be made possible.

③ The computerization of the ballot count management should accurately tabulate the votes by party or candidate, the ballot count should be verifiable, and ensure the observation of the parties or candidates.

In regard to the early voting ballot issuing system currently our country adopted, there is an argument that it has a higher possibility of secret ballot fraud than the electronic voting machine that was proven in the past to have a high possibility of manipulation. It especially pointed out as a problem that the National Election Commission obtained a perfunctory certification through a self-formed committee rather than a certification from a professional agency for the related software's source code in the process of introducing the early voting ballot issuing system and applying it to the election process.

According to a NEC press release in May 2014, they made the ballot sorter's source code public to the security advisory committee established by the NEC and had its software officially certified by the Korean Information Technology Association, but not verified by independent experts. However, **as for the early voting ballot issuing system, its source code was not made public and its software was not officially certified by the Korean Information Technology Association.**

Some are voicing suspicion regarding intentionality, but the NEC is not providing a convincing explanation. In May 2018, through a press release, the NEC emphasized that with the local elections soon approaching, that they are establishing integrity and security of its devices and system. However, there was no mention of the early voting ballot issuing system's source code being certified even by its own security advisory committee.

(Excerpt from Exhibit No. 12 October 8, 2019 Sky Daily news article "Only Election commission knows the essential info of controversial and problem-fraught early votes.")

However, in the 21st general election, despite numerous criticism like stated above, the NEC and the different levels of the election commission have deliberately violated the secret ballot principle, the principle to verify voting results, etc. by for instance, not making public the early vote procedures even to its own security advisory committee. This kind of deliberate election intervention should not be repeated.

Thus, except for the election day votes of each candidates, the rest including early votes and the proportional representation voting should be ruled invalid as they cannot be verified.

23. Sub-conclusion

For the reasons as stated above, **there needs to be recount of ballots and electronic verification of the mechanical devices and related system of the electronic ballot counters used in the 21st general election in the Yeonsu-gu district. If a comprehensive verification does not happen, all kinds of suspicions related to the introduction of the electronic ballot counting machine will linger.**

As the NEC mentioned in 2012 that "although some say that errors made by electronic ballot counting cannot be undone, our election law states that it has a device that can correct errors," and also said, "Our election law has an election litigation procedure that, if one has an objection about the election results, one can contest the result of the election even after the election. Especially, **as the ballots themselves and the image files of the ballots are sealed and preserved, verification of ballots are always possible,**" if there is an objection regarding the electronic ballot counting machine, we can say that the NEC's position also actively approves of ballot recounts through election lawsuits.

[7] Although some claims that if mistakes are made with the count it's irreversible, our election law has a device that can correct errors.

o Our election law has an election litigation procedure that, if one has an objection about the election results, one can contest the result of the election even after the election.

o Especially, **as the ballots themselves and the image files of the ballots are sealed and preserved, verification of ballots are always possible.**

(Excerpt from Exhibit No. 13 "About the Ballot Classifier," p. 10 from the National Election Commission publication)

Accordingly, **we highly request that all the votes including the early votes and the election day votes of the Yeonsu-gu district be manually recounted, and there be an examination as to whether there was external intervention involved in the electronic ballot counting machine and related system.** If this kind of examination is not conducted, the result of the 21st general election should be deemed invalid.

24. Use of QR code, not a bar code, on the early voting ballots is against the law.

25. The use of QR code is a clear violation of the Public Official Election Act.

In August 2018, the National Assembly's Public Administration and Safety Committee stated in its report on 'The Approval of CEC's 2017 Fiscal Year Balance of Accounts and Reserve Fund Disbursement' that "the NEC has printed QR codes and not bar codes on the early voting ballots to enclose information such as the name of the election," and interpreted that **"This is an aspect that is contradictory to the definition of bar code that the Public Official Election Act stipulates."**

The above-mentioned opinion of the 2018 Public Administration and Safety Committee is the first official concession that the legislative branch, the National Assembly, has made regarding the so-far controversial "QR code use on the early vote ballots" that has been pointed out as the epicenter of violation of secret ballot principle and the current law. Yet, all level of election commissions including the NEC has used the QR code on the early voting ballots in the 21st general election.

The NEC used QR codes on the early voting ballots instead of bar codes in the upcoming general election. However, Article 151, clause 6 of the election law stipulates that "The serial number printed on the ballots should be in the form of a bar code (a pattern in the form of bars that a computer can recognize), and the bar code can contain the names of the election, election district and the Election commission in

charge." In the background of the controversy regarding the use of the QR codes is the fact that **someone pointed out that a person's political inclination information as to which candidate and party the voter voted for could be leaked through the QR code.**

Even the 2018 National Assembly raised an objection saying "It does not agree with the current law."

Prior to this, even the Congress raised an issue as to the problem related to QR code. "The preliminary review on CEC's 2017 Fiscal Year Balance of Accounts" published by the Public Administration and Security Council of the 2018 National Assembly criticized that "Even though Article 151 of the current Public Official Election Act stipulates that ballots' serial numbers should be expressed as a bar-formed symbol, the NEC printed QR codes." The same report also pointed out that "This has an aspect that is contradictory to the current law."

(Excerpt from Exhibit No. 14 April 13, 2020 New Daily article "Election commission insists on QR code when election law stipulated bar code should be on ballots")

This issue along with the electronic ballot counting machine is directly connected to electronic problem that is introduced in the election procedure, and in the context that this violates the plaintiff's right to hold public office (Article 25 of the Constitution), the people's right to vote (Article 24 of the Constitution), and also the secret ballot principle (Article 41 of the Constitution) if the QR code contains individuals' vote results while one cannot tell how much voter identification information is included in the code and there is no way to verify the information.

26. Although the information that can be contained in the QR code is broad, according to the election document, it's been revealed that the National Election Commission obtained information beyond what was regulated, thus this constitutes a clear violation of the law.

According to Article 151, Clause 6 of the Public Official Election Act, 'the serial number printed on the early voting ballot should be in the form of a bar code (in the form of bars that can be read by a computer), and in the **bar code can contain the name of the election, name of the electoral district, and the related election commission**' which **limits the information contained in the barcode and if the QR code contains information other than 'the name of the election, name of the electoral district, and the related election commission', this clearly violates the aforementioned Article 151, Clause 6 of the Public Official Election Act.**

In the picture below, according to the QR code printed on the early voting ballots of the 2017 presidential election and the finding, at the end of the serial number instead of numbers, alphabets were included which is irregular and "the alphabets could possibly be 'encrypted' and must have some nefarious purpose if they are persistent on using the QR code" which citizen groups continue to raise issues with.



(Excerpt from Exhibit No. 15 September 5, 2018 Sky Daily article "National Assembly officially concedes on QR code on ballots violates current law")

However, the National Election Commission explained that, "The serial numbers have simply been expressed in alphanumeric form and these are not encryptions," and as stated before, they have never attempted to make any verifications. Also, according to the "2020 Election Information System's Integrated Consigned Management Project Request for Proposal," the operating systems that are directly linked to the early voting ballots, 'such as the election management system and the integrated registration system,' have massively amassed personal information (refer to the table below) but the citizens does not know what information was included in the QR code since it did not go through a special technological verification process, thus makes this a violation of Article 151, Clause 6 of the Public Official Election Act.

System Name	Personal Information File Contents	Reason for Implementation
Election Management System	<ul style="list-style-type: none"> ◦ Collected Information: name, resident registration number, address, phone number, email address, record of divorce, prior conviction, military service status, education, tax payment, teaching experience, assets ◦ Estimated Number of Personal Information: approximately 5 million people 	<ul style="list-style-type: none"> ◦ Processed more than 1 million personal information ◦ Processed more than 50,000 unique identifying information
Integrated Registration System	<ul style="list-style-type: none"> ◦ Collected Information: name, birth date, gender, last 3 digits of resident registration number, personal stamp or signature, address ◦ Estimated Number of Personal Information: approximately 420 million people (nation-wide) 	<ul style="list-style-type: none"> ◦ Processed more than 1 million personal information ◦ Processed more than 50,000 unique identifying information

System Name	Personal Information File Contents	Reason for Implementation
Overseas Voters Management System (including Permanent Registration System)	<ul style="list-style-type: none"> ◦ Collected Information: name, resident registration number, passport number, phone number, email address, record of divorce, last-known address, overseas address, reason for vote ineligibility ◦ Estimated Number of Personal Information: approximately 500,000 people 	<ul style="list-style-type: none"> ◦ Processed more than 50,000 unique identifying information
Overseas Voters Internet Report/Request System (including Overseas List access service)	<ul style="list-style-type: none"> ◦ Collected Information: name, resident registration number, passport number, phone number, email address, record of divorce, last-known address, overseas address, reason for vote ineligibility ◦ Estimated Number of Personal Information: approximately 500,000 people 	<ul style="list-style-type: none"> ◦ Processed more than 50,000 unique identifying information
Online Voting System	<ul style="list-style-type: none"> ◦ Collected Information: administrator name, department, contact number, email address, position, voter name, department, email address, birth date, mobile phone number, etc. 	<ul style="list-style-type: none"> ◦ Preparing for the expansion of accumulated personal information processing in the future

(Excerpt from Exhibit No. 16 "2020 Election Information System's Integrated Consigned Management Project Request for Proposal", p.9)

27. Sub-conclusion

The early voting results that changed the 21st general election's results in the Yeonsu-gu district and other districts across the nation are statistically untrustworthy as explained above.

In addition, like stated above QR codes were imbedded in early voting, and despite being criticized by the National Assembly that QR codes are violating the current laws, the NEC and all levels of the commission are enforcing the use of QR codes and the NEC should be handling a fair election, but they have destroyed the fairness of an election as well as the principle of secret ballots, so these violations are significant which should invalidate not just the 21st general election results from the Yeonsu-gu district but from all districts nationwide.

28. The early voting ballots used ballot papers and QR codes that differs from what is regulated from the Public Official Election Act

The defendant which includes the NEC has used QR codes. The Public Official Election Act specifies that bar codes are to be used, but this general election committed an illegal act by using QR codes, not bar codes, on the early voting ballots.

Public Official Election Act

Article 146, Clause 3: When it comes to voting, there should be no identifying markers that will assume the identity of the voter.

Article 151, Clause 6: ‘Despite Clauses 1 and 5, Election Commissions of the region, city and county, ballots issued at early voting stations should be prepared by early voting officials using the ballot issuing machine. In this case, the serial number being printed on the ballot should be in the form of a bar code (marking in the shape of a rod which can be read by a computer), and in the bar code, the name of the election, name of the electoral district and the managing election commission can be included.’

Article 179, Clause 1, Point 1: ‘failure to use regular ballot papers’

In the early voting of this general election, the Public Official Election Act was violated as described above by using QR codes on the ballots, **which is a cause to invalidate the election because they failed to use regular ballot papers.**



(Left: bar code, right: QR code)

Also, as clarified above, in the QR code printed on the early voting ballots of this election, there were information that would not be contained in a bar code—a serial number that can contain personal information, such as prior conviction, army service, tax payment, email address, educational background information, asset information, which is not only a violation of Public Official Election Act Article 146, Clause 3 but also a violation of the secret ballot principle, which is a serious violation of the constitution.

29. Conclusion

Reasons as stated such above, the results of the 21st general election was tainted by the

negligence or intentional acts of the defendant. The election procedure cannot be trusted either, as the QR code was used in early voting, electronic ballot counting machines, electronic counting machines, etc., which constitutes violations of the Public Official Election Act. Such aspects were pointed out by a statistician, the world's foremost authority in fraudulent election and such use of the QR codes was a violation of the principle of the secret ballot, which is one of the 4 principles. In consideration of all these, there is sufficient reasons to invalidate the results of the 21st general election.

The fact that the results of the 21st general election were compromised by external intervention would be proven if verified by a recount, but it must be emphasized once more that the recount should proceed only with the premises that the integrity of the electronic forensic should be established first and the ballots to be the same as the original ballots through QR code comparison.

Regarding the results of the 21st general election, there has been endless complaints about multiple statistically incomprehensible occurrences, expert opinions that it was a fraudulent election, and endless discontent expressed by the people. Although it's not been proven accurate, these issues must be addressed and improved through this lawsuit as there are those who have willfully approached the election process with the intent of manipulation. These mistakes and bad practices that should not be allowed must be judged and pulled out from its root by the Supreme Court in order to obtain its root of establishment of the democratic electoral system for the future.

Methods of Proof

1. Exhibit No. 1 The 21st general election results from Yeonsu-gu district in Incheon
2. Exhibit No. 2 The 20th general election results from Yeonsu-gu district in Incheon
3. Exhibit No. 3 The list of candidates' Inside and Outside Jurisdiction rates are 99% or more identical in the 21st general election
4. Exhibit No. 4 The results of Jongno-gu votes of 21st general election
5. Exhibit No. 5 The results of Jongno-gu votes of 20th general election
6. Exhibit No. 6 May 4, 2020 Chosun Ilbo news article "Early voting result not understood statistically ... NEC has responsibility to clear suspicions"
7. Exhibit No. 7-1 "Frauds in the Korea 2020 Legislative election" by Walter Mebane
8. Exhibit No. 7-2 The Korean translation of "Frauds in the Korea 2020 Legislative election" by Walter Mebane
9. Exhibit No. 8 March 4, 2018 Joongang Sunday article "Electronic voting machine exported from Korea may pose great danger to Democratic Republic of Congo"
10. Exhibit No. 9 September 10, 2018 The Cybersecurity 202: The U.S. is warning Congo that using electronic voting machines could backfire
11. Exhibit No. 10 Misclassified votes of the 16th presidential election, where candidate Lee, Hoi-chang of the Grand National Party demanded recount of the ballots that resulted in a table that summarized the occurrences of misclassified votes
12. Exhibit No. 11 July 1, 2016 Yonhap News article "Austria holding presidential election again...Constitutional court vacates election results for foul play in absentee votes"
13. Exhibit No. 12 October 8, 2019 Sky Daily news article "Only Election commission knows the essential info of controversial and problem-fraught early votes."
14. Exhibit No. 13 National Election Commission newsletter "About the Ballot Sorter"
15. Exhibit No. 14 April 13, 2020 New Daily article "Election commission insists on QR code when election law stipulated bar code should be on ballots"
16. Exhibit No. 15 September 5, 2018 Sky Daily article "National Assembly officially concedes on QR code on ballots violates current law"
17. Exhibit No. 16 "2020 Election Information System's Integrated Consigned Management Project Request for Proposal"

May 2020

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For the Supreme Court

**ELECTION
FRAUD**

LEGAL
DOCUMENTS

PRELIMINARY PLEADING FOR
CASE NO. 2020-30

Min Kyung-wook

Synopsis for “PRELIMINARY PLEADING FOR CASE NO. 2020-30”

This document is a court filing submitted by the attorneys for former National Assemblyman, MIN Kyung Wook, to the Supreme Court of the Republic of Korea, regarding the ‘Invalidation lawsuit against the general election’ of April 15, 2020.

The detailed document is alleging instances of electoral fraud that was perpetrated in the South Korean general election. It includes diagrams, pictures, and graphs to help the court (and the reader) to more clearly understand the arguments and the substance of the alleged election fraud.

Among the claims presented is evidence of fraudulently created votes that impacted the outcome of the election – and mandates a proper investigation of allegations concerning voting procedures and election results

The filing goes on outline other instances of alleged fraud, to include claims of electronic manipulation of the electoral process. The plaintiff seeks a proper forensic examination of image files, electronic counting machines, software, and other parts of the ‘electronic’ infrastructure used in the April 15th, 2020 election.

In addition to claims of electronic manipulation, the lawsuit claims irregularities and illegalities involving the physical vote and vote counting process, as well as inconsistencies and problems with ballot handling and ballot chain of custody.

The lawsuit argues that the aforementioned irregularities contaminated the electoral process nationwide, and also produced electoral results in the Yeonsu-gu district that did not reflect the free will of the electorate.

Preliminary Pleading

Case: 2020-30 Invalidation lawsuit against the general election

Plaintiff: Min Kyung-wook

Defendant: Commissioner of Incheon Yeonsu-gu's election commission

Regarding the case above, the plaintiff's legal representative submits a written preliminary pleading as follows.

I. The 21st general election conducted on April 15, 2020, was clearly a rigged election, and we should no longer repeat this stain on the Republic of Korea's democracy by thoroughly verifying and revealing the entire process of the election through this lawsuit.

The lawsuit against the 21st general election is different from the previous lawsuit against the National Assembly election.

Beyond the simple difference of the number of votes cast, clear evidence is continuously being found such as evidence that reveals ballots created outside the election process were mixed with those from the official ballot box, the ballot box was changed and that the actual election results by the citizens of the country were contaminated. This general election has reached a point where the court has to establish a litmus test through a ruling to prevent such unfortunate history from repeating itself again. This election is not just about checking the election results for individual candidate. It needs the manipulation to be verified through the court.

Furthermore, digital measures were used throughout the election process. Ballot paper was printed from a printer on site, the paper was managed through a QR code printed on it; the result of voting was immediately recorded on the National Election Committee's server; the counting process was conducted through an electronic counting machine connected to the server; and image files of the ballot paper were saved on the counting machine.

Therefore, the verification of the digital measures above is very important because ballots mixed in with the official ballot box before or after the election process should be checked with digital methods, such as the image file and integrated voter list. Manual counting without verification of all the ballots and digital methods used in the election would only half of verification and would be insufficient to achieve the purpose of this lawsuit.

As for the subject of verification of this lawsuit, I would like to state in three categories: 1. the need to verify ballots themselves, 2. the need to verify the electronic methods used, 3. the need to examine the vote counting process because it was not legally conducted.

II. The existence of externally created votes, not those exercised by voters, has had a serious impact on the outcome of this election, which confirms the pressing need to verify the votes themselves.

If there is a vote done externally, it is self-evident that it can affect the outcome of the election in any way and also determine the outcome. In this general election, the votes made externally (referred to as "made vote" hereafter) were found in not just in one constituency but across the country and that the Yeonsu district was no exception.

As long as the 'votes made' externally exist, manual counting that simply counts the total number of votes is meaningless. Ballots themselves must be verified before they are counted

manually. In the current situation, one has to identify what are votes were made externally
as described below.

I will explain this in the following paragraph.

1. At a polling station in Shinjung-dong, Bucheon, the total number of “Inside Jurisdiction” early voting ballots were 18,210. This means that it took 4.74 seconds per voter to finish the whole voting process. This is impossible if there was no manipulation.

The “Inside Jurisdiction” early voting polling station for Shinjung-dong, Bucheon, was in the communication hall located on the third floor of Bucheon City Hall, 210 Giljoo-ro, Bucheon, Gyeonggi. The “Inside Jurisdiction” early voting polling station for Sang-dong, Bucheon, was at the main auditorium located on the fifth floor of the Joong-dong Administrative Welfare Center, 342 Buil-ro, Bucheon, Gyeonggi.

However, the following election results came out at the polling stations mentioned above.

Constituency	District	Registered voter	Votes cast	Votes per candidate						Invalid ballots	Blank ballots
				Democratic Party	United Future Party	Justice Party	Minjung Party	National Revolution Divide Party	Total		
Shinjung-dong	Total	106,581	69,598	37,137	28,174	2,755	532	317	68,915	683	36,983
	Inside Jurisdiction early voting	18,210	18,210	11,483	5,758	672	100	66	18,079	131	0
Sang-dong	Total	66,410	45,423	25,306	17,159	1,976	367	201	45,009	414	20,987
	Inside Jurisdiction early voting	12,961	12,959	8,367	3,826	521	102	48	12,864	95	2

(Exhibit No. 24 Excerpts from the total results of the votes casted in the Bucheon district of Gyeonggi)

This election’s early voting was conducted from April 10 to 11, 2020. Polling opened at 6 a.m. and closed at 6 p.m. and it was conducted for 12 hours each and for 24 hours in total. In the following table, you will see how many ballots were cast per minute and how long it took to cast a ballot at the Shinjoong and Sang-dong’s polling stations.

	Shinjoong-dong “Inside Jurisdiction” early voting	Sang-dong “Inside Jurisdiction” early voting
Total votes	18,210	12,959
Number of votes per minute	12.64	8.99
Time for each vote	4.74 seconds	6.66 seconds

There was only one ballot box each for these two polling stations.

However, as shown in the following article, all voters had their body temperature checked; applied hand sanitizer, put plastic gloves on their hands that was provided; presented identification cards; received a nearly 50-centimeter-long proportional representative ballot paper from the printer on site and practiced social distancing, all due to the Covid-19. If 18,210 people actually voted in 24 hours, the waiting line would have been extremely long, since there was only one ballot box.

Entering the polling station, a person in charge of checking body temperature conducted the check of voters' heads with a contactless thermometer. When entering the polling station after going through the **temperature check**, poll workers **recommended applying hand sanitizer and wearing plastic gloves**.

Since then, **workers had voters keep a distance of more than 1 meter with the voter ahead at the entrance of the two lines dividing into Inside Jurisdiction and Outside Jurisdiction**.

Voters who entered inside the polling station presented their identification card and received one ballot paper for the district election and another for the proportional representative election. "Outside Jurisdiction" voters also received return mail envelope from the polling workers. Then they headed to the voting booth to exercise their precious sovereignty and put not only the ballot papers but also their own wishes and wishes for regional development in the ballot box.



과다 중인 사전투표가 시작된 10일 중원 투표장을 사전투표소에서 한 선거관리직가 코호나19 확진을 예방하기 위해 공공직물에게 손소독제와 위생장갑 제공을 권유하고 있다. 사진/김지훈 기자
과다 중인 사전투표가 진행 시작된 가운데 중원 투표장을 사전투표소에서 한 선거관리직가 코호나19 확진을 예방하기 위해 공공직물에게 손소독제와 위생장갑 제공을 권유하고 있다. 사진/김지훈 기자

Exhibit No. 25 Excerpt from MSTODAY April 10, 2020 article [Out-in-the-Field Sketch] 'Let's Make Our Own Future for Chuncheon' Early Voting for the General Election Begins. It takes more than 4.74 seconds to apply hand sanitizer, but as shown in the picture, voters are lined at a distance from each other as voting is conducted.

The Bucheon City Election Commission argued that there were not many waiting lines because there were many printers printing ballot papers at the polling station, but this argument is clearly wrong. No matter how many printers there were to print ballot papers, the following occurs when voters line up in front of one ballot box.

A limited number of voters was allowed to enter the area where identification cards were checked, and they had to practice social distancing. After the identification verification process, voters also kept their distance with others until they arrived at the voting booth. The number of voting booths was limited as well. The age group who participated most in early voting was those in their 50s. They tend to be more uncomfortable with moving around than those in their 20s and 30s. Furthermore, there was only one ballot box, so they had to wait in line during the voting process as seen in the following picture.

ID verification line

Voting booth

Line for those finished



Therefore, it is impossible for voters to vote and leave in 4.74 seconds or 6.66 seconds unless there are multiple ballot boxes. Thus, the number of early votes in Bucheon’s Shinjoong-dong and Sang-dong alone can be used to determine the existence of “made votes,” or that there were more votes than actual number of votes casted.

2. It was revealed that some districts had more ballots than the actual number of ballot papers issued. This also happened during the primary process of the Unified Progressive Party’s proportional representative race, and it was found that fraudulent activity had occurred.

The number of votes must be less than or equal to the actual number of ballot papers issued. If the number of votes cast is higher than the actual number of ballots issued, it can only be said that the number of votes cast is incorrect or that votes came in from outside.

In the case of Samchun-3 dong, Wansan-gu, Jeonju, the actual number of voters or number of ballot papers issued was 4,674, but there were total of 4,684 votes cast. This means that there were 10 more votes than the actual number of voters or ballot papers issued.

4,674 voters, but 4,684 ballots... ‘suspicion of phantom election’ magnified
 Samchun-3 dong, Wansan-gu, Jeonju Inside Jurisdiction early voting for proportional representation... district early voting ‘voter = votes casted’ must match but 10 votes were casted more than actual voters... “NEC knew but went ahead with counting” might cause big ramification

전주시완산구위원회				
		완산구	비례	115-116
비례대표개표상황표 [수작업]				
제21대 국회의원선거 (비례대표) 삼천3 동 제 투표구 [인내사전, 7월반] 4.16				
1. 투표지분류 개시시각 : 2020년 4월 16일 이시 56분 07:26				
2. 투표용지교부수와 투표수 대조결과(③, ④란은 심사-집계부에서 기재) 한도 넘어서지 않음				
투표함수	선거인수 (①)	투표용지 교부수(②)	투표수 (③)	투표용지교부수와 투표수의 차 (④②③)
2	4,674	4,674	4,684	신상인 -9 -10
3. 정당별 득표상황				비서진
구 분	부서별	개합부 (제1)번	상조부 (제2)번	정 정
				신상인

(Excerpt from Exhibit No. 26 New Daily May 20, 2020 article [4,674 voters, but 4,684 ballots... ‘suspicion of phantom election’ magnified])

The election commission of Wansan didn’t say that the number of voters for Samchun-3 dong was wrong. Instead, it argues that there were votes mixed in from other districts. The district that

the commission argues that some votes were mixed in with was from Seonsin-dong’s 9th polling station. But votes from the 9th polling station were cast on the actual voting day, so they do not have QR codes on their ballot papers. Ballot papers in Samchun-3 dong’s “Inside Jurisdiction” early voting ballot box had QR codes, so there is **a low possibility that such votes were mixed with each other, since ballot papers for the actual voting day and early voting day can be differentiated with the naked eye.**

In addition, it is unusual to see a one-vote difference in the number of ballot papers issued and votes cast, so a big difference of 10 votes is very rare. The committee members must have checked the cause of the situation numerous times. They could not come up with a reason for the 10-vote difference, and signed the ballot counting table.

Even after the committee members signed the ballot counting table, they corrected the table for more than three hours. They ended the ballot count without correcting the difference of 10 votes. This indicates that the ballots were not identifiable to each other just by looking at the existence of QR codes. Therefore, the Wansan-gu election commission’s explanation that ballot papers for the actual voting day were mixed into the ballot counting station for “Inside Jurisdiction” early voting is a lie.



(Excerpt from Exhibit No. 26 New Daily May 20, 2020 article [4,674 voters, but 4,684 ballots... ‘suspicion of phantom election’ magnified]. The commissioner released the result on April 16th at 3:41, but the counting continued even after the release and the final tabulation ended on April 16th at 7:26.)

Moreover, it is hard to dismiss the discovery of more ballots than the number of ballot papers in the ballot box as merely a mistake. This is because this was also found during the 2012 Unified Progressive Party’s proportional representative election primary, which the party itself admitted was a rigged election.

Based on the results of their own investigation, the Unified Progressive Party confirmed that fraud played a part in their proportional representative candidate being chosen last March. It was found that there was also evidence of poor management, such as **there were more ballots casted into the ballot box than the number of voters who showed up at the polling station**, that there were no fingerprints or signatures of election officials.

(Excerpt from Exhibit No. 27 KBS May 2, 2012 article [Unified Progressive Party, confirmed fraud in ‘proportional election’...announced today])

Therefore, the presence of more votes than the number of voters in the Wansan district is also a clear indication of the existence of “made votes.”

3. During the ballot counting process, there were early voting ballot papers found that were attached to each other. This is also consistent with evidence of election fraud during the 2012 Unified Progressive Party’s proportional representative election primary.

Early voting ballot papers, like shown below, a paper roll is used and added to the printer, like the one used to print receipts, as the voter’s identification is being checked, **the ballot is then immediately printed from the printer and the printer will cut it, so it’s impossible for the early voting ballots to stick together as that is how it is delivered to the voters.**



(This is a picture of how the early voting ballot is immediately printed at the Jeonju Election Commission on April 9, 2020. The printer will automatically cut the printed ballot and will deliver it to the voter.)

However, **in Seongbuk-gu’s 1st district in Seoul, there was an unprecedented situation where the corner of the early voting ballot papers was attached to each other like sticky notes, and counting officials had to detach them by hand.**





(Excerpt from Exhibit No. 28-1 Ballots (1) stuck to each other from the Seongbuk-gu's 1st district in Seoul (multimedia material))

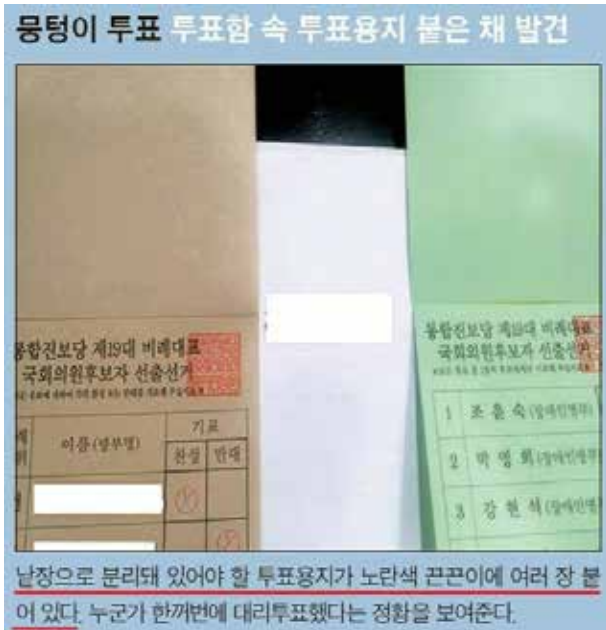


(Excerpt from Exhibit No. 28-2 Ballots (2) stuck to each other from the Seongbuk-gu's 1st district in Seoul (multimedia material). The counting official is putting down the ballots one-by-one as if counting ballots in general.)



(Excerpt from the multimedia material above. The corner of the ballots was attached to each other, so the counting officials had to detach them by one-by-one.)

Such “sticky votes” were not only seen in this election, but also **in the 2012 Unified Progressive Party proportional representative election primary, which was found to be a rigged election.**



(Excerpt from Exhibit No. 29 Joongang Ilbo May 4, 2012 news article [‘Gymnasium Election’ was not to this extent])

Every voter is different and each ballot paper is issued to the voter by cutting it off from the printer. The only answer for why the ballots were attached to each other is either they were sticky votes like the case of the Unified Progressive Party, or they were improperly manufactured at the factory.

Therefore, the presence of the attached votes is also a testament to the spread of ‘made votes’ across the country, helping manipulate the results of the national election, including that of Yeonsu-gu.

4. There were a large number of ballot papers found across the country that are invalid under the Public Official Election Act.

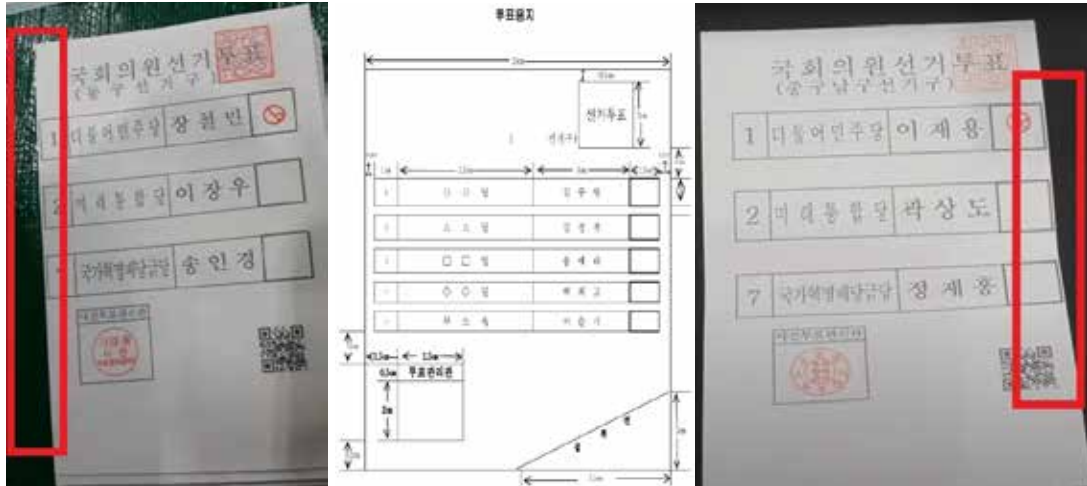
Article 179 of the Public Official Election Act states that failure to use a regular ballot paper means it is invalid.

Article 179 of the Public Official Election Act (Invalid Votes)

(1) Any of the following votes shall be nullified: <Amended by Act No. 6663, Mar. 7, 2002; Act No. 7189, Mar. 12, 2004; Act No. 7681, Aug. 4, 2005; Act No. 13497, Aug. 13, 2015>

1. Where the regular ballot paper is not used;

However, there were various cases where non-regular ballot papers were used across the country in this general election, as shown below.

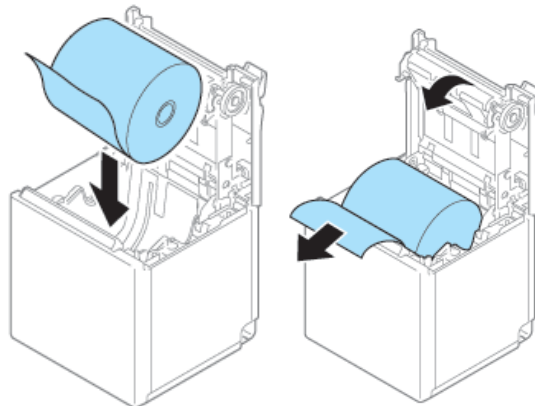


(Left: Exhibit No. 30-2 Irregular ballot paper (specification) – Dong-gu electoral district of Daejeon,

Center: Exhibit No. 30-1 Formal ballot paper (specification) – **from attached Form 42(A) of the Public Official Election Regulations.**

Right: Exhibit No. 30-3 Irregular ballot paper (specification) – Junggunam-gu electoral district of Daegu)

According to the law, regular ballot papers have an even margin on each side and a regular margin of 0.5 centimeters at the bottom side. However, the irregular ballot papers have a very narrow margin on one side and a long margin at the bottom side. As you can see below, this is not an error that could occur during the printing process, so it is not a regular ballot paper. The printer used for printing early voting ballot papers uses roll-type paper, as shown below.



(On the left, shows how the paper is installed into the early voting ballot printer, on the right, shows how the paper is printed from the inside to the outside.)



(Left: Excerpt from Exhibit No. 33-1 National Election Commission December 17, 2018 post [Election Equipment] Standard and Procurement Schedule for the Early Voting Ballot Paper Printer)

Right: Excerpt from Exhibit No. 25 MSTODAY April 10, 2020 news article)

According to the photo posted directly by the NEC on its website (Exhibit No. 33-1), a printer equipped with parts that secure the paper so that it does not deviate to the left or right is set as standard, and such printer was used during this general election.

Also, if the width of the paper is the same due to the nature of a printer programmed to start printing at a specific location, it will always print starting from the same location. The higher the price of a printer, the more precise the starting point is. Although this is from the estimated budget for 2025, the price of the printer above is 1.2 million won, which means that it is quite an expensive product. Such a printer is more sophisticated than inkjet printers used at home or printers built into credit card readers used in the workplace.

2 조달일정

제작시기	예산추정규모 (단가*수량)	조달세부계획	비고
2025년	147억원 (1,200천원 (12,200조))	① 사전규격공고 : 2025. 6. ② 본 공고 : 2025. 6. ③ 입찰 : 2025. 7. ~ 2025. 8. ④ BMT : 2025. 9. ⑤ 제작기한 : 2025. 9. ~ 2026. 2.	내용연수 5년

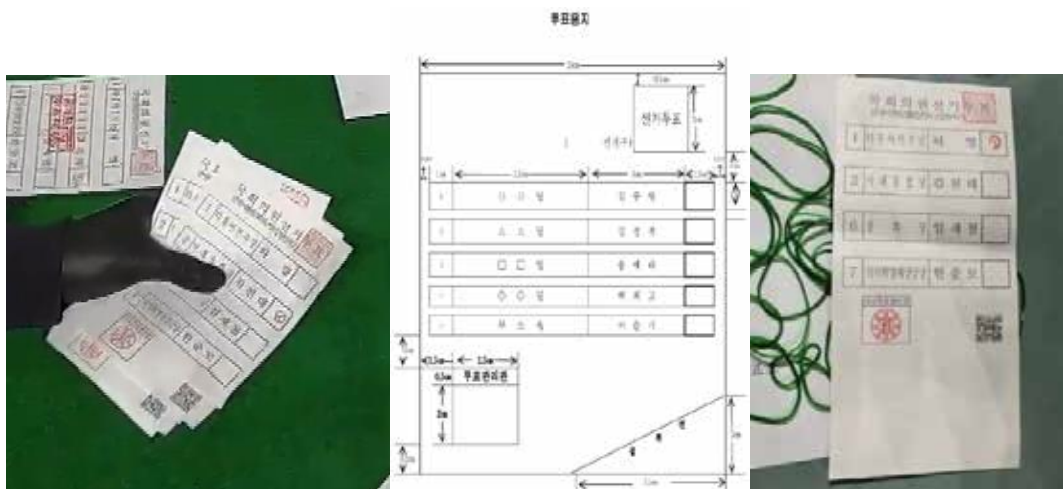
(Excerpt from Exhibit No. 33-2 National Election Commission December 17, 2018 post [Election Equipment] Standard and Procurement Schedule for the Early Voting Ballot Paper Printer. The printer used in this election is the Epson TM-C3400 model retailed at around 18 million won.)

In addition, the early voting ballot paper is manufactured to fit in the printer's internal tray and uses the same paper, so the margins on the left and right sides cannot be different, as in the pictures above.



(Excerpt from Exhibit No. 34 MBC April 10, 2020 news segment [Choice 2020] Early Voting Begins Today...Wear Mask and Practice Social Distancing. The paper tray guide in the printer matches the width of the paper, so if it prints while leaning to one side the paper will be crumpled.)

Nevertheless, in this election, ballot papers with different margins were found from various electoral districts, as if they ran into an accident while cutting large numbers at the print shop. In addition to the papers with different margins on the left and right sides, other irregular ballot papers with margins on the bottom side were also found.



(Left: Exhibit No. 32-1 Formal ballot paper (specification) – Chuncheon, Cheorwon, Hwacheon, Yanggu electoral districts, Center: Exhibit No. 30-1 Formal ballot paper (specification) - **from attached Form 42(A) of the Public Official Election Rules**, Right: Exhibit No. 32-2 Irregular ballot paper (specification) - Chuncheon, Cheorwon, Hwacheon, Yanggu electoral districts)

The early voting ballot papers' space and margin are specified by the computer **in accordance with legal standards**. Then the paper is printed and cut by the printer accordingly, so a ballot paper with a long margin on the bottom side cannot be regarded as a regular ballot paper. Thus, it is invalid ballot paper.

In accordance with the Public Official Election Rules (attached table 2-2), the ballot for the regular National Assembly member election conducted after the expiration of the term of office uses white colored paper. The paper for the proportional representative election uses light green color. **Early voting paper ballot prints out paper with a background color on site, but the one for the**

regular assembly member election does not need to have a background color printed since it is white.

투표용지의 색도

선 거 명		색 명
대 통 령 선 거		흰 색
임기만료에 의한 국회의원선거	지역구국회의원선거	흰 색
	비례대표국회의원선거	연 두 색

(Excerpt from Exhibit No. 35 Table 2-2 from the Public Official Election Rules)

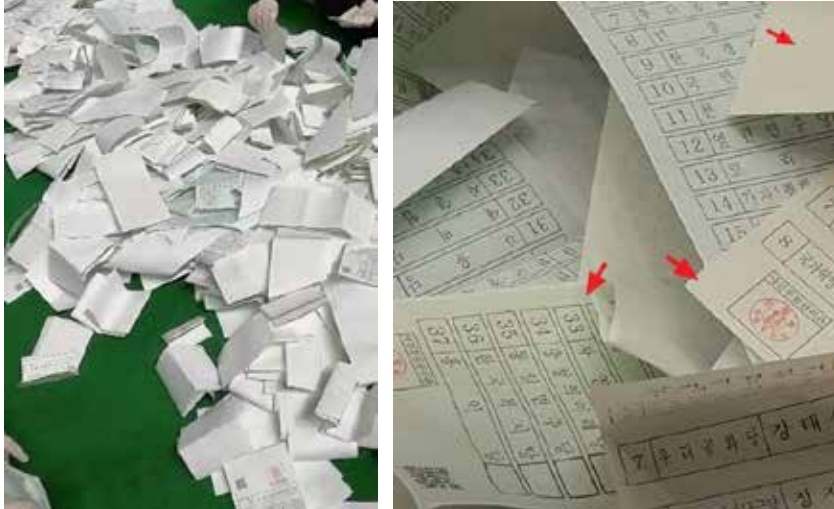
But as you can see below, **the ballots for the assembly member constituency election outside the circle are white, but those in the circle are yellow.**



(Exhibit No. 36 Irregular ballot paper (color) – Seongbuk district of Seoul)

Also, as mentioned earlier, early voting ballot papers are printed on one side of the white colored paper, so even if it is a ballot paper for the proportional representative election, the opposite side of the printed paper should be white, even though the background color may be printed on the front side.

However, **as you can see below, the regular ballot paper on the left, is white on the back side, but the irregular ballot on the right, has a background color on the back. The color is different even though they came from the same early voting ballot box. Thus, they cannot be regular ballot papers.**



(Left: Exhibit No. 31-1 Formal ballot paper (color) – Gangwon-do province, Right: Exhibit No. 31-2 Irregular ballot paper (color) – Guri. The ballot papers with the red arrows is more yellow compared to other ballots.)

Usage of non-regular ballot papers was found all over the country like shown above, and Yeonsu-gu was not an exception. This is not only a reason for invalidation, but also indicates that the “made votes” were deliberately designed to bring about a rigged election.

5. Ballot papers for “Inside Jurisdiction” early voting should be folded before inserting them into the ballot box, like papers used for day-of voting. However, there were large number of papers found that were unfolded.

The Public Official Election Act states that a voter should fold the ballot paper then put it in the ballot box.

Public Official Election Act Article 157, Section 4
 A constituent, after receiving the ballot paper, shall enter a voting booth, select one candidate (referring to one political party in the election of the proportional representative National Assembly members and the election of the proportional representative local council members), from among those entered in the ballot paper, make a mark in the corresponding column of the ballot paper, **fold the ballot paper on the spot so that other persons cannot see the contents,** and then put it in the ballot box in the presence of the voting observers.

According to the aforementioned regulation, in the case of “Inside Jurisdiction” early voting, the ballot paper should be folded and placed in the ballot box in front of voting observers. The observers are there to monitor whether the voters follow such regulations. However, as you can see below, in this general election, there were a large number of ballot papers with no sign of folding even though they were for “Inside Jurisdiction” early voting. Some papers were sharp, as if they had been cut off.



(Exhibit No. 37 Inside Jurisdiction early voting ballot (Cheongju-si))



(Exhibit No. 38 Inside Jurisdiction early voting ballot (Namyangju-si))



(Exhibit No. 39 Inside Jurisdiction early voting ballot (Guri-si))

You can see ballot papers that were stiff and never folded, just like new dollar bills. This violates Article 157, Section 4, of the law that mandates that voters fold ballot papers so that no one can see the marking made on them. Polling observers should have prevented such ballots from occurring, but they were found across the country. This phenomenon defies common sense.

Therefore, it is difficult to see such votes as being inserted in the ballot box through the legitimate early voting process. The fact that the papers that were never folded indicate the strong evidence of existence of “made votes.”

6. Partial conclusion

The above confirmed that **the “made votes” resulted in nationwide election fraud.** Professor Walter Mebane is world-renowned on rigged elections and is a highly knowledgeable and accurate expert on the detection of rigged elections. His studies so far have shown that all of the election concluded as rigged election turned out to be actually rigged. He has shown strong confidence that “made votes” affected and even changed the outcome of the election through his five reports on this issue.

Therefore, **as we can see in IV. 3 (Exhibit No. 46-1-2), “made votes” must also have been mixed into Yeonsu-gu’s electoral district, so it’s not just necessary to manually check the ballot, but to check the ballot itself to determine what are “made votes” exclude them from the manual count. In order to find reasons for invalidation of the election, the unconstitutionality and illegality of the “made votes” must be checked.**

III. Also, verification of image files, electronic counting machines, etc. are essential, as the results of this election have been contaminated by electronic means.

In addition to the “made votes” of this election, the results were contaminated by electronic means, which distorted the will of the people. The German Federal Constitutional Court ruled on March 3, 2009 that the use of electronic voting machines in the 16th German Federal Assembly election was unconstitutional based on the fact that electronic methods are vulnerable to outside intervention and that the detailed process is only known by professionals if it is not disclosed to the public (2 BvC 3/07, 2 BvC 4/07). Therefore, we must verify the above electronic methods.

1. The opposite result occurred when ballot counting observers were suspicious of the results of the electronic ballot counting machine, demanded a recount and reset the machine.

There was a counting observer who was observing at a counting station located in Buyeo, South Chungcheong. He was looking at the counting process of early voting ballot papers for Oksan-myeon. He found out that many ballots with ballot number 2 marked (opposition party) were sorted as invalid, and a batch of ballot papers for number 1 marked (ruling party) had some papers with ballot number 2 marked mixed in. He asked Buyeo-gun’s election commission for a recount. An official from the commission acted as if he was resetting the electronic counting machine and recounted the ballot papers.

During the first counting process, **candidate No. 1 received some 180 votes and candidate No. 2 received some 80 votes. Candidate No. 1 won by a huge amount. However, during the recount, after resetting the machine, it was found out that candidate 1 received 159 votes, while candidate 2 received 170 votes. The result came out differently.**

The following table shows the number of polling stations that each candidate won during the early election in Gongju, Buyeo and Chungyang.

Number / Name	Buyeo	Gongju	Chungyang
1 / Park Su-hyeon	5	12	6
2/ Chung Jin-seok	11	4	4

Ultimately, candidate No. 2, Chung Jin-seok, won the election in this district. However, if the counting observer didn't request a recount and the counting machine wasn't reset, there is a chance that Buyeo's election results could have been the same as those of Gongju and Chungyang, where candidate No. 1 won which 30-60 ballots would have continued to have gone to the opposing candidate.

D씨는 "그때마다 항의해서 분류기를 재가동해 2번 후보의 표를 읊면 단위별로 많게는 30~60장씩 되찾아 왔다"며 "이런 현상은 사전투표지를 개표할 때 자주 발생했다"고 했다. 그는 "개표기가 워낙 빨리 작동해 유심히 관찰하지 않으면 개표가 어떻게 진행되는 조차 알기 어렵다"라고도 했다.

(Excerpt from Exhibit No. 42 Joongang Ilbo May 14, 2020 news article [‘The sorter at the Buyeo polling station was strange’ NEC claims ‘nothing wrong with the machine’])

The NEC said that there is more than a 20% chance that the machine will sort the ballot as one that needs double checking, and that the machine has no problem. However, a bill counting machine with more than 20% chance of miscounting money cannot be used, so a machine with more than 20% chance of sorting paper as one that needs extra checks is not achieving the performance required for an automatic sorting machine.

Since the same sorting machine was used nationwide, it is easy to guess that there are many places where the vote changed due to such errors, which can indicate that there is a reason for invalidating the outcome of this general election.

2. The NEC even admitted that the ballot counting machine might have defects when complained about the miscounting.

There was a counting observer who was present at a counting station in Seongbuk-gu, Seoul. He complained strongly about the situation where the counting machine continuously sorted ballot papers for the United Future Party into the tray used for votes for the Democratic Party. A Seongbuk-gu election commission official said other machines are experiencing similar errors and that the error can result 1,810 votes being recorded as 1,680 votes. The official even said that the results from the machine are not credible.





(Excerpt from Exhibit No. 43 video, video source: <https://youtu.be/YiFCsb7KT9Y>)

As you can see in the case of Gongju/Buyeon/Chungyang, there were many sorting errors when using the electronic counting machine and the commission official even admitted that the counting result could cause a difference of 130 votes due to the machine's defect.

It is clear that losing 130 votes in a single ballot box can have a serious impact on the outcome of a battleground area where the outcome is decided by 1,000 votes. But if the counting observers fail to raise objections because they could not see the fast-sorting process with their eyes, it is highly likely that there will be many ballot boxes that were counted without correcting errors that could affect the outcome.

하지만 현재 우리나라가 실시하고 있는 집중 전자개표 방식은 투표소에서 투표함을 개표소까지 송부하는 과정에서 투표함 봉인시비가 끊이지 않고 있을 뿐만 아니라 집중개표 방식으로 인해 개표 결과가 지연되고 많은 예산이 소요되고 있는 실정입니다.

또한 중앙선거관리위원회는 최근 검증되지 않은 투표지분류기를 사용함으로써 투표지분류기의 기계적 결함, 오작동, 고장 등으로 오류 가능성이 상시 존재하고 있는 실정입니다.

이와 같은 상황에서 제18대 대통령선거의 개표 조작의혹이 제기되는 등 지난 2년간 지속적으로 사회적 갈등이 유발되어 국론이 분열되는 악순환이 계속되고 있는 실정입니다.

이 밖에도 중앙선거관리위원회와 지역선거관리위원회의 투표 결과의 취합 과정에서 개별 노트북이나 컴퓨터 등에 바이러스, 악성코드, 해킹 등을 통해서 투표 결과가 왜곡되거나 오류가 발생할 가능성도 높다는 지적이 계속해서 제기되고 있습니다. 그 결과 각종 선거 때마다 개표 오류는 물론 개표 부정 논란이 발생하는 등 선거 결과에 대한 국민적 불신이 점점 증대되고 있습니다.

(Excerpt from Exhibit No. 44 page 68 of the review of Computer Organization under the Public Line Act)

As mentioned above, the discussion over electronic counting machines has been going on for a long time because of the possibility of distortion of the machines, vulnerability to external hacking and defects in the machines. Instead of the equivocation that the counting machine is an auxiliary machine used for manual counting, we need a thorough verification process to check the machine operating method, the image files saved in the machine and software program used. This will allow us to prevent suspicions of rigged elections from constantly being raised while allowing us to find reasons for the nullification of the election which used all types of electronic devices.

3. The German Constitutional Court stated that voters should be allowed to know, control and verify electronic devices used for the election. The court banned the use of machines that do not guarantee them. Nothing is clear about the use of electronic devices in this general election.

All types of election commissions continuously argue that counting machines are just auxiliary devices used to help manual counting.

둘째, “구·시·군선거관리위원회는 개표 시 투표지를 유·무효별 또는 후보자별로 구분하거나 계산에 필요한 경우 기계장치 또는 전산조직을 보조적으로 이용할 수 있다.”는 규정을 신설함으로써 개표의 정확성을 담보하도록 하였으며,

(Excerpt from Exhibit No. 44 page 56 of the review of Computer Organization under the Public Line Act)

However, in the actual situation, ballot papers are gathered based on ballot boxes and the counting machine is used to sort ballot papers. The sorted ballot papers are counted by the electronic counting machine. The process is heavily digitalized, and manual counting only occurs when the machine sorts a ballot as invalid. You can see this in photos above from Exhibit No. 43, where counting officials do not count ballots manually but wait for the machine to be replaced when the machine is considered to be malfunctioning.

There is also a court ruling of Leitsätze zum Urteil des Zweiten Senats vom 3. März 2009, 2 BvC 3/07, 2 BvC 4/07 from German Federal Constitutional Court that mentions the requirements for electronic devices used in election.

종이 투표의 경우, 관련 법규에 명시된 조작이나 위조는 분명하고도 가시적인 수단을 통해서만 가능하기 때문에 그 인지가 어렵지 않지만, 전자투표기 소프트웨어의 오류 내지는 의도적 조작을 통한 선거 위조는 관련 전문가들 빼고는 인지하기 극히 어렵다. 이런 상황에서 일어날 수도 있는 선거 기계의 심각한 영향을 고려할 때 선거의 공공성 원칙을 지키기 위한 특별한 사전 조치가 필요해진다.

위 판결 내용에서 나타난 것처럼 연방헌법재판소의 판결은 전자투표기 사용 자체를 거부한 것이 아니라, 사용 이전에 일반 유권자들이 전자투표기 작동을 충분히 인지·제어·검증할 수 있어야 함을 전제한 것이다. 말하자면 선거의 공공성에 부합되게 유권자들이 전자투표기의 메커니즘을 '꿰뚫고' 있어야 할 뿐만 아니라, 사후 재검표도 가능해야 한다는 얘기다.

(Excerpt from Exhibit No. 41 from pages 5, 8 of a case study on Germany’s decision on the unconstitutional use of electronic voting machines)

However, election commissions across the country ignored the request for the disclosure of the source code used in the QR code-issuing program and ballot sorting program, as well as questions raised about the use of QR codes. They said the network operates strictly offline, but the machine had a wireless network feature in its network configuration. Ordinary voters cannot recognize, control and verify the electronic methods.



(Excerpt from Exhibit No. 45 video (multimedia material) on how to connect early voting poll station network)

It is a well-known fact that wireless networks are more vulnerable to security than wired communication networks. The NEC said it removed the LAN card, but it established a network for early voting polling stations after producing tutorial video to show how to set up wired and wireless network systems using a LAN card.

지난 12일 선관위는 "'4·15 총선 의혹 진상규명과 국민주권회복대회'에서 제시된 부정선거 근거에 대한 위원회 입장"이라는 제목의 보도자료를 통해 "투표지분류기는 투표지를 인식하는 광학 센서가 있으나 QR코드를 인식하지는 못하며, 운용장치(노트북)는 랜카드 제거 후 각급 선관위에 배부되므로 외부 통신망과 연결될 수 없다"고 설명했다.

(Excerpt from Exhibit No. 40 New Daily May 19, 2020 news article [‘General election’s ballot sorter connected with the outside’...Min Kyung-wook presents evidence ‘ballot counting table’])
Therefore, it is clear that the network was used during this election and wireless networks, in particular, are more vulnerable to hacking than wired networks, but the NEC is trying to hide such facts at this point. We need to verify the overall network system in order to conclude that there was no election meddling from outside.

4. Partial conclusion

Electronic methods were used throughout the voting process, including identification, ballot paper issuing, ballot box storage, counting and checking of the counted number.

There is a risk that electronic methods can easily change the outcome of the vote with just a small number of people compared to manual counting. For this reason, electronic methods should only be used in elections only if people can recognize, control and verify them, following the attitude of the German court.

However, instead of revealing information to the public, at various levels the election commissions are busy hiding the entire election process and lying every time.

Therefore, the error of sorting ballot papers through the electronic counting machine was confirmed. The misclassification of votes could have a decisive effect on the outcome since the difference in votes was 80 and 180. This kind of misclassification did not occur in just one district, so it will be the same situation in Yeonsu-gu.

Unless the NEC releases all information on the QR codes, image files and electronic counting machine, which are the main reasons for the misclassification, the results of the general election cannot be trusted. As mentioned earlier, we cannot identify “made votes” unless we compare the actual vote with the image file saved, to the integrated voter list, etc. Trust in the results of this election can only be obtained through a thorough verification of the exact electronic methods, including comparing them with the image file of the ballot paper. The illegality can also be determined only through the verification mentioned above.

IV. Voting and counting processes were also conducted illegally during this election.

1. There was a case where an official signed a seal paper attached to the early voting ballot box outside the polling station.

A voter requested the disclosure of a CCTV record for the Namyangju early voting station and obtained the video. In the video, there was someone who visited the place where the ballot box was stored and signed a seal paper on top of the early voting ballot box.



(CCTV video excerpt from April 10, 2020 at 18:42:11 where the early voting ballots were stored for the Namyangju, Gyeonggi election commission; video source: <https://youtu.be/KhGMjTq1vV4> around 9 minutes 8 second mark)

If it is a new signature on the seal paper, we cannot be sure whether the early voting ballot box in the video has been replaced or if it is an actual ballot box.

2. The NEC officials interrupted the counting observers participating in the counting process, so they were not able to monitor it properly.

Counting observers have the right to observe and monitor the counting process at a near distance, in accordance to the Public Official Election Act.

Public Official Election Act Article 181

(7) The Gu/Si/Gun election commission shall provide the ballot-counting witnesses with seats so as to witness the proceeding of the ballot counting at a near distance (not less than one meter nor more than two meters) enough to identify the contents of the ballot counting.

(8) Where a ballot-counting witness finds any illegal matter concerning the ballot counting and demands the correction thereof, the Gu/Si/Gun election commission shall correct it if the demand is deemed justifiable.

(9) **A ballot-counting witness may, at any time, go round the ballot counting place to watch or take a photograph of the ballot-counting situation**, and install telephones, computers and other communication equipment at such places as designated by the chairman of the Gu/Si/Gun election commission in the ballot-counting place or the general spectators' gallery, and use such equipment to inform a candidate or political party of the ballot-counting proceeding.

However, during this election, an official from the Yeonsu-gu election commission said, “Hey you, don’t take a video. Don’t take a video of the sorting machine. I am warning you again. Do not take a video,” as can be seen at around the 20 second mark of Exhibit No. 47. The official threatened and stopped the counting observer from exercising his right to record the counting process.



(Excerpt from Exhibit No. 47 video of Yeonsu, Incheon counting process (Warning you. Do not record the electronic sorter). The counting observer is refrained from recording from the beginning of the video, then was ‘warned’ to stop filming the entire electronic sorters inside)

An official from Seongbuk-gu’s election commission distorted the law and told counting observers that they have to stay at least a meter away from the scene. The official screamed at counting observers that they could not monitor or take a video of the detailed process. **This undermined the national interest in a fair ballot counting process, going beyond the infringement of the individual rights of the counting observer.**



(Excerpt from Exhibit No. 43 video)

3. Many seal papers were damaged, and CCTVs were not installed across the country. The only way to guarantee the integrity of the election is by verifying both ballot papers and electronic methods.

As you can see below, many seal papers on the ballot boxes were damaged across the country. There were some traces left of the attachment of new seal papers. Ballot boxes were not properly sealed and locked, so it would not be surprising if some votes were added later on. Many districts did not have CCTVs for the early voting day, actual election day and after-hours of the election day.

The precondition for electoral integrity of **securely storing ballot papers not only during counting but also during the after-election verification process** has collapsed.



(Excerpt from Exhibit No 46 picture (1) of ballot storage box from Yeonsu-gu, picture (2) from a second ballot storage box from Yeonsu-gu)



(Excerpt from Exhibit No. 46-3 picture of a ballot storage box from Namyangju, Exhibit No 46-4 picture of a ballot storage box from Dongdaemun-gu)

Therefore,

- (1) Verification of whether “made votes” were added afterward by comparing image files saved on the electronic counting machine with actual ballot papers.
- (2) Verification of whether there were “made votes” created during the early voting process by comparing copies of early voters’ identification with the actual number of early voting ballot papers.
- (3) Verification of whether manipulation or meddling of election results occurred electronically through digital forensics, document submission order, fact check, etc. must take place.

4. Partial conclusion

As the NEC has confessed, the vote counting process, including the preservation of votes, has been lax, and the possibility that the results may have been contaminated cannot be ruled out. Therefore, it is not just a manual recount that is needed. Thorough verification of the voting and counting processes and electronic evidence are required. Actual ballot papers should be compared with electronic evidence to exclude “made votes” from the recount. Also, it is required to find out when exactly the illegal activity occurred. Only through detailed verification can any attempts to intervene from the outside be blocked.

V. Conclusion

It is clear that the results of this general election were contaminated nationwide by not only “made votes” but also through electronic measures, which damaged the results of Yeonsu-gu district as well as it went against the people’s will.

The contamination of the election outcome came about due to opaque disclosure of information related to the QR code and electronic counting machine, which was the case previously as well, and the lax early voting system. We reached a point where we can no longer let the NEC manage elections, which are the key to the democracy. It is only giving an empty promise, saying “we will do better next time.”

Furthermore, the NEC said publicly that it will disclose all related data.

선관위 "민경욱, 선거 무효 소송? 기꺼이 모든 자료 공개"

CBS 김현정의 뉴스쇼 | 2020-04-29 09:34



뉴스듣기

17

22

가



(translation: NEC “Min Kyung-wook, filed election invalidation lawsuit? Willingly disclose all data”, posted April 29, 2020 09:34)

However, the election commission from Yeonsu-gu, Incheon refused to preserve ballot papers for the proportional representative election and integrated voter list even though the court has ordered their preservation. According to the commission, the “NEC did not give permission to do so.”

All levels of election commissions, as well as the NEC, are refusing to preserve image files, electronic counting machines, etc. as requested by many other candidates, including the plaintiff.

The defendant and the NEC must provide all related documents to prove there was not illegal activity throughout the election process, as they had promised. But the defendant and the NEC are uncooperative with this lawsuit and are trying to be above the law.

Thus, the court, as the guardian of the law, must verify not only the manual count but also the actual ballots. It must verify the electronic measures taken, the voting and counting processes that should have been done to prevent “made votes” affecting the manual count. This should be carried out to guarantee the individual right of the plaintiff. Not only that, but the court must also understand that it is in the middle of history and has the mission of correcting rampant illegalities and let people know that there is no exception to the rule of law. We hope that the illegal activities that occurred in this election will not be repeated again as we prepare the defense as above.

Methods of Proof

1. Exhibit No. 24: Election results of Bucheon-si, Gyeonggi
2. Exhibit No. 25: Media article from MSTODAY on April 10, 2020 [Out-in-the-Field Sketch] ‘Let’s Make Our Own Future for Chuncheon’ Early Voting for the General Election Begins
3. Exhibit No.26: Media article from New Daily on May 20, 2020 [4,674 voters, but 4,684 ballots... ‘suspicion of phantom election’ magnified]
4. Exhibit No.27: Media article from KBS on May 2, 2012 [Unified Progressive Party, confirmed fraud in ‘proportional election’ ...announced today]
5. Exhibit No.28-1: Sticky ballots (1) from Seongbuk-gu, Seoul
6. Exhibit No.28-2: Sticky ballots (2) from Seongbuk-gu, Seoul
7. Exhibit No.29: Media article from JoongAng Ilbo on May 4, 2012 [‘Gymnasium Election’ was not to this extent]
8. Exhibit No. 30-1: Standard for regular ballot paper – from attached Form 42(A) of the Public Official Election Regulations
9. Exhibit No. 30-2: Standard for irregular ballot paper – Dong-gu, Daejeon electoral district
10. Exhibit No. 30-3: Standard for irregular ballot paper – Junggunam-gu, Daegu electoral district
11. Exhibit No. 31-1: Image of regular ballot paper (color) – Gangwon province
12. Exhibit No. 31-2: Image of irregular ballot paper (color) – Guri-si
13. Exhibit No. 32-1: Image of regular ballot paper (specification) – Chuncheon, Cheoron, Hwacheon, Yanggu electoral districts
14. Exhibit No. 32-2: Image of irregular ballot paper (specification) – Chuncheon, Cheoron, Hwacheon, Yanggu electoral districts
15. Exhibit No. 33-1: National Election Commission December 17, 2018 post [Election Equipment] Standard and Procurement Schedule for the Early Voting Ballot Printer
16. Exhibit No. 33-2: National Election Commission December 17, 2018 post [Election Equipment] Standard and Procurement Schedule for the Early Voting Ballot Printer
17. Exhibit No. 34: Media segment from MBC on April 10, 2020 [Choice 2020] Early Voting Begins Today...Wear Mask and Practice Social Distancing
18. Exhibit No. 35: Table 2-2 from the Public Official Election Rules
19. Exhibit No. 36: Image of an irregular ballot paper (color) – Seongbuk-gu, Seoul
20. Exhibit No. 37: Image of Inside Jurisdiction early voting ballot paper (Cheongju)
21. Exhibit No. 38: Image of Inside Jurisdiction early voting ballot paper (Namyangju)
22. Exhibit No. 39: Image of Inside Jurisdiction early voting ballot paper (Guri)
23. Exhibit No. 40: Media article from New Daily on May 19, 2020 [‘General election’s ballot sorter connected with the outside’ ...Min Kyung-wook presents evidence ‘ballot counting table’]
24. Exhibit No. 41: Explanation of a German court’s ruling on the use of electronic devices
25. Exhibit No. 42: Media article from JoongAng Ilbo on May 14, 2020 [‘The sorter at the Buyeo polling station was strange’ NEC claims ‘nothing wrong with the machine’]
26. Exhibit No. 43: Captured images from video
27. Exhibit No. 44: Review of the public election law on electronic systems
28. Exhibit No. 45: Tutorial video for installing networks at the early voting polling station
29. Exhibit No. 46-1: Image (1) of ballot box in Yeonsu-gu
30. Exhibit No. 46-2: Image (2) of ballot box in Yeonsu-gu
31. Exhibit No. 46-3: Image of ballot box in Namyangju

32. Exhibit No. 46-4: Image of ballot box in Dongdaemun-gu
33. Exhibit No. 47: Video of election committee official warning a counting observer in Yeonsu-gu, Incheon

Attachments

1. One copy of each method of proof as above

June 2020

The plaintiff's legal representative
Attorney Do Tae-woo

The Supreme Court

**ELECTION
FRAUD**

LEGAL
DOCUMENTS

DOCUMENT FOR PRELIMINARY
BRIEFING (YEONSU-GU, INCHEON)
CASE NO. 2020-30

Min Kyung-wook

**Synopsis for “Document for Preliminary Briefing (Yeonsu-gu, Incheon)
Case No. 2020-30”**

This document is another legal brief prepared by the legal team of former South Korean National Assemblyman, Mr. MIN Kyung Wook, in a suit filed against the District Election Commissioner of the Yeonsu-gu District, City of Incheon.

The lawsuit centers on allegations of election fraud perpetrated during the April 15, 2020 general election held in South Korea. The filing includes photographic evidence, screenshots of relevant information/evidence, and other visual aids to help the court (and the reader) understand better the allegations of election fraud during the recent South Korean general election.

Among the claims included in the brief are serious allegations of ballot paper mishandling and other chain-of-custody irregularities. For example, the brief cites as evidence details of ballot papers being found among election-related documents discarded by the National Election Commission at a local junkyard. *Reference: (Exhibit No. 120 JoongAng Ilbo article, “Why does the Buyeo ballot come out of the Siheung junk shop? The NEC: “don’t know”).

Other allegations include evidence of irregularities involving electoral observers being obstructed and/or not permitted to carry out their assigned, and lawful, functions. The legal basis for establishing and operating temporary voting stations is also challenged by the plaintiff.

The plaintiff also argues that the NEC’s response to the several allegations raises serious doubt about the authenticity and integrity of the April 15th election and on South Korea’s electoral system, such that public trust has been eroded.

Document for Preliminary Brief

Case 2020-30 National Assembly Election Nullification
Plaintiff Min Kyung-wook
Defendant Yeonsu-gu, Incheon District Election Commissioner

Regarding the aforementioned case, the plaintiff's legal representative(s) have prepared a brief as follows.

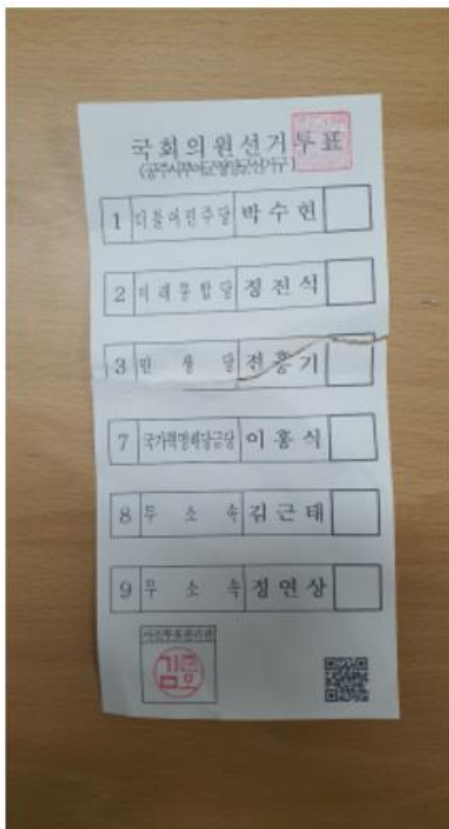
1. The fact that ballot papers were found among election-related documents discarded by the National Election Commission.

(Exhibit No. 120 JoongAng Ilbo article, “Why does the Buyeo ballot come out of the Siheung junk shop? The NEC “don’t know”)

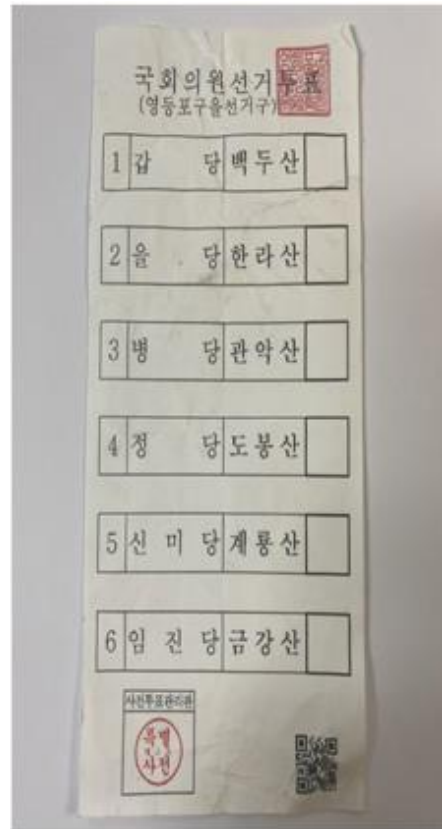
Even though it was Saturday, July 4, 2020, a weekend, several citizens who were holding a rally in front of the National Election Commission (hereinafter referred to as the ‘NEC’) complex in Gwacheon, Gyeonggi-do, witnessed a five-ton truck leaving at around 14:00. The above citizens, who were suspicious of this, followed the route of the above truck and saw that the above vehicle entered a junk shop in Siheung, Gyeonggi-do, and leaving something like wastepaper there.

As a result of checking the wastepaper from the above vehicle, all of these wastes were documents produced by the National Election Commission, and shockingly, the same ballot paper as the real ballot paper as shown in the picture below was found.

<Exhibit No. 121 Picture of real ballot paper>



<Exhibit No. 122 Picture of ballot paper>



First of all, if you look at Exhibit No. 122 the model ballot that was found, to distinguish it from the real ballot, it contains the party name and the candidate's name under an assumed name, or it is supposed to be distinguished simply by looking at the seal of the “model”.

However, the real ballot paper of Exhibit No. 121 shows the actual candidates' numbers and names listed in the Gongju-Buyeo-Cheongyang district in Chungnam, and there is a QR code on the bottom right side of the ballot, so you will know that it is an 'early voting' ballot paper. If you scan the QR code, it shows 31 numbers: "202004150002 02440202 4414 0005642" and clearly demonstrates that the above ballot is a "real ballot" with numbers that correspond to the real ballot paper:

<Exhibit No. 121: Results of the QR code scan on the ballot>
 202004150002 April 15, 2020 The 21st National Assembly Election <Election Name>
 02440202 Gongju Buyeo Cheongyang Electoral District <Electoral District Name>
 4414 Cheongyang-gun Election Commission <Managing Election Commission>
 0005642 5,642th Issued Ballot <Issuance Serial Number>

In addition to the QR code, an early voting officer's name “Kim, Jun-oh” is stamped on the bottom left of the ballot paper above, and the person above was identified as an employee of the National Election Commission. The ballots found are the 'real ballots' in terms of the appearance or the scan contents of the QR code, and it has been discovered that the NEC has kept them without any authority and tried to dispose of them without permission.

2. The NEC’s explanation means that the current voting system has completely collapsed.

Regarding the fact that the above real ballots were found in the junk shop, the NEC acknowledged that the wastes were documents discarded by the NEC on July 4, 2020, and admitted that the ballots were printed at the "2nd early voting station of Yangnam-myeon in Gyeongju-si, Gyeongbuk (**Exhibit No. 123 July 22, 2020, the NEC's explanatory material on the press article "Buyeo ballot paper was found in a junk shop of Siheung."**)

A thorough fact-finding check is needed on whether the explanation above by the NEC is in line with actual facts, but even if the NEC assumes the facts based on the explanatory materials below, the authenticity and integrity of the voting cannot be guaranteed at all. This case, the general election of the National Assembly which took place under a voting system that cannot cover the authenticity of the real vote, is invalid.

A. The fact that the same QR code was issued repeatedly means that there is no device to guarantee the authenticity or integrity of the ballot paper.

The defendant per the NEC has argued that the function of the QR code on the early voting ballot is 'anti-forgery' or 'identification of forgery' but just before the election they gave reasons that they use the QR code to accurately manage the number of ballots issued and because it has a resilience, etc.

(Previously, as the plaintiff pointed out, there was no reason to substitute the bar code to a QR code that has no legal basis from the Public Official Election Act, so the explanation by the NEC will be considered true and to be used for this preliminary brief.)

The NEC has argued that ‘the QR code guarantees the integrity of the ballot paper, and that integrity can be found by checking the serial number of the QR code issued according to the quantity issued.’ The NEC's claim was that the QR code was the only function to ensure the authenticity or integrity of the ballot, given that the authentic early voting ballot paper is well cared for, the early voting manager's seal is printed together with the ballot when printing out the ballot paper instead of actually sealing it.

However, according to the NEC's explanation on the discovery of the ballot, they are acknowledging themselves that the QR code, the only device that guarantees the authenticity of the ballot paper, has completely lost its function.

<Exhibit No. 123 Excerpt from the National Election Commission's explanatory material>

1. About the ballot issuance process

The early voting ballot was identified as a damaged early voting ballot paper during printing at a special early voting station (2nd early voting station in Yangnam-myeon, Gyeongju-si, Gyeongbuk, Hyundai Motor's Gyeongju Training Center) set up for COVID-19 confirmed patients, and the detailed process is as follows.

The voter's constituency ballot was printed normally and during the printing of the proportional representation ballot, the ballot jammed (jam), so the printing was suspended. When the front and back covers of the ballot issuing machine were opened, the roll paper was aligned and restarted, each of the proportional representation ballots and one of the ballot papers in the district was re-printed.

The NEC self-acknowledged that the ballot paper with the same QR code was issued multiple times and explained that the ballot jam occurred during the ballot printing process, which caused duplicate issuance. In addition, according to the plaintiff's verification on the above explanatory material of the National Election Commission, it was not automatically re-printed when the jam was resolved and the printer lid was closed, but the election management system input the command 'print the ballot' several times (It is the click of the ballot issuance button over again on the screen according to the system, **see the screen capture from the early voting management training video for the 21st National Assembly election, below in Exhibit No. 124**) so the ballot paper with the same QR code printed again.

<Figure 1 – Exhibit No. 124 A screen capture from the early voting management training video for the 21st National Assembly election (Refer to 16 minutes and 37 seconds of the video)>



This fact represents a major flaw in the election system. As previously explained by the NEC, the serial number of the QR code is issued in response to the quantity printed, and accordingly, even if it appears to be a real ballot, one serial number corresponds to one issuance, so if you check the serial number, the authenticity of the corresponding ballot paper can be checked; it turns out that the NEC's explanation was completely fictional.

According to the defendant's explanation so far, the QR code on the ballot is the only device to identify whether the ballot was forged or not, however, according to the NEC's explanation, even the QR code on the ballot cannot guarantee the authenticity of the ballot since they admitted that one ballot with the same QR code is cast and another ballot is discarded in the garbage; it also suggests even if multiple ballots are forged or issued, no ballot can be known as the real ballot.

The defendant is responsible for proving the legitimacy of the election management in that the administrative litigation is applied in this case, but there is no means to prove that the election of this case was legitimate since the QR code, which is the only means to prove the legitimacy or verity of the ballot, is no longer trusted.⁵¹ Eventually, due to the above circumstances, the election in this case can only be considered invalid, and the plaintiffs' claim should be admitted.

B. The fact that a ballot with the same QR code (serial number) is issued even if a ballot issuance order is entered several times based on one elector means that the 21st general election was held under an unconstitutional election system in violation of 'the principle of secret ballot'.

As mentioned earlier, the fact that a ballot with the same QR code is issued by pressing the ballot issuance button again on the terminal list system proves that the current election system is a complete violation of the 'secret ballot principle,' as described below.

If you look at the system screen on the list terminal in Figure 1, you can see that the personal information of the elector is registered in the middle of the right side. According to the explanation of the NEC, even if an elector enters the order of issuing a ballot several times in the same state, a ballot with the same QR code is printed. This is the result of not having a complete separation of the list terminal which is to verify the elector's identity and the ballot printer⁵², and **the function of the QR code does not guarantee the authenticity of the ballot, but rather it means that it functions to verify for which elector the ballot was issued.**

⁵¹ Assuming the only way to prove the authenticity or integrity of ballot papers or ballots cast, the only way is to verify and prove whether or not all electors voted on the election day, and whom they voted for. If circumstances reach such a point, it leads to the conclusion that the 21st general election should be nullified, and re-election should be carried out.

⁵² Since there is a risk of violating the secret ballot principle, in the US, the voter is checked on the electoral roll, and the voter identification terminal or the electoral roll and ballot making machine are completely separated physically and electronically. Therefore, if you check the voter on the electoral roll, you can input the command directly to the ballot making machine and print out the ballot.

< Figure 1 - Exhibit No. 124 The 21st National Assembly Election early voting management training video screen capture >



< Figure 2 - Exhibit No. 123 The 21st National Assembly Election early voting management training video screen capture >



* According to the processing method and photo above, it can be seen that the ballot issuing machine and the list terminal are physically completely linked.

Ultimately, it suggests that the serial number of the QR code corresponding to the voter information exists when the information of a particular voter is entered, and **the QR code is given in response to the information of the voter, not in response to the quantity or order of the printed ballot paper.** Therefore, looking at the serial number of the QR code, you get to know to which voter the ballot was issued to and **it directly violates one of the four major principles of the election, 'secret ballot principle':** if you check the mark on the ballot paper, you can find out which candidate a specific voter voted for.

Therefore, the 21st general election is invalid, which has a serious defect by violating the principle of secret elections. In addition, it is essential in this case to verify the central server of the election management system that recorded all electronic integrated voters' list, QR code data, and ballot issuing machine logs in order to confirm whether QR code data corresponding to integrated voters' list is recorded. And it is a verification that must be accepted in order to reveal the legitimacy of the election also for the NEC including the defendant.

C. There is no means to institutionally secure the integrity and authenticity of the ballot by neutralizing the Election Commission itself, such as the seal to guarantee the authenticity of the ballot.

As stipulated in section 3 and below on page 4 of the preparatory documents filed on June 30, 2020, valid ballots shall be stamped and sealed by the chairman of the election commission at each level as stipulated by Articles 184 and 186 of the Public Official Election Act and the National Election Commission rules, and all ballots, including valid and invalid ballots, must be kept by each gu/si/gun election commission until the election invalidity suit is over.

In addition to the current invalidity suit raised by each electoral district in the Supreme Court, the entire 21st general election invalidity suit filed by the Christian Liberty Unification Party as well as by voters, ballots should be kept by the Election Commission at all levels in accordance with the Public Official Election Act regardless of validity or invalidity.

Nevertheless, if you look at the NEC's explanatory material, they are acknowledging themselves that they have violated the regulations under the Public Official Election Act.

<Excerpts from Exhibit No. 122 NEC's explanatory material>

Among the election equipment and election documents that were in the acquired vehicle, the NEC sent the early voting records that needed to be handed over to the Gyeongju-si Election Commission by registered mail. But in this process, the second early voting station of Yangnam-myeon's 'envelope for damaged ballot paper, etc.' was missing and it is believed to have been discarded later mixed with other items.

Even according to NEC's explanation, the NEC admits that the NEC discarded the torn ballot paper without handing it over to the Election Commission in charge; they also admit that in this case it should be put in the 'envelope for damaged ballot paper, etc.' and kept by the 'Gyeongju-si

Election Commission' regardless of its authenticity. Above all, the explanation itself is shocking since the National Election Commission does not have the right to keep the ballot regardless of whether the ballot is valid or invalid under the Public Official Election Act, and the right to destroy it, much less.

This is a direct violation of the obligation to preserve ballots and the like under the Public Official Election Act, and **it is clear that the Election Commission, which is only a party to the election invalidity suit, has taken the lead in discarding the evidence of the election invalidity suit in this case.** This is why the preservation of evidence filed by each plaintiff in the other election invalidity suits including this case, should be admitted and the verification procedure must be carried out as soon as possible.⁵³

In addition, the NEC's explanation below shows that the election commission, including the defendant, has no understanding of the preservation obligations under the Public Official Election Act.

< Excerpts from Exhibit No. 122 NEC explanatory material >

Meanwhile, on July 21, 2020 (Tue), the Cheongyang-gun Election Commission confirmed that the number of ballot papers issued and the number of votes matched (1,778) when the votes cast outside of the voters' registered district were reviewed under the observation of members recommended by the political parties, among valid ballots (1,1751), we confirmed the early voting ballot cast outside of the district that is identical to the serial number of the media article.

Although it was confirmed that the voter's early voting was normally handled, received, and counted, there was a mistake in the management of the damaged early voting paper in the process of taking over and handing over non-face-to-face to prevent the spread of COVID-19. We are deeply aware of the responsibility for this incident, and we apologize for causing concern to our people.

The NEC instructed the Cheongyang-gun Election Commission to open the ballot that was cast by the voters from outside of their registered district to see if another substance with the same QR code of the above ballot paper exists. Although they claim that the ballot was reviewed in the presence of members recommended by the political parties, they do not reveal who the attended members were, and who performed each ballot checking with the same QR code, the same with the identified ballot that they claim to have found.

⁵³ Nevertheless, the preservation of evidence requested for servers, electronic integrated voters' list, and other electronic counting equipment, etc. to the National Election Commission filed with the Supreme Court are dismissed because they are still 'expected to be submitted if necessary'. This fact that the National Election Commission, including the defendant, is discarding the evidence without preserving it, has proved that the reason for the rejection is not valid at all and against the purpose of the preservation of evidence.

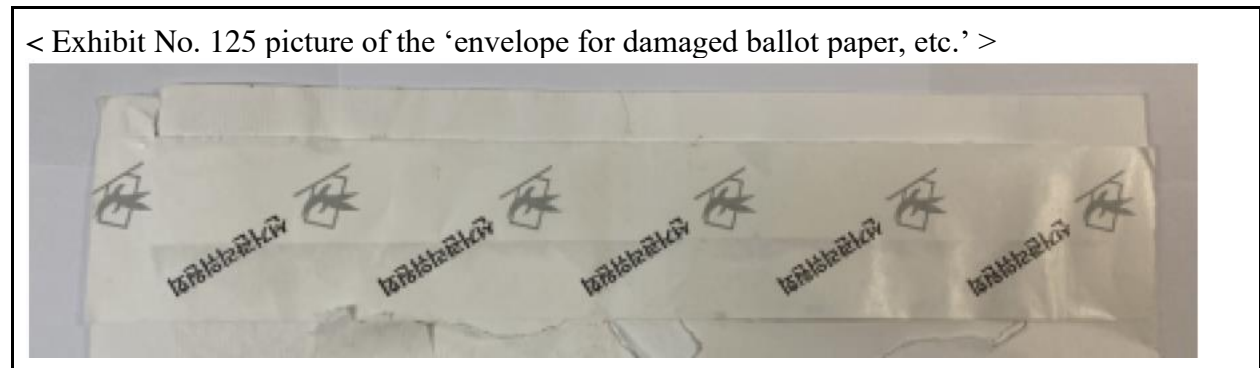
Each plaintiff, including this case, cannot see the destruction of the evidence of the defendants as described above, so we will apply for a preservation of evidence to the Supreme Court again.

Above all, the idea that the election commission can open the ballots held by the election commissions at different levels is due to misunderstanding the Public Official Election Act and seriously undermines the integrity of the ballot. In accordance with Article 186 of the Public Official Election Act, the ballot boxes stored by election commissions at each level are to be stamped and sealed by the chief judge of each level, who also serves as the chairman of the election commission at each level, and in order to release them, it must be carried out through strict procedures with the approval of the NEC chairman and the observation of party observers of each candidate.

Nevertheless, the fact that Cheongyang-gun Election Commission randomly opened the valid ballot box and used physical means to find a ballot that matches the QR code damaging and releasing the seal on the ground that a ballot paper discarded by the National Election Commission has been discovered will completely undermine the purpose and function of sealing documents, such as 'securing the identity and integrity of related documents such as ballots through sealing'.

According to the explanation of the NEC, the ballot paper that was re-issued this time was sealed and stored by saying, "the first printed electoral district ballot paper was torn in front of the voter, put it in a 'envelope for damaged ballot paper, etc.' and sealed it after voting." However, given the condition of the envelope found, it was simply taped without the seal of the chairman of the district election commission as well as the early voting officer's seal, and nothing of the 'seal' as defined by the Public Official Election Act has been made at all. (**Exhibit No. 125 picture of 'envelope for damaged ballot paper, etc.'**).

< Excerpts from Exhibit No. 122 NEC explanatory material >
Early voting staff informed the voter that he would issue a new printed ballot paper and notified the observer; the previous printed ballot paper was torn in front of the voter, placed in the 'envelope for damaged ballot paper, etc.' and sealed after the voting was completed.



As the plaintiff has pointed out several times, the "seal" by the National Election Commission has been carried out in the opposite sense to the "seal" in the Public Official Election Act, which guarantees the authenticity and integrity of the contents until it is opened with a legitimate title

after being stamped and sealed by the election commissioner or officials while observers are watching.

This means that the Election Commission, including the defendant, who bears the responsibility to prove the legitimacy of the election, has no means to prove and verify that the 21st general election was truly a result of reflecting the will of the voters, which means that the 21st general election is invalid even legally.

3. The 21st general election is invalid because it is clear that voting was conducted unfairly without the presence of observers of political parties, and that temporary voting station was established and operated randomly without any legal grounds.

A. Article 148(1) of the Public Official Election Act stipulates that only one early voting station should be installed in eup, myeon, and dong.

Article 148(1) of the Public Official Election Act stipulates that one (1) early voting stations must be installed and operated at each eup/myeon/dong. In other words, no more than one can be installed in each eup/myeon/dong unit in the administrative district, and there are no exception rules that can be installed arbitrarily more than one.

The Bucheon Election Commission stated, in relation to the counting of 18,210 votes from the early voting station in Shinjung-dong Bucheon-si district on the premise that only one early voting station should be installed in each eup, myeon, and dong, "Bucheon has been integrated into the metropolitan dong since last year and has a large population, so it has not been accurately grasped though, we explained earlier that there must have been a lot of ballot paper printing machines and polling booths (in one early voting station of Shinjung-dong)." (**Exhibit No. 126-1 article, 'Voting time in early voting only took 4.7seconds per voter in Shinjung-dong, Bucheon.. Guinness Record level', Exhibit No. 126-2 article, 'Bucheon-si suffers from the election, metropolitan dong sparks'**).

As such, setting up only one early voting station for each eup, myeon, and dong is an enforcement regulation to prevent from damaging election fairness by so-called recruitment vote, which allows a voter to set up a polling station arbitrarily so that a certain region or region can vote intentionally. These exceptions could not be found anywhere under the Public Official Election Act, so the Bucheon-si Election Commission had to install one early voting station despite the excessive population as the administrative district was changed to metropolitan dong.

B. The 21st general election is invalid due to the establishment and operation of an illegal early voting station, so-called 'special early voting station' without any legal basis.

NEC claimed that the double-issued ballot paper was printed at the "special early voting station (2nd early voting station of Yangnam-myeon, Gyeongju-si, Gyeongbuk)," and the NEC installed and operated eight so-called 'special' early voting stations nationwide. (**Exhibit No. 127 press release "NEC operates a special early voting station within the Life Therapy Center).**

< Excerpts from Exhibit No. 127 press release “NEC operates a special early voting station within the Life Therapy Center >

NEC will operate a special early voting station on April 10th and 11th at the Life Therapy Center, where COVID-19 confirmed patients are being treated.

The NEC revealed that the decision was made in consultation with health authorities to guarantee the voting rights of voters who were confirmed with COVID-19 after the expiration date of the mail-in voting report.

Special early voting stations are installed in eight Life Therapy centers in Seoul, Gyeonggi, Daegu, and Gyeongbuk, which have a large number of confirmed patients and medical and support personnel, and the operation hours are five to eight hours a day during early voting period, taking into account the number of people in quarantine in the Life Therapy Center.

This 2nd early voting station in Yangnam-myeon corresponds to the special early voting station mentioned in the press release above, and it is an early voting station to allow voters to participate in early voting regardless of what the NEC calls it.

In the case of early voting stations, Article 148 (2) of the Public Official Election Act stipulates that the gu/si/gun Election Commission shall announce its name, location, and installation and operation period on the 9th before the election day.⁵⁴ According to the Gyeongju-si Election Commission's announcement on the establishment and operation of the early voting station, the 2nd early voting station in Yangnam-myeon is nowhere to be found other than the original Yangnam-myeon, which was set up by the Gyeongju-si Election Commission, and only the press release of the National Election Commission shows the aforementioned special early voting station (**Exhibit No. 127**). Given that the aforementioned press release was dated 4/7/2020, it can be seen that even this unauthorized announcement of the National Election Commission's special early voting station was not made 9 days ago from the early voting days of 4/10/2020 - 4/11/2020. (**Exhibit No. 128 picture from Gyeongju-si early voting station guide announcement**).

⁵⁴ Article 148(2) of the Public Official Election Act, the gu/si/gun Election Commission shall announce its name, location, and installation and operation period by the ninth day before the election day (the rest omitted)

< Exhibit No. 128 Excerpts from Gyeongju-si early voting station guide announcement >



The image shows a blue banner for '경주시 사전투표소' (Gyeongju-si Early Voting Station) with a logo of a ballot box and a speech bubble. Below the banner is a table listing 13 early voting stations across various districts of Gyeongju-si.

사전투표소 명	설치장소 (건물명)	소재지
감포읍 사전투표소	경주시수산인회관	감포읍 감포항구길 34-11
안강읍 사전투표소	북경주행정복지센터	안강읍 비화원로 47
건천읍 사전투표소	건천초등학교 체육관	건천읍 내서로 1105
외동읍 사전투표소	외동읍행정복지센터	외동읍 읍청사로 25
양북면 사전투표소	양북면민복지회관	양북면 감은로 17
양남면 사전투표소	양남주민활력센터	양남면 해변공원길 101
내남면 사전투표소	내남면복지회관	내남면 이조중앙길 31
산내면 사전투표소	산내면행정복지센터	산내면 문북로 1822
서면 사전투표소	서면행정복지센터	서면 내서로 458
현곡면 사전투표소	현곡면복지회관	현곡면 용담로 311
강동면 사전투표소	강동면복지회관	강동면 강동로 17

< Exhibit No. 127 Excerpts from press release “NEC operates a special early voting station within the Life Therapy Center” >

Press release			
Release date April 7, 2020	2 pages in total	www.nec.go.kr	Public Affairs Division 02)503-2791 02)507-2758

NEC operates a special early voting station within the Life Therapy Center
 = Covid-19 confirmed patients who failed to report vote-by-mail, medical and support personnel can vote

In the explanatory material related to the duplicate ballot paper issuance, the NEC acknowledges at least two facts: “management of special early voting stations must be under the management of each gu/si/gun election commission,” “ballot paper, ballot and election-related documents of early voting stations should be kept by each gu/si/gun election commission.”

< Excerpt from Exhibit No. 123 NEC explanatory material >

Generally, the voting management of early voting stations is handled by local government employees, and election related documents such as early voting logs are handed over to the jurisdictional gu/si/gun NEC officials. However, considering the difficulties of securing manpower due to concerns of COVID-19 infection and the burden of voting management of the gu/si/gun on election day, the special early voting stations secured manpower appointing the NEC staffs,

However, the 2nd special early voting station in Yangnam-myeon was installed and operated only by the National Election Commission without any legal basis, and there was no announcement on the installation of the early voting station, and it has been revealed that the NEC tried to dispose of the related documents such as ballot paper and ballots without permission, without handing them over to the local election commission. This makes the presumption that the other seven special early voting stations could have been the same, and **this is a discovery itself that the National Election Commission was caught trying to arbitrarily destroy all data on the operation of the special early voting station, which is not legally based.**

In particular, each gu/si/gun Election Commission consistently explains that the special early voting station was ‘done by the National Election Commission, so they don't know about it at all,’ and considering that the NEC managed everything about the special early voting station and discarded documents related to elections after storing them, the explanation for each gu/si/gun Election Commission appears to be true (**Exhibit No. 129 Recording file of calls with Gyeongju Election Commissions Officials**).

In the end, **special early voting station is a total 'illegal polling station' installed in violation of the regulation that only one early voting station can be installed in one eup/myeon/dong administrative district, the regulation that the installation and operation authority is the Election Commission at each level, and the regulation on preliminary announcement of the installation and operation of early voting station.**

C. Special early voting station is illegal in that it is directly managed by the unauthorized National Election Commission and operated without the participation of the party candidate’s election observer.

In the case of early voting stations, the Public Official Election Act stipulates that the gu/si/gun Election Commission appoints one early voting officer for each early voting station from 60 days before the election to 10 days after the election (**Article 146-2 (1) and (4) of the Public Official**

Election⁵⁵, Article 67 (1) and (2)6) of the Public Official Election Management Regulations⁵⁶). In the case of early voting clerks, it is stipulated that the Eup/Myeon/Dong Election Commission, which is a subordinate organization, is required to commission.

Therefore, the NEC does not have the authority to appoint a voting officer, and even if it appoints an early voting officer, it is stipulated that the announcement must be made 60 days before the election, and the early voting officer must perform his duties in accordance with the direction and supervision of the competent local election commission, considering Article 67 of the Public Election Rules. This is not simply a procedural regulation, but it is a rule that the Public Official Election Act stipulated in the text to prevent the concentration of authority on the National Election Commission and to set the authority and responsibility to the election commissions at each level, so called, a regulation that defined vertical separation of power expressly stipulated in the text in order to implement the constitutional ideology, that is, the separation of powers and checks and balances.

Despite the regulations of the Public Official Election Act above, the NEC has appointed an early voting officer exclusively supervised by the NEC to operate special early voting stations. This is something that cannot be justified by the alleged purpose that the special early voting station claims; to guarantee voting rights for COVID-19 patients and **is a serious violation of election procedures**⁵⁷. In fact, if you look at the explanation of this part of the NEC, it is an excuse that you can freely operate a special early voting station without legal grounds to achieve an urgent purpose while acknowledging the existence of all the above-mentioned illegal facts. This is not an argument that is worth hearing but just an excuse because it is a selfish interpretation that is directly against the statute reservation principle.

< Excerpt from Exhibit No. 122 NEC explanatory material >

Generally, the voting management of early voting stations is handled by local government employees, and election related documents such as early voting logs are handed over to the jurisdictional gu/si/gun NEC officials. However, considering the difficulties of securing

⁵⁵ Article 146-2 of the Public Official Election Act (voting officers and early voting officers)

① Gu/si/gun Election Commissions have one voting officer per polling district and one early voting officer per early voting station to manage voting-related affairs.

④ Appointment, dismissal, allowance and other necessary matters of the voting officer and early voting officer shall be stipulated as National Election Commission rules.

⁵⁶ Article 67 of the Public Official Election Management Regulations (voting officers and early voting officers) ① The gu/si/gun Election Commission appoints one voting officer and one early voting officer (hereafter in this Article referred to as "voting officer, etc.") from 60 days before the election 5 days after the reason for the election is confirmed in the case of an by-election where the reason for the election is confirmed less than 60 days before the election day) to 10 days.

⁵⁷ In this case, the early voting officer may set the order by date during the early voting period.

② Voting officers, etc., must comply with the laws and regulations, perform their duties in good faith, and follow the instructions of the competent gu/si/gun Election Commission or the eup/myeon/dong Election Commission.

manpower due to concerns of COVID-19 infection and the burden of voting management of the gu/si/gun on election day, the special early voting stations secured manpower appointing the NEC staffs,

< Exhibit No. 130 Excerpt from Oh my News article ‘The Buyeo ballot found at the Siheung Junk shop was issued in Gyeongju’ >

In response, NEC's official report and the official explained, "We operated a special early voting station on April 10-11, the early voting day, to guarantee the voting rights of confirmed patients who are in isolation after entering a life therapy facility in an emergency situation called the spread of COVID-19." At that time, Kim Jong-oh served as a voting officer at the special early voting station that was installed at Hyundai Motor's training center in Gyeongju."

“At that time, the central, municipal, provincial Election Commission employees were dispatched to special early voting stations scattered across the country to take charge of the elections,” he said. “The members of the gu/si/gun Election Commission were busy with their duties alone, so the staff of the central, municipal, provincial Election Commission were forced to take charge of the special early voting station.”

Then, when asked whether the “party observers” were at the special early voting station, he said, “No one of the party observers applied to be an observer in fear of COVID-19 infection. So, we appointed an observer among the medical center staff. At the Hyundai Motor Training Center where Secretary Kim Jong-oh worked, two medical staff were observers.”

*In the content of the article, 'Kim Jong-oh' seems to be a mistake of Kim Jun-oh'.

In addition, another serious violation is that, as shown in the article above, **the polling station was operated without any "party observers" being assigned to the special early voting station**. The fact that the NEC announced the illegal installation of the special early voting station only three days before the early voting date is clear that they appointed voting officers hurriedly and they did not even receive an observer request nor provided the candidate an opportunity to apply.

In the end, the special early voting station has no choice but to be concluded as a **“total illegal voting station” that is directly against fair elections**, even in the sense that the NEC excluded observers of the candidate who are directly involved in the election and ran polling stations.

D. The serial number identified on the QR code certifies that the entire election, including special early voting stations, is invalid.

<Exhibit No. 121 The result of scanning the QR code of the ballot paper>

202004150002 April 15, 2020 The 21st National Assembly Election <Election Name>
 02440202 Gongju Buyeo Cheongyang Election District <Electoral District Name>
 4414 Cheongyang-gun Election Commission <Competent Election Commission>
 0005642 5642th issued ballot paper <Issued Serial Number>

As previously mentioned, if you scan the QR code of the duplicate ballot paper found this time, the last 7 digits corresponding to the serial number are “0005642”, which means that it is the 5,642th issued ballot paper.

The above sequence means that the voter of Cheongyang-gun was the 5,642th voter of the early voting station nationwide. This means the number of early voters in Cheongyang-gun has already reached 5,101 in the first early voting day.

< Exhibit No. 131 Screenshot of early voting progress as of 18:00 on the 1st day >

구시군명	선거인수	사전투표자수
합계	1,781,956	210,278
전주시서북구	221,795	18,264
전주시동남구	315,234	29,018
공주시	93,377	14,232
보령시	87,941	14,808
마산시	252,074	24,968
서산시	145,241	17,660
태안군	55,660	9,074
공안군	45,714	5,901
논산시	102,942	12,852
계룡시	33,583	5,698
당진시	137,649	14,041
무안군	59,625	9,512
서천군	47,374	8,482
홍성군	84,600	11,118
청양군	28,464	5,101
해성군	79,683	10,031

Early voting ballot paper for Cheongyang-gun voters issued from the 2nd day would have been issued starting from '0005102'. As of 10 a.m. on the 2nd day, the early voting status for Cheongyang-gun voters is 1,159 as shown in the following figure. If so, the cumulative number of early voters in Cheongyang-gun by 10 a.m. on the 2nd day was 6,261 (= 5101 + 1159), and the serial number of the QR code on the last early voting ballot paper issued by 10 a.m. would have been “0006261”. As described by NEC, the serial number of the ballot paper issued and discarded at the 2nd special early voting station in Yangnam-myeon is “0005642”, so it is possible to predict that the above ballot paper was issued before 10 a.m. on the 2nd day of early voting.

< Exhibit No. 132 Screenshot of early voting progress as of 10:00 on the 2nd day >

결과보기
[충청남도] [2일차] [10시]

[비례대표국회의원선거 기준]사전투표상황은 해당시간의 '10분 전'에 집계된 자료입니다.

구시군명	선거인수	사전투표자수
합계	1,781,956	51,996
천안시서북구	221,795	5,076
천안시동남구	315,234	7,440
공주시	93,377	3,346
보령시	87,941	3,279
아산시	252,074	6,438
서산시	145,241	4,623
태안군	55,660	2,145
금산군	45,714	1,363
논산시	102,942	2,978
계룡시	33,583	1,370
당진시	137,649	3,586
부여군	59,625	2,372
서천군	47,374	1,852
홍성군	84,600	2,639
청양군	28,464	1,159
예산군	70,683	2,320

However, the 2nd special early voting station in Yangnam-myeon above operated only from 10:00 to 18:00 on the 2nd day of early voting.

< Exhibit No. 127 Excerpt from press release “NEC operates a special early voting station in the Life Therapy Center >

Installation status of early voting stations

Province	gu/si/gun	Facility name	Installed Polling place	Operation date and time
Gyeongbuk	Gyeongju-si (Yangnam-myeon)	Hyundai Motor Gyeongju Training Center	Training Center Isolated Building	April.11(Sat) 10:00-18:00

In the end, unlike the NEC's explanation, **the 2nd special early voting station in Yangnam-myeon cannot issue ballot paper with serial number “0005642” on the QR code as above. NEC's explanation is clearly false.** It makes us reasonably infer two facts from the above conclusion that seems shocking.

First, the QR code that is supposed to function to determine the authenticity of the ballot paper that the NEC has claimed is not reliable at all, and it only results against the secret ballot combining with the voter information, as mentioned earlier. Second, **it can produce the same ballot paper, which overlaps the QR code at a place other than a polling place and at a time other than voting time.**

Even if we rely solely on the NEC's explanation, it is clear that the special early voting station as above is not properly operated and is a total illegal voting station that produces incomprehensible ballot paper. In addition, the aforementioned total illegal voting place is an “early” voting place, and it is possible to vote in all electoral districts across the country other than the area where the polling place is located, the illegality inevitably has spread to the all electoral districts of the pre-21st general election. As a result, both the legality and fairness of the 21st general election were lost, and the entire election above was invalid.

4. Conclusion

The fact that the real ballot paper with the QR code marked was found in the garbage discarded by the NEC is that the current voting system cannot guarantee fairness and authenticity at all, as we saw earlier, and the Election Commission, which should complement and manage it, has rather tried to dispose of election related documents and ballot paper without permission, so the current voting system and elections under the supervision of the Election Commission including the defendants have lost both trust and fairness.

An election system that cannot verify even the very basic fact that the voter actually voted is an **illegal election system** that should be immediately abolished along with the evaluation that it is unfair, and the 21st general elections carried out accordingly, since no evidence of legality can be made, a judgment of invalidity, that is, a judgment admitting all of the plaintiffs' claims, should be made immediately. That is the last chance and only way to straighten out the Republic

of Korea from the defendants who planned and neglected fraudulent elections manipulating the will of the sovereign people.

October 16, 2020

Plaintiff's legal representation

Attorney Yoo Seung-soo
Attorney Lee Dong-hwan
Attorney Kwon Oh-yong
Attorney Doe Tae-woo
Attorney Park Ju-hyun
Law Firm Daeho
Attorney-in-Charge Kim Mo-deum
Seok Dong-hyun

Messrs. Supreme Court

**ELECTION
FRAUD**

**LEGAL
DOCUMENTS**

LIST OF LAWSUITS FILED

The Legal Team

Synopsis for “List of Lawsuits Filed”

The list is a compilation of the lawsuits filed by the legal representatives to invalidate the election results of the 2020 General Election in South Korea. The list summarizes 126 lawsuits that were filed, including the plaintiffs, defendants, and current status and results (if any). The purpose of filing these complaints was to investigate whether or not the integrity of the election was compromised. However, while a few cases had advanced to the preliminary stages, and a few were dismissed, the vast majority had not even had initial hearings – as the date of this summary, in September 2020 – five months after the election. After previous elections, court cases challenging the electoral process or some part of it have typically been resolved in a matter of weeks.

	Constituency name	Litigation type (Date lawsuit was filed)	Parties to suit		Cause of action	Result (Sentence date)
			Plaintiff	Defendant (Commissioner of)		
1	Proportional representative	Invalidation of the election (2020. 4. 17)	Hwang and 83 people	NEC	Argues that the proportional representative election as a whole is invalid due to the problem with the application process of satellite political parties and candidates.	Date for pleading not set
2	Proportional representative	Invalidation of the election (2020. 5. 7)	Lee	NEC	Argues that the election is invalid due to the problem with the application process for the satellite political parties created by the two major parties for the proportional representative election and the two parties' decision not to participate in such election.	Date for pleading not set
3	Proportional representative	Invalidation of the election (2020. 5. 12)	Kim and 5 people	NEC	Argues that the election is invalid since early voting was processed without confirming the integrity of the early voting ballot box, QR codes were used on the early voting ballot	Date for pleading not set

					papers, and the ballot printing machine that did not receive public certification on its operating program and did not receive public verification on its source code was used.	
4	Proportional representative	Invalidation of the election (2020. 5. 15)	Lee	NEC	Argues that the election is invalid due to regulations related to the use of ballot papers that were not confirmed visually by counting officials, the use of QR codes, stamps by the early voting officials, cut off QR code sections, early voting ballot papers not being publicly announced, and the introduction, verification and storage of the electronic operating program not being established.	Date for pleading not set
5	Proportional representative-all election districts	Invalidation of the election (2020. 5. 14)	Sung and 1 person	NEC	Argues that the election as a whole is invalid due to the use of	Date for pleading not set

					QR codes on the early voting ballot papers and printed stamps by the early voting officials, the gap in election results between the early voting and the election day voting by interference from external influence, and possibility of mixed ballots and manipulation using the electronic counting machine.	
6	Proportional representative - Gimhae-si 1st district, Gimhae-si 2nd district	Invalidation of the election (2020. 5. 14)	Seok and 42 people	NEC, Gimhae-si	Argues that the proportional representative and Gimhae-si's 1st and 2nd district elections are invalid due to the gap in election results between the early voting and the election day voting, use of QR codes on early voting ballot papers, and the government's announcement of an emergency stimulus package for individuals, citing Covid-19.	Date for pleading not set

7	Proportional representative - 8 electoral districts	Invalidation of the election (2020. 5. 14)	OO Party	NEC, Jongno-gu, Yeonsu-gu, Gwangju Seo-gu, Daejeon Seo-gu, Sejong-si, Bucheon-si, Paju-si, Jinju-si	Argues that the proportional representative and 8 districts' elections are invalid due to the use of QR codes on the early voting ballot papers, printed stamps by early voting election officials, the gap in election results between early voting and election day voting, use of counting machine with an external communication feature, the government's complicity in providing coupons for taking care of children, mismanagement of the early voting ballot box, and mismanagement of the election process after election day.	Date for pleading not set
8	Yusung-gu 1st district, Yusung-gu 2nd district	Invalidation of the election (2020. 5. 15)	Chang and 1 person	Yusung-gu	Argues that the elections of Yusung-gu 1st and 2nd district are invalid due to Daejeon-si's decision to provide emergency	Date for pleading not set

					stimulus checks for city residents, coupons for taking care of children and temporary financial aid to low-income households, citing Covid-19, right before the early voting day as well as election day.	
9	Daejeon Jung-gu	Invalidation of the election (2020. 4. 29)	Lee	Daejeon Jung-gu	Argues that the election is invalid due to a public servant working at the police department being permitted to apply as a candidate.	Date for pleading not set
10	Yeonsu-gu 2nd district	Invalidation of the election and results (2020. 5. 7)	Min	Yeonsu-gu	Argues that the election is invalid due to the use of QR codes on the ballot papers, printed stamps by the early voting officials, the gap in election results between early voting and election day voting because of interference from outside, and the possibility of mixed ballots	Date for pleading not set, 1 pleading preparatory meeting

					and manipulation because of the use of an electronic counting machine.	
11	Seongnam-si Bundang-gu 2nd district	Invalidation of the election and results (2020. 5. 14)	Kim	Seongnam-si, Bundang-gu	Argues that the election is invalid due to the use of QR codes on the ballot papers, printed stamps by the early voting officials, the gap in election results between early voting and election day voting because of the interference from outside, and the possibility of mixed ballots and manipulation because of the use of an electronic counting machine.	Date for pleading not set
12	Gwanak-gu 2nd district	Invalidation of the election (2020. 5. 15)	Park	Gwanak-gu	Some 2.5 million ballots were given to a specific candidate during early voting. The 2.5 million dark voters violated the Public Official Election Act, registration act, political party act and the National Security Law.	Date for pleading not set

13	Yangsan-si 2nd district	Invalidation of the election (2020. 4. 29)	Na	Yangsan-si	Argues that the election is invalid due to the use of QR codes on the ballot papers, the gap in election results between early voting and election day voting because of interference from outside, and the possibility of mixed ballots and manipulation because of the use of electronic counting machines.	Date for pleading not set
14	Saha-gu 1st district	Invalidation of the election (2020. 4. 29)	Kim	Saha-gu		Date for pleading not set
15	Busan Nam-gu 2nd district	Invalidation of the election (2020. 4. 29)	Lee	Busan Nam-gu		Date for pleading not set
16	Daejeon Jung- gu	Invalidation of the election (2020. 5. 1)	Lee	Daejeon Jung-gu		Date for pleading not set
17	Dobong-gu 2nd district	Invalidation of the election (2020.5.1)	Kim	Dobong-gu		Date for pleading not set
18	Yeongdeungpo -gu 2nd district	Invalidation of the election (2020. 5. 1)	Park	Yeongdeun gpo-gu		Date for pleading not set
19	Paju-si 2nd district	Invalidation of the election (2020. 5. 1)	Park	Paju-si		Date for pleading not set
20	Wonju-si 1st district	Invalidation of the election (2020. 5. 4)	Kim and 23 people	Wonju-si		Date for pleading not set
21	Wonju-si 2nd district	Invalidation of the election (2020. 5. 4)	Lee and 14 people	Wonju-si		Date for pleading not set
22	Chuncheon-si 1st district	Invalidation of the election (2020. 5. 4)	Gil and 47 people	Chuncheon -si		Date for pleading not set
23	Goyang-si 4th district	Invalidation of the election (2020. 5. 4)	Park and 51 people	Goyang-si Ilsan Dong-gu	Date for pleading not set	

24	Seongnam-si Bundang-gu 2nd district	Invalidation of the election (2020. 5. 4)	Han and 48 people	Seongnam-si Bundang-gu		Date for pleading not set
25	Ansan-si Danwon-gu 2nd district	Invalidation of the election (2020. 5. 4)	Kim and 30 people	Ansan-si Danwon-gu		Date for pleading not set
26	Ansung-si	Invalidation of the election (2020. 5. 4)	Lee and 38 people	Ansung-si		Date for pleading not set
27	Yongin-si 3rd district	Invalidation of the election (2020. 5. 4)	Kim and 50 people	Yongin-si Suji-gu		Date for pleading not set
28	Yongin-si 4th district	Invalidation of the election (2020. 5. 4)	Park and 54 people	Yongin-si Giheung-gu		Date for pleading not set
29	Pyeongtaek-si 1st district	Invalidation of the election (2020. 5. 4)	Ryu and 53 people	Pyeongtaek-si		Date for pleading not set
30	Hwasung-si 1st district	Invalidation of the election (2020. 5. 4)	Chun and 24 people	Hwasung-si		Date for pleading not set
31	Euiwang-si, Gwacheon-si	Invalidation of the election (2020. 5. 4)	Han and 49 people	Euiwang-si, Gwancheon-si		Date for pleading not set
32	Dong-gu, Michuhol-gu 1st district	Invalidation of the election (2020. 5. 4)	Lee and 47 people	Dong-gu, Michuhol-gu		Date for pleading not set
33	Osan-si	Invalidation of the election (2020. 5. 16 / 2020. 5. 11)	Choi	Osan-si		Date for pleading not set
34	Seodaemun-gu 1st district	Invalidation of the election (2020. 5. 6 / 2020.5.14))	Lee	Seodaemun-gu		Date for pleading not set

35	Eunpyeong-gu	Invalidation of the election (2020. 5. 6)	Hong	Eunpyeong-gu		Date for pleading not set
36	Incheon Seo-gu 2nd district	Invalidation of the election (2020. 5. 6)	Park	Seo-gu		Date for pleading not set
37	Gangdong-gu 1st district	Invalidation of the election (2020. 5. 6)	Lee and 49 people	Gangdong-gu		Date for pleading not set
38	Gwangjin-gu 2nd district	Invalidation of the election (2020. 5. 7)	Kim and 51 people	Gwangjin-gu		Date for pleading not set
39	Gangseo-gu 2nd district	Invalidation of the election (2020. 5. 7)	Lee and 9 people	Gangseo-gu		Date for pleading not set
40	Dongjak-gu 2nd district	Invalidation of the election (2020. 5. 7)	Chang and 54 people	Dongjak-gu		Date for pleading not set
41	Songpa-gu 2nd district	Invalidation of the election (2020. 5. 7)	Kim and 52 people	Songpa-gu		Date for pleading not set
42	Geumcheon-gu	Invalidation of the election (2020. 5. 7)	Kim and 8 people	Geumcheon-gu		Date for pleading not set
43	Gwanak-gu 2nd district	Invalidation of the election (2020. 5. 8)	Choi and 11 people	Gwanak-gu		Date for pleading not set
44	Ansan-si Sangrok-gu 2nd district	Invalidation of the election (2020. 5. 8)	Kang and 10 people	Ansan-si Sangrok-gu		Date for pleading not set
45	Seodaemun-gu 2 nd district	Invalidation of the election (2020. 5. 8)	Lee and 12 people	Seodaemun-gu		Date for pleading not set

46	Dong-gu Michuhol-gu 2nd district	Invalidation of the election (2020. 5. 8)	Lee and 8 people	Michuhol- gu		Date for pleading not set
47	Incheon Seo- gu 1st district	Invalidation of the election (2020. 5. 8)	Na and 11 people	Seo-gu		Date for pleading not set
48	Uijeongbu-si 1st district	Invalidation of the election (2020. 5. 8)	Kim and 9 people	Eijeongbu- si		Date for pleading not set
49	Gyeyang-gu 1st district	Invalidation of the election (2020. 5. 8)	Park and 8 people	Gyeyang- gu		Date for pleading not set
50	Gyeyang-gu 2nd district	Invalidation of the election (2020. 5. 8)	Kang and 8 people	Gyeyang- gu		Date for pleading not set
51	Nonsan-si, Gyeryong-si, Geumsan-gun	Invalidation of the election (2020. 5. 8)	Kim and 64 people	Nonsan-si, Gyeryong- si, Geumsan- gun		Date for pleading not set
52	Sejong-si 2nd district	Invalidation of the election (2020. 5. 8)	Kim and 11 people	Sejong-si		Date for pleading not set
53	Cheongju-si Sangdang-gu	Invalidation of the election (2020. 5. 8)	Kim and 34 people	Cheongju- si Sangdang- gu		Date for pleading not set
54	Bucheon-si 3rd district	Invalidation of the election (2020. 5. 8)	Cha	Bucheon-si		Date for pleading not set
55	Namyangju-si 3rd district	Invalidation of the election (2020. 5. 8)	Lee and 49 people	Namyangju -si		Date for pleading not set
56	Jung-gu, Seongdong-gu 2nd district	Invalidation of the election (2020. 5. 8)	Eom and 49 people	Jung-gu, Seongdong -gu		Date for pleading not set

57	Jongno-gu	Invalidation of the election (2020. 5. 8)	Lee and 18 people	Jongno-gu		Date for pleading not set
58	Jung-gu, Seongdong-gu 1st district	Invalidation of the election (2020. 5. 8)	Kim and 15 people	Seongdong-gu		Date for pleading not set
59	Nowon-gu 1st district	Invalidation of the election (2020. 5. 8)	Kim and 9 people	Nowon-gu		Date for pleading not set
60	Mapo-gu 1st district	Invalidation of the election (2020. 5. 8)	Shim and 19 people	Mapo-gu		Date for pleading not set
61	Mapo-gu 2nd district	Invalidation of the election (2020. 5. 8)	Yoo and 8 people	Mapo-gu		Date for pleading not set
62	Dongdaemun-gu 1st district	Invalidation of the election (2020. 5. 8)	Lee and 9 people	Dongdaemun-gu		Date for pleading not set
63	Yeonsu-gu 1st district	Invalidation of the election (2020. 5. 8)	Rho and 7 people	Yeonsu-gu		Date for pleading not set
64	Dongdaemun-gu 2nd district	Invalidation of the election (2020. 5. 8)	Jin and 9 people	Dongdaemun-gu		Date for pleading not set
65	Bucheon-si 4th district	Invalidation of the election (2020. 5. 8)	Seo and 6 people	Bucheon-si		Date for pleading not set
66	Dangjin-si	Invalidation of the election (2020. 5. 8)	Kim and 5 people	Dangjin-si		Date for pleading not set
67	Gangbuk-gu 1st district	Invalidation of the election (2020. 5. 8)	Kim and 13 people	Gangbuk-gu		Date for pleading not set

68	Cheongju-si Chungwon-gu	Invalidation of the election (2020. 5. 8)	Choi and 5 people	Cheongju- si Chungwon- gu		Date for pleading not set
69	Yangchun-gu 2nd district	Invalidation of the election (2020. 5. 8)	Cho and 10 people	Yangchung -gu		Date for pleading not set
70	Guro-gu 1st district	Invalidation of the election (2020. 5. 8)	Yeo and 11 people	Guro-gu		Date for pleading not set
71	Siheung-si 1st district	Invalidation of the election (2020. 5. 8)	Lim and 9 people	Siheung-si		Date for pleading not set
72	Ansan-si Danwon-gu 1st district	Invalidation of the election (2020. 5. 9)	Park and 11 people	Ansan-si Danwon-gu		Date for pleading not set
73	Gwangju-si 2nd district	Invalidation of the election (2020. 5. 9)	Choi and 9 people	Gwangju-si		Date for pleading not set
74	Gimpo-si 1st district	Invalidation of the election (2020. 5. 9)	Lee and 8 people	Gimpo-si		Date for pleading not set
75	Gimpo-si 2nd district	Invalidation of the election (2020. 5. 9)	Jun and 9 people	Gimpo-si		Date for pleading not set
76	Anyang-si Manan-gu	Invalidation of the election (2020. 5. 9)	Song and 9 people	Anyang-si Manan-gu		Date for pleading not set
77	Anyang-si Dongan-gu 1st district	Invalidation of the election (2020. 5. 9)	Park and 10 people	Anyang-si Dongan-gu		Date for pleading not set
78	Gwangju-si 1st district	Invalidation of the election (2020. 5. 11)	Kim and 9 people	Gyeonggi Province Gwangju-si		Date for pleading not set

79	Gimhae-si 1st district	Invalidation of the election (2020. 5. 11)	Kwon and 46 people	Gimhae-si		Date for pleading not set
80	Ulsan Buk-gu	Invalidation of the election (2020. 5. 11)	Lee and 19 people	Buk-gu		Date for pleading not set
81	Buk-gu, Gangseo-gu 1st district	Invalidation of the election (2020. 5. 11)	Park and 15 people	Buk-gu		Date for pleading not set
82	Jeungpyeong-gun, Jincheon-gun, Eumsung-gun	Invalidation of the election (2020. 5. 11)	Kwak and 35 people	Jeungpyeong-gun, Jincheon-gun, Eumsung-gun		Date for pleading not set
83	Daeduk-gu	Invalidation of the election (2020. 5. 11)	Chung and 9 people	Daeduk-gu		Date for pleading not set
84	Suseong-gu 2nd district	Invalidation of the election (2020. 5. 11)	Ahn and 9 people	Suseong-gu		Date for pleading not set
85	Ansan-si Sangrok-gu 1st district	Invalidation of the election (2020. 5. 11)	Shim and 10 people	Ansan-si Sangrok-gu		Date for pleading not set
86	Cheongju-si Seowon-gu	Invalidation of the election (2020. 5. 11)	Lee and 26 people	Cheongju-si Seowon-gu		Date for pleading not set
87	Cheonan-si 3rd district	Invalidation of the election (2020. 5. 11)	Yoo and 21 people	Cheonan-si Dongnam-gu		Date for pleading not set
88	Cheonan-si 1st district	Invalidation of the election (2020. 5. 11)	Yoon and 22 people	Cheonan-si Dongnam-gu		Date for pleading not set
89	Yangcheon-gu 1st district	Invalidation of the election (2020. 5. 12)	Heo and 47 people	Yangcheon-gu		Date for pleading not set

90	Dongdaemun-gu 1st district	Invalidation of the election (2020. 5. 12)	Heo	Dongdaemun-gu		Date for pleading not set
92	Namyangju-si 1st district	Invalidation of the election (2020. 5. 13)	Shim	Namyangju-si		Date for pleading not set
92	Guri-si	Invalidation of the election (2020. 5. 13)	Na	Guri-si		Date for pleading not set
93	Cheongju-si Seowon-gu	Invalidation of the election (2020. 5. 13)	Choi	Cheongju-si Seowon-gu		Date for pleading not set
94	Yoosung-gu 1st district	Invalidation of the election (2020. 5. 13)	Park and 9 people	Yoosung-gu		Date for pleading not set
95	Asan-si 2nd district	Invalidation of the election (2020. 5. 13)	Park and 8 people	Asan-si		Date for pleading not set
96	Daejeon Seo-gu 1st district	Invalidation of the election (2020. 5. 13)	Chang and 13 people	Seo-gu		Date for pleading not set
97	Gwangmyeong-si 1st district	Invalidation of the election (2020. 5. 13)	Yang and 8 people	Gwangmyeong-si		Date for pleading not set
98	Uijeongbu-si 2nd district	Invalidation of the election (2020. 5. 13)	Kim and 11 people	Uijeongbu-si		Date for pleading not set
99	Gwanak-gu 1st district	Invalidation of the election (2020. 5. 13)	Kim and 12 people	Gwanak-gu		Date for pleading not set
100	Seongnam-si Jungwon-gu	Invalidation of the election (2020. 5. 13)	Kim and 8 people	Seongnam-si Jungwon-gu		Date for pleading not set

101	Anyang-si Dongan-gu 2nd district	Invalidation of the election (2020. 5. 13)	Chang and 10 people	Anyang-si Dongan-gu		Date for pleading not set
102	Gangdong-gu 2nd district	Invalidation of the election (2020. 5. 13)	Ha and 8 people	Gangdong-gu		Date for pleading not set
103	Gimhae-si 2nd district	Invalidation of the election (2020. 5. 13)	Cho and 8 people	Gimhae-si		Date for pleading not set
104	Gangneung-si	Invalidation of the election (2020. 5. 14)	Kwon and 8 people	Gangneung-si		Date for pleading not set
105	Songpa-gu 2nd district	Invalidation of the election (2020. 5. 14)	Rho and 45 people	Songpa-gu		Date for pleading not set
106	Seongnam-si Bundang-gu 1st district	Invalidation of the election (2020. 5. 14)	Choi and 37 people	Seongnam-si Bundang-gu		Date for pleading not set
107	Hanam-si	Invalidation of the election (2020. 5. 14)	Song and 37 people	Hanam-si		Date for pleading not set
108	Paju-si 1st district	Invalidation of the election (2020. 5. 14)	Han and 16 people	Paju-si		Date for pleading not set
109	Geumcheon-gu	Invalidation of the election (2020. 5. 15)	Kang	Geumcheon-gu		Date for pleading not set
110	Jeungpyeong-gun, Jincheon-gun, Eumsung-gun	Invalidation of the election (2020. 5. 15)	Kyung	Jeungpyeong-gun, Jincheon-gun, Eumsung-gun		Date for pleading not set
111	Cheongju-si Sangdang-gu	Invalidation of the election (2020. 5. 15)	Yoon	Cheongju-si Sangdang-gu		Date for pleading not set

112	Goyang-si 3rd district	Invalidation of the election (2020. 5. 15)	Choi and 8 people	Goyang-si Ilsan Dong-gu		Date for pleading not set
113	Gangnam-gu 3rd district	Invalidation of the election (2020. 5. 15)	Kim and 43 people	Gangnam-gu		Date for pleading not set
114	Seongbuk-gu 1st district	Invalidation of the election (2020. 5. 15)	Lee and 41 people	Seongbuk-gu		Date for pleading not set
115	Seongbuk-gu 2nd district	Invalidation of the election (2020. 5. 15)	Kim and 37 people	Seongbuk-gu		Date for pleading not set
116	Namyangju-si 2nd district	Invalidation of the election (2020. 5. 15)	Kim	Namyangju-si		Date for pleading not set
117	Namyangju-si 1st district	Invalidation of the election (2020. 5. 8)	Kim and 8 people	Namyangju-si		Complaint dismissed (2020. 6. 19)
118	Guri-si	Invalidation of the election (2020. 5. 9)	Chang and 8 people	Guri-si		Complaint dismissed (2020. 5. 28)
119	Goyang-si Deokyang-gu	Invalidation of the election (2020. 5. 14)	Chang and 33 people	Goyang-si Deokyang-gu		Complaint dismissed (2020. 6. 5)
120	Songpa-gu 1st district	Invalidation of the election (2020. 5. 14)	Shin and 40 people	Songpa-gu		Complaint dismissed (2020. 6. 5)
121	Proportional representative	Invalidation of the election (2020. 5. 15)	Han and 1 person	NEC		Complaint dismissed (2020. 7. 1)

122	Gwanak-gu 2nd district	Invalidation of the election (2020. 5. 14)	Sung	Gwanak-gu		Complain t withdraw al (2020. 6. 11)
123	Proportional representative	Invalidation of the election (2020. 4. 8)	OO Party and 3 people	NEC and 2 people		Complain t dismissed (2020. 8. 5)
124	Sokcho-si Inje- gun, Gosung- gun, Yangyang-gun	Invalidation of the election (2020. 5. 15)	Kim	Sokcho-si		Complain t dismissed (2020. 9. 22)
125	Proportional representative - all electoral districts	Invalidation of the election (2020. 5. 16)	Jwa and 1 person	Moon Jae- in and 20 people		Amendin g
126	Proportional representative	Invalidation of the election (2020. 6. 15)	Chung and 3243 people	NEC		Amendin g

**ELECTION
FRAUD**

LEGAL
DOCUMENTS

LEGAL ASPECTS OF THE TRANSFER
OF THE NATIONAL ELECTION
COMMISSION'S SERVER DURING
THE ELECTION LITIGATION IN
KOREA

Yoon Jinki

Synopsis for “Legal aspects of the transfer of the National Election Commission’s server during the election litigation in Korea”

The 21st National Assembly Election in Korea was held on April 15, 2020, and many lawsuits claiming electoral misconduct and alleged fraud are still in progress.

As this situation was unfolding, the Korean National Election Commission moved the central server used in the 21st general election from its original location to another location on September 30, 2020 – even while 127 election lawsuits are ongoing. The central server contains the most essential evidence for determining whether election fraud occurred on April 15th. This report argues that the act of terminating and deleting the leased server despite the ongoing election proceedings clearly violates the Public Official Election Act, despite the National Election Commission’s legal responsibility and may also be grounds for invalidating the election itself. This paper discusses the legal issues surrounding the jurisdiction of the election lawsuits and reviews the key legal aspects involving the election litigation.

It is argued that the removal of the servers more of a criminal case than a simple administrative matter. However, given the current political situation in South Korea, it is argued that domestic agencies are unable to effectively investigate and uphold election integrity.

Therefore, it is argued, since the use of high-performance electronic devices in elections worldwide is expected to increase in the future, it is appropriate for an international group of experts to carry out a follow-up investigation on the ROK election computing equipment and records. This would be in line with the trend towards greater international cooperation in monitoring elections worldwide.

Legal aspects of the transfer of the National Election Commission's server during the election litigation in Korea

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Preface

The 21st National Assembly Election in Korea was held on April 15, 2020, and is currently surrounded by controversy over election fraud, and litigations on the election are in progress. As this situation was unfolding, the Korean National Election Commission (hereinafter referred to as the "NEC") moved the central server used in the 21st general election from the original location to another location on September 30, 2020. This server contains the integrated electoral register and various electronic records, which are the most essential evidence for determining whether fraud was committed during this election. Since the transfer of these servers were carried out in the midst of 127 election lawsuits that are in progress, legal responsibilities have been raised in relation to the obligation to preserve election materials under the Public Official Election Act in Korea. Also, the removal of the temporary server used for the election held on May 1, 2020, is going through similar legal problems. In this article, these issues and related issues such as the jurisdiction of the election lawsuits and legislative deficiencies will be reviewed.

Duty to keep election materials under the Public Official Election Act in Korea

According to Article 186 of the Public Official Election Act and Article 107 of the Public Official Election Management Regulation on the preservation of election materials, in principle the election commission should preserve the ballot papers, ballot boxes, voting records, ballot-counting records, election records, and all other documents related to the election during the term of the elected persons. Provided that there are no disputes over the election arises or is pending, the preservation period of the records may be until one month of the filing deadline, or until one month after the date of receipt of the notification of the final judgment or decision when the dispute over the election is terminated.

This regulation on the preservation of election materials stipulates the obligation of the election commission to preserve election materials by the prescribed time limit of the act, and in view of its purpose and nature, it is a mandatory rule, and it should be seen that it cannot be shortened or changed by the election commission.

Nevertheless, it is illegal for the NEC to damage or destroy election materials in violation of the deadline for the preservation of election materials and should be found liable accordingly.

Filing an election lawsuit and dismissing the application for preservation of evidence

Initially after the election, the number of original election lawsuits related to the 21st general election was 139, of which 137 are known as an election invalidity suit and 2 as a lawsuit against candidate's election. Some of these lawsuits have been withdrawn, and there are 127 election lawsuits pending as of October 7, 2020. 11. 20.

Many of these parties have applied for preservation of evidence before bringing the lawsuit in preparation for legal proceedings. In the evidence preservation trial for this application, the court accepted the preservation of evidence for documents, such as the ballot papers, ballot boxes. However, the ballot classifier, counter, laptop, early voting equipment, the NEC server, computer data stored in the server, relay (router), which are the core evidence for uncovering election fraud through computer manipulation was rejected or dismissed without exception.

However, electronic records and media related to electronic voting, such as electronic devices used for early voting, their electronic records, ballot classifier programs, ballot classifiers that were actually used, log data or the computer central processing unit in which they are stored, are actually an important and essential part of the election, therefore, the court had to accept the application for preservation of evidence against them.

Evidence preservation trials were conducted in separate cases, but the results of the evidence preservation trials were the same nationwide.

Therefore, the Solidarity of Lawyers for the Truth of the 4.15 Rigged Election has accused Chief Justice Kim Myung-soo on May 25th on suspicions that the Supreme Court had systematically intervened and controlled the outcome of the court's decision in connection with the April 15th general election lawsuit, and such an act of the Supreme Court is an overt abuse of authority and an act of interfering with the election trial. The progress of the Prosecutor's Office investigation into this accusation is unknown.

Liability for central server transfer actions

Act of transferring the central server

On September 30, 2020, when the election trial at the Supreme Court was imminent, the NEC dismantled the server that held the election records kept at the Gwanak office and transferred it to the Gwacheon office. This transfer was made possible because the court rejected the application for preservation of evidence against the server. Otherwise, this would never had happened.

The debate over fraud in the 21st general election is in a hot state, and whether or not fraud was committed during early voting is a key issue. However, because the election commission tried to cover all the CCTVs during early voting, it is near to impossible to check whether the actual voting took place and the only thing left was the computerized records in the server, so if the server is damaged, it will have a significant impact on the election litigation.

On the other hand, the NEC explained that the plan to relocate the Gwacheon office was already established in 2014, and the move was in no way related to the general election server. The NEC claimed that this project was to introduce a server for monitoring the operation status of the computer center's auxiliary facilities and the internal environment, and it has no relation to the election data, and that the election data from the April 15th general election has been preserved.

However, many IT experts believe that the transfer of the server is intended to manipulate evidence, such as the correction and deletion of electronic records in preparation for the trial. Since the current plaintiff's and defendant's claims are different, this claim must be corroborated by evidence later. To this end, the NEC must provide the central server as evidence to the court and receive a neutral expert's appraisal.

Legal responsibility

Article 186 of the Public Official Election Act restricts the obligations of preserving election materials in writing of the ballot papers, ballot boxes, voting records, ballot-counting records, election records, and all other 'documents' related to elections. There may be controversy over whether or not to preserve 'electronic records and media' related to the electronic ballot counts, such as the electronic records, ballot classifier programs, ballot classifiers actually used, log data or computer central processing unit in which data is stored.

As for the electronic records and media related to the electronic ballot counts, it may be interpreted that the election commission is not obligated to preserve them because the law did not specify them as objects of materials to be preserved. This interpretation can be regarded as based on the principle of the criminal law interpretation of the prohibition of analogical application (Analogieverbot), and it will be developed from the point of view that expanding the interpretation should be cautious as the regulation is not about rights, but about imposing obligations. However, this interpretation is absurd, and this is an issue that the prohibition of analogical application should not be applied.

In interpreting laws, the current objective legal intention should be the standard for legal interpretation. Therefore, electronic records and media related to the electronic ballot counts, such as the electronic records, ballot classifier programs, ballot classifier actually used, log data or the computer central processing unit in which data is stored, naturally must be subject to the preservation obligation.

According to the German Constitutional Court, the law is not a non-living document, but a living and developing spirit (Geist) that tries to come into effect while keeping pace with the state of our daily lives.

In the case of early voting, which is a key issue of the fraudulent election, considering that computers are used to process the ballots and the reality that so-called electronic counting is being made using a ballot classifier in general, it is undeniable that the electronic records media related to electronic voting, such as the electronic records, ballot classifier programs, ballot

classifiers actually used, log data or the computer central processing unit in which data is stored, occupy a very important and essential part in the whole process of the electoral system.

If so, it is reasonable to interpret that due to the nature of the computer organization and media used in the election and the electronic records stored therein should be included under the obligation to preserve election materials.

Unless there are special circumstances, the duty to preserve election materials includes the duty to preserve original election materials unchanged at its storage location in accordance with legal procedures. This is because the storage location of various election materials differs depending on the type, and it is highly likely to be damaged if it is out of its location. Therefore, it can be said that the NEC's relocation of the central server based on its existing office relocation plan, it is an act of violation of the law, which may damage the original election materials (data) and render a fair trial impossible. As such, it should be viewed as a very serious violation of the law and as long as an election lawsuit is filed, the existing plan to relocate should have been temporarily suspended in accordance with the law because the suspension period is not a long period that would have a significant impact on the extent of not being able to execute the existing plan.

Therefore, the transfer of the server violates the obligation to preserve election materials, and in accordance with the law, all public officials who participated in the planning and the execution of this illegal act should be punished for their crime, i.e., the crime of abandonment of duties under Article 122 of the Criminal Act, the crime of abuse of authority under Article 123 of the Criminal Act, and the crime of invalidity of public documents under Article 141 of the Criminal Act. In addition, in accordance with Article 78 of the State Public Officials Act, they will be held responsible for violating their duties with disciplinary action.

Legal responsibility for the act of terminating the temporary server

Temporary server termination

The NEC leased and used a temporary server from the outside for the April 15th general election, but the lease period was until the end of April, and this was not extended after the election and was terminated and discarded on May 1st according to the contract. These acts of the NEC that appear to be legitimate on the outside should be evaluated differently from a legal point-of-view.

Legal responsibility

Unless there were special circumstances, the duty to preserve election materials includes the duty to preserve the original materials in accordance with legal preservation procedures without altering the election materials at its kept location.

It is an obvious violation of Article 186 of the Public Official Election Act that in a situation where an election lawsuit can be predicted, the NEC signed a contract in which the lease period

expired earlier than the prescribed period of preserving election materials according to Article 186, and deleted data on the leased server early.

Even if the data of the leased server is backed up and stored, it does not affect the breach of obligations under Article 186 because it is not the original data. Also, data may remain on the central server, but as for whether it is all the data on the leased server or not, it is impossible to verify that it is authentic because all the data on the leased server was destroyed.

Therefore, all public officials who participated in the planning and the execution of this illegal act should be punished for their crime, i.e., the crime of abandonment of duties under Article 122 of the Criminal Act, the crime of abuse of authority under Article 123 of the Criminal Act, and the crime of invalidity of public documents under Article 141 of the Criminal Act. In addition, in accordance with Article 78 of the State Public Officials Act, they will be held responsible for violating their duties with disciplinary action.

It is not known which electronic records were in this deleted temporary server. According to Article 224 of the Public Official Election Act, in cases where there is a violation of the rules on elections, only when it is deemed to have had a substantial effect on the election results, all or part of the election is invalid. Therefore, if the NEC fails to prove that the electronic records in the temporary server did not affect the election results, the deletion of the temporary server will be grounds for invalidating the entire 21st general election.

Problems in the jurisdiction of election litigation

According to Articles 222 and 223 of the Korean Public Official Election Act, the Supreme Court has the jurisdiction to judge lawsuits concerning the election of the President, National Assembly members, and mayor/governors (more precisely, the election of the council members of the proportional representative city/Do (state), and the election of the mayor/governor). Therefore, in these cases parties claiming invalidity of the election itself or invalidity of a candidate's election must file a lawsuit with the Supreme Court.

In Korea, the chairperson of the relevant constituency election commission becomes the defendant in an election lawsuit against the validity of the presidential and parliamentary elections itself. The constituency election commission is affiliated with the NEC.

Article 114 (2) of the Constitution stipulates that the chairman of the NEC is elected from among the members, but customarily a member, who is the Supreme Court Justice, is elected as the chairman. As a result, when an election lawsuit is filed, there is a concern that the fairness of the trial will be undermined because the Chief Justice has to make a trial with the chairperson of the constituency election commission, which is headed by a fellow Chief Justice. In theory, there is a risk that members of an independent constitutional institution becoming heads of another constitutional institution will lead to self-contradiction of the independent institution.

Since the judgment of an election lawsuit belongs to a type of constitutional court in its nature, it is a principle to leave it to the constitutional court in a country where the constitutional court

system has been established. Since the constitutional court is established in Korea, it is desirable to make it under the jurisdiction of the constitutional court, and it is a mistake to prescribe it under the exclusive jurisdiction of the Supreme Court. At present, when there is a controversy over a fraudulent election, the fact that the problem arises from the preservation of evidence in the early stages is deeply related to such institutional errors.

As can be seen in the case of Venezuela, the politicization of the judiciary is closely related to the collapse of the state. Currently, the Supreme Court of Korea is showing considerable political bias, and in this situation, amid controversy over fraudulent elections, maintaining a national system in which other Supreme Court judges preside over election proceedings, it should be improved immediately because of breaking the principle of checks and balances in the distribution of state power.

In Article 111 of the Constitution, the five powers of the constitutional court are specified, and it is logically not an issue to add election trial judges to them. The law should be amended to allow the constitutional court to judge election lawsuits through amendments to the Constitution and the Public Official Election Act.

Legislative deficiencies in the Public Official Election Act

Regarding the preservation of election materials, the Korean Public Official Election Act has two deficiencies. The Public Official Election Act neglects the importance of preserving election data using a computerized server and the possibility of damage, so it does not clearly stipulate electronic records and electronic media as a subject of obligation to preserve election materials and does not stipulate punishment clauses in the Public Official Election Act.

Even if interpretation or other laws can compensate for these deficiencies, in the future the Public Official Election Act should include electronic devices and records in the preservation obligation to eliminate controversy and stipulate punishment clauses.

The electoral system is a very important system that embodies the value of representative democracy, and the preservation of election materials is an essential part of the operation of the electoral system, and it is very important to observe the retention period. In particular, forgery, falsification, damage, and disposal of election materials by election officials who are chosen are very important matters that shake the roots of democracy.

Election officials should be treated to be subject to aggravated punishment rather than abandonment of duties, abuse of authority, or invalidating public documents compared to other public officials. By laying the groundwork like this on which election management can be carried out strictly, it is necessary to eradicate the actions of election officials who violate the law without hesitation.

The legislature must promptly amend the Public Official Election Act to stipulate the obligation to preserve electronic records and establish a strict order of election management by stipulating directly strengthened penalties for violating these obligations under the act.

Conclusion: Summary and Implications

In principle, the duty to preserve election materials under Article 186 of the Public Official Election Act also includes the duty to preserve the original election materials unchanged at the storage location, and the election commission, which transferred election materials that could damage the materials due to non-urgent reasons, violated the duty to preserve such materials. As such, the relevant public officials should be held legally responsible. In addition, the act of terminating and deleting the leased server during the election proceedings clearly violates Article 186 of the Public Official Election Act and must bear corresponding legal responsibility and may be grounds for invalidating the election itself.

There are several legal deficiencies surrounding the preservation of election materials, but these deficiencies can be resolved through amendments to the Constitution and laws. Amending the Constitution is not an easy matter, but amending the law is relatively easy.

From a different perspective, this election lawsuit is more of a criminal case than a simple administrative case. The issue of being in violation of the Public Official Election Act is a criminal issue, and despite the fact that the Prosecutor's Office must proceed with an investigation, no investigation has been conducted. This is deemed to be somewhat related to the political situation in Korea and implies that it is pointless to rely solely on the judgment of domestic investigative agencies to investigate evidence on a series of election irregularities, such as server transfer and the deletion of the temporary server. Therefore, it is of the opinion that it is essential to entrust the investigation to a group of international experts on the audit of the election computing equipment and election computer records.

In conclusion, since the use of high-performance electronic devices in elections worldwide is expected to increase in the future, it is predicted that there will be many disputes over the illegality of these devices. The legal aspects of the preservation of electronic election data in Korea this time is considered to have great implications globally. In preparation for election disputes caused by electronic records and electronic devices, it is considered that the solidarity for international surveillance and follow-up investigation should be further organized and strengthened.

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