UC Merced UC Merced Electronic Theses and Dissertations

Title

Political Institution, Information, and Authoritarianism

Permalink

https://escholarship.org/uc/item/7mh327x7

Author Jang, Jun Hyeok

Publication Date 2022

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, MERCED

Political Institution, Information, and Authoritarianism

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy

in

Political Science

by

Jun Hyeok Jang

Committee in Charge:

Professor Haifeng Huang, Chair Professor Courtenay R. Conrad Professor Aditya Dasgupta

2022

© Copyright

Jun Hyeok Jang, 2022

All rights reserved

The Dissertation of Jun Hyeok Jang is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

Courtenay R. Conrad

Aditya Dasgupta

Haifeng Huang, Chair

University of California, Merced 2022

Dedication

To Soo-an Jang, who has always stood by me throughout this journey

Contents

Acknowledgements	Х
Curriculum Vita	xii
Abstract	xvi

Contents (Continued)

1 Subnational Elections and Media Freedom in Autocracies:	
Diffusion of Local Reputation and Regime Survival	1
1.1 Introduction	2
1.2 Authoritarian Elections	3
1.2.1 Authoritarian Elections in General	5
1.2.2 Subnational Elections in Autocracies	6
1.3 Diffusion of Local Reputation and Regime Survival	7
1.4 Empirical Analysis	10
1.4.1 Operationalization of Key Concepts	11
1.4.2 Endogeneity Concerns	14
1.4.3 Estimation	16
1.4.4 Placebo Test	18
1.5 Conclusion	20
1.6 Appendix	26
2 Do Torm I imit Evacions in Autocracios Increase Penression	46

2 Do Ter	m Limit Evasions in Autocracies Increase Repression	
2.1 Intr	oduction	48
2.2 Ter	m Limit Evasions and Repression	50
2.2.1	Conventional Wisdom	50
2.2.2	Term Limit Evasion as Breaking Mutual Expectations	52
2.2.3	Type of Evasions, Signaling, and Repression	54
2.3 Em	pirical Analysis	56
2.3.1	Operationalization of Key Variables	56

2.3.2	Testing Hypothesis 1	
2.3.3	Result	61
2.3.4	Testing Hypothesis 2	62
2.3.5	Separate Indices of Information Manipulation	63
2.4 Co	nclusion	65
2.5 Ap	ppendix	71

3 Delegitimizing Opposition Party after Autocratization: Evidence		
from Sou	th Korean Newspapers	76
3.1 Int	roduction	78
3.2 Au	tocratization and Delegitimizing Propaganda	80
3.2.1	Threats from Opposition Parties after Autocratization	80
3.2.2	Autocratization and More Censorship?	81
3.2.2	More Delegitimizing Propaganda after Autocratization	81
3.3 Ba	ckground: South Korea under Park Chung-hee	84
3.3.1	The Yushin Reform	84
3.3.2	Regime-Controlled Newspapers	85
3.4 Em	pirical Evidence	85
3.4.1	Data	85
3.4.2	Low Visibility of NDP	86
3.4.3	Measuring the Change in Delegitimizing Propaganda	87
3.4.4	Event Comparison	88
3.4.5	Measuring Delegitimizing Propaganda using Word Embedd	dings
		92
3.4.6	Result	93
3.5 Co	ncluding Remarks	95
3.6 Ap	pendix	101

List of Figures

1	Marginal Effect of Subnational Elections on Regime Breakdown	.19
2	Proportion of Institutionalized Subnational Elections in Autocracies 1949-2010	.26
3	The Density plot of media freedom varying by subnational elections	.27
4	National Elections and Subnational Elections in Autocracies (1949-2010)	.27
5	Relationship between Media Freedom and Subnational Government Index	.28
6	Marginal Effect of Subnational Elections on Regime Breakdown	.32
7	Marginal Effect of Subnational Elections on Regime Breakdown	.35
8	Marginal Effect of Subnational Elections on Regime Breakdown	.39
9	Marginal Effect of Subnational Elections on Regime Breakdown	.41
10	Marginal Effect of Subnational Elections on Regime Breakdown	.43
11	Marginal Effect of Subnational Elections on Regime Breakdown	.45
12	Improved Covariate Balance after the Propensity Weighting Refinement	.60
13	Standardized Mean Difference of Repression	.61
14	Estimated Changes of Standardized Repression over Time	.62
15	Estimated Changes of Standardized Repression over Time	.63
16	Balance of Pre-treatment Outcomes between Two Treatment Groups	.63
17	Estimated Changes of Information Manipulation after Term Limit Extensions .	.65
18	List of countries and treatment distribution	.71
19	Estimated Changes of Standardized Repression over Time	.73
20	Estimated Changes of Standardized Repression over Time	.73
21	Estimated Changes of Standardized Repression over Time	.74
22	Estimated Changes of Standardized Repression over Time	.74
23	Estimated Changes of Standardized Repression over Time	.75
24	Estimated Changes of Standardized Repression over Time	.75
25	Temporal Changes of Media Visibility in South Korea	.87
26	Temporal Changes of Media Visibility of NDP	.91
27	Temporal Changes of Average Cosine Similarity	.94
28	Frequency of Words related to Disunity1	102
29	Frequency of Words related to Disunity1	103
30	Temporal Changes of Average Cosine Similarity	103

List of Tables

1	Linear Probability Model	17
2	Placebo Test with Alternative Variables	19
3	Summary Statistics	28
4	Linear Probability Model	30
5	Linear Probability Model	31
6	Linear Probability Model	33
7	Linear Probability Model	34
8	Linear Probability Model	36
9	Linear Probability Model	37
10	Linear Probability Model	38
11	Linear Probability Model	40
12	Linear Probability Model	42
13	Linear Probability Model	44
14	Descriptive Statistics	72
15	Estimated Changes of Repression after Term Limit Evasions	72
16	Summary of Two Conflicts in NDP	90
17	Examples of News Reports about Two Conflicts	91
18	Effect of Autocratization on Average Daily Coverage on NDP	101

Acknowledgments

The journey to Ph.D. could not have been possible without numerous supporters. First, I am indebted to my advisor, Haifeng Huang, for providing me with constant personal and intellectual support over the past five years. A plethora of conversations with him has shaped me as a better political scientist. Without his critical feedback, I could not have published my first paper in a peer-reviewed journal. Moreover, his suggestion to study the world, not the literature, made me keep thinking about my role as a political scientist whose research can be a guide for a better society. I am incredibly grateful to have him as my academic advisor and the intellectual beacon of light.

I am grateful to have great dissertation committee members. They all full-heartedly supported me throughout this journey. Courtenay Conrad provided me with many valuable suggestions on my research, job market materials, and interviews. Her scientific approach to politics made me pursue rigorous scientific arguments in my research. I thank Aditya Dasgupta for always encouraging me to think about big pictures, puzzles, and contributions. It was always joyful to have conversations with him and read his research. I also thank Daniel de Kadt. Before he left UC Merced, he provided me with numerous suggestions about my research and made me think about better ways to analyze data. I still remember when we had group meetings and discussed what to do with data. Thanks to Melissa Sands, whose devotion to students during the pandemic made me ponder the true meaning of teaching.

I feel fortunate that I have been a part of political science at UC Merced. Six years ago, I decided to enter this program without much thinking. I just wanted to stay in California, and my cousin studied here, so it seemed easier to get used to living in the States as an international student. But I met great scholars, colleagues, and students who became an important part of my life. I thank my cohorts, Nick Cruz, Shengkuo Hu, Ada Johnson-Kanu, and Katie Herzog. Although the path to a Ph.D. sometimes felt like an endless tunnel filled with full of darkness, I did not feel lonely, thanks to my cohorts who stood by me. Thanks to Ae-sil Woo, my best friend, housemate, sister, and an academic colleague. I easily got through the earlier period of the grad program with her help and support. Thanks to Peter Carey and Melissa Baker for being great senior grad students and academic mentors. I thank Dylan Moses, Eddie Lucero, Reagan Dobbs, and Jung Chen for being great colleagues and always making the department cozy. I still remember the night when we headed out downtown to hunt various tacos. Thanks to all graduate students in political science for being great friends, supporters, and colleagues. Also, I thank Seungjun Kim, a pomodoro study group leader. I was able to finish writing the third chapter of the dissertation thanks to the time I spent in the study group

I entered the program in my 20s and am finishing it in my 30s. During this time, my family kept me afloat. Thanks to my dad and mom, Ki-ho Jang and In-soon Kim, for their endless devotion, making me a better person. I thank my older brother, Jae-hyeok Jang. I always rely on him the most, and he is the one I always look up to.

Last but not least, I thank my partner, Soo-an Jang. Her love makes me become who I am. I never felt lonely in a foreign country because of her. She is the main reason I live. She always inspires me to be a better person. She is the inspiration itself. I dedicate this dissertation to her.

JUNHYEOK JANG

jjang23@ucmerced.edu

https://www.junhyeokjang.com/

EDUCATION

University of California, Merced	Merced, CA
Ph.D. in Political Science	2022
Concentration: Political Institutions and Political Economy	
Dissertation Title: Political Institution, Information, and Authoritarianism	
Dissertation Committee: Haifeng Huang (Chair), Courtenay Conrad, Aditya Dasgupta	
Chung-Ang University Seoul.	South Korea

	Scoul, South Fronte
B.A. in Psychology	2016
B.A. in Political Science and International Relations	2016
Summa Cum Laude	

PEER-REVIEWED PUBLICATION

Jang, JunHyeok. 2022. "Subnational Elections and Media Freedom in Autocracies: Diffusion of Local Reputation and Regime Survival." *Political Research Quarterly*, Online First.

WORKING PAPERS/PROJECTS

Working Papers

- \cdot Do Term Limit Evasions in Autocracies Increase Repression?
- · Delegitimizing Opposition Party after Autocratization: Evidence from South Korean Newspapers
- · The Rise of Female Elites and Traditional Female Rhetoric in Authoritarian Propaganda: Quantitative Evidence from North Korean State Media

Working Projects

- $\cdot\,$ Politically Gendered MZ Generation in South Korea
- · Comparative Analysis of Twitter Usage by Parties in Emerging Democracies (With Daniel de Kadt)

RESEARCH INTERESTS

Substantive Fields

· Authoritarian Politics, Political Institutions, Political Communication, South and North Korea

Methodology

 Computational Text Analysis, Machine Learning, Time-Series Cross-Sectional Analysis, Causal Inference, Bayesian Inference, Survival Model

PRESENTATIONS/SEMINARS

2022

· MPSA Annual Meeting

2021

· APSA Annual Meeting

- · California Workshop in Empirical Political Science (CaliWEPS IV)
- · Association for Asian Studies Annual Conference
- · USC Korean Studies Institute Virtual Graduate Symposium
- \cdot Asian PolMeth

2020

- · APSA Annual Meeting (Online Conference)
- · Asian Online Political Science Seminar Series
- · PolMeth XXXVII (Online Poster)
- · MPSA Mini-Conference on Autocratic Politics (Canceled due to COVID-19)
- · WPSA Annual Meeting (Canceled due to COVID-19)

2019

- · UCLA Graduate student Comparative Politics Annual Conference
- $\cdot\,$ WPSA Mini-Conference on Autocratic Politics
- \cdot MPSA Annual Meeting

2018

· New Directions in Analyzing Text as Data Conference (Poster)

RESEARCH EXPERIENCE

Graduate Student Researcher at UC Merced

- \cdot Comparative Analysis of Twitter Usage by Parties in Emerging Democracies, with Daniel de Kadt, Winter 2020
- Historical Knowledge, Social Trust and Media, with Haifeng Huang, Summer 2017 (Huang, Haifeng, and Xinsheng Liu. 2018 "Historical knowledge and national identity: Evidence from China." Research & Politics 5, no. 3)

ADDITIONAL TRAINING

ICPSR Summer Program	Aug 2019
· Game Theory II: Advanced Topics (EITM Certification)	
· Advanced MLE: Panel Analysis and Survival Model	
ICPSR Summer Program	July 2018
· Game Theory I: Introduction (EITM Certification)	
\cdot Regression Analysis III: Advanced Methods (EITM Certification)	
Government and Business Strategies in a Globalizing World	July 2014
\cdot Instructed by Vinod K. Aggarwal, Professor at the Department of Political Science,	UC Berkeley
TEACHING EXPERIENCE: INSTRUCTOR OF RECORD	

Authoritarian Politics

· POLI 190 How To Be an Autocrat (Spring 2021, Fall 2021)

TEACHING EXPERIENCE: TA/ TEACHING FELLOW

Research Design, Causal Inference, Econometrics

- · POLI 175 Advanced Analysis of Political Data (Fall 2020, Fall 2019)
- · ECON 110 Econometrics (Spring 2020)
- · POLI 010 Understanding Political Controversies (Spring 2017)

International Relations

· POLI 005 Introduction to International Relations (Spring 2019, Spring 2018, Fall 2016)

Others

- · POLI 100 Congressional Politics (Fall 2018)
- · POLI 190 Politics of Poverty and Prosperity (Fall 2017)

TEACHING INTERESTS

Substantive Courses

· Authoritarian Politics, North Korean Politics, Politics of Two Koreas, Comparative Politics, Media Politics, Introduction to International Relations, Introduction to Political Economy

Method Courses

 \cdot Research Design, Causal Inference, Introduction to Text Analysis, Introduction to Game Theory

GRANTS AND SCHOLARSHIPS

Hayek Fund for Scholars by Institute For Humane Studies \$750	Spring,	2022
UC Merced Graduate Dean's Dissertation Fellowship \$11,000	Spring,	2022
Nina Dolores Wack Family Fellowship \$500	Fall,	2021
APSA Annual Meeting Accessibility Grant \$190	Fall,	2021
APSA Annual Meeting Accessibility Grant \$150	Fall,	2020
2019 EITM Certification Scholarship \$5,000	Summer,	2019
Travel Funding for UCLA Graduate student Comparative Politics Conference \$200	ce Spring,	2019
Travel Funding for New Directions in Analyzing Text as Data Conference \$900	Fall,	2018
School of Social Sciences, Humanities, and Arts Dean's Research Award \$850	Summer,	2018
UC Merced Political Science Fellowhip Award \$18,096	2016-	-2021
Academic Scholarship, Chung-Ang University, Seoul	2009-	-2015
PROFESSIONAL SERVICES		

Journal Reviewer The Journal of Politics Conference Discussant WPSA 2019, MPSA 2019, AOPSSS 2020

PROGRAMMING SKILLS

R, Python, STATA, MPlus

LANGUAGE PROFICIENCY

Korean: Native English: Fluent

REFERENCES

Haifeng Huang Associate Professor of Political Science University of California, Merced hhuang24@ucmerced.edu

Courtenay Conrad Associate Professor of Political Science University of California, Merced cconrad2@ucmerced.edu

Aditya Dasgupta Assistant Professor of Political Science University of California, Merced adasgupta3@ucmerced.edu

Political Institution, Information, and Authoritarianism Jun Hyeok Jang Doctor of Philosophy in Political Science University of California, Merced Abstract

This dissertation consists of three distinct articles that address two important but understudied questions in authoritarian politics: (1) how the effects of nominally democratic institutions on regime survival are conditioned by other traditional dictatorial toolkits and (2) how institutional changes are associated with information manipulation and media reports.

In the first paper, I examine how different authoritarian institutions interact by showing that subnational elections' effect on regime survival is conditional on the free flow of information. I argue that the benefit of subnational elections for regime survival is conditional on a lack of media freedom: As the level of media freedom increases, the positive influence of holding subnational elections on regime survival decreases. This is because subnational elections provide local politicians with opportunities to build good reputations, and when good reputations formed at the local level spread to other jurisdictions via relatively free media, citizens can use them as a focal point to coordinate against the regime. I find empirical support for my theory using the quantitative analysis of Time-Series Cross-Sectional data.

The second paper examines the conventional wisdom that autocrats engage in more repression after successfully circumventing term limits, a popular personalization tool in contemporary autocracies. I argue that the answer is only a partial yes. First, the evasion is followed by an increase in covert repression (information manipulation) but not overt repression because the impending threat comes from diffuse and less explicitly identified masses. Moreover, and somewhat paradoxically, this increase is more likely to occur after term limit extensions, the less severe form of term limit evasion, than after term limit removals, the more severe form of evasion. This is because the removal serves as a costly signal about regime capacity that dissuades the masses from protesting, substituting repression. Using time-series cross-sectional data on authoritarian countries with term limits and leveraging a difference-in-differences estimator with matched sets that address endogeneity issues carefully, I find empirical support for my theory.

In the last paper, I discuss the relationship between autocratization and delegitimizing propaganda. Autocratization increases threats from marginalized opposition elites whose parties are more incentivized to mobilize the masses. What do autocrats do to counter this threat? I argue that autocrats increase delegitimizing propaganda, exaggerating the disunity of opposition parties strategically. It undermines opposition parties' legitimacy as a competent alternative that conveys consistent and credible information. Moreover, this propaganda complements existing censorship. To validate my argument, I compare how regime-controlled newspapers in the South Korean dictatorship cover two very similar

internal conflicts in the opposition party that occurred before and after autocratization. Using word embeddings that quantify delegitimizing propaganda, I find that newspaper reports after autocratization were more likely to associate the opposition party with negative words related to disunity.

Part 1 Subnational Elections and Media Freedom in Autocracies: Diffusion of Local Reputation and Regime Survival

Subnational Elections and Media Freedom in Autocracies: Diffusion of Local Reputation and Regime Survival

Abstract

What is the effect of subnational elections on autocratic regime survival? The existing literature suggests that holding subnational elections help foster autocratic regime stability. I argue that the benefit of subnational elections for regime survival is conditional on a lack of media freedom: As the level of media freedom increases, the positive influence of holding subnational elections on regime survival decreases. This is because subnational elections provide local politicians with opportunities to build good reputations, and when good reputations formed at the local level spread to other jurisdictions via relatively free media, citizens can use them as a focal point to coordinate against the regime. Using the quantitative analysis of Time-Series Cross-Sectional data, I find empirical support for my theory.

1 Introduction

What is the effect of subnational elections on autocratic regime survival? The extant literature on authoritarian elections has argued that elections serve to stabilize the regime (Gandhi 2008, Geddes 2005, Magaloni 2006). Holding elections not only provides an autocrat with domestic and international legitimacy (Levitsky and Way 2010, Schedler 2002), but also signals the strength of the regime to opposition elites (Little 2012, Magaloni 2006, Rozenas 2016, Simpser 2013), thereby deterring challenges to the regime. More importantly, the recent literature has paid close attention to how elections enable an autocrat to co-opt oppositions (Gandhi 2008, Gandhi and Lust-Okar 2009, Magaloni 2006) as well as how they provide information about the popularity of the regime, its officials, and its opponents (Brownlee 2007, Miller 2015). Despite the difference in foci, the literature has largely argued that autocratic elections can enhance regime survival.

As a part of the autocratic election literature, recent scholarship has begun to study subnational elections in autocracies. It has been argued that subnational elections serve to co-opt competent opposition local elites by allowing them to take the local office and have some extent of discretion (Gandhi and Lust-Okar 2009). Moreover, subnational elections allow citizens to select their own local leaders who are familiar with local affairs (Buckley et al. 2014), and send a signal of discontent about incumbent leaders (Gandhi and Lust-Okar 2009, Geddes 2005). By enabling autocrats to gather information about the competence of local elites, replace incompetent subordinates, and/or co-opt competent oppositions, subnational elections are believed to stabilize authoritarian regimes.

But are subnational elections always conducive to regime survival? Take the recent case of Turkey. In 2019, Turkey held a mayoral election, and many opposition local leaders, including Ekrem İmamoğlu, of Istanbul, won control of local governments. If the election had been a part of government efforts to co-opt competent local leaders, as the extant literature has commonly posited, President Recep Tayyip Erdoğan should have let Imamoglu take office. Instead, he attempted to dismiss the result of the election in Istanbul by demanding a new election. Why did Erdoğan oppose İmamoğlu's taking local office? An important reason is that he was concerned that by becoming mayor, İmamoğlu would increase his reputation and attract more people to challenge his rule in the future.

In this paper, I argue that such concerns are general and that while subnational elections by themselves may help an autocrat hold onto power, their positive role will be reduced if combined with relatively free media. First, subnational elections create good reputations for local political entities who prove their value by winning control of subnational offices and performing well in the office. However, the creation of good local reputations itself does not necessarily undermine regime stability. For the good reputation of a local leader to become a threat to regime stability, it must diffuse to other jurisdictions via relatively free media so that many citizens, including those in other jurisdictions, observe it and use it as a focal point to coordinate against the regime.

Thus, if there are both subnational elections that incubate local politicians' good

reputations and relatively free media that disseminate those reputations, the benefit of subnational elections on regime stability is offset by the detrimental effect, which can undermine regime stability. In contrast, when subnational elections are not accompanied by some degree of media freedom, citizens across jurisdictions are less likely to collectively identify and coordinate around the most competent local leadership to challenge the incumbent regime. Therefore, an autocrat can benefit from the elections while limiting the threats. Drawing upon this theory, I hypothesize that the benefit of subnational elections on autocratic regime stability is conditional on a lack of media freedom: as the level of media freedom increases, the positive influence of holding subnational elections on regime survival decreases.

To test the hypothesis, I use a linear probability model with time-series cross-sectional (TSCS), subnational elections data and newly developed data of media freedom in authoritarian countries from 1949 to 2010. I find empirical support for my theory: The probability of regime survival decreases when subnational elections exist along with a relatively high level of media freedom. I find that this empirical pattern is also consistent with an independent variable that takes into account the quality of subnational elections. Moreover, I show that this interaction effect is not attributed to either implementing national elections or general liberalization.

Broadly speaking, the paper expands our understanding of authoritarian institutions by illuminating how different types of authoritarian institutions can interact with each other. The existing literature on authoritarian institutions has argued that autocrats stabilize regimes by implementing nominally democratic institutions such as elections (Gandhi and Lust-Okar 2009), parties and legislatures (Gandhi 2008, Svolik 2012), and free media (Egorov, Guriev and Sonin 2009, Lorentzen 2014). However, little is known about how those institutions interact with each other (Gehlbach, Sonin and Svolik 2016). For example, as subnational elections and free media have each been argued to contribute to authoritarian rule, will the simultaneous existence of both institutions augment such benefits? My results suggest that while individual institutions may help an autocrat stay in power, their combination may have very different consequences.

This paper also expands our understanding of authoritarian regime survival. Using cross-country data, existing studies have widely discussed various factors that affect autocratic regime survival, such as regime types (Geddes, Wright and Frantz 2018, Kim and Kroeger 2018), national elections (Knutsen, Nygård and Wig 2017), economic performance (Lucardi 2019), and personalism (Grundholm 2020). In this paper, I do not necessarily argue that media diffusion of local reputation is the most important explanatory variable of regime survival relative to other causes. What I rather argue is that, other things equal, it is worth examining how implementing subnational elections conditionally affects regime survival, which has been understudied in the previous literature.

Furthermore, this paper contributes to the expanding literature on media and information flow in autocracies. Egorov, Guriev and Sonin (2009) and Lorentzen (2014) show that free media provide autocrats with information about wrongdoings of local officials, offering them opportunities to punish incompetent local officials, and this expectation incentivizes local officials to perform well. Consequently, some degree of free media can foster regime stability. I argue that a relatively free media's reports on local affairs also have costs for authoritarian regimes by informing citizens of the reputations of successful local politicians, who can then rise to challenge the national leader. Other studies of media and information flow in authoritarian societies have analyzed how media and communication facilitate coordination among citizens about whether, how, and when to challenge the regime (Little 2016, Shadmehr and Bernhardt 2017). I note that a successful uprising needs a competent leader, and free media can help citizens identify and coalesce around such a leader.

2 Authoritarian Elections

2.1 Authoritarian Elections in General

Recent literature on authoritarian institutions has attempted to account for the coexistence of autocratic regimes and elections (Gandhi and Lust-Okar 2009). Specifically, research questions have centered on how elections help autocrats hold onto power. One of the most important roles of elections concerns the revelation of information. First, elections provide autocrats with information about the popularity of the regime and its officials (Blaydes 2010, Malesky and Schuler 2011, Miller 2015). Without elections, autocrats have a hard time knowing "whether the population genuinely worships them or worships them because they command such worship" (Wintrobe 1998, 20). In this vein, low support at the polls or low levels of turnout indicates that citizens are not satisfied with the regime and its subordinates. If public grievances are not seriously considered, an uprising against the government may result and eventually undermine regime survival. Hence, information gathered from elections can be leveraged to discipline members of the regime. Elections also provide autocrats with information about the distribution of support in society (Brownlee 2007, Magaloni 2006). Learning who the most popular elites are is crucial to regime survival as autocrats with this information are able to respond to those elites with direct spoils, policy concessions, or repression (Gandhi 2008).

Another important role of elections in autocracies is to co-opt potential opponents. The literature posits that elections serve to co-opt opposition elites (Blaydes 2010), party members (Magaloni 2006), and larger groups within society (Gandhi 2008). By allowing potential opposition actors to compete and win control of offices, autocrats divide opposition group into those competing to be insiders and those who do not, thereby reducing the probability of collective dissent against the government (Gandhi and Lust-Okar 2009). Elections also enable autocrats to signal their strength, thereby hindering potential anti-government movements. For example, a landslide victory in a competitive election with high turnout signals to opposition elites that the regime is invincible (Magaloni 2006). Even if elections are non-competitive and fraudulent, the autocrat can demonstrate that they have enough power to explicitly manipulate the result of elections (Little 2012, Rozenas 2016). Ruling elites often manipulate electoral results even in elections they cannot lose to magnify the influence of signaling power (Simpser 2013).

In addition, holding elections can also signal the legitimacy of the regime to domestic and international audiences (Levitsky and Way 2010, Schedler 2002).

Despite growing attention to the positive roles of elections in autocracies, scholars also argue that holding elections may cost regime stability. The incumbent's fraudulent behavior to win in an election can serve as a focal point that facilitates mass mobilization against the government, which eventually increases the likelihood of regime breakdown (Kuntz and Thompson 2009, Tucker 2007). Holding elections also can undermine autocratic regime coherence within ruling cliques because an election result provides would-be coup plotters with information about whether the incumbent can be removed without provoking public unrest (Wig and Rød 2016). Knutsen, Nygård and Wig (2017), on the other hand, provide a mixed argument that although elections can enhance autocratic survival in the long run, they can also be detrimental to regime survival since elections serve as focal points, reducing collective action problems among opposition groups.

2.2 Subnational Elections in Autocracies

Recent literature on autocracies has also begun discussing subnational elections. Building on the literature on national elections in autocracies, scholars contend that subnational elections can serve to co-opt competent and popular local elites by providing them with opportunities to hold offices and benefit from political spoils while enjoying some decision-making capacity (Gandhi and Lust-Okar 2009). Co-opted local elites can in turn provide many benefits to the regime. For instance, Reuter (2013) finds that Russia's hegemonic party, United Russia, benefits from the cooptation of popular local elites through subnational elections since co-opted local elites can mobilize more local citizens to support the hegemonic party in national elections. Because competent and popular local elites who are potential opponents of the regime can be co-opted through elections, the autocratic government tends to hold targeted subnational elections in regions where local elites control considerable political machines (Reuter et al. 2016).

Subnational elections are important also because a dictator who wants to stay in power indefinitely and maximizes rents has an incentive to govern well (Olson 1993), but in any reasonably sized country, an autocrat has to rely on local officials to manage local affairs. Therefore, selecting competent officials familiar with local issues and holding them accountable is important to maintain regime stability. Subnational elections help solve this adverse selection problem by letting citizens make informed choices about which leader is best for their jurisdiction. In the case of Russian gubernatorial elections, for example, Buckley et al. (2014) find that citizens are more likely to elect governors who have experience in local governments in their region rather than people who have better educational backgrounds. Similarly, in China, voters use their electoral power to select good officials in subnational congress (Manion 2017), which then tend to provide more public goods that local governments need (Zhang et al. 2004). This suggests citizens can select competent local officials who are familiar with local issues.

Subnational elections also help solve a moral hazard problem by keeping local of-

ficials in check. Local officials have an incentive to seek rents, as does a dictator, and rent-seeking damages citizen welfare (Olken and Pande 2012). Competition in subnational elections serves to provide information about how local officials are performing and can eventually undermine local collusions (Geddes 2005). Moreover, an autocrat can punish local officials who turn out to be incompetent or corrupt, as low turnout and low support for a local incumbent signal to a leader that the official has been misgoverning (Gandhi and Lust-Okar 2009).

In sum, the literature on authoritarian subnational elections has emphasized the benefits of those elections for autocrats. In particular, autocrats appear to gain from the information provided by subnational elections about the competence and popularity of local elites or politicians. Such information allows a leader to select/co-opt competent local elites, and monitor/replace incompetent subordinates. However, the literature has rarely focused on the fact that citizens also receive information from elections and can act on such information. And citizens' access to such information can be detrimental to the survival of an incumbent regime. In the following section, I argue that information about the competence and performance of local politicians that is revealed through subnational elections and the winners' subsequent performance using autonomous decision-making power offset the positive influence of subnational elections on regime survival when the information diffuses to other jurisdictions via relatively free media. I also contend that this mechanism is less likely to work in national elections.

I refer to subnational elections as local or regional level elections in dictatorships where a dictator intends to allow citizens to select competent or popular local elites and elected officials have some authority to influence local governance without the intervention of unelected actors, in line with the existing literature. Subnational elections discussed in the literature often exclude the extreme case of elections where results are predetermined and local competition is either window-dressing or non-existing. In such cases, competent and popular local politicians or parties are less likely to be selected if an autocrat does not prefer them. Moreover, it is more likely that important decisions at the subnational level are made by appointed actors from the central government. Then elections may not increase the quality of local governance, thereby reducing their benefits. Therefore, subnational elections, discussed in this paper, exclude such extreme window-dressing cases.

3 Diffusion of Local Reputation and Regime Survival

When there are no subnational elections, a dictator can appoint the most loyal officials in local jurisdictions, which reduces the probability of rebellion or betrayal by local officials. However, loyalty often costs competence. Since the dictator is far away from local affairs, the loyal officials they appoint may not be familiar with local affairs. Moreover, as Reuter and Robertson (2012, 1025) contend, loyalty costs the well-being of citizens because resources that are supposed to be used for local affairs are allocated to a political machine that fosters the relationship between a leader and their officials. Studies on Chinese local governments suggest that appointed local leaders are more responsible for implementing central policies in local jurisdictions, rather than providing the public goods and services local citizens want (Xiang 2000, Zhang et al. 2004).

Scholars have posited that subnational elections can solve the competence¹ issue by allowing citizens to vote the most competent and popular politicians into the local office. Yet, few examine the potential threat such competence of elected local politicians can pose to a dictator. Myerson (2006, 2011) contends that decentralization and subnational elections provide potential leaders with opportunities to build good reputations.² A local politician and party can first prove their competence by winning control of municipal or provincial governments. Compared to national parliamentary elections, oppositions have more chances to win in subnational elections (Hankla and Manning 2017, Sabatini 2003).

In addition, elected local officials accumulate more reputations by performing well in their office. This performance is based on autonomous decision-making power, such as allocating resources (Rakner and Van de Walle 2009, Sabatini 2003) and implementing government programs (Albertus 2015). Moreover, this autonomous power can be utilized to increase local supports apart from the central politics by distributing resources to potential supporters and implementing favorable policies (Albertus 2015, Sabatini 2003).

Even if appointed officials are competent and provide what local constituents want, building a good reputation is not easy. First, it is difficult for such competent elites to prove their quality because citizens lack monitoring devices. The well-being of citizens cannot be readily attributed to the competence of local elites because it is unclear whether the successful local governance is due to local leadership or central leadership. Moreover, appointed leaders are part of the regime and may have participated in the regime's wrongdoings against the people. Such negative associations and historical baggage mean that there is a common expectation that such an appointed local leader will be less likely to challenge the existing regime, and citizens will be less likely to rally behind them, despite their competence. Elected politicians, on the other hand, are more independent of the regime and have their mandate, regardless of whether they are from opposition parties or the regime party.

Although a dictatorship sometimes only allows members of a ruling party to run in a subnational election, internal competition incentivizes politicians to be competent and build good local reputations to be reelected. Manion (2014) contends that local Chinese congressmen and women who are popularly elected view themselves as delegates of local citizens. They establish a personal reputation to be reelected by focusing on parochial activities. Therefore, elected local politicians are much more likely to com-

¹By competence, I refer to a broad set of characteristics that make a politician a good leader in executive positions.

²For instance, Vicente Fox, who won the presidential election of Mexico in 2000, ending the dominance of the PRI regime, had built a good reputation since he ran for governor in the state of Guanajuato in 1991 (Shirk 2000). Likewise, Tancredo Neves, a Brazilian opposition politician and the first democratically elected leader after the military regime, proved his political influence by winning the gubernatorial election of Minas Gerais (Ribeiro 2015).

mand citizens' attention and coordinate their support.

While winning subnational elections and holding autonomous decision-making power can create a good reputation at the local level, it does not necessarily undermine regime survival. More specifically, the reputation can threaten regime stability when visible to many citizens, including those in other jurisdictions, and serving as a focal point that facilitates opposition coordination. However, suppose the local reputation does not diffuse such that citizens are ignorant about competent local politicians in other jurisdictions. In that case, citizens across jurisdictions cannot collectively identify and coordinate around the same local politician or party, which makes effective collective actions less likely. I argue that with relatively free media in a country, the political reputation accumulated in a local jurisdiction is more likely to spread to other jurisdictions and magnifies the chance to organize against a regime. Media is a major source of political information that shapes public opinion. Media reports can prompt people to focus on a certain political issue among others (Iyengar, Peters and Kinder 1982, McCombs and Shaw 1972) and affect how people feel about a political issue (Nelson, Clawson and Oxley 1997).

Existing studies suggest that autocracies often demobilize potential challengers to justify why they are entitled to rule (Dukalskis and Patane 2019, Dukalskis and Gerschewski 2017). And these legitimizing efforts tend to intensify when there are major challenges (Dukalskis and Patane 2019). Likewise, the best-case scenario for an autocrat here is to demobilize competent local politicians by making them only known in the local jurisdiction, while citizens in other regions are ignorant of them. Then, an autocrat can maximize the benefit of good local governance or co-optation of opposition politicians while reducing potential threats. When media are considerably constrained, such that the incumbent can readily censor critical information undermining the regime, the diffusion of local reputation is highly unlikely. Consequently, an autocrat may be able to benefit from holding subnational elections.

However, media freedom is not something an autocrat can restrain completely. This is particularly the case where media are market-oriented so that there exist many profitdriven private media outlets (Besley and Prat 2006, Gehlbach and Sonin 2014, Gentzkow, Glaeser and Goldin 2006, Petrova 2011). To buy-off media outlets, an autocrat must compensate for the loss of potential profits from advertising, which increase with the size of the advertising market. What matters is that the expansion of the advertising market itself is not readily controllable as it is influenced in part by such external factors as the development of media technology (Gehlbach and Sonin 2014). Moreover, dictators sometimes have to strategically allow partially free media to keep their bureaucrats in check (Egorov, Guriev and Sonin 2009, Lorentzen 2014, Lu and Ma 2019). Therefore, an autocrat may sometimes have to accept a certain degree of media freedom.

Relatively free media are fond of reporting the news of "star" politicians who stand out from ordinary politicians because such coverage increases readership and advertising revenues (Lu and Ma 2019). Thus, when media are relatively free, stories of the outstanding performance of local leaders are more likely to draw the media's attention, be widely reported, and eventually diffuse to other jurisdictions. In this case, holding subnational elections have the potential to destabilize the regime as enough aggrieved citizens can identify and coordinate around the most competent local politician and party. For example, when opposition local politicians utilize their autonomous power to organize or incite collective actions against the regime, diffused reputations may help them mobilize citizens in other jurisdictions as well as in theirs. This increased likelihood of magnified collective actions imposes extra costs of deterring potential threats on the regime, which could have been utilized for regime stability otherwise.

Therefore, when the reputation of local politicians spreads, the benefits of holding subnational elections, such as gathering information about local affairs and co-opting competent local elites, should be offset by the detrimental effect. If the negative effect becomes extreme, institutionalizing subnational elections can cost an incumbent their tenure. Based on the preceding discussion, my main hypothesis is that the benefit of subnational elections on autocratic regime stability is conditional on a lack of media freedom: As the level of media freedom increases, the positive influence of holding subnational elections on regime survival decreases.

Note that this reputation-building and diffusion mechanism is less likely to work in national elections because they do not provide enough opportunities for building reputation about the politician's competence in governance in the first place. First, simply competing in national executive elections is less likely to allow oppositions to participate in governance, which is critical to showcasing the competence in governing. Furthermore, although a few opposition politicians can take parliamentary seats, it is less likely than subnational elections for elected officials to have autonomous decisionmaking power. Subnational elected officials use this power to prove their competence by allocating resources and implementing policies to areas that directly affect citizen's well-being. In contrast, members of parliament may not readily point to their successes as much as elected local officials do because they are in a position that is less likely to make policies autonomously to deal with concrete problems citizens have (Hankla and Manning 2017, Manion 2017). Therefore, without accumulated reputation about the quality of governance in the first place, relatively free media are less likely to serve as a moderator of the effect of national elections on regime stability. In a placebo test, I examine this implication.

4 Empirical Analysis

In the following, I conduct a quantitative empirical test, using a linear probability model with cross-country Time-Series Cross-Sectional (TSCS) data on authoritarian countries between 1949 and 2010. More specifically, I use a TSCS dataset constructed by Geddes, Wright and Frantz (2014, 2018, henceforth GWF). They classify a country-year as authoritarian and included in the dataset if an executive won control of the government through indirect, unfair, and/or uncompetitive selection procedures. Moreover, even if leaders were elected democratically, a country-year is considered autocratic from which such leaders transformed democratic selection procedures to undemocratic procedures (Geddes, Wright and Frantz 2014).

4.1 Operationalization of Key Concepts

The dependent variable is *Autocratic Regime Breakdown*, a dummy variable that is coded as 1 if a regime collapses in a country-year and 0 otherwise.³ Following GWF, I consider autocratic regime breakdown occurred in a country-year when there were significant changes in the set of basic formal and informal rules for choosing leaders as well as leadership. More specifically, the breakdown is considered occurred when a country-year held a competitive election for a leader or leadership and a person other than the incumbent or his allies won; when the government was replaced by a different regime via irregular domestic events, such as a coup, popular uprising, rebellion, civil war, or other coercive measures; and when the ruling group changed the basic formal and informal rules for choosing leaders (Geddes, Wright and Frantz 2014, 317-318).⁴ Thus, a regularized leadership change does not mean a regime change. Similarly, it is not considered a regime breakdown even if there is a partial opening of democratic features unless it entails major changes in basic rules for selecting a leader. Moreover, regime breakdown includes not only autocracy-to-democracy changes but also autocracy-to-autocracy transitions.⁵

The independent variable, *Subnational Election*, is conceptualized as an executive or legislative election for the lower-level governments in which citizens are allowed to select competent or popular local elites who have some authority to influence local governance without the intervention of unelected actors. The ideal operationalization has to measure whether a regime implements regular subnational elections, and if so, to what extent these elections are competitive and allow elected politicians to wield autonomous power at the subnational level. Unlike national elections, however, there is no existing indicator that directly measures competitiveness. Thus, I use the two best available indicators from V-Dem v.10 (Coppedge et al. 2020) to proxy the implementation of subnational elections that allow elected politicians to build local reputations.

First, I leverage *Regional Government Elected* and *Local Government Elected* variables. Regional government in V-Dem typically refers to the second-highest level of government, just below the national government. On the other hand, local government indicates the level of government below the regional government. When multiple levels exist, the coding is based on a government with the most responsibilities and resources.

⁵The theory does not specify the direction of regime breakdown after local politicians or parties become a national figure due to freer media. As discussed, the threats due to the rise of local politicians can take various forms. Just because elected local politicians play a critical role in regime breakdown does not necessarily mean that they democratize a regime.

³In the appendix, I use constraints on executive power (Polity2) as alternative dependent variables to proxy the degree in which dictators' power is limited due to threats from rising opponents. Using empirical strategies used in the main analysis, I find results consistent with main findings.

⁴The current coding does not consider regime breakdowns stemming from external factors such as foreign invasion or the government losing control of its territory. However, one may argue that regime collapses due to international events could also be related to the theoretical account. For example, when an opposition movement led by a local politician who becomes a national figure and challenges the regime, a leader can remove this politician. It may then result in an invasion by foreign power that brings about a regime change. In the appendix, I run an additional analysis with a dependent variable that codes regime collapses by foreign actors as well as domestic actors as 1. The results are consistent.

The variables are coded as 1 if a country-year is considered to have a local (regional) election, such that the local (regional) executive or/and the local (regional) assembly is elected in general, and 0 otherwise. Since elections are not held every year, to be coded as having subnational elections, a country-year does not have to hold an election in a specific year. Following Cheibub, Gandhi and Vreeland (2010), I focus instead on whether a country institutionalizes subnational elections, regardless of the competitiveness, such that citizens and local officials acknowledge that such elections should be held regularly. In the appendix, illustrates the proportion of subnational elections in the dataset of autocracies by year. Over time, the proportion of both local and regional elections in autocracies increases.

To code a country as having subnational elections, the elections do not have to be institutionalized nationally. For example, Russia allows only a few regions to have elections and directly appoints local officials otherwise. This is not a serious problem for my research because even if only some regions of a country hold subnational elections, local leaders and parties in those regions still have opportunities to build a good reputation and potentially threaten the dictator if those local reputations are able to diffuse across the country. Similarly, I do not count a larger country with more units of local jurisdiction as having more subnational elections than a smaller country. What is important is the existence of elections that allow local politicians to emerge with good reputations and whether those reputations can easily spread nationwide.

The caveat of using the first measure is that it does not account for the quality of elections. There can be a case in which subnational elections are institutionalized, yet uncompetitive and window-dressing so that they do not properly serve to help elected politicians build a local reputation. For example, North Korean subnational elections, which are the epitome of window-dressing elections without any competition, are considered the same as Mexican subnational elections where opposition elites are allowed to compete and elected officials have enough authority to control their jurisdictions.⁶ In this case, North Korea is more analogous to untreated groups (coded as 0).⁷

To address this issue and provide additional empirical support, I also leverage the *Local Government Index* and *Regional Government Index* from V-Dem. These continuous measures represent the degree to which elected local (regional) officials, if any, are autonomous from unelected actors at the local (regional) level. Scores range from 0, if there is no subnational election at all; to 1 if locally elected officials have full discretion. The measures indirectly account for the quality of elections because if subnational elections are not simply window-dressing but to serve as a meaningful institution to select competent workers, dictators with such intention would give elected politicians more autonomy and authority. For example, the average score of the Local Government Index

⁶See Dagyum Ji. "Leader Kim Jong Un votes in North Korean local elections." NK News (July 22, 2019). https://bit.ly/3wB7YUZ

⁷For transparency and replicability, I do not arbitrarily change some values of the *Regional(Local) Gov*ernment Elected variable from 1 to 0. Rather in the appendix, I modify these variables, using a 10% quantile of the *Local Government Index* and *Regional Government Index* as a threshold. Specifically, I change country-year observations of the local(regional) election that are previously coded as 1 to 0 if the local(regional) quality index is less than or equal to 10% quantile.

of North Korea in the dataset is 0.097 while that of Mexico is 0.903, which reveals the difference in the two country's elections.

My hypothesis posits that the effect of subnational elections on autocratic regime breakdown is conditional on media freedom. To proxy *Media Freedom*, I use Media System Freedom (MSF) data, which is a newly developed indicator by Solis and Waggoner (2020). Media freedom, as a measurement, is commonly characterized as "the level of constraint that journalists and other media personnel face in producing media content" (Solis and Waggoner 2020, 3). This constraint can be measured in a diverse way because it can be either direct (e.g., direct restrictions and controls (Price 2002)) or indirect (e.g., journalistic practices like self-censorship), and come from either state or non-state actors.

Due to this multifaceted nature of media freedom, however, existing indices provide information only on "certain aspects of media freedom while overlooking others" (Solis and Waggoner 2020, 2). More specifically, each indicator emphasizes different aspects. For example, the Press Freedom Index by Reporters Without Borders focuses mostly on harassment of media, which reveals the indirect constraints on journalists, whereas Freedom House's Freedom of the Press considers more direct constraints, such as legal and political constraints on media freedom. In addition, even the same indicator reveals a different aspect of media freedom depending on the period it was generated because the criteria of how to evaluate media freedom change over time. Both aforementioned indices, for instance, have changed their coding scheme many times since their inception (Solis and Waggoner 2020).

To address the limitations of existing indicators and measure latent and comprehensive aspects of media freedom, Solis and Waggoner (2020) employ an item response theory (IRT) model with multiple existing indicators⁸. An IRT model is a statistical model that uncovers latent aspects of variables, using items that provide information about a certain part of the latent measure. By assembling multiple pieces, the model generates a comprehensive indicator that provides the best approximate of media freedom in a given time and country.

To this end, this indicator ends up evaluating two major components of media freedom.⁹ First, it evaluates media outlets' ability to produce content without undue influence, which is relevant to government censorship, legal and economic environments, non-state actors' influence, and harassment of journalists. Second, it measures journalistic practices, such as self-censorship, content bias, and media corruption. Since my theory considers relatively free media to be the conveyor of unrestricted information, which can be affected by not only institutional freedom but also journalistic practices,

⁸Indicators include Freedom House's Freedom of the Press, Global Media Freedm (Whitten-Woodring and Van Belle 2017), Reporters Without Borders, and seven V-Dem variables: government censorship, critical media, media perspectives, journalist harassment, media self-censorship, media bias, and media corruption.

⁹This is based on the items included in the IRT model. For example, it can be said that this measure evaluates journalistic practices because some items included in the model—such as Reporters Without Borders: Press Freedom Index; and V-Dem's self-censorship, media bias, and media corruption indices—capture this aspect.

it is appropriate to use this comprehensive measure of media freedom. For easier interpretation, the index is re-scaled to situate within 0 (no media freedom) and 1 (perfect media freedom). In the dataset for the main analyses, the level of media freedom ranges from .0029 to .7942.

4.2 Endogeneity Concerns

Autocratic regimes may fail not because of subnational elections with media freedom but because of the vulnerability of a leader. And this regime vulnerability may be the origin of subnational elections and relatively free media. If this is the case, the institutionalization of subnational elections and media freedom may occur simultaneously as the epiphenomena of the weakness of power (Pepinsky 2014) or inevitable regime liberalization. On the other hand, if autocrats are powerful, they may impede subnational elections and free media such that we may not be able to observe any of them.

Empirically, this is problematic because there may be a lack of country-years with free media and no subnational elections or of country-years with subnational elections but no free media. If so, interacting the two variables will suffer from the issue of lack of common support, that is, insufficient variation in the treatment under certain conditions (Hainmueller, Mummolo and Xu 2019). To see an actual distribution in the data, in the appendix, I present the density plot of media freedom varying by local elections and regional elections. First, many observations, regardless of the existence of subnational elections, especially in the case of regional elections, have a very low level of media freedom. Nevertheless, the figure indicates that there are plenty of observations with relatively free media (scale 0.4 - 0.6) without subnational elections as well as with censored media (scale 0 - 0.2) with local elections. Similarly, in the appendix, the figure shows the relationship between media freedom scores and the local and regional government index in the dataset. Many country-years in autocracies have, in general, both a low level of local (regional) government index and low media freedom. However, there are still plenty of observations with a higher local and regional government index with lower media freedom and vice versa. In addition, Pearson's correlations for the two relationships are 0.344 and 0.334, respectively, which means that the quality of subnational government and media freedom are not empirically highly endogenous to each other.

Even if there is enough variation in the treatment under certain conditions, estimation models still need to reduce biases due to unobservable regime strength that may affect both treatments and the outcome. In this research, I use a regime-fixed effects model with time-variant confounders.¹⁰ First, a regime-fixed effects model captures all time-invariant differences between autocratic regimes as well as countries. Controlled regime-specific characteristics include but are not limited to geography, colonial history, prior and current regime type (Geddes, Wright and Frantz 2014), historical political economy differences, and founding episodes (Albertus and Menaldo 2012). All these

¹⁰Miller (2016) points out that regime-fixed effects can generate bias because observations are selectively excluded. In the appendix, I use country-fixed effects model with regime type controls instead and show that results are consistent with the main findings.

factors can affect the regime's inherent vulnerability. This model ensures that the results will be driven by variation in subnational elections and media freedom within regimes rather than between them.

Furthermore, I include a battery of time-varying control variables in the estimation model. First, I include the Personalism variable constructed by Geddes, Wright and Frantz (2018, GWF). It measures the degree to which "the dictator has personal discretion and control over the key levers of power in his political system." For example, in an autocratic regime with a high level of personalism, the dictator can wield powers without constraints of political elites within his ruling clique, such as the military or a ruling party.¹¹ To measure a latent concept of personalism, GWF leverages an IRT model, using several indicators that measure the personalization of access to political offices, the ruling party, the military, and the security apparatus.¹² It is plausible that a dictator personalizing a regime may restrict the influence of nominally democratic institutions, such as subnational elections and freer media, to marginalize other co-opted elites in a ruling clique. Also, personalization can affect regime survival by reducing coup probability or increasing mass mobilization (Grundholm 2020). Including this variable as a confounder has an advantage over simply controlling for time-invariant regime type variables, which are automatically controlled for by a regime fixed-effect. That is, it accounts for a temporal variation of personalization "within" the rule of an individual ruler as well as a particular regime such that it allows for tracking power shift within a ruling coalition, which may be highly correlated with dictator's power in general.

Modernization theory contends that economic development is highly associated with autocratic regime breakdown and democratization (e.g. Acemoglu et al. 2009, Boix 2003, Przeworski et al. 2000). For example, as per capita income increases, citizens are more likely to be educated, thereby demanding more democratic rights from the government. To ameliorate public tensions, a dictator may choose to implement subnational elections and allow partially free media. To control for this alternative path, I include logged *GDP per capita* and *GDP growth* in the estimation model.

Another key covariate I control for is *National Elections*. As mentioned earlier, the literature has argued that holding national elections for legislators and executives serves to stabilize the autocratic regime. Moreover, I assume that autocratic regimes with national elections are more likely to implement subnational elections as they have already held national elections. Using *exselec* and *legselec* variables in the Democracy-and-Dictatorship-revisited dataset (Cheibub, Gandhi and Vreeland 2010), I code a country-year as 1 if the national leader or national legislators are selected by direct or indirect elections and 0 otherwise. Since the observations in this dataset end in 2008, I expand the data to 2010 following their coding schemes.

¹¹It means that this concept does not capture the dictator's power over citizens or foreign actors.

¹²More specifically, the measure is constructed by the following eight items: whether personal loyalty matters to accessing high office, whether a leader creates a new support party after seizing power, whether a leader controls appointments to the committee of the party executive, whether the committee is simply a rubber stamp, whether a leader controls the security apparatus, whether a leader controls the promotion of loyal officers, whether a leader creates loyal paramilitary forces, and whether a leader purges disloyal officers.

Next, I control for *Natural Resources*. Egorov, Guriev and Sonin (2009) show that autocrats in resource-rich countries have fewer incentives to use free media to hold bureaucrats accountable because rents from natural resources can compensate for poor governance by incompetent or corrupt bureaucrats. In addition, the resource curse literature has argued that natural resources contribute to autocratic longevity (e.g. Aslaksen 2010, Ross 2001). As a proxy for natural resources, I use data for a country's logged value of oil and gas, collected by Ross and Mahdavi (2015). Last, following Kim and Kroeger (2018), I control for two dichotomous measures of ongoing political instability, *Interstate War* and *Civil War*, which are coded as 1 if a country-year has experienced such wars in the previous year and 0 otherwise. In the appendix, I present a descriptive statistics of main variables.

4.3 Estimation

For the estimation, I employ the following linear probability model¹³:

Pr(breakdown_{*i*,*t*}) = *f*(Subnational Election_{*i*,*t*-1}, Media Freedom_{*i*,*t*-1}) +
$$\theta * \mathbf{C}_{i,t-1} + \mu_i + \delta_t + \sum_{d=1}^{3} \gamma_d * \text{Duration}_{i,t}^d + \epsilon_{i,t}$$

where *i* denotes regime and *t* denotes time. f(.) is a linear interaction function of the explanatory variables of interest, while $C_{i,t}$ is a vector of lagged time-varying covariates. In addition, regime fixed effects are denoted by μ_i , year fixed effects are denoted by δ_t , and the γ_d are coefficients for a cubic duration trend. Lastly, $\epsilon_{i,t}$ refers to all other omitted errors. Regime fixed effects capture time-invariant differences between regimes and year fixed effects capture world trends that are common to all regimes. Since younger regimes are systematically different from older ones, I also include the duration trends, following Lucardi (2019).

The results are presented in Table 1. Column 1 presents the result with local elections as a main independent variable, Column 2 shows the result of estimation with regional elections as a main explanatory variable, and Column 3 and 4 shows the result with the local government index (local quality) and the regional government index (regional quality) as an independent variable, respectively. Since this paper focuses on the conditional effect of subnational elections, the main quantities of interest are *Local Election * Media Freedom, Regional Election * Media Freedom, Local Quality * Media Freedom,* and *Regional Quality * Media Freedom.*

As reported, the associations between local elections, regional elections, or the quality of local/regional governments and regime breakdown are conditional on media freedom, and the relationships are statistically significant (except the first estimation, which is p<0.1). For example, the coefficients of local elections and regional elections are, respectively, -0.043 and -0.065, which means that if the level of media freedom is 0, the probability of regime breakdown is estimated to decrease by 4.3 percentage points and

¹³I follow Lucardi (2019) who also uses a linear model to estimate the probability of regime breakdown. Using survival models with cross-country data often fails to account for regime-specific characteristics, which may considerably affect regime breakdowns.

	DV: Regime Breakdown			
	Local	Regional	Loc Quality	Reg Quality
Local Election	-0.043			
	(0.026)			
Regional Election		-0.065**		
C C		(0.031)		
Local Quality			-0.211***	
			(0.070)	
Regional Quality				-0.162*
				(0.083)
Media Freedom	0.226**	0.250***	0.260***	0.266***
	(0.093)	(0.078)	(0.089)	(0.082)
Local Election * Media Freedm	0.173*			
	(0.102)			
Regional Election * Media Freedom		0.207**		
		(0.095)		
Local Quality * Media Freedom			0.430**	
			(0.197)	
Regional Ouality * Media Freedom				0.467^{**}
				(0.190)
Regime-Fixed	Y	Y	Y	Y
Year-Fixed	Y	Y	Y	Y
Confounders	Y	Y	Y	Y
Poly(Duration,3)	Y	Y	Y	Y
Observations	3,611	2,999	3,685	3,743
Note:		*	*p<0.1; **p<0.0	05; ***p<0.01

Table 1: Linear Probability Model

p<0.1; p<0.05; p<0.01SE clustered at the regime in parentheses.

6.5 percentage points. Consistent with the theory, these findings indicate that subnational elections help foster autocratic regime stability when media are effectively constrained. The coefficients of interaction terms are 0.173 (weakly significant)¹⁴ for local elections and 0.207 (significant) for regional elections. Substantively, the marginal effect of institutionalizing subnational elections on the probability of regime breakdown increases by 17.3 percentage points or 20.7 percentage points as media freedom increases from 0 to 1 within a regime.

Since the interaction between two continuous variables, quality indicators and media freedom, makes interpretation difficult, and for a more intuitive understanding of the interaction term between subnational elections and media freedom, I present marginaleffect plots in Figure 10. As predicted, the marginal effects of local and regional elections on regime breakdown are positively conditional on the level of media freedom. When a country has highly constrained media, holding subnational elections or institutionalizing local or regional governments with autonomous elected officials reduces the probability of regime breakdown. In other words, the incumbent can benefit from subnational elections with constrained media, as I hypothesize. However, as media becomes freer, the positive effect of subnational elections disappears.

4.4 Placebo Test

One may argue that institutionalizing subnational elections in autocracies could be part of a broad tendency to implement nominally democratic elections. If so, implementation of subnational elections may simply be endogenous to that of national elections, so that the significance of the interaction between subnational elections and media freedom could actually be due to the interaction between national elections and media freedom.

In the appendix, I plot the relationship between the institutionalization of national elections and that of local and regional elections in autocracies. If implementing subnational elections is endogenous to adopting national elections, I would rarely be able to observe cases of 'no national elections, yes subnational elections' or 'yes national elections, no subnational elections.' However, many country-years indeed have a lot of the latter case, despite the paucity of the former. This implies that adopting subnational elections as a strategy to govern local offices well does not necessarily go hand-in-hand with adopting national elections, which are now very common in autocracies.

To provide more evidence, I run a placebo test with the same estimation model, but with national elections as an independent variable. The estimation results are presented in the first column of Table 2. As can be seen, the interaction between national elections and media freedom has no statistical significance on regime breakdown, which means that my empirical finding cannot be attributed to a general trend of implementing nominally democratic elections and their relationship with media freedom. Theoretically,

¹⁴Considering that the binary indicators of subnational elections do not capture the quality of election so that treatment effects are diluted, it is understandable that the empirical result with the local election indicator is weakly significant.


Figure 1: Marginal Effect of Subnational Elections on Regime Breakdown

this result also supports my argument that reputation-building and diffusion mechanism is unique to subnational elections and less likely to work in national elections.

	DV: Regime Breakdown					
	National Election	Local Election	Regional Election	Local Quality	Regional Quality	
	*Media Freedom	* Liberalization	* Liberalization	* Liberalization	* Liberalization	
Placebo	0.012	0.010	0.243	0.199	0.386	
Interaction	(0.074)	(0.177)	(0.193)	(0.347)	(0.254)	
Regime-Fixed	Y	Y	Y	Y	Y	
Year-Fixed	Y	Y	Y	Y	Y	
Confounders	Y	Y	Y	Y	Y	
Poly(Duration,3)	Y	Y	Y	Y	Y	
Observations	3,763	3,591	2,979	3,665	3,723	
Note:				*p<0.1; **p<	0.05; ***p<0.01	

Table 2: Placebo Test with Alternative Variables

SE clustered at the regime in parentheses.

Other possible scenario is that general liberalization, not media freedom specifically,

moderates the effect of subnational elections. I also think this is less likely because in order for competent local politicians to be threatening to an autocrat, their reputation should diffuse to other jurisdictions and several components of liberalization, such as an independent judiciary, have less to do with it. I assume that media freedom plays a more critical role in disseminating information as compared to other liberalization components. To examine this, I replace the media freedom index in the main model with the Liberal Democracy Index from V-Dem. This index measures to what extent the ideal of liberal democracy achieved is, using a variety of democracy components, such as civil liberties, constraints on executive power, and an independent judiciary. The second to fifth columns in Table 2 represent the results and show that all coefficients of interaction terms are not statistically significant. This suggests that media freedom, not liberalization in general, serves to make subnational elections detrimental to regime survival.

5 Conclusion

What is the effect of subnational elections on autocratic regime survival? I have argued that the benefit of subnational elections for regime survival is conditional on a lack of media freedom: As the level of media freedom increases, the positive influence of holding subnational elections on regime survival decreases. Although the data in empirical analyses ends in 2010, the theory applies to the contemporary media environment centered on social media. That is, widespread social media can play a critical role in conveying local reputation and make authoritarian regimes vulnerable to opposition movements centered around competent elected local politicians. Take Turkey as an example. The Erdoğan regime had successfully dominated and benefited from local elections while controlling information, using state-owned radio and television stations (Esen and Gumuscu 2016). However, dissidents who are dissatisfied with state-controlled media began paying attention to alternative information from digital media at the time of the local election in 2019. By defeating Erdoğan's Justice and Development Party (AKP) for a mayoral seat in Istanbul and using this rapid rise of social media, Ekrem İmamoğlu gained a considerable reputation across the country (Güvenç and Langlois 2019) and supported opposition movements.

If the combination of subnational elections and relatively free media is detrimental, an autocrat may employ some strategies to maximize the benefit of one while reducing the detrimental effects of the other. It may be interesting to investigate in future research how autocrats, especially those who necessarily need subnational elections to maintain competition among local elites, mitigate threats by restraining the diffusion of local reputations throughout a country. For example, an autocrat might use controlled national media to spread "bad" reputations of competent local politicians not only to halt their ambition for national office but also to signal that they are still under the autocrat's control.

References

- Acemoglu, Daron, Simon Johnson, James A Robinson and Pierre Yared. 2009. "Reevaluating the modernization hypothesis." *Journal of monetary economics* 56(8):1043–1058.
- Albertus, Michael. 2015. "The role of subnational politicians in distributive politics: Political bias in Venezuela's land reform under Chávez." *Comparative Political Studies* 48(13):1667–1710.
- Albertus, Michael and Victor Menaldo. 2012. "Dictators as founding fathers? The role of constitutions under autocracy." *Economics & Politics* 24(3):279–306.
- Aslaksen, Silje. 2010. "Oil and democracy: More than a cross-country correlation?" *Journal of Peace Research* 47(4):421–431.
- Besley, Timothy and Andrea Prat. 2006. "Handcuffs for the grabbing hand? Media capture and government accountability." *American economic review* 96(3):720–736.
- Blaydes, Lisa. 2010. *Elections and distributive politics in Mubarak's Egypt*. Cambridge University Press.
- Boix, Carles. 2003. Democracy and redistribution. Cambridge University Press.
- Brownlee, Jason. 2007. *Authoritarianism in an Age of Democratization*. Cambridge University Press.
- Buckley, Noah, Timothy Frye, Guzel Garifullina and Ora John Reuter. 2014. "The political economy of Russian gubernatorial election and appointment." *Europe-Asia Studies* 66(8):1213–1233.
- Cheibub, José Antonio, Jennifer Gandhi and James Raymond Vreeland. 2010. "Democracy and dictatorship revisited." *Public choice* 143(1-2):67–101.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsent, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard et al. 2020. "V-Dem Codebook v10. Varieties of Democracy (V-Dem) Project.".
 URL: https://www.v-dem.net/en/data/data-version-10/
- Dukalskis, Alexander and Christopher Patane. 2019. "Justifying power: when autocracies talk about themselves and their opponents." *Contemporary Politics* 25(4):457–478.
- Dukalskis, Alexander and Johannes Gerschewski. 2017. "What autocracies say (and what citizens hear): Proposing four mechanisms of autocratic legitimation." *Contemporary Politics* 23(3):251–268.
- Egorov, Georgy, Sergei Guriev and Konstantin Sonin. 2009. "Why resource-poor dictators allow freer media: A theory and evidence from panel data." *American political science Review* 103(4):645–668.

- Esen, Berk and Sebnem Gumuscu. 2016. "Rising competitive authoritarianism in Turkey." *Third World Quarterly* 37(9):1581–1606.
- Gandhi, Jennifer. 2008. *Political institutions under dictatorship*. Cambridge University Press New York.
- Gandhi, Jennifer and Ellen Lust-Okar. 2009. "Elections under authoritarianism." *Annual review of political science* 12:403–422.
- Geddes, Barbara. 2005. Why parties and elections in authoritarian regimes? In Annual Meeting of the American Political Science Association. URL: http://www.daniellazar.com/wp-content/uploads/authoritarian-elections.doc
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2014. "Autocratic breakdown and regime transitions: A new data set." *Perspectives on Politics* 12(2):313–331.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2018. *How dictatorships work: Power, personalization, and collapse.* Cambridge University Press.
- Gehlbach, Scott and Konstantin Sonin. 2014. "Government control of the media." *Journal of Public Economics* 118:163–171.
- Gehlbach, Scott, Konstantin Sonin and Milan W Svolik. 2016. "Formal models of nondemocratic politics." *Annual Review of Political Science* 19:565–584.
- Gentzkow, Matthew, Edward L Glaeser and Claudia Goldin. 2006. The rise of the fourth estate. How newspapers became informative and why it mattered. In *Corruption and Reform: Lessons from America's Economic History*. University of Chicago Press pp. 187–230.
- Grundholm, Alexander Taaning. 2020. "Taking it personal? Investigating regime personalization as an autocratic survival strategy." *Democratization* 27(5):797–815.
- Güvenç, Duygu and Jérémie Langlois. 2019. "When Media Capture Backfires: Local Elections and Digital Media in Turkey." *Center for International Media Assistance* (July 22). **URL:** *https://bit.ly/3t9r4Py*
- Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How much should we trust estimates from multiplicative interaction models? Simple tools to improve empirical practice." *Political Analysis* 27(2):163–192.
- Hankla, Charles R and Carrie Manning. 2017. "How local elections can transform national politics: Evidence from Mozambique." *Publius: The Journal of Federalism* 47(1):49–76.
- Iyengar, Shanto, Mark D Peters and Donald R Kinder. 1982. "Experimental demonstrations of the "not-so-minimal" consequences of television news programs." *American political science review* 76(4):848–858.

- Kim, Nam Kyu and Alex M Kroeger. 2018. "Regime and leader instability under two forms of military rule." *Comparative Political Studies* 51(1):3–37.
- Knutsen, Carl Henrik, Håvard Mokleiv Nygård and Tore Wig. 2017. "Autocratic elections: Stabilizing tool or force for change?" *World Politics* 69(1):98–143.
- Kuntz, Philipp and Mark R Thompson. 2009. "More than just the final straw Stolen elections as revolutionary triggers." *Comparative Politics* 41(3):253–272.
- Levitsky, Steven and Lucan A Way. 2010. *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press.
- Little, Andrew. 2016. "Communication Technology and Protest." *The Journal of Politics* 78(1):152–166.
- Little, Andrew T. 2012. "Elections, fraud, and election monitoring in the shadow of revolution." *Quarterly Journal of Political Science* 7(3):249–283.
- Lorentzen, Peter. 2014. "China's strategic censorship." *American Journal of Political Science* 58(2):402–414.
- Lu, Fengming and Xiao Ma. 2019. "Is Any Publicity Good Publicity? Media Coverage, Party Institutions, and Authoritarian Power-Sharing." *Political Communication* 36(1):64–82.
- Lucardi, Adrián. 2019. "Strength in Expectation: Elections, Economic Performance, and Authoritarian Breakdown." *The Journal of Politics* 81(2):553–570.
- Magaloni, Beatriz. 2006. Voting for autocracy: Hegemonic party survival and its demise in Mexico. Vol. 296 Cambridge University Press.
- Malesky, Edmund and Paul Schuler. 2011. "The Single-Party Dictator's Dilemma: Information in Elections without Opposition." *Legislative Studies Quarterly* 36(4):491–530.
- Manion, Melanie. 2014. "Authoritarian parochialism: Local congressional representation in China." *The China Quarterly* 218:311–338.
- Manion, Melanie. 2017. ""Good types" in authoritarian elections: the selectoral connection in Chinese local congresses." *Comparative Political Studies* 50(3):362–394.
- McCombs, Maxwell E and Donald L Shaw. 1972. "The agenda-setting function of mass media." *Public opinion quarterly* 36(2):176–187.
- Miller, Michael K. 2015. "Elections, information, and policy responsiveness in autocratic regimes." *Comparative Political Studies* 48(6):691–727.
- Miller, Michael K. 2016. "Reanalysis: Are coups good for democracy?" *Research & Politics* 3(4):2053168016681908.

- Myerson, Roger. 2006. "Federalism and incentives for success in democracy." *Quarterly Journal of Political Science* 1:3–23.
- Myerson, Roger B. 2011. "Toward a theory of leadership and state building." *Proceedings* of the National Academy of Sciences 108(Supplement 4):21297–21301.
- Nelson, Thomas E, Rosalee A Clawson and Zoe M Oxley. 1997. "Media framing of a civil liberties conflict and its effect on tolerance." *American Political Science Review* 91(3):567–583.
- Olken, Benjamin A and Rohini Pande. 2012. "Corruption in developing countries." *Annu. Rev. Econ.* 4(1):479–509.
- Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review* 87(3):567–576.
- Pepinsky, Thomas. 2014. "The institutional turn in comparative authoritarianism." *British Journal of Political Science* 44(3):631–653.
- Petrova, Maria. 2011. "Newspapers and parties: How advertising revenues created an independent press." *American Political Science Review* 105(4):790–808.
- Price, Monroe E. 2002. *Media and sovereignty: The global information revolution and its challenge to state power*. MIT press.
- Przeworski, Adam, Michael E Alvarez, Jose Antonio Cheibub and Fernando Limongi. 2000. *Democracy and development: political institutions and well-being in the world, 1950-1990.* Vol. 3 Cambridge University Press.
- Rakner, Lise and Nicolas Van de Walle. 2009. "Democratization by elections? Opposition weakness in Africa." *Journal of democracy* 20(3):108–121.
- Reuter, Ora John. 2013. "Regional patrons and hegemonic party electoral performance in Russia." *Post-Soviet Affairs* 29(2):101–135.
- Reuter, Ora John and Graeme B Robertson. 2012. "Subnational appointments in authoritarian regimes: Evidence from Russian gubernatorial appointments." *The Journal of Politics* 74(4):1023–1037.
- Reuter, Ora John, Noah Buckley, Alexandra Shubenkova and Guzel Garifullina. 2016. "Local elections in authoritarian regimes: An elite-based theory with evidence from Russian mayoral elections." *Comparative political studies* 49(5):662–697.
- Ribeiro, José Augusto. 2015. Tancredo Neves: a noite do destino. Editora José Olympio.
- Ross, Michael L. 2001. "Does oil hinder democracy?" World politics 53(3):325-361.
- Ross, Michael L and Paasha Mahdavi. 2015. "Oil and Gas Data, 1932-2014.". URL: https://doi.org/10.7910/DVN/ZTPW0Y

- Rozenas, Arturas. 2016. "Office insecurity and electoral manipulation." *The Journal of Politics* 78(1):232–248.
- Sabatini, Christopher. 2003. "Latin America's lost illusions: Decentralization and political parties." *Journal of democracy* 14(2):138–150.
- Schedler, Andreas. 2002. "The menu of manipulation." *Journal of democracy* 13(2):36–50.
- Shadmehr, Mehdi and Dan Bernhardt. 2017. "When Can Citizen Communication Hinder Successful Revolution?" *Quarterly Journal of Political Science* 12(3):301–323.
- Shirk, David A. 2000. "Vicente Fox and the Rise of the PAN." *Journal of Democracy* 11(4):25–32.
- Simpser, Alberto. 2013. Why governments and parties manipulate elections: theory, practice, and implications. Cambridge University Press.
- Solis, Jonathan A. and Philip D. Waggoner. 2020. "Measuring Media Freedom: An Item Response Theory Analysis of Existing Indicators." *British Journal of Political Science* pp. 1–20.
- Svolik, Milan W. 2012. The politics of authoritarian rule. Cambridge University Press.
- Tucker, Joshua A. 2007. "Enough! Electoral fraud, collective action problems, and postcommunist colored revolutions." *Perspectives on Politics* 5(3):535–551.
- Whitten-Woodring, Jenifer and Douglas A Van Belle. 2017. "The correlates of media freedom: An introduction of the Global Media Freedom Dataset." *Political Science Research and Methods* 5(1):179–188.
- Wig, Tore and Espen Geelmuyden Rød. 2016. "Cues to coup plotters: Elections as coup triggers in dictatorships." *Journal of Conflict Resolution* 60(5):787–812.
- Wintrobe, Ronald. 1998. *The political economy of dictatorship*. Cambridge University Press.
- Xiang, Jiquan. 2000. "Self-government in Chinese villages: An evaluation." *Perspective* 1(4).
- Zhang, Xiaobo, Shenggen Fan, Linxiu Zhang and Jikun Huang. 2004. "Local governance and public goods provision in rural China." *Journal of public economics* 88(12):2857– 2871.

6 Appendix



6.1 Proportion of Institutionalized Subnational Elections in Autocracies 1949-2010

Figure 2: Proportion of Institutionalized Subnational Elections in Autocracies 1949-2010



6.2 The density plot of media freedom varying by subnational elections

Figure 3: The Density plot of media freedom varying by subnational elections

6.3 National Elections and Subnational Elections in Autocracies



Figure 4: National Elections and Subnational Elections in Autocracies (1949-2010)



6.4 Relationship between Media Freedom and Subnational Government Index

Figure 5: Relationship between Media Freedom and Subnational Government Index

6.5 Summary Statistics of Main Variables

	Variable	Moon	SD	Min	May
	Vallable	Mean	50	IVIIII	IVIAX
1	Regime Breakdown	0.04	0.20	0.00	1.00
2	Local Election	0.53	0.50	0.00	1.00
3	Regional Election	0.34	0.47	0.00	1.00
4	Local Quality	0.28	0.29	0.00	0.98
5	Regional Quality	0.18	0.26	0.00	0.99
6	Media Freedom	0.25	0.19	0.00	0.79
7	Personalism	0.42	0.28	0.00	1.00
8	National Election	0.77	0.42	0.00	1.00
9	ln(GDP)	7.98	0.95	5.59	11.65
10	Growth	0.02	0.10	-0.68	1.54
11	ln(oil)	11.21	10.51	0.00	26.81
12	Civil War	0.98	0.13	0.00	1.00
13	Interstate War	0.97	0.17	0.00	1.00

Table 3: Sumn	nary Statistics
---------------	-----------------

6.6 List of regimes included in the analysis (1949-2010)

Country	V	Country	Vara	Country	Veee	Country	V
Afabanistan	Year	Chile	Year	Country	Year	Country Demuklic of the Comm	Year
Afghanistan	1040 1073	China	1974-1969	Ivory Coast	2000-2000	Republic of the Congo	1909-1991
Afghanistan	1974-1978	Colombia	1950-1953	Kazakhstan	1992-2010	Republic of Vietnam	1956-1963
Afghanistan	1979-1992	Colombia	1954-1958	Kenva	1964-2002	Republic of Vietnam	1964-1975
Afghanistan	1997-2001	Costa Bica	1949-1949	Kuwait	1962-2010	Romania	1949-1989
Albania	1949-1991	Cuba	1953-1959	Kyrgyzstan	2006-2010	Russia	1994-2010
Algeria	1963-1992	Cuba	1960-2010	Kyrgyzstan	1992-2005	Russia	1949-1991
Algeria	1993-2010	Czech Republic	1949-1989	Laos	1960-1960	Rwanda	1963-1973
Angola	1976-2010	Democratic Republic of the Congo	1961-1997	Laos	1961-1962	Rwanda	1974-1994
Argentina	1952-1955	Democratic Republic of the Congo	1998-2010	Laos	1976-2010	Rwanda	1995-2010
Argentina	1956-1958	Dominican Republic	1949-1962	Lesotho	1971-1986	Saudi Arabia	1949-2010
Argentina	1959-1966	Dominican Republic	1964-1965	Lesotho	1987-1993	Senegal	1961-2000
Argentina	1967-1973	Dominican Republic	1967-1978	Liberia	1949-1980	Serbia	1992-2000
Argentina	1977-1983	Ecuador	1964-1966	Liberia	1981-1990	Serbia	1949-1990
Armenia	1995-1998	Ecuador	1971-1972	Liberia	1998-2003	Sierra Leone	1968-1968
Armenia	1999-2010	Ecuador	1973-1979	Libya	1952-1969	Sierra Leone	1969-1992
Azerbaijan	1992-1992	Egypt	1949-1952	Libya	1970-2010	Sierra Leone	1993-1996
Azerbaijan	1994-2010	Egypt	1953-2010	Madagascar	2010-2010	Sierra Leone	1998-1998
Bangladesh	2008-2008	El Salvador	1949-1982	Madagascar	1961-1972	Singapore	1966-2010
Bangladesh	1972-1975	El Salvador	1983-1994	Madagascar	1973-1975	Somalia	1970-1991
Bangladesh	1976-1982	Eritrea	1994-2010	Madagascar	1976-1993	South Africa	1949-1994
Bangladesh	1983-1990	Eswatini	1969-2010	Malawi	1965-1994	South Korea	1949-1960
Belarus	1992-1994	Ethiopia	1975-1991	Malaysia	1958-2010	South Korea	1962-1987
Belarus	1995-2010	Ethiopia	1949-1974	Mali	1961-1968	South Yemen	1968-1990
Benin	1961-1963	Ethiopia	1992-2010	Man	1969-1991	spain	1949-1976
Benin	1964-1965	Gabon	1961-2010	Mauritania	2006-2007	Sti Lanka	1979-1994
Denin	1966-1967	Georgia	1992-1992	Mauritania	2009-2010	Syria	1950-1951
Benin	1968-1969	Georgia Cormon Domogratic Ropublic	1993-2003	Mauritania	1961-1978	Syria	1952-1954
Benin	1970-1970	Chana	1950-1990	Mauritania	1979-2003	Suria	1956-1956
Bolivia	1949-1951	Ghana	1967-1969	Mongolia	1949-1993	Svria	1964-2010
Bolivia	1952-1952	Ghana	1973-1979	Morocco	1957-2010	Taiwan	1950-2000
Bolivia	1953-1964	Ghana	1982-2000	Mozambique	1976-2010	Taiikistan	1992-2010
Bolivia	1965-1969	Greece	1968-1974	Namibia	1991-2010	Tanzania	1965-2010
Bolivia	1970-1971	Guatemala	1955-1958	Nepal	2003-2006	Thailand	2007-2007
Bolivia	1972-1979	Guatemala	1959-1963	Nepal	1949-1951	Thailand	1949-1957
Bolivia	1981-1982	Guatemala	1964-1966	Nepal	1952-1991	Thailand	1958-1973
Botswana	1967-2010	Guatemala	1967-1970	Nicaragua	1949-1979	Thailand	1977-1988
Brazil	1965-1985	Guatemala	1971-1985	Nicaragua	1980-1990	Thailand	1992-1992
Bulgaria	1949-1990	Guatemala	1986-1995	Niger	1961-1974	The Gambia	1966-1994
Burkina Faso	1961-1966	Guinea	2009-2010	Niger	1975-1991	The Gambia	1995-2010
Burkina Faso	1967-1980	Guinea	1959-1984	Niger	1997-1999	Togo	1961-1963
Burkina Faso	1981-1982	Guinea	1985-2008	Nigeria	1967-1979	Togo	1964-2010
Burkina Faso	1983-1987	Guinea-Bissau	2003-2003	Nigeria	1984-1993	Tunisia	1957-2010
Burkina Faso	1988-2010	Guinea-Bissau	1975-1980	Nigeria	1994-1999	Turkey	1949-1950
Burma/Myanmar	1959-1960	Guinea-Bissau	1981-1999	North Korea	1949-2010	Turkey	1958-1960
Burma/Myanmar	1963-1988	Haiti	1951-1956	Oman	1949-2010	Turkey	1961-1961
Burma/Myanmar	1989-2010	Haiti	1958-1986	Pakistan	1949-1958	Turkey	1981-1983
Burundi	1963-1966	Haiti	1987-1988	Pakistan	1959-1971	Turkmenistan	1992-2010
Burundi	1967-1987	Haiti	1989-1990	Pakistan	1976-1977	Uganda	1967-1971
Burundi	1988-1993	Haiti	1992-1994	Pakistan	1978-1988	Uganda	1972-1979
Burundi Cambadia	1997-2003	Haiti	2000-2004	Pakistan	2000-2008	Uganda	1981-1985
Cambodia	1954-1970	Honduras	1949-1956	Panama	1950-1951	Uganda United Areb Emiretes	1987-2010
Cambodia	1971-1973	Honduras	1072 1001	Panama	1934-1933	United Arab Eliliates	1972-2010
Cambodia	1970-1979	Hungary	1973-1901	Panama	1903-1902	Uzbekistan	1974-1964
Cameroon	1961-1983	Indonesia	1950-1966	Paramay	1949-1954	Venezuela	2006-2010
Cameroon	1984-2010	Indonesia	1967-1999	Paraguay	1955-1993	Venezuela	1949-1958
Central African Republic	2004-2010	Iran	1949-1979	Peru	1949-1956	Yemen	1949-1962
Central African Republic	1961-1965	Iran	1980-2010	Peru	1963-1963	Yemen	1963-1967
Central African Republic	1966-1979	Iraq	1949-1958	Peru	1969-1980	Yemen	1968-1974
Central African Republic	1980-1981	Iraq	1959-1963	Peru	1993-2000	Yemen	1975-1978
Central African Republic	1982-1993	Iraq	1964-1968	Philippines	1973-1986	Yemen	1979-2010
Chad	1961-1975	Iraq	1969-1979	Poland	1949-1989	Zambia	1968-1991
Chad	1976-1979	Iraq	1980-2003	Portugal	1949-1974	Zambia	1997-2010
Chad	1983-1990	Ivory Coast	2001-2010	Republic of the Congo	1961-1963	Zimbabwe	1981-2010
Chad	1991-2010	Ivory Coast	1961-1999	Republic of the Congo	1964-1968		

6.7 Alternative Measure of Local Election and Regional Election

In this analysis, I modify *Regional Government Elected* and *Local Government Elected* variables in a way that excludes extreme window-dressing elections. Specifically, I use 10% quantile of the *Local Government Index* and *Regional Government Index* as a threshold and change country-year observations of local(regional) election that are previously coded as 1 to 0 if local(regional) quality index is is less than or equal to 10% quantile. Results are consistent (p = 0.07, p = 0.09 respectively).

		DV: Regime Breakdown
	Local	Regional
Local Election	-0.045	
	(0.027)	
Regional Election		-0.051
		(0.035)
Media Freedom	0.236**	0.276***
	(0.098)	(0.085)
Local Election * Media Freedm	0.175*	
	(0.105)	
Regional Election * Media Freedom		0.183*
C C		(0.100)
Regime-Fixed	Y	Y
Year-Fixed	Y	Y
Confounders	Y	Y
Poly(Duration,3)	Y	Y
Observations	3,611	2,999

Table 4: Linear Probability Model

Note:

*p<0.1; **p<0.05; ***p<0.01

SE clustered at the regime in parentheses.



Dependent Variable: All regime failure cases **6.8**

Note:

	DV: Regime Breakdown					
	Local	Regional	Loc Quality	Reg Quality		
Local Election	-0.046 (0.028)					
Regional Election		-0.051 (0.035)				
Local Quality			-0.214*** (0.071)			
Regional Quality				-0.157** (0.079)		
Media Freedom	0.235** (0.099)	0.276*** (0.085)	0.288*** (0.095)	0.284 ^{***} (0.087)		
Local Election * Media Freedm	0.177* (0.106)					
Regional Election * Media Freedom		0.183* (0.100)				
Local Quality * Media Freedom			0.399** (0.200)			
Regional Quality * Media Freedom				0.443** (0.193)		
Regime-Fixed	Y	Y	Y	Y		
Year-Fixed	Y	Y	Y	Y		
Confounders	Y	Y	Y	Y		
Poly(Duration,3)	Y	Y	Y	Y		
Observations	3,611	2,999	3,685	3,743		

Table 5: Linear Probability Model

*p<0.1; **p<0.05; ***p<0.01 SE clustered at the regime in parentheses.



Figure 6: Marginal Effect of Subnational Elections on Regime Breakdown

6.9 No interaction

		DV: Regi	me Breakdown	
	Local	Regional	Loc Quality	Reg Quality
Local Election	-0.004			
	(0.020)			
Regional Election		-0.004		
Regional Licenon		(0.026)		
		(0.020)		
Local Quality			-0.053	
			(0.047)	
Regional Quality				0.030
riegioriai Quarty				(0.050)
Media Freedom	0 347***	0 326***	0 300***	0 344***
Media Fieedoni	(0.072)	(0.076)	(0.076)	(0.073)
	(0.072)	(0.070)	(0.070)	(0.073)
Regime-Fixed	Y	Y	Y	Y
Year-Fixed	Y	Y	Y	Y
Confounders	Y	Y	Y	Y
Poly(Duration,3)	Y	Y	Y	Y
Observations	3,611	2,999	3,685	3,743

Table 6: Linear Probability Model

Note:

*p<0.1; **p<0.05; ***p<0.01 SE clustered at the regime in parentheses.

6.10 National election interaction included

		DV: Reg	ime Breakdown	1	
	Local	Regional	Loc Quality	Reg Quality	
Local Election	-0.043				
	(0.026)				
Regional Election		-0.072^{**}			
		(0.031)			
Local Quality			-0.213^{***}		
			(0.070)		
Regional Quality				-0.164^{*}	
				(0.084)	
Media Freedom	0.231^{*}	0.352***	0.274^{**}	0.272**	
	(0.125)	(0.132)	(0.118)	(0.109)	
National Election	0.004	0.022	0.005	0.005	
	(0.018)	(0.023)	(0.019)	(0.019)	
Local Election * Media Freedm	0.174^{*}				
	(0.101)				
Regional Election * Media Freedom		0.226^{**}			
		(0.094)			
Local Quality * Media Freedom			0.436**		
			(0.198)		
Regional Quality * Media Freedom				0.470^{**}	
				(0.192)	
National Election * Media Freedom	-0.006	-0.112	-0.017	-0.007	
	(0.075)	(0.098)	(0.077)	(0.074)	
Regime-Fixed	Y	Y	Y	Y	
Year-Fixed	Y	Y	Y	Y	
Confounders	Y	Y	Y	Y	
Poly(Duration,3)	Y	Y	Y	Y	
Observations	3,611	2,999	3,685	3,743	

Table 7: Linear Probability Model

Note:

 $p = \sqrt{p^{*} p^{-0.1; **} p^{-0.05; ***} p^{-0.01}}$ SE clustered at the regime in parentheses.



Figure 7: Marginal Effect of Subnational Elections on Regime Breakdown

6.11 Interaction with Human Rights Index

		DV: Regin	ne Breakdown	
	Local	Regional	Loc Quality	Reg Quality
Local Election	0.027 (0.021)			
Regional Election		0.029 (0.038)		
Local Quality			0.061 (0.050)	
Regional Quality				0.116* (0.064)
Human Rights	-0.046*** (0.014)	-0.032** (0.013)	-0.037*** (0.014)	-0.035*** (0.012)
Local Election * Human Rights	0.039 ^{**} (0.018)			
Regional Election * Human Rights		0.035 (0.021)		
Local Quality * Human Rights			0.040 (0.033)	
Regional Quality * Human Rights				0.054* (0.028)
Regime-Fixed	Y	Y	Y	Y
Year-Fixed	Y	Y	Y	Y
Confounders	Y	Y	Y	Y
Poly(Duration,3)	Y	Y	Y	Y
Observations	3,600	2,997	3,674	3,732

Table 8: Linear Probability Model

Note:

p<0.1; **p<0.05; ***p<0.01SE clustered at the regime in parentheses.

6.12 Interaction with V-Dem Liberal Democracy Index

		DV: Regi	ime Breakdown	l
	Local	Regional	Loc Quality	Reg Quality
Local Election	0.005 (0.028)			
Regional Election		-0.035 (0.032)		
Local Quality			-0.039 (0.065)	
Regional Quality				-0.057 (0.070)
Liberalization	0.456** (0.191)	0.365** (0.159)	0.409** (0.168)	0.349** (0.139)
Local Election * Liberalization	0.010 (0.177)			
Regional Election * Liberalization		0.243 (0.193)		
Local Quality * Liberalization			0.199 (0.347)	
Regional Quality * Liberalization				0.386 (0.254)
Regime-Fixed	Y	Y	Y	Y
Year-Fixed	Y	Y	Y	Y
Confounders	Y	Y	Y	Y
Poly(Duration,3)	Y	Y	Y	Y
Observations	3,591	2,979	3,665	3,723

Table 9: Linear Probability Model

Note:

p<0.1; p<0.05; p<0.05; p<0.01SE clustered at the regime in parentheses.

6.13 Dependent Variable: POLITY2

	DV: Polity2				
	Local	Regional	Loc Quality	Reg Quality	
Local Election	-1.019 (0.730)				
Regional Election		-1.592** (0.785)			
Local Quality			-1.754 (1.436)		
Regional Quality				-1.519 (1.586)	
Media Freedom	13.674*** (2.025)	14.177*** (2.088)	14.164*** (2.034)	14.690*** (1.996)	
Local Election * Media Freedom	4.057* (2.087)				
Regional Election * Media Freedom		5.710** (2.243)			
Local Quality * Media Freedom			7.180 ^{**} (3.517)		
Regional Quality * Media Freedom				9.348** (4.117)	
Regime-Fixed	Y	Y	Y	Y	
Year-Fixed	Y	Y	Y	Y	
Confounders	Y	Y	Y	Y	
Poly(Duration,3)	Y	Y	Y	Y	
Observations	3,585	2,975	3,659	3,717	

Table 10: Linear Regression Model

Note:

 $^{*}p<0.1; ^{**}p<0.05; ^{***}p<0.01$ SE clustered at the regime in parentheses.



Figure 8: Marginal Effect of Subnational Elections on Regime Breakdown

6.14 Analysis with observations with institutionalized national elections

	DV: Regime Breakdown					
	Local	Regional	Loc Quality	Reg Quality		
Local Election	-0.044 (0.032)					
Regional Election		-0.067 (0.042)				
Local Quality			-0.203** (0.087)			
Regional Quality				-0.112 (0.141)		
Media Freedom	0.185* (0.096)	0.205** (0.087)	0.237** (0.106)	0.239*** (0.092)		
Local Election * Media Freedom	0.181* (0.108)					
Regional Election * Media Freedom		0.221** (0.105)				
Local Quality * Media Freedom			0.416* (0.229)			
Regional Quality * Media Freedom				0.448* (0.266)		
Regime-Fixed	Y	Y	Y	Y		
Year-Fixed	Y	Y	Y	Y		
Confounders	Y	Y	Y	Y		
Poly(Duration,3)	Y	Y	Y	Y		
Observations	2,808	2,336	2,896	2,919		

Table 11: Linear Probability Model

Note:

 $^{*}p<0.1; ^{**}p<0.05; ^{***}p<0.01$ SE clustered at the regime in parentheses.



Figure 9: Marginal Effect of Subnational Elections on Regime Breakdown

6.15 Analysis with imputed control variables

I use Amelia II to impute missing values of control variables.

	DV: Regime Breakdown					
	Local	Regional	Loc Quality	Reg Quality		
Local Election	-0.034 (0.025)					
Regional Election		-0.054* (0.027)				
Local Quality			-0.203*** (0.066)			
Regional Quality				-0.162* (0.085)		
Media Freedom	0.240*** (0.091)	0.271*** (0.076)	0.262*** (0.087)	0.274*** (0.079)		
Local Election * Media Freedom	0.152 (0.099)					
Regional Election * Media Freedom		0.174* (0.093)				
Local Quality * Media Freedom			0.422** (0.189)			
Regional Quality * Media Freedom				0.430** (0.186)		
Regime-Fixed	Y	Y	Y	Y		
Year-Fixed	Y	Y	Y	Y		
Confounders	Y	Y	Y	Y		
Poly(Duration,3)	Y	Y	Y	Y		
Observations	4,150	3,418	4,216	4,288		

Table 12: Linear Probability Model

Note:

p < 0.1; **p < 0.05; ***p < 0.01SE clustered at the regime in parentheses.



Figure 10: Marginal Effect of Subnational Elections on Regime Breakdown

6.16 Country Fixed Effects

Table A11 replicates Table 1 and Table 2 with country fixed effects and regime type controls.

	DV: Regime Breakdown								
	Local	Regional	Loc Quality	Reg Quality	National Elec	Local	Regional	Loc Quality	Reg Quality
Local Election	-0.025 (0.023)					0.014 (0.028)			
Regional Election		-0.031 (0.026)					-0.026 (0.027)		
Local Quality			-0.111* (0.064)					0.016 (0.058)	
Regional Quality				-0.167** (0.076)					-0.112* (0.065)
Media Freedom	0.218*** (0.071)	0.285*** (0.065)	0.244*** (0.075)	0.246*** (0.062)	0.439*** (0.091)				
Liberalization						0.435** (0.182)	0.424*** (0.156)	0.492*** (0.149)	0.357*** (0.121)
National Election	-0.012 (0.013)	-0.010 (0.014)	-0.007 (0.013)	-0.007 (0.013)	0.012 (0.017)	-0.028* (0.014)	-0.022 (0.015)	-0.025* (0.014)	-0.019 (0.014)
Local Election * Media Freedom	0.152* (0.082)								
Regional Election * Media Freedom		0.149* (0.076)							
Local Quality * Media Freedom			0.320** (0.162)						
Regional Quality * Media Freedom				0.439*** (0.159)					
National Election * Media Freedom					-0.116 (0.076)				
Local Election * Liberalization						0.063 (0.178)			
Regional Election * Liberalization							0.288 (0.185)		
Local Quality * Liberalization								0.059 (0.304)	
Regional Quality * Liberalization									0.557** (0.235)
Country-Fixed	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year-Fixed	Y	Y	Y	Y	Y	Y	Y	Y	Y
Confounders	Y	Y	Y	Y	Y	Y	Y	Y	Y
Poly(Duration,3)	Y 2 6 1 1	Y 2 000	Y 2.695	Y 2 742	Y 2 762	Y 2 501	Y 2.070	Y 2.665	Y 2 722
	3,011	2,999	3,000	3,743	3,703	3,391	2,979	3,003	3,123

Table 13: Linear Probability Model

Note:

*p<0.1; **p<0.05; ***p<0.01 SE clustered at the country in parentheses.



Figure 11: Marginal Effect of Subnational Elections on Regime Breakdown

Part 2 Do Term Limit Evasions in Autocracies Increase Repression?

Do Term Limit Evasions in Autocracies Increase Repression?

Abstract

Will there be more repression after term limit evasions? The conventional wisdom is that autocrats engage in more repression after successfully circumventing term limits. In this paper, I argue that the answer is only a partial yes. First, the evasion is followed by an increase in covert repression (information manipulation) but not overt repression because the impending threat comes from diffuse and less explicitly identified masses. Moreover and somewhat paradoxically, this increase is more likely to occur after term limit extensions, the less severe form of term limit evasion, than after term limit removals, the more severe form of evasion. This is because the removal serves as a costly signal about regime capacity that dissuades the masses from protesting, substituting repression. Using time-series cross-sectional data on authoritarian countries with term limits and leveraging a difference-in-differences estimator with matched sets that address endogeneity issues carefully, I find empirical support for my theory.

1 Introduction

Countries with a presidential system often adopt term limits—constitutional restrictions on the maximum number of terms that the head of state, typically a president, may serve (McKie 2019). Many contemporary autocrats are also constrained by term limits because the clause is one of the rules that are inserted automatically in contemporary constitutions without much deliberation (Baturo 2014, 78). Not surprisingly, however, autocrats often evade term limits by reinterpreting, amending, or repealing the constitution. From 1960 to 2010, fifty percent (35 out of 69) of authoritarian countries with presidential term limits had experienced at least one circumvention,¹ and there are only two failed cases during this period.²

Once an autocrat successfully circumvents term limits, it is often assumed that more severe repression will follow. For example, when the parliament in Egypt approved constitutional amendments for presidential term limit extension in 2019, Amnesty International warned that the circumvention would further "the climate of repression that already exists in the country."³ In this vein, existing studies often consider, without careful investigation, term limit evasions a harbinger of regime personalization (Burkhardt 2021, Cassani 2020), which is associated with an increase in repression (Frantz et al. 2020). Considering that many autocracies have term limits and autocrats often succeed in circumventing them, investigating the implication of term limit evasions is important to understand contemporary autocracies. However, our understanding of their implications has remained incomplete because existing studies tend to focus on methods (e.g., Baturo 2014, Ginsburg, Melton and Elkins 2011, Versteeg et al. 2020) and determinants (e.g., Baturo 2014, Corrales 2016, McKie 2019, Negretto 2013, Posner and Young 2018), rather than consequences, of the evasion.

I argue that the current understanding between term limit evasions and repression misses two important points. First, it is unclear what kind of repression will increase. The literature on repression often categorizes it into multiple types and suggests that autocrats strategically choose a certain type depending on threats they encounter. Second, we lack the understanding of potential differences between term limit extensions and removals regarding post-evasion repression. Existing studies on presidentialism agree that term limit removals require more state capacity than term limit extensions (Maltz 2007, McKie 2019, Versteeg et al. 2020) and this difference may affect autocrats' decision to use more post-evasion repression.

In this paper, I consider different types of repression and term limit evasions. Repression is a tool to respond to or prevent threats from collective dissents that alter the status quo (Ritter and Conrad 2016). It includes many forms, such as overt repression with explicit violations of personal integrity and covert repression with less violent restriction

¹See the appendix. This pattern has also been prevalent in recent years, as seen in cases such as Evo Morales in Bolivia (2017), Abdel Fattah El-Sisi in Egypt (2019), and Vladimir Putin in Russia (2020).

²Zambia (2001) and Venezuela (2007). Most failed evasions occurred in democracies.

³Amnesty International, "Egypt: Parliament's approval of constitutional amendments demonstrates their complete disregard for human rights." April 16, 2019. https://bit.ly/3xXldi3

of empowerment rights, such as information manipulation (Escribà-Folch 2013, Frantz and Kendall-Taylor 2014, Guriev and Treisman 2019). The former targets already identified oppositions, while the latter targets broad opposition movements. Since the purpose and target of such repressive tactics vary, autocrats choose a proper type of repression based on impending threats.

My first research question is what type of repression is likely to follow term limit evasions. Term limits clearly stated in a constitution allow people to form a mutual expectation that an incumbent will step down after their terms are over, regardless of competitiveness and popularity. This expectation dissuades people from challenging a regime. However, a term limit evasion breaks this expectation and increases potential risks from oppositions mobilizing the masses. Autocrats then have an incentive to use repression to prevent the threat. Since this threat comes from the changed cost-benefits calculations of the diffuse and less explicitly identified masses, I first hypothesize that autocrats should use more covert repression, not overt repression, after term limit evasions. In terms of covert repression, I specifically focus on information manipulation, which is considered a dominant covert repression strategy in contemporary autocracies (Guriev and Treisman 2019, 2020a, b).

My second research question concerns how different types of term limit evasions lead to different levels of repression. There are broadly two types of evasions: extension and removal. Sometimes, autocrats extend several more terms by amending or reinterpreting the existing constitution but remain term limits per se. On the other hand, there are cases where autocrats remove the entire constitutional clause regarding term limits. I argue that term limit removal is more costly than term limit extension. A regime engaging in the former has to confront more challenges in and out of the regime. I argue that the ability to overcome the costliness of term limit removal signals potential opponents that the incumbent has enough state capacities to take risks, thereby dissuading the opposition from protesting the government. And this increased deterrence, substituting repression, offsets the increased risk after term limit evasions. Therefore, I hypothesize that the increase in covert repression after term limit evasions should appear only in the case of term limit extension, not removal. In other words, even though term limit evasions may lead to more repression, such an increase will paradoxically concentrate on the less severe form of term limit evasion (extension) than the more severe form (removal).

To test the hypotheses, I use time-series cross-sectional (TSCS) data from 1960 to 2010 on authoritarian countries with a presidency or semi-presidency where term limits exist when an autocrat enters the office. Estimating how the post-evasion period differs from the pre-evasion period is challenging because the timing of term limit evasions is not exogenous but highly endogenous to the incumbent's pre-treatment conditions, such as a prior trend of repression as well as confounders. To address this concern, I leverage a newly-developed difference-in-differences estimator with matched sets (Imai, Kim and Wang forthcoming). This identification strategy explicitly compares each treated unit with matched control groups that share the same history of term limit evasions and a similar trend of pre-treatment repression as well as covariates.

The results support my hypotheses. First, I find no statistically significant increase in overt repression after term limit evasions. In contrast, I find a significant increase in information manipulation, a dominant covert repression strategy. Moreover, the analysis considering different types of term limit evasions provides evidence that this significant increase in covert repression disappears when a term limit evasion is term limit removal. This is not attributed to a potential alternative explanation that a regime engaging in term limit removal has a high level of repression prior to the evasion so that there is no room for further increase. Lastly, additional empirical analysis with separate indices of information manipulation further suggests that media-related manipulations, such as censorship and media bias, significantly increase after term limit extensions while the harassment on journalists, which is close to overt repression, does not.

This paper advances the growing literature on autocratic regime personalization by illuminating the dynamic between personalization and repression. Currently, only Frantz et al. (2020) examine a broad pattern between personalization and overt repression. Using a term limit evasion that paves a way of permanency in office (Baturo and Elkink 2021) and becomes one of the common ways to personalize a regime as an example of personalization, I argue that contemporary autocrats do not always prefer to use observable overt repression after personalization but use more covert repression under a limited condition.

Furthermore, this paper provides the first empirical and generalizable evidence about the consequence of term limit evasions by focusing on authoritarian regimes where most term limit evasions occur (Maltz 2007, Reyntjens 2016, Tull and Simons 2017). Previous studies lack providing a generalized pattern because of their tendency to conflate regime types by focusing on regions, such as Africa (e.g. Reyntjens 2020, Tull and Simons 2017) and Latin America (e.g. Corrales 2016, Negretto 2013), or countries with presidentialism (e.g. Ginsburg, Melton and Elkins 2011, Versteeg et al. 2020).

2 Term Limit Evasions and Repression

2.1 Conventional Wisdom

In this paper, I investigate the consequence of autocrats' term limit evasions on repression, which is often considered one of the core aspects of autocracies (Gerschewski 2013). Conventional wisdom is that autocrats will engage in more repression after successfully circumventing term limits because term limit evasions in autocracies are often regarded as a harbinger of deepening personalistic power. For example, Cassani (2020) argues that term limit evasions in Sub-Saharan Africa "has become a recurring mode of autocratization, through which African aspiring over-stayers weaken executive constraints, taint political competition, and limit citizens' possibility to choose who governs." Similarly, Burkhardt (2021) considers term limit extension in Russia a harbinger of regime personalization. And the personalization of a regime is considered to entail more repression due to the lack of mechanisms cultivating regime supports (Frantz et al. 2020). Consider the following examples. When the parliament in Egypt approved constitutional amendments for presidential term limit extension in 2019, Amnesty International claimed that the circumvention would "strengthen impunity for human rights violations by members of the security forces, furthering the climate of repression that already exists in the country. ... parliamentarians have chosen to approve amendments that will facilitate the authorities' crackdown on freedom of expression, association and assembly, erode people's rights, and exacerbate the human rights crisis in the country.⁴ Similarly, when Hugo Chávez in Venezuela removed term limits via a referendum, an opposition elite claimed that "we've got tough days ahead of us, with more repression for opposition members, more persecutions and political prisoners."⁵

Although no existing study empirically examines this relationship, studies on the effect of term limits suggest that leaders after term limit evasions may engage in more repression. They build on a common argument that term-limited leaders are less likely to engage in repression. Maltz (2007) points out that when leaders have to step down due to term limits, they are less able to deploy typical methods of preventing regime alternation, such as repression. Similarly, Baturo (2014) projects that presidents with term limits are more constrained, and this gives them less room to employ repression. Especially, this reluctance to use repression is more prevalent when presidents are in their last term because they want to avoid unnecessary future dissent (Baturo 2014, Suzuki 2019). Therefore, these studies imply that if autocrats, especially those in their last terms, are released from existing term limits, they may gain another momentum to use repression, which used to be restricted.

In sum, the conventional wisdom is that there will be more repression after a term limit evasion. It considers term limit evasions as the initiation of personalization that results in negative changes. However, two important pieces are missing in the current understanding. First, it is unclear what kind of repression will increase, if any. Existing studies suggest that repression has multiple types, and autocrats strategically choose one or the other depending on impending threats they face. Second, less considered is potential heterogeneity between term limit extensions and removals. Scholars on presidentialism commonly argue that term limit removals require more state capacity than term limit extensions (Maltz 2007, McKie 2019, Versteeg et al. 2020). This difference may then affect autocrats' decision to use more post-evasion repression. In this paper, I argue that a particular type of repression, covert repression, increases after a particular type of term limit extensions. This argument somewhat paradoxically suggests that the increase in repression concentrates on cases of the less severe form of term limit evasions.

⁴Amnesty International, "Egypt: Parliament's approval of constitutional amendments demonstrates their complete disregard for human rights." (April 16, 2019). https://bit.ly/3xXldi3

⁵AFP, "Chavez win sparks opposition warnings." (February 17, 2009). Accessed via LexisNexis.

A constitution is often considered to generate a mutual expectation about how to cooperate and coordinate in particular moments (Carey 2000, Hardin 1989). Albertus and Menaldo (2012) further argues that even constitutions in authoritarian regimes incorporate the distribution of power among elites and serve as a commitment device that promotes trust in the inner circles based on the mutual belief that regime supporters will punish noncompliance. Among various constitutional arrangements, Svolik (2012, 198) points out that term limits draw a line in the sand and make a leader's compliance easily and publicly observable. Unlike other constitutional constraints, which may entail an array of interpretations, term limits are relatively simple and unambiguous. Versteeg et al. (2020, 10) emphasize this point, saying that "anyone who can count can establish that an incumbent's time is up, by simply comparing the number of years in each term and the number of terms allowed to the number of years and terms the current president has actually served." For this reason, term limits are often called bright-line constitutional rules (Dixon and Landau 2019, Ginsburg, Melton and Elkins 2011, Versteeg et al. 2020).

Building on this literature, I assume that term limits, as one of the "brightest" constitutional arrangements, induce other actors to form a mutual expectation that the incumbent will comply with this commitment and step down after their terms are over, regardless of competitiveness and popularity. This expectation dissuades the masses from participating in collective actions against a leader, rendering oppositions⁶ difficult to mobilize them. An anti-government movement occurs when the benefits of participating in protests outweigh the costs and the likelihood of success is relatively high (Kuran 1991, Tucker 2007). The expectation that a leader will leave the office when their term is over regardless of their popularity increases the benefits of acquiescence or decreases those participating in protests. Moreover, oppositions in competitive authoritarian regimes (Levitsky and Way 2010) have fewer incentives to mobilize the masses in the first place because the mandatory withdrawal of the incumbent generates uncertainty and elite infighting. Oppositions can benefit from this uncertainty, which sometimes results in the defeat of the chosen successors of a ruling clique (Baturo 2014, 212). Thus, it is beneficial for the masses and oppositions to acquiesce, especially when the incumbent is at their last term.

In this scenario, the incumbent's circumvention of term limits breaks the mutual expectation that the incumbent will be automatically removed from the office. In other words, there is no committed institution that limits the incumbent's terms in the post-evasion period. Even if there is a remaining de-jure term limits after the extension of term limits, I assume that it is less likely to be considered as de-facto term limits because audiences have already observed their breakdown and a "president for life" becomes a real danger (McKie and Carlson 2022).⁷ Citizens then no longer believe acquiescence as

⁶By oppositions, I mean "any elites who are not included in the ruling coalition (for whatever reason)"(Grundholm 2020). Unlike regime insiders, such mobilizing the masses is the only viable option for oppositions to challenge a regime due to the lack of access to the state apparatus.

⁷Moreover, most term limit extensions in autocracies do not confine to one term extension. For exam-

a viable option, becoming more willing to accept the cost of participating in collective actions against the incumbent, all else being equal. It means that citizens have a lower threshold about the acceptable incompetence of the incumbent. As a result, oppositions become easier to mobilize the masses against the incumbent in the post-evasion period.

Autocrats have incentives to use repression to prevent such challenges. However, not all types of repression are optimal. Repression is often categorized into two types: overt repression and covert repression (Escribà-Folch 2013, Frantz and Kendall-Taylor 2014, Guriev and Treisman 2019, 2020*b*, Levitsky and Way 2010). Overt repression entails explicit violations of personal integrity, such as torture and political imprisonment. It is to target and remove already identified oppositions, thereby eliminating the source of threats (Escribà-Folch 2013, Frantz and Kendall-Taylor 2014). Because of this nature, the violation is highly visible, which results in a high level of legitimacy costs and potential backfires from the masses.

In contrast, covert repression includes less violent restriction of individual empowerment rights, such as suppressing freedom of expression. Instead of targeting specific opposition groups, this repression aims to alleviate threats from broad opposition movements that are diffuse or difficult to identify (Frantz and Kendall-Taylor 2014). Since it relies on less explicit and terrorizing methods, it entails less legitimacy cost than overt repression.⁸ However, it is less effective once the collective action problem is solved and opposition groups are formed (Escribà-Folch 2013). In this paper, I specifically focus on information manipulation, which has been considered a dominant repression strategy among other covert repressions in contemporary autocracies (Guriev and Treisman 2019, 2020*a*,*b*).

Autocrats have incentives to choose the type of repression based on the type of impending threats (Frantz and Kendall-Taylor 2014). In the case of term limit evasions, using covert repression is beneficial to autocrats because the increased probability of collective actions is primarily due to changed cost-benefits calculations of the masses who are diffuse and less explicitly identified. In other words, threats are not likely to increase from already identified and significant oppositions. Thus, autocrats have few incentives to use more overt repression after the evasion. This is the first point that deviates from the conventional wisdom that does not consider the types of repression. I expect that autocrats may use more repression, but only covert repression after the evasion.

Hypothesis 1: There will be an increase in covert repression (Information Manipulation) after a term limit evasion. In contrast, overt repression will not increase after a term limit evasion.

ple, from 1960 to 2010, only 2 out of 29 extensions were the one term extension.

⁸It does not mean that covert repression is cost-free. It is always best for an autocrat not to use repression regardless of its type.

2.3 Type of Evasions, Signaling, and Repression

The previous section discusses how term limit evasions break a mutual expectation about autocrats' compliance. This broken commitment increases the likelihood of collective dissents, which incentivizes an autocrat to engage with covert repression to prevent them. However, autocrats make strategic decisions to cope with threats (Moore 2000), and it is always best for autocrats not to use repression if not necessary (Rivera 2017). In this section, I further consider the type of term limit evasions. I contend that autocrats may not need more covert repression when they remove term limits because the removal is a more costly action that signals a regime capacity for deterrence, substituting repression.

Although the literature on presidential term limits largely does not pay close attention to the difference between term limit extension and removal, scholars agree that term limit removal requires more state capacity. For example, Maltz (2007) argues that countries with greater state capacity are more likely to engage in term limit removals. He finds that all but one country eliminating term limits were presidential regime, rather than a semi-presidential regime, between 1992 and 2006, which leads him to posit that "presidents in fully presidential regimes—where the chief executive's office exists in its most potent form—have both a stronger motive and a greater capacity to topple term limits" (129).

McKie (2019) argues that term limit removal is riskier than extension so that it can occur only when a regime has enough competitiveness. He finds that in electoral democracies, prior trends of interparty electoral competition decide whether the incumbent chooses abolition, extension, or no contravention of presidential term limits. That is, the more previous legislative elections become noncompetitive, the more likely a president attempts to abolish term limits. In line with these arguments, Versteeg et al. (2020) posit that "particularly powerful" presidents opt for the removal of term limits and "when a president has the political clout to remove term limits entirely, he will likely do so" (20). Despite the difference in contexts, this strand of research discussing the types of evasion commonly posits that term limit removal requires more state capacity to take a risk. I apply this argument in authoritarian contexts and argue that term limit removal is also more costly than term limit extension in autocracies.

First, a regime risks more challenges from ruling elites. Svolik (2012, 198) argues that term limits encourage some ruling elites to "invest their career in their generation of leaders rather than the current political leadership." However, when they notice the incumbent's attempt to evade term limits, elites who supported other factional members may resent the change. Thus, autocrats have to share their spoils or provide unfavorable policy concessions to alleviate internal tensions from ruling elites. For example, when Algerian dictator Abdelaziz Bouteflika attempted to scrap a two-term limit via legislatures, he provided considerable rents to legislative members by increasing their pay right before the vote. In addition, autocrats sometimes have to purge competent and loyal ruling elites because of their dissent, which eventually risks future governing. I argue that this cost is more severe when autocrats attempt abolition because it entirely cuts the ruling elites' future with other leaders they had supported.
Furthermore, an autocrat removing term limits incur more reputational costs. Term limits are often considered a crucial democratic norm that prevents a single leader from taking office indefinitely. In autocracies, such term limits window-dress a regime as democratizing, like other nominally democratic institutions do. The government's attempt to evade such term limits may then risk this democratic reputation (Maltz 2007, 139). And this damage to the democratic facade can lead to a domestic backlash. Official attempts to circumvent term limits can serve as a focal event that facilitates people's attention to the role of term limits (McKie and Carlson 2022). This increased attention can induce people not only to discuss the topic but also to mobilize against the government. For example, when Bolivia's president Evo Morales defied the result of the previous referendum and attempted to abolish term limits via the Constitutional Court in 2017, thousands of people marched through streets to condemn his attempt.⁹ In addition to the domestic response, this lack of democratic reputation may further cost a regime by losing supports from international communities (Murray, Alston and Wiebusch 2019). In this case, the complete removal of term limits is a more risky choice that entails reputational costs because it implies that the regime has no intention of compliance with democratic norms at all.

A more costly term limit removal than an extension is key to understanding a heterogenous increase in covert repression after term limit evasions. That is, term limit removal is a more costly signal to the masses that the incumbent has enough state capacities to take risks, which dissuades them from protesting the government. Since potential challengers always lack precise information about the incumbent's strength, they have an incentive to make a choice based on the informative signals (Boix and Svolik 2013). The signal from term limit removals reduces the perceived probability of successful dissents, thereby dissuading people who observe the broken commitment from mobilizing.

Therefore, a term limit evasion is not simply a broken commitment that incentivizes a ruler to increase covert repression. In addition, selecting term limit removal, rather than term limit extension, serves as a signal about regime capacity that substitutes the use of repression. If not necessary, it is always best for autocrats not to use repression (Rivera 2017). We should then observe no significant change in covert repression after term limit removals.¹⁰ In sum, the preceding discussion considering the types of term limit evasions leads me to further posit that autocrats will be more likely to use more covert repression, which is information manipulation, only after term limit extensions.

⁹Reuters. "Bolivians protest Morales' new bid to extend term limits." October 11, 2017. https://reut.rs/ 3FHafSD

¹⁰This argument is analogous to existing studies of signaling theories in authoritarian contexts. For example, the literature on authoritarian electoral manipulation posits that excessive and blatant manipulation of elections which result in nonsensical victories of the incumbent, is meant to signal that a regime has enough capabilities to afford resources to silent unwelcome voices from opposition elites or citizens (Magaloni 2006, Simpser 2013). Similarly, the authoritarian propaganda literature posits that ham-handed propaganda, which is costly but does not seem to persuade the public, serves as a signal that a regime has a strong capacity to maintain social control, thereby implicitly intimidating the masses (Huang 2015).

Hypothesis 2: There will be an increase in covert repression (Information Manipulation) only after a term limit extension.

3 Empirical Analysis

3.1 Operationalization of Key Variables

I use time-series cross-sectional (TSCS) data from 1960 to 2010 on authoritarian countries with a presidency or semi-presidency where term limits exist when a leader enters the office. More specifically, I first select country-years that are considered as authoritarian by Geddes, Wright and Frantz (2014, 2018).Observation units are included if an executive won control of the government through indirect, unfair, and/or uncompetitive selection procedures.

I then subset units based on the following criteria, modifying a dataset by Baturo (2014). First, a national leader of a country-year must be a unitary actor who is an effective national executive directly or indirectly elected by constituents. I exclude a country-year in which a term-limited leader who is called president is ceremonial. The data for effective leaders are extracted from the Archigos V.4.1. (Goemans, Gleditsch and Chiozza 2009). Second, all national leaders enter the office with term limits, and term limit evasion can happen only when a leader is constrained or understood to be constrained by term limits in the first place. This condition excludes a country-year in which national leaders are not constrained by term limits. Examples are prime ministers, kings in monarchies, general secretaries of one-party states, and presidents without term limits.

I consider two different types of repression as dependent variables: *Overt Repression* and *Covert Repression*—information manipulation. First, I use the inverse of human rights protection scores by Fariss (2014), following Frantz et al. (2020). Using a variety of existing indicators that measure physical integrity violations, such as torture and political imprisonment, Fariss (2014) provides unbiased estimates of overt repression. Second, I use an inverted score of *Freedom of Expression and Alternative Sources of Information index* from V-Dem (Coppedge et al. 2020) to proxy the degree of information control by an autocratic government. This index uses a Bayesian factor analysis that incorporates multiple indices that measure the degree to which the government respects media freedom, the freedom of ordinary people to discuss politics, and freedom of academic and cultural expression.

The independent variable, *Term Limit Evasion*, is coded as 1 in the first year in which the incumbent leader successfully¹¹ circumvents constitutional constraints by extending or repealing term limits and every subsequent year under the same leadership, and 0 otherwise.¹² Scholars have documented several modes of term limit evasion (see Baturo 2014, Ginsburg, Melton and Elkins 2011, Versteeg et al. 2020). First, some leaders in their last term amend or reinterpret the existing constitution to seek one more term. Second, some presidents reset their term and start a new countdown by promulgating a

¹¹It means that I exclude two failed term limit evasion attempts.

¹²The coding of a ruler is decided based on who remains in office on July 1st of that year.

new constitution and annulling the constraints of a previous constitution. Third, a few leaders eliminate term limits. Last, some scholars (e.g. Baturo 2014) also characterize a more subtle way of extending terms as term limit evasion, such as when a president technically steps down from office after the last term, but assumes a different office and strengthens that office while diminishing the power of the president. The quintessential example is Vladimir Putin of Russia in 2008. After completing his final term in 2008, he assumed the position of prime minister and put Dmitry Medvedev in office as a "placeholder president" (Versteeg et al. 2020). Following the previous studies (e.g. Baturo 2014, McKie 2019), I consider all aforementioned modes of evasion as treated cases. In the appendix, I provide a list of treated regimes in the analysis.

Important to note is that this coding makes the first year of term limit evasion, t, represents a pre- and post-evasion period adjacent to the date of term limit evasion. An identification and estimation strategy I elaborate in the next section allows me to specify the change of repression at t + F, where F > 0. Thus, I stress that examining coefficients at t + F is more accurate to analyze whether repression increases after term limit evasions.

A key moderator, *Term limit removal*, is coded as 1 if autocrats entirely abolish term limits and 0 if it is term limit extension. Not surprisingly, data included in the analysis show that only 12 out of 32 total evasion cases are term limit removals. It is analogous to existing studies of presidential countries that find that term limit extension is more prevalent than term limit removal.

3.2 Testing Hypothesis 1

The first theoretical expectation suggests that we ought to observe a significant increase in covert repression after a term limit evasion at t + F (F > 0), compared to that in a counterfactual at t + F where no term limit evasion occurs, all else being equal. In contrast, we should not observe any significant increase in overt repression after a term limit evasion, compared to that in a counterfactual at t + F where no term limit evasion occurs, all else being equal. However, this estimand cannot be simply identified because a term limit evasion is not randomly assigned but its timing of implementation may be endogenous to prior conditions, such as the prior level of repression and pre-treatment confounders. Unfortunately, a naive identification is not useful because it requires very strict assumption, such as strict or sequential exogeneity.

More specifically, scholars have commonly used linear two-way fixed effects regression to estimate generalized difference-in-differences (DID) when the treatment is dichotomous. However, recent scholarship questions whether the linear model properly generates a counterfactual within repeated observations (e.g. Goodman-Bacon 2021, Imai and Kim 2021, Imai, Kim and Wang forthcoming, Kropko and Kubinec 2020). For example, Imai, Kim and Wang (forthcoming, 7) contends that "In addition to the fact that the linearity assumption may be too stringent, it is also difficult to understand how these models use observed data to estimate relevant counterfactual quantities." Moreover, they point out that generalized DID can not be simply applied to linear twoway fixed effects regression when treatment conditions within a unit constantly change. Since a country in my data can go in and out of the treatment condition—that is, a country can experience multiple term limit evasions—a conventional linear model with twoway fixed effects may not properly estimated changes of repression.

To address endogeneity issues and provide a better identification with less stringent assumptions, I utilize the newly-developed DID estimator with matched sets (Imai, Kim and Wang forthcoming). This strategy explicitly matches and compares each treated unit with matched control groups that share the same history of term limit evasions and a similar trend of pre-treatment level of repression as well as covariates.¹³ Matching, in general, improves the validity of causal inference by comparing treated and control observations that share similar characteristics (Ho et al. 2007). In line with this concept, Imai, Kim and Wang (forthcoming) proposes a matching method that incorporates the characteristics of TSCS data in which the timing of receiving treatment varies across units.

The primary goal of this empirical analysis is to identify the following estimand:

Potential outcome at t+F
when the evasion occurs at t and remains until t+F
with no evasion at t-1, any history from t-2 to t-L

$$\delta_{t+F} = \mathbb{E}[\overbrace{Y_{i,t+F}(\{X_{i,t+l}\}_{l=0}^{F} = \mathbf{1}_{F+1}, X_{i,t-1} = 0, \{X_{i,t-l}\}_{l=2}^{L})}_{Potential outcome at t+F}} \underbrace{|\{X_{i,t+l}\}_{l=0}^{F} = \mathbf{1}_{F+1}, X_{i,t-1} = 0, \{X_{i,t-l}\}_{l=2}^{L})}_{of treated group}} \underbrace{|\{X_{i,t+l}\}_{l=0}^{F} = \mathbf{1}_{F+1}, X_{i,t-1} = 0, \{X_{i,t-l}\}_{l=2}^{L})}_{of treated group}}$$

where δ_{t+F} is average treatment effect for the treated. Each treated group is a countryyear experiencing term limit evasion at *t* and remaining under the treatment condition until t + F (i.e., $X_{i,t-1} = 0, \{X_{i,t+l}\}_{l=0}^{F} = \mathbf{1}_{F+1}$), while sharing the same treatment history with a counterfactual until t - L (i.e., $\{X_{i,t-l}\}_{l=2}^{L}$). The purpose of this empirical process is to examine if the estimate of δ_{t+F} is significantly greater than 0 only when repression is covert.

For the identification, I use the following DID estimator:

$$\hat{\delta}_{t+F} = f\left(\underbrace{(Y_{i,t+F} - Y_{i,t-1})}_{\text{Outcome difference of a treated unit}} - \underbrace{W(Y_{i',t+F} - Y_{i',t-1})}_{\text{Weighted average of outcome differences within a set of controls sharing similar characteristics}}\right)$$

where W(.) refers to an weighted average of outcome differences within a set of control groups that are assumed to share similar characteristics with a treated unit and f(.) denotes an weighted average of samples that are included only if a country-year (i, t) changes a treatment status from 'no evasion' at t - 1 to 'yes evasion' at t and at least one control set exists.

¹³I use the open-source statistical software, PanelMatch: https://github.com/insongkim/PanelMatch

The novelty of this estimator comes into play when a matched control group for a each treated unit (i.e., i') is defined. First, each treated unit with a treatment history (i.e., $X_{i,t-1} = 0$ and $\{X_{i,t-l}\}_{l=2}^{L}$) is "matched" with a group of control units—called a matched set—sharing the same history of treatment at the same time period up to t - L.¹⁴ Although *L* can be selected among any non-negative integer, Imai, Kim and Wang (forthcoming, 11) suggest that a relatively large *L* can "increase the credibility of limited carryover effect and the parallel trend assumptions." As such, I choose L = 3 to guarantee enough credibility as well as maximize the number of observations included in the estimation.

After the initial matching, the matched sets are further refined by matching or weighting. This process is based on outcome histories, which is the prior trend of repression, and the history of potential confounders. In the analysis, I use propensity score weighting refinement, which provides the best mean covariate balance.¹⁵ For the specification of refinement, I include three years of lag for pre-treatment covariates and outcomes, in accordance with *L*.

Regarding confounders, I use various observable indicators that may endogenous to term limit evasions and repression. First, I use the Polity score to measure the degree to which the incumbent is free from other domestic political elites, especially ruling elites. As Gleditsch and Ward (1997) argues, the Polity score reflects "decisional constraints on the chief executive." Thus, it is plausible that as the score gets lower, autocrats become freer from constraints, thereby more likely to engaging in the breakdown of institutional rules.¹⁶

Second, I use logged GDP per capita and logged GDP growth as a proxy for the degree to which an autocrat is less influenced by domestic oppositions. I assume that the incumbent with high popularity is less likely to be constrained. Unfortunately, as McKie (2019) points out, no existing data provides reliable cross-country information on presidential approval ratings. Thus, I use economic performance as a proxy based on an argument that economic performance is correlated with people's support of dictators (Guriev and Treisman 2020*a*). Third, the confounders include logged foreign aid a country receives to proxy regime's international reliance. I assume that autocrats from countries with less economic reliance on other countries have more discretion over domestic policy decisions, such as term limit evasions. The included data are from World Bank.

Fourth, natural resources are included in covariates. The resource curse literature has posited that abundant natural resources allow autocrats to rely less on institutionalized systems to extract more resources, contributing to the regime consolidation with respect to ruling elites (Fails 2019). Similarly, natural resources incentivize rulers to depend less on international actors for improving the economy. To control for this confounder, I use data for a country's value of oil and gas, collected by Ross and Mahdavi

¹⁴It means that unmatched data are excluded from the entire analysis.

¹⁵In the appendix, I run analyses without refinement and with alternative refinement methods. Results are consistent.

¹⁶I do not use V-Dem's democracy indices because their components include the freedom of expression, which is one of the dependent variable.

(2015), as a proxy of natural resources. Last, I include a binary indicator of whether a country-year sees any domestic or international armed conflict to proxy regime stability. The data for armed conflicts are taken from UCDP/PRIO Armed Conflict Dataset, version 19.1 (Gleditsch et al. 2002, Pettersson, Högbladh and Öberg 2019). In the appendix, I provide a descriptive statistics of variables included in the analysis.

Figure 12 shows how the refinement of matched sets improves the covariate balance between treatment units and their matched sets. Each scatter plot compares the absolute value of standardized mean difference before and after the refinement. The mean difference is standardized by "the standard deviation of each covariate across all treated observations in the data so that the mean difference is measured in terms of standard deviation units" (Imai, Kim and Wang forthcoming, 16). Each point below the 45-degree line implies that the standardized mean balance of a certain covariate is improved after the refinement. The plots suggest that the refinement improves the balance. Especially, the refinement dramatically reduces the imbalance of Polity. It means that when the estimator compares term limit evasions and cases without evasions, the two groups share similar prior trends of observable covariates as well as repression. When I find significant changes of covert or overt repression after the evasion, this improved balance effectively restricts the possibility that this result is simply attributed to the prior trend of repression or other covariates.



Figure 12: Improved Covariate Balance after the Propensity Weighting Refinement

Note: Each scatter plot compares the absolute value of standardized mean difference for each covariate before (horizontal axis) and after (vertical axis) the propensity score weighting of matched sets.

The identification strategy assumes that treated units and refined matched sets have a parallel trend in the post-treatment period, conditioning on the history of the treatment, outcomes, and confounders. Although this identification assumption cannot be directly tested, examining whether there is a parallel trend of outcomes in pre-treatment periods can increase the credibility of this assumption. Figure 13 illustrates standardized mean differences of the lagged overt repression and information control at each pre-treatment period. Specifically, gray lines show the mean difference before refinement and black lines present the mean difference after refinements. As can be observed, the black lines are almost flat, which implies that holding a parallel trend assumption is quite convincing. Given this assumption holds, the potential outcome without a term limit evasion is identified using the weighted average of the control units in the refined matched set. Subsequently, the DID estimates for each treated observation are computed and averaged across all treated observations. In addition, I use a 1000-block-bootstrap to compute conventional standard errors.



Figure 13: Standardized Mean Difference of Repression

Note: The plots represent the standardized mean difference over the pre-treatment time period. Specifically, gray lines show the mean difference before refinement and black lines present the mean difference after refinements.

Therefore, the DID estimator with matched sets allows for calculating how the level of repression changes at t + F as compared to control groups sharing the same histories of term limit evasions, a parallel trend of repression, and similar trends of observable pre-treatment confounders. Compared to the linear model with a stringent linearity assumption, this model is nonparametric with less model dependence. Moreover, since this method estimates the quantity of interest within matched sets, it is appropriate for my unbalanced TSCS dataset.

3.3 Result

Figure 14 presents the weighted average of DID estimates for varying F.¹⁷ More specifically, the left panel report estimated changes of overt repression and the right panel reports those of covert repression. Since two dependent variables have different ranges of measurement, I standardize them for easier interpretations. Note that I limit the maximum of F to 2 because higher F substantially reduces the number of treated groups and matched sets, which exacerbates the inefficiency of estimation.

¹⁷In the appendix, I report a table of results.



Figure 14: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.

The findings support Hypothesis 1. First, there is no statistically significant increase in overt repression after term limit evasions. Second, there is statistically significant increase in information manipulation after term limit evasions. Specifically, on average, information manipulation increases by 0.13 standard deviations at t + 2. Given that the average level of information manipulation tends to be already high in autocracies, this increase is substantially meaningful. Moreover, this increase is not attributed to a prior pattern of information control or other confounders considering the identification and estimation method I employ.

3.4 Testing Hypothesis 2

Hypothesis 2 further considers the type of term limit evasions and points that this significant increase in covert repression only appears after term limit extension, not term limit removal. To further test this hypothesis, I use the same DID estimator with matched sets with a moderator. More specifically, I divide treated country-years into two groups: one group treated by extension of term limits and the other treated by removal of term limits. After dividing a treated group into two, I compute separate estimates to examine if there is different degree of changes in information control after the evasion.¹⁸

The results, reported in Figure 15, support my hypothesis. First, there is no statistically significant increase in overt repression after any type of term limit evasions. Although overt repression seem to weakly significantly increase at t and t+1, its increasing pattern disappears at t + 2. Second, there is statistically significant increase in information manipulation only after term limit extensions. Specifically, on average, information manipulation increases by 0.19 standard deviations at t + 2.

¹⁸I leverage 'Moderator' in *PanelEstimate* Function.



Figure 15: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.

One may argue that the reason we can observe the significant increase in covert repression only after term limit extension is that a regime engaging in term limit removal has a high level of repression prior to the evasion. To examine the balance of pre-treatment repressions between two treatment groups, I report the density of the mean difference of pre-treatment repressions from t-3 to t-1 in Figure 16. As seen in the figures, there is no significant difference in the prior level of overt repression and information manipulation between the removal and extension groups, which debunks this alternative claim.



Figure 16: Balance of Pre-treatment Outcomes between Two Treatment Groups

Note: The figures report the density of the mean difference of pre-treatment repressions from t-3 to t-1. "ns" means that there is no significant difference at a 95% confidence level.

3.5 Separate Indices of Information Manipulation

To further our understandings of information manipulation after term limit extensions, I run separate analyses, using individual indices of the information manipulation index. V-Dem's *Freedom of Expression and Alternative Sources of Information* index incorporates multiple indices that measure diverse aspects of the information environment. More specifically, each indicator measures whether the government directly or indirectly attempt to censor the print or broadcast media (*Media Censorship*), whether there is media bias against oppositions (*Media bias*), whether there is self-censorship among journalists (*Media Self-Censorship*), whether the major print and broadcast outlets routinely criticize the government (*Media Critical*), whether the major print and broadcast media represent various political perspectives (*Media Perspectives*), whether individual journalists are harassed (*Journalists Harassment*), whether men(*women*) are able to openly discuss political issues (*Free Discussion for Men(Women*)), and whether there is academic freedom and freedom of cultural expression related to political issues (*Free Expression Academic & Culture*). For a more straightforward interpretation, I inverse and standardize all indicators to make positive coefficients represent the government's manipulation.

Figure 17 reports the estimated changes of each information manipulation-related indicator after term limit extensions. The findings show that media-related manipulations, such as media censorship and media bias, significantly increase after term limit extensions. It makes sense intuitively, given that most mass information control is conducted by censoring messages from the media. Furthermore, the results show that open political discussion becomes significantly restricted after term limit evasions, regardless of gender. Interestingly, there is no significant increase in harassment on journalists. Compared to other indices, this is more related to overt repression, which I expect to have null changes after any types of term limit evasions.



Figure 17: Estimated Changes of Information Manipulation after Term Limit Extensions

Note: The weighted average of DID estimates for varying F is reported. For a more straightforward interpretation, dependent variables are inversed and standardized. Thus, positive coefficients represent more information manipulation. Error bars indicate 95% bootstrap confidence intervals.

4 Conclusion

Despite widespread term limit evasions in authoritarian contexts, our understanding of their consequences remains incomplete. In this paper, I examine the consequence of term limit evasions on repression in autocracies. I argue that autocrats increase repression after the evasion but covert repression (Information Manipulation) only because the impending threat comes from diffuse and less explicitly identified masses. Moreover, I further contend that this increase in repression does not appear when the evasion is term limit removal because it serves as a costly signal that dissuades the opposition from protesting. Using a careful identification strategy with the DID estimator with matched sets (Imai, Kim and Wang forthcoming), I find that a significant increase in repression does not increase after term limit evasion. Moreover, I find a somewhat paradoxical finding: The increase in covert repression is more likely to occur in cases of term limit extension, the less severe form of term limit evasion, than in term limit removal.

This paper illuminates the dynamic between personalization and repression. Despite a growing body of the literature on personalization (e.g. Baturo and Elkink 2021, Geddes, Wright and Frantz 2018, Grundholm 2020), only Frantz et al. (2020) examine a broad pattern between personalization and overt repression. Using a term limit evasion that paves a way of permanency in office (Baturo and Elkink 2021) as an example of personalization, I argue that contemporary autocrats do not always prefer to use observable overt repression after personalization but use more covert repression under a limited condition.

While this study finds no surge of repression after term limit removals, the most severe form of the evasion, it does not necessarily mean that there is no more human rights violation subsequently. That is, term limit removals may still lead to more unobserved suppression of individual empowerment rights by signaling regime capacity and inducing more self-censorship of behaviors of the masses. This hardly observable self-censored behavior can be considered an indirect human rights violation, prevalent in contemporary autocracies.

References

- Albertus, Michael and Victor Menaldo. 2012. "Dictators as founding fathers? The role of constitutions under autocracy." *Economics & Politics* 24(3):279–306.
- Baturo, Alexander. 2014. *Democracy, dictatorship, and term limits*. University of Michigan Press.
- Baturo, Alexander and Jos Elkink. 2021. *The New Kremlinology: Understanding Regime Personalization in Russia*. Oxford University Press.
- Boix, Carles and Milan W Svolik. 2013. "The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships." *The Journal of Politics* 75(2):300–316.
- Burkhardt, Fabian. 2021. "Institutionalizing Personalism: The Russian Presidency after Constitutional Changes." *Russian Politics* 6(1):50–70.
- Carey, John M. 2000. "Parchment, equilibria, and institutions." *Comparative Political Studies* 33(6-7):735–761.
- Cassani, Andrea. 2020. "Autocratisation by Term Limits Manipulation in Sub-Saharan Africa." *Africa Spectrum* 55(3):228–250.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsent, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard et al. 2020. "V-Dem Codebook v10. Varieties of Democracy (V-Dem) Project.". URL: https://www.v-dem.net/en/data/data-version-10/
- Corrales, Javier. 2016. "Can anyone stop the president? Power asymmetries and term limits in Latin America, 1984–2016." *Latin American Politics and Society* 58(2):3–25.
- Dixon, Rosalind and David Landau. 2019. "Constitutional End Games: Making Presidential Term Limits Stick." *Hastings Law Journal* 71:359.
- Escribà-Folch, Abel. 2013. "Repression, political threats, and survival under autocracy." *International Political Science Review* 34(5):543–560.
- Fails, Matthew D. 2019. "Oil income and the personalization of autocratic politics." *Political Science Research and Methods*. DOI: https://doi.org/10.1017/psrm.2019.14.
- Fariss, Christopher J. 2014. "Respect for human rights has improved over time: Modeling the changing standard of accountability." *American Political Science Review* 108(2):297–318.
- Frantz, Erica and Andrea Kendall-Taylor. 2014. "A dictator's toolkit: Understanding how co-optation affects repression in autocracies." *Journal of Peace Research* 51(3):332–346.

- Frantz, Erica, Andrea Kendall-Taylor, Joseph Wright and Xu Xu. 2020. "Personalization of Power and Repression in Dictatorships." *The Journal of Politics* 82(1):372–377.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2014. "Autocratic breakdown and regime transitions: A new data set." *Perspectives on Politics* 12(2):313–331.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2018. *How dictatorships work: Power, personalization, and collapse.* Cambridge University Press.
- Gerschewski, Johannes. 2013. "The three pillars of stability: legitimation, repression, and co-optation in autocratic regimes." *Democratization* 20(1):13–38.
- Ginsburg, Tom, James Melton and Zachary Elkins. 2011. "On the evasion of executive term limits." *William and Mary Law Review* 52:1807–1872.
- Gleditsch, Kristian S and Michael D Ward. 1997. "Double take: A reexamination of democracy and autocracy in modern polities." *Journal of Conflict Resolution* 41(3):361–383.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Håvard Strand. 2002. "Armed conflict 1946-2001: A new dataset." *Journal of Peace Research* 39(5):615–637.
- Goemans, Henk E, Kristian Skrede Gleditsch and Giacomo Chiozza. 2009. "Introducing Archigos: A dataset of political leaders." *Journal of Peace Research* 46(2):269–283.
- Goodman-Bacon, Andrew. 2021. "Difference-in-differences with variation in treatment timing." *Journal of Econometrics*.
- Grundholm, Alexander Taaning. 2020. "Taking it personal? Investigating regime personalization as an autocratic survival strategy." *Democratization* 27(5):797–815.
- Guriev, Sergei and Daniel Treisman. 2019. "Informational autocrats." *Journal of Economic Perspectives* 33(4):100–127.
- Guriev, Sergei and Daniel Treisman. 2020*a*. "The popularity of authoritarian leaders: A cross-national investigation." *World Politics* 72(4):601–638.
- Guriev, Sergei and Daniel Treisman. 2020b. "A theory of informational autocracy." *Journal of public economics* 186:104158.
- Hardin, Russell. 1989. Why a Constitution. In *The Federalist Papers and the New Institutionalism*, ed. Bernard Grofman and Donald Wittman. Algora Publishing.
- Ho, Daniel E, Kosuke Imai, Gary King and Elizabeth A Stuart. 2007. "Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference." *Political Analysis* 15(3):199–236.

Huang, Haifeng. 2015. "Propaganda as signaling." Comparative Politics 47(4):419–444.

- Imai, Kosuke and In Song Kim. 2021. "On the use of two-way fixed effects regression models for causal inference with panel data." *Political Analysis* 29(3):405–415.
- Imai, kosuke, In Song Kim and Erik Wang. forthcoming. "Matching methods for causal inference with time-series cross-sectional data." *American Journal of Political Science*
- Kropko, Jonathan and Robert Kubinec. 2020. "Interpretation and identification of within-unit and cross-sectional variation in panel data models." *PloS One* 15(4):e0231349.
- Kuran, Timur. 1991. "Now out of never: The element of surprise in the East European revolution of 1989." *World politics* 44(1):7–48.
- Levitsky, Steven and Lucan A Way. 2010. *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press.
- Magaloni, Beatriz. 2006. *Voting for autocracy: Hegemonic party survival and its demise in Mexico*. Vol. 296 Cambridge University Press.
- Maltz, Gideon. 2007. "The case for presidential term limits." *Journal of Democracy* 18(1):128–142.
- McKie, Kristin. 2019. "Presidential term limit contravention: Abolish, extend, fail, or respect?" *Comparative Political Studies* 52:1500–1534.
- McKie, Kristin and Elizabeth Carlson. 2022. "Do contravention attempts affect public support for presidential term limits?: Evidence from sub-Saharan Africa." *Democratization* 29(1):133–153.
- Moore, Will H. 2000. "The repression of dissent: A substitution model of government coercion." *Journal of conflict resolution* 44(1):107–127.
- Murray, Christina, Eric Alston and Micha Wiebusch. 2019. Presidential Term Limits and the International Community. In *The Politics of Presidential Term Limits*, ed. Alexander Baturo and Robert Elgie. Oxford University Press.
- Negretto, Gabriel L. 2013. *Making Constitutions: Presidents, Parties, and Institutional Choice in Latin America.* Cambridge University Press.
- Pettersson, Therése, Stina Högbladh and Magnus Öberg. 2019. "Organized violence, 1989–2018 and peace agreements." *Journal of Peace Research* 56(4):589–603.
- Posner, Daniel N and Daniel J Young. 2018. "Term Limits: Leadership, Political Competition and the Transfer of Power." *Institutions and Democracy in Africa: How the Rules of the Game Shape Political Developments* pp. 260–278.

- Reyntjens, Filip. 2016. "The struggle over term limits in Africa: A new look at the evidence." *Journal of Democracy* 27(3):61–68.
- Reyntjens, Filip. 2020. "Respecting and circumventing presidential term limits in sub-Saharan Africa: a comparative survey." *African Affairs* 119(475):275–295.
- Ritter, Emily Hencken and Courtenay R Conrad. 2016. "Preventing and Responding to Dissent: The Observational Challenges of Explaining Strategic Repression." *American Political Science Review* 110(1):85–99.
- Rivera, Mauricio. 2017. "Authoritarian institutions and state repression: The divergent effects of legislatures and opposition parties on personal integrity rights." *Journal of Conflict Resolution* 61(10):2183–2207.
- Ross, Michael L and Paasha Mahdavi. 2015. "Oil and Gas Data, 1932-2014.". URL: https://doi.org/10.7910/DVN/ZTPW0Y
- Simpser, Alberto. 2013. Why governments and parties manipulate elections: theory, practice, and implications. Cambridge University Press.
- Suzuki, Akisato. 2019. Effects of Presidential Term Limmits. In *The Politics of Presidential Term Limits*, ed. Alexander Baturo and Robert Elgie. Oxford University Press.
- Svolik, Milan W. 2012. The politics of authoritarian rule. Cambridge University Press.
- Tucker, Joshua A. 2007. "Enough! Electoral fraud, collective action problems, and postcommunist colored revolutions." *Perspectives on Politics* 5(3):535–551.
- Tull, Denis M and Claudia Simons. 2017. "The institutionalisation of power revisited: presidential term limits in Africa." *Africa Spectrum* 52(2):79–102.
- Versteeg, Mila, Timothy Horley, Anne Meng, Mauricio Guim and Marilyn Guirguis. 2020. "The Law and Politics of Presidential Term Limit Evasion." *Columbia Law Review* pp. 2019–14.

5 Appendix

5.1 List of Authoritarian Countries with Term Limits

Figure 18 shows a list of authoritarian countries with term limits and the distribution of term limit evasions. Specifically, red colored boxes indicate post-evasion periods. Note that not all countries depicted in this figure are included in the analysis. For example, the Philippines is excluded because it does not have a pre-evasion period. To be included in the analysis, a treated unit has at least three years of pre-evasion periods (L = 3) and those of post-evasion periods (F = 2).



Figure 18: List of countries and treatment distribution

5.2 Descriptive Statistics of Variables included in TSCS analysis

	var_name	Mean	SD	Min	Max
1	Term Limit Evasion	0.30	0.46	0.00	1.00
2	Information Control	-0.45	0.24	-0.93	-0.03
3	Repression	-0.03	0.94	-2.69	2.40
4	ln(GDP)	0.03	0.09	-0.44	0.51
5	Growth	7.95	0.84	5.82	10.37
6	Prio	0.24	0.43	0.00	1.00
7	Polity	-2.43	4.90	-9.00	9.00
8	ln(oil)	10.78	10.58	0.00	26.81
9	Extension	0.17	0.37	0.00	1.00

Table 14: Descriptive Statistics

5.3 Main Results Reported in a Table

	All Evasions		Extensions		Removals	
Time	Overt Repression	Information Manipulation	Overt Repression	Information Manipulation	Overt Repression	Information Manipulation
t	0.022 (0.042)	0.036 (0.005)	0.085 (0.025)	0.048 (0.028)	-0.082 (0.006)	0.017 (0.046)
<i>t</i> +1	0.023 (0.073)	0.074 (0.039)	0.141 (0.053)	0.106 (0.054)	-0.173 (0.109)	0.02 (0.053)
<i>t</i> +2	-0.006 (0.006)	0.129 (0.055)	0.116 (0.125)	0.189 (0.085)	-0.209 (0.150)	0.028 (0.064)
n(Treated)	32	32	20	20	12	12
Confounders	Y	Y	Y	Y	Y	Y

Table 15: Estimated Changes of Repression after Term Limit Evasions

Note: Bootstrapped standard errors are reported in parentheses. Coefficients that are statistically significant at the conventional level (p < .05) are in boldface. n(Treated) refers to the number of treated groups.

5.4 No Refinement



Figure 19: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.



Figure 20: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.

5.5 Propensity Score Matching



Figure 21: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.



Figure 22: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.

5.6 Mahalanobis Distance Matching



Figure 23: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.



Figure 24: Estimated Changes of Standardized Repression over Time

Note: The weighted average of DID estimates for varying F is reported. Dependent variables are standardized for easier comparisons. Error bars indicate 95% bootstrap confidence intervals.

Part 3 Delegitimizing Opposition Party after Autocratization: Evidence from South Korean Newspapers

Delegitimizing Opposition Party after Autocratization: Evidence from South Korean Newspapers

Abstract

Autocratization increases threats from marginalized opposition elites whose parties are more incentivized to mobilize the masses. What do autocrats do to counter this threat? I argue that autocrats increase delegitimizing propaganda, exaggerating the disunity of opposition parties strategically. It undermines opposition parties' legitimacy as a competent alternative that conveys consistent and credible information. Moreover, this propaganda complements existing censorship. To validate my argument, I compare how regimecontrolled newspapers in the South Korean dictatorship cover two very similar internal conflicts in the opposition party that occurred before and after autocratization. Using word embeddings that quantify delegitimizing propaganda, I find that newspaper reports after autocratization were more likely to associate the opposition party with negative words related to disunity.

1 Introduction

Autocrats seek regime stability by sharing power with challengers, including opposition elites, through nominally democratic institutions (Meng, Paine and Powell 2022). Cooptation through institutions reduces the probability of opposition dissent via costly non-institutional means. However, this power-sharing is not static. Autocrats sometimes aggrandize executive power by impeding previous co-opted opposition elites from accessing political processes. I call this transition away from power-sharing regimes within already authoritarian countries autocratization (Lührmann and Lindberg 2019, Sinkkonen 2021).¹ Autocratization incentivizes opposition elites to rely more on non-institutional means, such as mass mobilization to challenge a regime. And opposition parties, if any, are conducive for elites to address the collective action problem by revealing sensitive information and providing cohesive information about popular dissatisfaction (Aksoy, Carter and Wright 2012, Rivera 2017). Autocrats then have an incentive to neutralize the opposition threat. What strategy can autocrats leverage to undermine opposition parties' capacities for mass mobilization? Despite growing interest in institutional breakdowns within autocracies, our understanding of its implication has remained incomplete.

This paper focuses on autocratic information manipulation. Existing studies suggest that censorship is prevalent to alleviate threats from the masses (e.g., Fong 2017, King, Pan and Roberts 2013, Roberts 2018). It is then plausible that autocrats enhance censorship on opposition parties after autocratization. However, what if opposition elites received scant attention from media even before autocratization such that there is no room for further censorship? Media outlets in autocracies do not tend to focus on political elites in general (Wu 1994). Moreover, if they report elites, they focus on ruling coalition members and their bureaucrats who may undermine regime stability, not opposition elites (Egorov, Guriev and Sonin 2009, Lorentzen 2014, Lu and Ma 2019, Sheen, Tung and Wu 2021).

I argue that autocratized regimes can further increase delegitimizing propaganda. More specifically, regime-controlled media are more likely to exaggerate opposition parties' disunity strategically. This strategy undermines opposition parties' legitimacy as a competent alternative that conveys consistent and credible information, thereby dissuading the masses from coordinating around opposition elites. Moreover, it is not arbitrary propaganda that always describes opposition parties as disunited, which may backfire when parties are actually cohesive. Instead, delegitimizing propaganda complements exiting censorship by emphasizing the negative aspects of opposition parties when they suffer internal disputes sporadically. This strategy is plausible as opposition parties are prone to factional conflicts. Therefore, I expect to observe that governmentcontrolled media after autocratization are more likely to delegitimize opposition parties involving internal conflicts than media in pre-autocratization.

¹I avoid using a similar term, "personalization (Geddes, Wright and Frantz 2018)," because it only considers the relationship between an autocrat and ruling coalition, such as ruling elites and military members.

I test my argument in the context of South Korea under Park Chung-hee. In an earlier power-sharing period, opposition elites with parties could participate in presidential and legislative elections. Moreover, four-year terms of presidents and legislative members guarantee enough room for political rotation. However, Park autocratized a regime by removing competitive presidential elections, reducing the number of legislative seats opposition elites could take, and reducing the number of legislative elections by extending legislators' terms. This paper examines how such autocratization changes the way government-controlled newspapers report the major opposition party, the New Democratic Party (NDP). NDP was the first opposition party that merged various opposition parties and became an influential opposition group. Regarding media data, I leverage digitized historical newspaper articles published from 1967 to 1979. Private newspapers are useful resources to examine the government's intention to control information targeting the masses because they were a major source of public information and a constant target of government controls, acting like a government mouthpiece (Cho, Lee and Song 2017, Park 2014).

For analysis, I compare how government-controlled media cover two very similar internal conflicts in the opposition party that occurred before and after autocratization. These conflicts share similarities in factional structures, causes, and consequences. That is, both concerned factional conflicts between the majority and minority factions seeking better distribution of power, which eventually led to holding separate party conventions. Moreover, both events are considered the most serious factional conflicts that NDP had ever experienced (Jhee 2015). Assuming the target event of reports is similar, I examine whether the degree to which media used negative coverage of the opposition party increased after autocratization. Although this approach does not capture the absolute degree of delegitimizing propaganda, it is the best possible effort, albeit descriptive, to identify a relative change in such propaganda within the same autocratic regime.

I quantify delegitimizing propaganda by utilizing a computer-assisted text analysis. Specifically, I compute the average semantic distance between word embeddings of the word "NDP" and those of disunity-related words with negative connotations. Word embeddings represent a word as a dense vector in a low-dimensional space based on ordered sequences of words in natural texts (Rodman 2020). And the distance between such word embeddings informs semantic similarity of underlying concepts (Rodriguez and Spirling 2022). That is, as word embeddings representing NDP and disunity-related become closer to each other, we can interpret that the media's portrayal of NDP becomes more negative. Based on the hypothesis, I expect that the semantic distance of word embeddings after autocratization is closer than that before autocratization.

I find that the newspapers after autocratization were more likely to associate NDP with negative words related to internal conflict and fragmentation. This enhanced delegitimizing propaganda after autocratization was found in government-controlled media reports where opposition parties had drastically low overall visibility regardless of autocratization. Furthermore, while both media reports published before and after autocratization increased the visibility of NDP as internal conflicts culminated in separate party conventions, there was no significant difference in the increase in visibility. Overall, a notable change of media after autocratization in South Korea was that they enhanced the negative portrayal of NDP, involving internal conflicts.

This study broadly speaks to the growing literature on autocratization (Lührmann and Lindberg 2019, Sinkkonen 2021, Skaaning 2020). Unlike a plethora of studies focusing on power-sharing autocracies, their transition to personalist or closed regimes by institutional breakdown is still an uncharted territory (Meng, Paine and Powell 2022). In this paper, I argue that institutional breakdowns entail government strategies that alienate opposition elites from the public as well as the government. Furthermore, this research expands our knowledge of authoritarian information manipulation by the government to undermine collective action capacities (Carter and Carter 2021, Huang 2015*b*, King, Pan and Roberts 2013, 2017, Roberts 2018). Last, in line with the growing scholarly effort to use word embeddings to detect implicit bias within texts (Chester 2021, Garg et al. 2018, Osnabrügge, Hobolt and Rodon 2021), this paper leverages word embeddings to detect the increase of delegitimizing propaganda underlying in governmentcontrolled newspaper articles.

2 Autocratization and Delegitimizing Propaganda

2.1 Threats from Opposition Parties after Autocratization

Co-optation through institutions, such as regular elections, and legislatures, provides the opposition with negotiation places, thereby reducing the probability of opposition dissent via costly non-institutional means (Meng, Paine and Powell 2022). Autocratization that limits opposition elites' access to such institutions then incentivizes them to rely more on non-institutional means, such as mass mobilization when challenging a regime. Moreover, when marginalized opposition elites can form a coalition under opposition parties, they can overcome the collective action problem (Howard and Roessler 2006). This paper specifically focuses on opposition parties as key threats after autocratization because contemporary autocracies with opposition parties, which are prevalent, do not tend to remove them even if they break down other institutions. For example, from 1946 to 2007, more than 88% of autocrats who allowed for de facto opposition parties kept the multi-party system intact during their tenures.²

Individuals are willing to participate in collective dissents only if the (private) benefits outweigh the costs. And this expected utility is highly contingent on information about the preference of others (Gleditsch and Rivera 2017, Kuran 1991). In this sense, opposition parties are conducive to mobilizing the masses because they "often expose and disseminate relevant information on the nature of authoritarian politics and condemn government policy in sensitive areas, which can generate and intensify discontent among larger segments of society" (Rivera 2017, 2190). Moreover, they have the potential to be a focal point that can collect separate outbursts of the opposition and generate mutual expectations about popular dissatisfaction with the regime (Radnitz 2006,

²For this statistic, I leverage a dataset by Cheibub, Gandhi and Vreeland (2010).

Rivera 2017). For example, in Kyrgyzstan, an opposition party coalition called the People's Movement of Kyrgyzstan created a nationwide network of oppositions to collect separate resentment and mobilize anti-Akayev protest (Radnitz 2006). Studies suggest that these threatening roles are alleviated when opposition parties have enough access to legislatures where they can negotiate with the incumbent (Aksoy, Carter and Wright 2012, Rivera 2017). However, autocratization removes this opportunity.

Autocrats then have an incentive to use repressive measures to undermine opposition parties' capacities to mobilize the public.³ This paper focuses on how a regime controls the information to impede opposition elites from mobilizing the masses.

2.2 Autocratization and More Censorship?

A dominant information control strategy to mitigate threats from the masses is censorship. Existing studies suggest that autocratic regimes limit public access to sensitive information that may facilitate collective dissents (King, Pan and Roberts 2013, Qin, Strömberg and Wu 2017, Roberts 2018). Given that threatening are opposition parties with a lack of access to institutions after autocratization, government-controlled media may have more incentives to limit their attention to such parties. By separating potential mobilizers from the masses, regimes may "prevent coordination of the core and the periphery, known to be an essential component in successful collective action" (Roberts 2018, 8).

However, what if opposition parties already received scant attention from media before autocratization such that there is not enough room for further censorship in general? For example, in Section 4.2, I show that regime-controlled media in South Korea paid little attention to a major opposition party even before autocratization. This is plausible because media in autocracies are often biased toward a regime regardless of their regime types (Cho, Lee and Song 2017), and they do not tend to focus on political elites (Wu 1994). Even if private media under power-sharing regimes sometimes focus on elites, targets are more likely to be ruling coalition members or their bureaucrats rather than opposition elites. For example, existing studies suggest that autocrats strategically allow the media to cover stories about bureaucrats (Egorov, Guriev and Sonin 2009, Lorentzen 2014) and ruling party members (Lu and Ma 2019) who have the potential to destabilize the regime by deviating from a ruler or a ruling party's norm. In addition, media reporting ruling coalition members serves to enhance power-sharing by increasing transparency (Sheen, Tung and Wu 2021).

2.3 More Delegitimizing Propaganda after Autocratization

This paper proposes an alternative information control strategy that impedes opposition parties from mobilizing the masses even when further censorship is limited. I argue

³Recent studies began investigating the relationship between repression and certain types of autocratization. For example, Jang (2022) examines the relationship between repression and term limit evasion in autocracies. Frantz et al. (2020), on the other hand, examine the association between repression and regime personalization at the expense of ruling elites.

that after autocratization, regime-controlled media are more likely to strategically exaggerate the disunity of opposition parties when they are involved in internal conflicts. This effort is to undermine opposition parties' legitimacy as a competent alternative that conveys consistent and credible information.

Autocratic regimes use media to shape an image about certain issues and actors (e.g., Carter and Carter 2021, Edel and Josua 2018). One of the imperative strategies is to augment positive aspects of a regime to persuade that the incumbent ruler has legitimacy, the capacity to maintain the belief that a current regime is appropriate for the society (Gerschewski 2013). This is a traditional meaning of propaganda as indoctrination (or soft propaganda (Huang 2015*b*)), and existing studies have widely discussed what and how information manipulation enhances positive perception about the incumbent autocrat (e.g., Dukalskis and Gerschewski 2017, Guriev and Treisman 2019, Schedler and Hoffmann 2016, Tannenberg et al. 2021).

Autocrats may gain legitimacy also by depicting opposition groups as worse alternatives (Dukalskis and Patane 2019). Despite this possibility, however, not until recently did a few studies begin focusing on the negative legitimation targeting the opposition. For example, Edel and Josua (2018) argue that autocrats describe targets of repression as anarchic and those who disrupt daily life. Similarly, Selvik (2018) shows that the supreme leader of Iran uses rhetoric that describes opponents as enemies and strangers who threaten the country. More recently, Chester (2021) find that Chinese media portrays the politics of foreign democratic countries, which can be regarded as a better alternative regime type, chaotic and corrupt. This is to show the masses that democracy is an incompetent regime type such that it cannot be a better alternative.⁴ Albeit different forms, the purpose of this propaganda is analogous to legitimizing propaganda, persuading the masses to form a certain attitude.

Unlike this limited attention in authoritarian studies, studies on electoral democracies have widely discussed negative campaigning that delegitimize opposition candidates (Lau and Rovner 2009). This campaigning is purported to induce voters to perceive oppositions as inferior choices, making them choose an attacker or not turn out to vote at all. The literature often holds that a decision to attack is based on strategic considerations of costs (Roese and Sande 1993) and benefits (Pinkleton 1997). That is, negative campaigns are used when the benefits of damaging a target outweigh the costs from backlash (Lau and Pomper 2004, Lau and Rovner 2009). This scenario is plausible when a target fails to refute attacks (Lau and Rovner 2009). The theory of delegitimizing propaganda builds on these studies.

I argue that autocrats are more likely to use media to delegitimize opposition parties after autocratization. More specifically, regime-controlled media are more likely to (1) exaggerate the tone regarding the disunity of opposition parties (2) when they suffer internal disputes.

First, propaganda focuses on disorganized aspects because it is an useful persuasion strategy that undermines opposition parties' capacities for mobilizing the masses. As

⁴Huang (2015*a*) indeed finds that the awareness of instability in foreign countries can foster satisfaction with own country.

mentioned, opposition parties, especially those who lack access to institutional means, are threatening because they can reveal sensitive information about the regime, collect individual resentment, and generate mutual expectation about popular dissatisfaction, thereby becoming a focal point to replace a regime (Aksoy, Carter and Wright 2012, Radnitz 2006, Rivera 2017). Delegitimizing propaganda make opposition parties perceived as disunited, damaging the information source's credibility. When party members are perceived to fight each other and send different messages, the masses have difficulty determining which information they have to focus on for better collective action, confusing whether other potential mobilizers have similar preferences over the opposition. Moreover, the lack of unity can portray opposition parties as inferior alternatives which are less likely to mount a credible challenge to a regime, inducing the masses to think the costs of collective dissents are high and eventually prefer the status quo. Therefore, delegitimizing propaganda dissuades public mobilization by persuasion, changing the masses' perception about the costs and benefits of following opposition parties.

Second, delegitimizing propaganda is not arbitrary propaganda that always describes opposition parties as disorganized, which may backfire when the parties are united in reality. In this case, simple censorship may be more effective. Instead, delegitimizing propaganda complements existing censorship by strategically exaggerating the disunity of opposition parties when they suffer internal conflicts, such as factional disputes over the distribution of power. This strategy is plausible because opposition parties are not immune to internal conflicts. For example, in South Korea, a major opposition party constantly struggled with factional conflicts throughout Park's regime (Jhee 2015). Moreover, the opposition cannot easily refute the propaganda, and the masses cannot readily recognize it because it accompanies actual dissonance within the party. For this reason, autocrats prefer to use this propaganda that may be less likely to backfire. Given that delegitimizing propaganda is sporadic media manipulation, this argument suits existing arguments on selective censorship that autocrats allow some information to flow when it is conducive to regime survival (e.g., Hassid 2012, Lorentzen 2014, Qin, Strömberg and Wu 2017).

I do not necessarily argue that a regime before autocratization does not leverage delegitimizing propaganda. Of course, regardless of autocratization, regime-controlled media would be more likely to emphasize negative aspects of the opposition than neutral media. What I argue here is that an autocratized regime has more incentive to focus on this propaganda strategy as they face impending threats from opposition parties mobilizing the masses. Put differently, a regime may be more desperate to use this means to control the opposition than the previous power-sharing period where the opposition threat can be handled in institutions. Therefore, a main hypothesis concerns a relative increase in delegitimizing propaganda.

Hypothesis: Government-controlled media after autocratization should be more likely to delegitimize opposition parties involving internal conflicts than media in pre-autocratization.

3 Background: South Korea under Park Chung-hee

I test the theoretical implication in the context of South Korea under the dictator Park Chung-hee. This context provides a useful testing ground because the regime experienced an explicit autocratization that marginalized previously co-opted opposition elites. This section summarizes autocratization in South Korea and the nature of private newspapers controlled by a regime.

3.1 The Yushin Reform

Park seized power through a coup in 1961 and became president in 1963 through an election. In this earlier period of the Park era, South Korea could be characterized as a power-sharing regime. Opposition elites were allowed to form political parties and participate in legislative and presidential elections. Especially, major opposition parties⁵ were able to coalesce into the New Democratic Party (NDP) in 1967, which provided effective leverage to opposition elites. With this regard, Park co-opted the opposition via nominally democratic institutions and allowed a venue for policy concessions. The dictator kept institutional channels and the constitution intact until he amended the constitution. Nevertheless, even in this process, he formally relied on existing institutional channels, such as the National Assembly and a referendum, and held a regular presidential and legislative election in 1971. President Park ran for a presidential election in 1971, which was highly competitive because of the popularity of the opposition candidate, Kim Dae Jung.

Park sowed the seed of autocratization on October 17, 1972, when he declared a martial law that arbitrarily dissolved the national assembly constituted in the 1971 election and temporarily banned activities of political parties. This martial law led to the subsequent constitutional reform in December, called "the Yushin (Revitalization) reform," which sprouted the seed of autocratization. The reform provided a president with considerable power while marginalizing coopted opposition elites. More specifically, Park became a de facto life-long president under the new constitution that removed presidential term limits and guaranteed his electoral victories via a rubber stamp vote in noncompetitive elections (Im 2011). As a result, opposition elites could no longer participate in a presidential election. In addition, the reform allowed a president to nominate one-third of the national assembly members, reducing the number of seats opposition elites could take. The term of legislative members extended to six years, purported to reduce the number of elections and a potential surge of opposition party members.

After the Yushin reform, NDP frequently incorporated civic organizations and citizens to challenge the regime. South Korean scholars suggest that this approach differed from previous ways to challenge a regime that focused on competition over policies within political institutions (Jhee 2015, 57).

⁵The New Korea Party led by former President Yun Bo-seon and the Populist Party led by Park Suncheon

3.2 Regime-Controlled Newspapers

The South Korean regime controlled private newspaper outlets, the dominant public information source since the mid-1960s. Right after Park took power through a coup in 1961, he initiated measures to undermine the influence of news outlets. For example, the government decrees prohibited media from criticizing the coup and purged "pseudo-journalists and pseudo-media agencies" from the previous regime (Cho, Lee and Song 2017). Although major private media outlets established some critical stances in the earlier period of Park's presidency in 1963, their autonomy waned significantly after the regime declared martial law in 1964 to restrict the media's ability to incite popular unrest. Subsequently, the regime implemented the Media Ethics Committee Law, which enhanced the press and broadcasting self-censorship.

Along with the law enforcement, the regime created a media-control unit in an information agency, the Korean Central Intelligence Agency. The agents were called a "newspaper reporter of an intelligence agency" as they were stationed at central offices of newspapers and intervened in the news to the extent that they decided whether to report specific facts or even the size of the article (Park 2014). Moreover, they frequently arrested and interrogated journalists who attempted to criticize the government (Cho, Lee and Song 2017). Due to this tight government control, media in the late 1960s acted like a government mouthpiece as students claimed, "what will you pay back for your sins against the people?" In this vein, Cho, Lee and Song (2017) empirically find that the regime's tighter media control before the Yushin reform was already associated with pro-regime bias in news coverage. The tight media control was prolonged and severe after the Yushin reform.

In the following, I examine how autocratization in South Korea, the Yushin reform, changed the way newspapers report the major opposition party, NDP, when similar internal conflicts occurred.

4 Empirical Evidence

4.1 Data

The primary dataset is a large corpus of historical newspaper articles from three major South Korean newspaper outlets— *Chosun Ilbo, Dong-A Ilbo,* and *Joong-Ang Ilbo.*⁶ I leverage these newspapers because the newspaper websites have released publicly available, fine-grained, and machine-readable articles published in the early 1960s and 70s. Using various web-scraping methods, I collected all news articles published from February 07, 1967, when NDP was established, to October 26, 1979, when president Park was assassinated. Private media under this period can be considered government-controlled as discussed earlier.

⁶*Dong-A Ilbo* was once considered the major opposition media outlet among others in the early 1960s. However, it was not able to avoid the government control such that it was later criticized by the opposition as a government mouthpiece.

Before conducting any quantitative analysis of text as data, I must make raw texts less complicated by removing uninformative texts in a way that does not harm substantive interpretation. This process is called "preprocessing," and researchers are advised to go through this process before the main analysis (Grimmer and Stewart 2013). Unlike commonly analyzed languages, such as English and Chinese, it is considered difficult to preprocess Korean because of the unique structure it has. That is, it cannot simply be tokenized based on space or word order and there is a plethora of word variation stemming from the same root. One of the advantages of analyzing historical newspaper articles is that existing dictionaries can capture most nouns, including the name of important political figures. In this research, I extract nouns from sentences by using an open-source text segmentation library for Korean.⁷

4.2 Low Visibility of NDP

Figure 25 illustrates the monthly coverage of these newspapers on the opposition party (NDP) and the ruling coalition (ruling party + president) in South Korea. I consider a newspaper article i is concerned with a specific actor when its title mentions an actor. Given that the ruling coalition and the opposition party are the most important political actors, and a title is a summary of an article, it is a conservative way to retrieve newspaper reports about certain political actors.

⁷Specifically, I use mecab in the Konlpy package in python.



Figure 25: Temporal Changes of Media Visibility in South Korea

Note: This figure illustrates the proportion of monthly coverage in major newspapers on the opposition paty (NDP) and the ruling coalition (ruling party + president) in South Korea. The plot contains several vertical dashed lines noting important months. First, the red area indicates the period of Yushin reform (autocratization). The light blue lines represent months with presidential and legislative elections. Last, the light green line indicates months with a referendum.

The plot shows that a low visibility of NDP existed even before Yushin reform such that there may not have been enough room for further censorship in general. Although the visibility of NDP substantially decreased after autocratization regarding the election or referendum periods, NDP overall received drastically little attention regardless of autocratization. Specifically, it generally received less than 0.5% monthly coverage. Moreover, compared to the monthly coverage on the ruling coalition throughout the periods, the media paid very scarce attention to the opposition party. In the appendix, I show that there is no statistically significant decrease in media reporting NDP after autocratization using the interrupted time series analysis.

4.3 Measuring the Change in Delegitimizing Propaganda

The ideal measurement of delegitimating propaganda P_i is

$$P_i(X = 0) = Y_i(D = 1|X = 0) - Y_i(D = 0|X = 0)$$

$$P_i(X = 1) = Y_i(D = 1|X = 1) - Y_i(D = 0|X = 1)$$

where Y_i refers to a negative tone of media reports about an opposition party involved in an internal conflict *i*. *D* represents whether media are biased toward a regime, and *X* denotes whether a regime experiences autocratization. Thus, P_i refers to the difference between a negative tone about a target issue of biased media and counterfactual media with perfect neutrality, given the identical condition of autocratization. For example, when an opposition party suffers a factional dispute after autocratization, $Y_i(D = 0|X =$ 1) would refer to the degree to which the neutral media describes the party negatively, using a perfect amount of terms implying a conflict. In contrast, the biased media intended to exaggerate the party's disunity would use a considerable number of negative words and expressions to increase $Y_i(D = 1|X = 1)$. I assume that biased media always use more negative tones (i.e., $Y_i(D = 1|X = 0) > Y_i(D = 0|X = 0)$ and $Y_i(D = 1|X = 1) >$ $Y_i(D = 0|X = 1)$). However, a negative tone of neutral media (i.e, $Y_i(D = 0|X = 0)$ or $Y_i(D = 0|X = 1)$) is not observable in autocracies where media tend to be influenced by the government. Moreover, as discussed earlier, it is especially true in South Korea, where the regime screened contents of private newspapers.

Although I cannot measure the absolute quantity of pre-and-post-autocratization delegitimizing propaganda, my hypothesis is more concerned with a relative propaganda change. Thus, the primary goal of empirical analysis is to identify the following estimand:

$$P_i(X=1) - P_i(X=0) = [Y_i(D=1|X=0) - Y_i(D=0|X=0)] - [Y_i(D=1|X=1) - Y_i(D=0|X=1)]$$

= [Y_i(D=1|X=0) - Y_i(D=1|X=1)] + [Y_i(D=0|X=1) - Y_i(D=0|X=0)].

I assume $Y_i(D = 0|X = 1) = Y_i(D = 0|X = 0)$. That is, I assume that reports by perfectly neutral media are orthogonal to autocratization. Therefore, the estimand of interest can be

$$P_i(X = 1) - P_i(X = 0) = Y_i(D = 1|X = 0) - Y_i(D = 1|X = 1).$$

The hypothesis expects this estimand to be greater than 0. However, identifying this quantity is still challenging because a target event i cannot occur concurrently before and after autocratization.

In this paper, I attempt to mitigate this issue by comparing media coverage about two very similar internal conflicts in NDP that occurred before and after the Yushin reform. Specifically, these events concern internal conflicts between the majority and minority factions of NDP, which could be a target of delegitimizing propaganda.

4.4 Event Comparison

NDP was not free from internal conflicts in part because it was the party that merged separate opposition parties and coalesced fragmented opposition elites centering around different prominent leaders. Among many notable conflicts, I use as the unit of analysis two major conflicts that occurred before and after the Yushin reform. These are useful cases for comparison because they shared similarities in actors, causes, and consequences. Moreover, the both events are considered among many internal conflicts the

most serious factional conflicts in NDP that could have led to party decomposition (Jhee 2015). Admittedly, this analysis is at best descriptive. However, it is the best effort to make observable events as similar as possible so that any difference in the tones of media coverage can imply the different level of information manipulation.

The first event, "the first separate party convention (1차 반당대회)," occurred in 1972, right before the Yushin reform. Before it happened, NDP suffered factional disputes between the majority faction centered around Yu Chin-san and the minority anti-Yu faction. Although Yu lost his leadership due to his attempt to avoid legislative competition in his regional constituency by arbitrarily becoming the first candidate for proportional representation, his influence in the party remained intact. Moreover, one of the party members later claimed that Park Chung-hee supported the majority faction because of its dovish approach to challenge a regime via institutional means.⁸ With this background, Yu's faction planned to regain his leadership by insisting on holding a national party convention as initially planned. Also, the majority suggested selecting a party leader based on appointment by district party leaders to guarantee the selection of Yu. In response to Yu's attempt to regain its official power in NDP, on the other hand, the minority faction insisted on delaying the convention and selecting a leader by standing committees of the district party. The consequence of this conflict was outstanding as both factions held separate party conventions. On September 26, 1972, the majority faction held a party convention without members of the minority faction and unanimously selected Yu as a new leader. In response, the minority faction held another convention, called the latest convention invalid, and decided to delay the convention that selected a new leader. In summary, the first conflict concerned the distribution of power between the majority and minority factions and eventually led to separate party conventions.

The second conflict, "the second separate party convention (2차 반당대회)," shared a similar cause, factional structure, and consequence. That is, the majority and minority factions, albeit different members, conflict over the distribution of power and eventually hold separate party conventions. It occurred in 1976 when a regime was successfully autocratized after the Yushin reform. Similar to the first case, NDP in 1976 also suffered factional conflicts between the majority faction led by Kim Young-sam and the anti-Kim minority faction led by Lee Cheol-seung. As occurred before, President Park supported the dovish faction, which is the minority faction this time (Jhee 2015).

One may argue that a potential threat to this case comparison is that Park sided with the majority faction in the first event but with the minority faction in the second event. I have to point out that the minority faction in the second event was not like minorities without power. The majority faction centered around Kim Young-sam was actually considered less powerful. In his memoir, Kim said that "although I was a leader of the party, I was like the minority in the party" (Kim 2000, 96). Thus, Park supported more influential and dovish factions in both cases. I argue that although Park supported one side of factions in both cases, his willingness to delegitimize the opposition party was more considerable in the latter case because of increased threats from the party mobilizing the masses after autocratization.

⁸The Academy of Korean Studies. 2010. https://bit.ly/3ihN1bA. (Last access: 3/27/2022)

Similar to the first conflict, there was a factional dispute over the distribution of power. The majority faction insisted leadership centered on its faction leader, Kim Young-sam while the minority faction sought leadership centered on collective leadership by minority elites. In consequence, each faction held separate party conventions that selected different leaders. Table 16 summarizes the main components of the two conflicts.

	First Conflict	Second Conflict	
Timing	Before Autocratization	After Autocratization	
Actors	Majority vs. Minority	Majority vs. Minority	
Park's support	Support Dovish Faction	Support Dovish Faction	
Cause	Distribution of Power	Distribution of Power	
Consequence	Separate Party Convention	Separate Party Convention	

Table 16: Summary of Two Conflicts in NDP

In the empirical analysis, I compare the degree of delegitimizing propaganda by newspaper reports regarding the two conflicts. Specifically, I subset newspaper articles published from three months before the separate party conventions to three weeks after the events. First, I choose three months to encompass enough periods of internal conflicts that eventually culminated in separate party conventions.⁹ Second, I select three weeks for the post-event time frame because Park declared martial law for autocratization three weeks after the first event. During a few months right after the martial law, newspapers did not report anything about NDP because the martial law temporarily disbanded all political activities. Table 17 demonstrates examples of news reports on the two conflicts. Eventually, I subset 27,424 articles published from 06/08/1972 to 10/17/1972 (First Event) and 30,392 articles from 02/25/1976 to 06/15/1976 (Second Event).

Before analyzing delegitimizing propaganda, I plot a temporal change of the number of articles about NDP published in the period of the two conflicts in Figure 26. This plot shows that although newspapers increased their visibility of NDP as the internal conflicts culminated in separate party conventions, there is no significant difference in the increase before and after autocratization. It implies that media may not simply increase the visibility of delegitimizing issues but instead, how media describe opposition parties matter to delegitimizing propaganda.

⁹Moreover, this is to avoid one potential threat of this comparison: a few violent events happened right before the second separate party convention. One may argue that this physical violence is negative enough to even neutral media would depict NDP negatively. I show in the empirical analysis that even before the violent events, media after autocratization were more likely to depict NDP as disunited.
Date of Publication	Text
9/22/1972 (Joong-Ang)	Unless a dramatic compromise is reached between the majority and the minority, the New Democratic Party (NDP) convention will be cancelled inevitibly. NDP plans to hold a central stand- ing committee to discuss superficial issues such as party reg- ulations, but the actual issue is the non-mainstream extreme anti-Yu movement, so there is little room for compromise.
5/8/1976 (Joong-Ang)	The overheated race for power of the New Democratic Party even feels absurd. From the people's side, it is not understand- able why they are competing so fiercely. Unfortunately, looking at the process of competing for power within this party, there are no signs of cool-headed self-obesity and hard work, but only a primary struggle for power.

Table 17: Examples of News Reports about Two Conflicts



Event 🐱 Event before Yushin 🐱 Event after Yushin

Figure 26: Temporal Changes of Media Visibility of NDP

Note: This figure illustrates the number of monthly coverage in major newspapers on the opposition paty (NDP) published in the period of the two conflicts (The first and second separate party conventions). Specifically, the primary data are newspaper articles from three major South Korean newspaper outlets— *Chosun Ilbo, Dong-A Ilbo,* and *Joong-Ang Ilbo.* I consider a newspaper article *i* is concerned with NDP when its title mentions NDP. The black dashed line indicates a date of separate party conventions (the consequence of two conflicts), and two colored smoothed lines represent lowess estimates.

4.5 Measuring Delegitimizing Propaganda using Word Embeddings

It is challenging to quantify the degree to which newspapers negatively report NDP regarding its conflict. A naive human-coding can be biased and limited to understand implicit changes of tones conveyed by media. In this paper, I leverage a computer-assisted text analysis method to mitigate this challenge. Specifically, I use the average semantic distance between word embeddings. Word embeddings are unsupervised learning methods that allow a word of interest to be represented as a dense vector in a lowdimensional space based on ordered sequences of words in natural texts (Rodman 2020). Rather than merely measuring the co-occurrence of words, this method compares words of interest with other neighboring words and computes a semantic meaning with a numeric vector. And as Rodriguez and Spirling (2022) put it, "distances between such vectors are informative about the semantic similarity of the underlying concepts they connote for the corpus on which they were built." A growing number of social science studies apply this method to quantify the implicit difference and change of tones in media (e.g., Chester 2021, Garg et al. 2018, Rodman 2020).

In this analysis, I compute the average distance between word embeddings of the word "NDP (신민당)" and various words with negative connotations that convey meanings related to disunity. To generate a dictionary of disunity-related words, I first select a few seed words that are directly relevant to conflicts and fragmentation. I then expand the dictionary by finding words that share similar meanings and numeric vectors with enough word frequency. Eventually, I acquire 47 words with negative connotations. In the appendix, I list the words and their frequencies. After computing each distance using cosine similarity¹⁰, I calculate the average distance weighted by term frequency. This approach controls for term frequency that may affect a propaganda strategy (Chester 2021).¹¹ The possible value ranges from 0 to 1, and the higher, the closer. Eventually, the weighted average distance between numerical vectors represents the degree to which media associate NDP with disunity. Based on the hypothesis, I expect that the semantic distance of word embeddings after autocratization is closer than that before autocratization.

The primary data are articles published three months before the separate party convention to three weeks after the events. To directly compare the semantic distance of word embeddings for each period, I cut the corpus into chronological time slices (month). By doing so, I can compare the average semantic distances of word embeddings at each time frame, such as that representing -90 days to -61 days of events. Moreover, I can also trace how the representation of words changes over time regarding the same event (e.g. Garg et al. 2018, Rodman 2020).

When examining differences in the embedding distance between words of interest over multiple time intervals, the most intuitive way is to split a time frame and calculate each embedding distance based on a text corpus within a sliced time frame. However, naive comparison among embeddings across time precludes an exact compari-

¹⁰It is the most common method to calculate the distance between word embeddings (Rodman 2020)

¹¹In the appendix, I present a robustness check with a standard mean.

son because of the stochastic nature of the neural network training process (Hamilton, Leskovec and Jurafsky 2016). In other words, the output vectors of each slice are placed in a space with a different coordinate system. For intuitive understanding, Smith et al. (2017)'s analogy is worth noting. "This is closely analogous to asking a cartographer to draw a map of England with no compass. The map will be correct, but she does not know which direction is north, so the angle of rotation will be random. Two maps drawn by two such cartographers will be identical, except that one will be rotated by an unknown angle with respect to the other."

To account for this issue, I use *Compass-Aligned Distributional Embeddings* (CADE), developed by Di Carlo, Bianchi and Palmonari (2019) and Bianchi et al. (2020).¹² Using word2vec (Mikolov et al. 2013) as a baseline model, CADE first trains a general vector space with all corpus and serves it as an atemporal (frozen) compass providing a shared coordinate system. It then computes word embeddings for each specific temporal slice inside a shared coordinate system. Since each embedding from different temporal slices shares the same coordinate system, I can precisely compute how embedding distances differ across time. Compared to other temporal word embedding models, it is relatively easy and efficient for applied researchers. Moreover, the model achieves good performance even with a relatively small number of datasets (Di Carlo, Bianchi and Palmonari 2019). Therefore, I use the entire corpus that includes all periods of two events to set a shared coordinate system and compute word embeddings for each temporal slice. For the selection of hyperparameters, I follow the guidelines of Rodriguez and Spirling (2022) by choosing 300 embedding dimensions and six context window sizes.

4.6 Result

Figure 27 shows the temporal changes of the weighted average cosine similarity from three months before the separate party conventions to three weeks after the event. The hypothesis posits that after the Yushin reform, regime-controlled newspapers would be more likely to portray NDP involving internal conflicts as disunited. Since it is impossible to observe a counterfactual concurrently before and after the autocratization, the current analysis assumes that the two events are analogous in terms of their degree of internal conflict. In other words, I assume that perfectly neutral media would portray NDP involving both events with the same degree of disunity.

¹²Although Rodman (2020) finds that a chronologically trained model (Kim et al. 2014) performs the best, it has a limitation as Di Carlo, Bianchi and Palmonari (2019) points out that "enforcing the vector similarity of one word across time may lead to excessively smooth differences between its representations in different time periods."



Figure 27: Temporal Changes of Average Cosine Similarity

The result supports the hypothesis. The plot shows that the differences in average cosine similarity between the word "NDP" and words related to disunity are always greater than 0 regardless of the temporal slices. In other words, the newspapers after autocratization were more likely to associate NDP with negative words related to internal conflict, regardless of days from the event. Specifically, the difference in average cosine similarity is the highest right before the separate party conferences occurred. In the appendix, I illustrate the result of a placebo test that uses the word "DRP", the ruling party, instead of the word "NDP" and show that this main result can not be attributed to the media's stochastic tendency to portray every party as disunited.

Overall, the findings show that South Korean media after autocratization did not simply change the visibility of opposition parties but instead enhanced the degree of negative tone they used to describe the opposition party. And this trend was found in media, where opposition parties received drastically low overall attention regardless of autocratization.

5 Concluding Remarks

What do autocrats do to counter threats from marginalized opposition parties after autocratization? I argue that autocrats increase delegitimizing propaganda, exaggerating the disunity of opposition parties strategically. It undermines opposition parties' legitimacy as a competent alternative that conveys consistent and credible information. Moreover, this propaganda complements existing censorship. I validate my argument by examining how regime-controlled newspapers in the South Korean dictatorship cover two very similar internal conflicts in the opposition party that occurred before and after autocratization. Using Compass-Aligned Distributional Embeddings that quantify delegitimizing propaganda, I find that newspaper reports after autocratization were more likely to associate the opposition party with negative words related to disunity. And this enhanced propaganda occurred in reports where opposition parties received drastically low overall visibility regardless of autocratization.

Although this paper focuses on the specific case in South Korea where autocratization occurred in electoral autocracy, opposition parties survived after autocratization, and the government used regime-controlled private newspapers to convey delegitimizing propaganda, the theory can be generalized to autocratization in any form of power-sharing regime and media. For example, if autocrats marginalize power-shared "ruling" elites via regime personalization (Geddes, Wright and Frantz 2018) in a singleparty regime, marginalized elites can defect to opposition elites and help them mobilize the masses (Grundholm 2020). Autocrats then have an incentive to undermine the legitimacy of defectors by leveraging propaganda that exaggerates the disunity of a coalition between defectors and outsiders. Despite the different scenarios, the basic logic is analogous to the main theory. Furthermore, autocrats can use various source of public information, including traditional state mouthpiece to social networks.

One untested but highly plausible argument is that exaggerating the opposition's disunity when they struggle with actual internal conflicts may be less likely to backfire and more likely to persuade the masses because of its hidden nature. It may be interesting to test this argument in future research by implementing an experiment that controls the tone of messages regarding the actual dissonance of the opposition and examining how such treatments influence respondents in terms of attitudes toward a target.

References

- Aksoy, Deniz, David B Carter and Joseph Wright. 2012. "Terrorism in dictatorships." *The Journal of Politics* 74(3):810–826.
- Bernal, James Lopez, Steven Cummins and Antonio Gasparrini. 2017. "Interrupted time series regression for the evaluation of public health interventions: a tutorial." *International journal of epidemiology* 46(1):348–355.
- Bianchi, Federico, Valerio Di Carlo, Paolo Nicoli and Matteo Palmonari. 2020. "Compassaligned distributional embeddings for studying semantic differences across corpora." *arXiv preprint arXiv:2004.06519*.
- Carter, Erin Baggott and Brett L Carter. 2021. "Propaganda and protest in autocracies." *Journal of Conflict Resolution* 65(5):919–949.
- Cheibub, José Antonio, Jennifer Gandhi and James Raymond Vreeland. 2010. "Democracy and dictatorship revisited." *Public choice* 143(1-2):67–101.
- Chester, Patrick J. 2021. "Framing Democracy: Characterizing China's Negative Legitimation Propaganda using Word Embeddings." *Unpublished Manuscript*.
- Cho, Joan E, Jae Seung Lee and BK Song. 2017. "Media Exposure and Regime Support under Competitive Authoritarianism: Evidence From South Korea." *Journal of East Asian Studies* 17(2).
- Di Carlo, Valerio, Federico Bianchi and Matteo Palmonari. 2019. Training temporal word embeddings with a compass. In *Proceedings of the AAAI conference on artificial intelligence*. Vol. 33 pp. 6326–6334.
- Dukalskis, Alexander and Christopher Patane. 2019. "Justifying power: When autocracies talk about themselves and their opponents." *Contemporary Politics* 25(4):457–478.
- Dukalskis, Alexander and Johannes Gerschewski. 2017. "What autocracies say (and what citizens hear): proposing four mechanisms of autocratic legitimation." *Contemporary Politics* 23(3):251–268.
- Edel, Mirjam and Maria Josua. 2018. "How authoritarian rulers seek to legitimize repression: framing mass killings in Egypt and Uzbekistan." *Democratization* 25(5):882–900.
- Egorov, Georgy, Sergei Guriev and Konstantin Sonin. 2009. "Why resource-poor dictators allow freer media: A theory and evidence from panel data." *American Political Science Review* 103(4):645–668.
- Fong, Brian. 2017. "In-between liberal authoritarianism and electoral authoritarianism: Hong Kong's democratization under Chinese sovereignty, 1997–2016." *Democratization* 24(4):724–750.

- Frantz, Erica, Andrea Kendall-Taylor, Joseph Wright and Xu Xu. 2020. "Personalization of Power and Repression in Dictatorships." *The Journal of Politics* 82(1):372–377.
- Garg, Nikhil, Londa Schiebinger, Dan Jurafsky and James Zou. 2018. "Word embeddings quantify 100 years of gender and ethnic stereotypes." *Proceedings of the National Academy of Sciences* 115(16):E3635–E3644.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2018. *How dictatorships work: Power, personalization, and collapse.* Cambridge University Press.
- Gerschewski, Johannes. 2013. "The three pillars of stability: Legitimation, repression, and co-optation in autocratic regimes." *Democratization* 20(1):13–38.
- Gleditsch, Kristian S and Mauricio Rivera. 2017. "The diffusion of nonviolent campaigns." *Journal of Conflict Resolution* 61(5):1120–1145.
- Grimmer, Justin and Brandon M Stewart. 2013. "Text as data: The promise and pitfalls of automatic content analysis methods for political texts." *Political Analysis* 21(3):267–297.
- Grundholm, Alexander Taaning. 2020. "Taking it personal? Investigating regime personalization as an autocratic survival strategy." *Democratization* 27(5):797–815.
- Guriev, Sergei and Daniel Treisman. 2019. "Informational autocrats." *Journal of Economic Perspectives* 33(4):100–127.
- Hamilton, William L, Jure Leskovec and Dan Jurafsky. 2016. "Diachronic word embeddings reveal statistical laws of semantic change." *arXiv preprint arXiv:1605.09096*.
- Hassid, Jonathan. 2012. "Safety valve or pressure cooker? Blogs in Chinese political life." *Journal of Communication* 62(2):212–230.
- Howard, Marc Morjé and Philip G Roessler. 2006. "Liberalizing electoral outcomes in competitive authoritarian regimes." *American Journal of Political Science* 50(2):365– 381.
- Huang, Haifeng. 2015*a*. "International knowledge and domestic evaluations in a changing society: The case of China." *American Political Science Review* 109(3):613–634.
- Huang, Haifeng. 2015b. "Propaganda as signaling." Comparative Politics 47(4):419-444.
- Im, Hyug Baeg. 2011. The origins of the Yushin regime: Machiavelli unveiled. In *The park chung hee era: The transformation of south korea*, ed. Byung-Kook Kim and Ezra F. Vogel. Harvard University Press Cambridge pp. 233–261.
- Jang, JunHyeok. 2022. "Do Term Limit Evasions in Autocracies Increase Repression?" Unpublished Manuscript.

- Jhee, Byong-Kuen. 2015. "Factional Conflicts of Opposition Parties under the Third and the Fourth Republics in Korea." *Journal of Korean Political and Diplmatic History* 37(1):39–74.
- Kim, Yoon, Yi-I Chiu, Kentaro Hanaki, Darshan Hegde and Slav Petrov. 2014. "Temporal analysis of language through neural language models." *arXiv preprint arXiv:1405.3515*
- Kim, Young Sam. 2000. *Kim Young Sam Hwegorok 2 [The Memoir of Kim Young Sam 2]*. BaekSanSeoDang.
- King, Gary, Jennifer Pan and Margaret E Roberts. 2013. "How censorship in China allows government criticism but silences collective expression." *American Political Science Review* 107(2):326–343.
- King, Gary, Jennifer Pan and Margaret E Roberts. 2017. "How the Chinese government fabricates social media posts for strategic distraction, not engaged argument." *American Political Science Review* 111(3):484–501.
- Kuran, Timur. 1991. "Now out of never: The element of surprise in the East European revolution of 1989." *World politics* 44(1):7–48.
- Lau, Richard R and Gerald M Pomper. 2004. *Negative campaigning: An analysis of US Senate elections*. Rowman & Littlefield.
- Lau, Richard R and Ivy Brown Rovner. 2009. "Negative campaigning." *Annual review of political science* 12:285–306.
- Lorentzen, Peter. 2014. "China's strategic censorship." *American Journal of Political Science* 58(2):402–414.
- Lu, Fengming and Xiao Ma. 2019. "Is Any Publicity Good Publicity? Media Coverage, Party Institutions, and Authoritarian Power-Sharing." *Political Communication* 36(1):64–82.
- Lührmann, Anna and Staffan I Lindberg. 2019. "A third wave of autocratization is here: what is new about it?" *Democratization* 26(7):1095–1113.
- Meng, Anne, Jack Paine and Robert Powell. 2022. "Authoritarian Power Sharing: Concepts, Mechanisms, and Strategies.".
- Mikolov, Tomas, Kai Chen, Greg Corrado and Jeffrey Dean. 2013. "Efficient estimation of word representations in vector space." *arXiv preprint arXiv:1301.3781*.
- Osnabrügge, Moritz, Sara B Hobolt and Toni Rodon. 2021. "Playing to the gallery: Emotive rhetoric in parliaments." *American Political Science Review* 115(3):885–899.

- Pan, Jennifer and Alexandra A Siegel. 2020. "How Saudi Crackdowns Fail to Silence Online Dissent." *American Political Science Review* 114(1):109–125.
- Park, Yong-Gyu. 2014. "Changes in Professional Identity of Journalists During the Park Chung-hee Regime." *Journal of Communication Research* 51(2):34–76.
- Pinkleton, Bruce. 1997. "The effects of negative comparative political advertising on candidate evaluations and advertising evaluations: An exploration." *Journal of Advertising* 26(1):19–29.
- Qin, Bei, David Strömberg and Yanhui Wu. 2017. "Why does China allow freer social media? Protests versus surveillance and propaganda." *Journal of Economic Perspectives* 31(1):117–40.
- Radnitz, Scott. 2006. "What really happened in Kyrgyzstan?" *Journal of Democracy* 17(2):132–146.
- Rivera, Mauricio. 2017. "Authoritarian institutions and state repression: The divergent effects of legislatures and opposition parties on personal integrity rights." *Journal of Conflict Resolution* 61(10):2183–2207.
- Roberts, Margaret E. 2018. *Censored: Distraction and Diversion inside China's Great Firewall*. Princeton, NJ: Princeton University Press.
- Rodman, Emma. 2020. "A Timely Intervention: Tracking the Changing Meanings of Political Concepts with Word Vectors." *Political Analysis* 28(1):87–111.
- Rodriguez, Pedro and Arthur Spirling. 2022. "Word Embeddings: What works, what doesn't, and how to tell the difference for applied research." *The Journal of Politics* 84(1):101–115.
- Roese, Neal J and Gerald N Sande. 1993. "Backlash Effects in Attack Politics 1." *Journal of Applied Social Psychology* 23(8):632–653.
- Schedler, Andreas and Bert Hoffmann. 2016. "Communicating authoritarian elite cohesion." *Democratization* 23(1):93–117.
- Selvik, Kjetil. 2018. "Autocratic legitimation in Iran: Ali Khamenei's discourse on regime "insiders" and "outsiders"." *Democratization* 25(7):1114–1131.
- Sheen, Greg Chih-Hsin, Hans H Tung and Wen-Chin Wu. 2021. "Power Sharing and Media Freedom in Dictatorships." *Political Communication* pp. 1–20.
- Sinkkonen, Elina. 2021. "Dynamic dictators: improving the research agenda on autocratization and authoritarian resilience." *Democratization* 28(6):1172–1190.
- Skaaning, Svend-Erik. 2020. "Waves of autocratization and democratization: a critical note on conceptualization and measurement." *Democratization* 27(8):1533–1542.

- Smith, Samuel L, David HP Turban, Steven Hamblin and Nils Y Hammerla. 2017. "Offline bilingual word vectors, orthogonal transformations and the inverted softmax." *arXiv preprint arXiv:1702.03859*.
- Tannenberg, Marcus, Michael Bernhard, Johannes Gerschewski, Anna Lührmann and Christian von Soest. 2021. "Claiming the right to rule: regime legitimation strategies from 1900 to 2019." *European Political Science Review* 13(1):77–94.
- Wu, Guoguang. 1994. "Command communication: The politics of editorial formulation in the People's Daily." *The China Quarterly* 137:194–211.

6 Appendix

6.1 Interrupted Time-Series Analysis

In this analysis, I statistically examine if media's visibility of NDP did not significantly decrease after the Yushin reform, as depicted in Figure 1. Specifically, I employ the following Interrupted Time Series Analysis (ITSA) model that assesses the longitudinal effect of an event (Bernal, Cummins and Gasparrini 2017).

$$Y_{t} = \beta_{0} + \beta_{1}(T) + \beta_{2}(X_{t}) + \beta_{3}(X_{t}T)$$

In the equation, Y_t represents the proportion of daily coverage (%) on NDP at time t, T is the time since President Park autocratized a regime via Yushin Reform (or Yushin Declaration), X_t is a dummy indicating the Yushin period—the pre-Yushin period is coded as 0 and the post-Yushin period is coded as 1—and $X_t T$ is an interaction term. In order to address serial autocorrelation in the data, I use a first-order autoregressive (AR1) model, following Pan and Siegel (2020). ITSA is a segmented regression model in which I can compute the prior and post trends in the proportion of coverage as well as immediate changes after the Yushin declaration. More specifically, β_0 captures the base-line proportion of coverage at T = 0 (10/17/1972 or 12/27/1972), β_1 shows underlying pre-Yushin trends in the proportion of coverage, β_2 represents the immediate change of the proportion of coverage after the Yushin declaration and β_3 captures the slope change in the post-Yushin period. The quantity of interest in this model is β_2 and β_3 that represent the immediate and long-term changes. Table 18 shows that there was no significant decrease in media reports on NDP after Yushin Declaration or Yushin Reform.

	Model 1	Model 2
Baseline	0.095***	0.075**
	(0.025)	(0.025)
Pre-Yushin Trend	-0.000^{***}	-0.000^{***}
	(0.000)	(0.000)
Post-Yushin Level Change	0.022	0.057
	(0.034)	(0.034)
Post-Yushin Slope Change	0.000^{***}	0.000^{***}
	(0.000)	(0.000)
AIC	4269.210	4267.914
BIC	4307.824	4306.529
Log Likelihood	-2128.605	-2127.957
Num. obs.	4613	4613

Table 18: Effect of Autocratization on Average Daily Coverage on NDP

*** p < 0.001; ** p < 0.01; * p < 0.05; p < 0.1

분쟁 불안 Words 전해차· 분파· 당파· 아집· 암투· 불협화음 자중지란 파당 공황 집안싸움 계파 분란 참예화 불협화 붕당 0.000 0.025 0.050 0.075 Frequency

6.2 Frequency of Words related to Disunity

Figure 28: Frequency of Words related to Disunity

Note: This plot illustrates the frequency of words related to disunity used in the main analysis.



6.3 Average Distance of Word Embeddings with Standard Mean

Figure 29: Temporal Changes of Average Cosine Similarity

6.4 Placebo Test with the word "DRP"



Figure 30: Temporal Changes of Average Cosine Similarity

Note: This plot replicates Figure 3 with the word "DRP", the ruling party, instead of the word "NDP."