Democratic Backsliding in El Salvador

POL 194H: Honors Thesis

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Introduction

How does exposure to state and criminal violence influence support for President Bukele and authoritarian policies in El Salvador?

Research Design

Key Findings

Literature Review

Causal Pathways & Theoretical Motivation

To examine the association between exposure to violence and

economic conditions and support for democratic governance under Bukele, I employ a quantitative research design utilizing survey data from the 2023 LAPOP AmericasBarometer for El Salvador. The analysis focuses on individual-level responses to questions regarding experiences of state violence, perceptions of economic well-being, and attitudes toward democracy.

Theory: Data-Generating Process (DGP)

To understand the determinants of incumbent support in the context of democratic backsliding, I propose a Data-Generating Process (DGP) where individual political preference (Y) is a function of exposure to predation (X), conditional on the voter's economic satisfaction (Z).

The causal mechanism linking violence to support for Bukele is conceptualized as follows:

1. **Exposure to Violence** (X): Exposure to insecurity serves as the primary independent variable. I theorize that the source of violence determines the political reaction:
    - Gang Extortion (X_{Gang}): Following the "Iron Fist" literature, exposure to non-state violence is hypothesized to increase perceptions of insecurity, potentially driving a demand for authoritarian order and increasing support for the strongman (H_1).

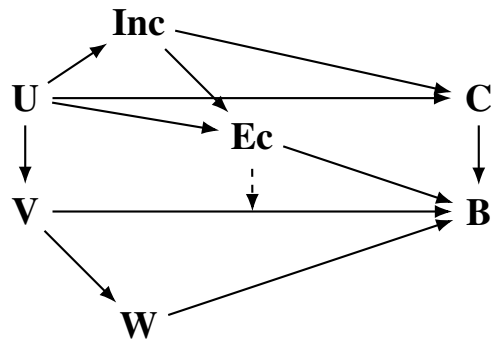
- State Predation (X_{State}): Conversely, exposure to state-led predation (Bribery) represents a violation of the social contract. This experience is hypothesized to decrease satisfaction with democratic governance and reduce incumbent support (H_2).

2. **Economic Perceptions** (Z): Economic satisfaction acts as a moderating variable. Individuals with positive economic perceptions ($Z > 0$) derive utility from the administration's management. I hypothesize that this "performance legitimacy" dampens the relationship between violence and political preference. Specifically, positive economic evaluations may neutralize the dissatisfaction caused by state violence or amplify the support derived from security demands (H_3).

3. **Support for Bukele** (Y): The outcome variable represents the individual's binary approval of Bukele's governance. It is modeled as the net result of these competing pressures: the security experience (X) and the economic experience (Z).

4. **Control Variables** (**C**):To block confounding paths and isolate the causal effect of violence, I condition on the following structural factors:

    - Urbanization: Urban residents may have distinct exposure levels to extortion networks and possess different baseline political attitudes compared to rural residents.
    - Income (SES): Socioeconomic status influences both the probability of victimization (target suitability) and political preferences. (Operationalized via Education).
    - Perceptions of Corruption: An individual's general view on political corruption is included to distinguish specific victimization events from generalized anti-system cynicism.



Legend
V = Exposure to Victimization (IV)
B = Support for Bukele (DV)
Ec = Economic Perceptions (Moderator)
U = Urbanization
Inc = Income
C = Perceptions of Corruption
W = Exposure to Welfare

Model Specification

To test these relationships, I estimate the probability of incumbent support using a Logistic Regression model. The log-odds of support are modeled as:

$$\ln\left(\frac{P(Y_i=1)}{1-P(Y_i=1)}\right) = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 (X_i \cdot Z_i) + \boldsymbol{\gamma}\mathbf{C_i} + \varepsilon_i$$

Where:

Y_i: Binary indicator of Support for Bukele.

X_i: Exposure to Violence (modeled separately as X_{Gang} or X_{State}).

Z_i: Retrospective Economic Perception (Proxy for State Investment).

$X_i \cdot Z_i$: Interaction term testing the compensatory/dampening hypothesis.

$\mathbf{C_i}$: Vector of controls (Urbanization, Education, Corruption Perception, Municipal Services).

Building on this theoretical framework, I test the following hypotheses:

H_0: There is no statistically significant relationship between exposure to victimization and the probability of supporting President Bukele.

The "Iron Fist" Hypothesis (Non-State Violence)

Existing literature on crime and authoritarianism suggests that high levels of criminal insecurity drive citizens to demand "Mano Dura" (Iron Fist) policies. Under conditions of high gang prevalence, victims are often willing to trade civil liberties and democratic checks for the promise of order. Consequently, victimization by non-state actors is expected to increase the appeal of the strongman.

H_1: Individuals exposed to non-state violence (Gang Extortion) will be more likely to support President Bukele, reflecting a demand for authoritarian security.

The "Broken Contract" Hypothesis (State Predation)

Conversely, direct predation by state actors represents a violation of the social contract. While citizens may tolerate strict measures against criminals, standard accountability theory suggests they will penalize the incumbent when the state apparatus itself becomes predatory. Therefore, victims of institutional corruption are expected to distinguish between the leader's rhetoric and the state's actual behavior.

H_2: Individuals exposed to state-led predation (Bribery) will be less likely to support President Bukele, reflecting dissatisfaction with institutional corruption.

The "Performance Legitimacy" Hypothesis (Moderation)

Finally, I posit that the political costs of security failures (or the sting of state predation) can be offset by economic performance. Following the logic of "performance legitimacy," perceived economic improvements serve as a compensatory mechanism. I hypothesize that economic satisfaction will moderate the relationship between victimization and support, effectively "dampening" the grievance caused by exposure to violence.

H_3: Positive economic perceptions will weaken the relationship between exposure to victimization and support for President Bukele.

Data and Measurement

Sample and Unit of Analysis

Unit of Analysis

The unit of analysis for this study is the individual survey respondent, representing the voting-age population (18 years and older) of El Salvador.

Data Source and Coverage

To examine the small-scale foundations of authoritarian support, I rely on data from the 2021 AmericasBarometer conducted by the Latin American Public Opinion Project (LAPOP). This survey utilizes a stratified, multi-stage cluster probability design to ensure national representatives across both urban and rural strata. The fieldwork was conducted via face-to-face interviews, capturing public sentiment during the consolidation of the Bukele administration but prior to the implementation of the 2022 State of Exception.

Sample Restrictions

The 2021 AmericasBarometer employs a "split-sample" design (Core A and Core B) to accommodate a broader range of questions. This study utilizes the **Core A** module, which contains the primary variables regarding victimization and political attitudes. While the total survey sample includes roughly 3,000 respondents, the Core A subset consists of approximately 1,500 individuals. After performing list-wise deletion for missing values on key theoretical variables—specifically victim status and economic perception—the final analytical sample consists of $N = 1,435$ observations.

As well, the analysis excludes responses coded as "Don't Know" (888888), "No Answer" (988888), and "Inapplicable" (999999). These codes represent non-substantive responses that do not map onto the theoretical continua of interest (e.g., the ordinal scale of economic perception or the binary status of victimization). For the "Inapplicable" category, missingness is structural, resulting from survey skip patterns (e.g., questions asked only to specific subsets of respondents). To ensure model validity, these observations are treated as missing data (NA) and removed via list-wise deletion for the final analytical sample.

Limitations

While the individual-level approach allows for a direct assessment of the psychological mechanisms linking victimization to political support, the cross-sectional nature of the data limits the analysis to a single point in time. This is especially pertinent given the rapidly evolving political landscape in El Salvador under Bukele, and due to the potential for reverse causality between political attitudes and reported victimization.

As well, the data fails to capture the attitudes of respondents before the 2019 election, where the question of Bukele support would be most relevant. Data from the 2023 LAPOP survey includes a question on vote choice in 2019, but the responses were heavily skewed toward Bukele, with over 70% of respondents reporting voting for him despite only winning around 52% of the vote. This suggests significant social desirability bias in the retrospective vote choice question, and puts into question the validity of using both this retroactive reporting as well as perception variables as a whole as the DV.

Additionally, the split-sample design prevents the entire survey from being utilized, requiring the use of proxies back primarily by theories around the data generating process for certain demographic controls (e.g., Education for Income) that were located in the excluded survey module.

Key Variables and Coding

This study focuses on the following key variables from the LAPOP 2021 Core A survey:

This study examines how exposure to victimization (X) affects support for President Bukele (Y), while accounting for potential compensation by economic perceptions (Z). The key variables are taken from the LAPOP 2021 Core A survey and are defined and operationalized as follows:

Dependent Variable (Y): Support for Bukele - Measured as a binary indicator of job approval for President Bukele. Derived from variable $M1$ ("Job Approval") in the 2021 LAPOP survey. To provide a rigorous test of committed support, neutral responses are grouped with the opposition:

$$\text{Support for Bukele} = \begin{cases} 1, & \text{if respondent rates performance as "Good" or "Very Good"} \\ 0, & \text{if respondent rates performance as "Fair", "Bad", or "Very Bad"} \end{cases} \quad (1)$$

The decision to group neutral responses ("Fair") with the opposition reflects two considerations specific to the Salvadoran context. Methodologically, given the "ceiling effect" of President Bukele's super-majoritarian approval ratings in 2021, treating neutral responses as support would artificially inflate the dependent variable, reducing variance and statistical leverage.

Theoretically, literature on survey behavior in backsliding democracies suggests that "neutral" categories often serve as a "safe harbor" for critical respondents subject to social desirability bias or fear of reprisal (Brownback and Novotny, n.d.; Tannenberg 2017). Therefore, coding "Fair" as non-support provides a conservative test of committed incumbent support, distinguishing explicit support from ambivalent and biased responses.

The independent variable of interest is exposure to victimization, operationalized in two distinct forms to capture the dual sources of violence in El Salvador:

Independent Variable 1 (X_{Gang}): Measured as exposure to non-state extortion (Gang Extortion) using variable $VICBAR4A$. This variable captures direct victimization by criminal groups. The operationalization is as follows:

$$\text{Gang Victim} = \begin{cases} 1, & \text{if respondent/family was a victim of extortion in last 12 months} \\ 0, & \text{otherwise} \end{cases} \tag{2}$$

Independent Variable 2 (X_{State}): Measures institutional abuse as exposure to state-led "kickback" (Bribery) using variable EXC6. This variable captures direct institutional corruption:

$$\text{Bribe Victim} = \begin{cases} 1, & \text{if a public official requested a bribe in last 12 months} \\ 0, & \text{otherwise} \end{cases} \tag{3}$$

Moderator (Z): Economic Perception - Measured as the respondent's retrospective evaluation of their personal economic situation (IDIO2), serving as a proxy for the receipt of effective state investment. Coded on a 3-point ordinal scale:

$$\text{Econ Perception} = \begin{cases} 1, & \text{Worse} \\ 2, & \text{Same} \\ 3, & \text{Better} \end{cases} \tag{4}$$

Control Variables (C): To mitigate confounding, the following structural and political variables are included:

Education (Inc_{proxy}): A proxy for Socio-Economic Status (SES). Coded as a 4-point ordinal scale based on the highest level of education completed (edr):

$$\text{Education Level} = \begin{cases} 0, & \text{None,} \\ 1, & \text{Primary,} \\ 2, & \text{Secondary,} \\ 3, & \text{Higher Education} \end{cases} \tag{5}$$

Urbanization (U): Binary indicator for urban residence (ur1new), accounting for the concentration of both extortion activity and economic opportunity.

$$\text{Urban} = \begin{cases} 1, & \text{if residence is Urban (City/Outskirts)} \\ 0, & \text{if residence is Rural} \end{cases} \tag{6}$$

Corruption Perception (C): A generalized measure of how common the respondent believes corruption is among politicians (exc7). Reversed so higher values indicate higher cynicism:

$$\text{High Corruption Perc.} = \begin{cases} 1, & \text{Very Uncommon} \\ 2, & \text{Uncommon} \\ 3, & \text{Common} \\ 4, & \text{Very Common} \end{cases} \tag{7}$$

Municipal Services (W_{proxy}): Satisfaction with local services (sgl1), serving as a proxy for the tangible delivery of public goods by the national government. Inverted so higher values indicate better services:

$$\text{Muni Services} = \begin{cases} 1, & \text{Very Bad} \\ 2, & \text{Bad} \\ 3, & \text{Fair} \\ 4, & \text{Good} \\ 5, & \text{Very Good} \end{cases} \tag{8}$$

Results

Model Estimation

Logistic Regression Results: Determinants of Bukele Support

	Dependent variable:	
	Support for Bukele	
	Main Effects	Interaction (H3)
	(1)	(2)
Extortion Victim	-0.465*	-0.343
	(0.207)	(0.533)
Econ Perception (Better)	0.451***	0.460***
	(0.103)	(0.110)
Urban (Yes)	-0.414**	-0.415**
	(0.148)	(0.148)
Education (0-3)	-0.426***	-0.426***
	(0.087)	(0.087)
Corruption Perc (High)	-0.130	-0.130
	(0.080)	(0.080)
Muni Services (Better)	0.092	0.091
	(0.060)	(0.060)
Interaction: Victim x Econ		-0.077
		(0.310)
Constant	1.935***	1.922***
	(0.404)	(0.407)
Observations	1,432	1,432
Log Likelihood	-667.722	-667.691
Akaike Inf. Crit.	1,349.445	1,351.383

========== Note: *p<0.05;* ***p<0.01;*** p<0.001

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Table 2

	Dependent variable:	
	Support for Bukele	
	(1)	(2)
Bribe Victim (State)	0.293	−0.948
	(0.336)	(0.872)
Econ Perception (Better)	0.470***	0.433***
	(0.103)	(0.105)
Urban	−0.435***	−0.437***
	(0.147)	(0.147)
Education	−0.446***	−0.444***
	(0.088)	(0.088)
Gen. Corruption Perc	−0.138*	−0.141*
	(0.080)	(0.080)
Muni Services	0.103*	0.099
	(0.060)	(0.061)
Interaction: Bribe x Econ		0.764
		(0.527)
Constant	1.884***	1.963***
	(0.404)	(0.408)
Observations	1,435	1,435
Log Likelihood	−670.230	−669.027
Akaike Inf. Crit.	1,354.460	1,354.054
Note:	*p<0.1; **p<0.05; ***p<0.01	

Limitations

Note: This submission focuses on the LAPOP survey data from 2021. That said,there are a couple of limitations with this data set that need to be addressed before the finalization of this paper.

Currently, I am examining different approaches to aggregation and measures of my variables using the following data sets:

2021 Legislative Election Data (n = 262)

- Municipality Vote share for each party
- Bukele's Party as opposed to direct vote

DIGESTYC - Census (Similar to ACS) 2021 - Municipality level demographic data

ACLED Conflict Data - Gang and State Violence events from 2018 to 2024

CSES 2019 Post-Election Survey (El Salvador) - Comparative Study of Electoral Systems (CSES)

(Castro and Kotti, n.d.; Gellman 2022; Meléndez-Sánchez et al. 2023a, 2023b)

Brownback, Andy, and Aaron M. Novotny. n.d. "Social Desirability Bias and Polling Errors in the 2016 Presidential Election." https://doi.org/10.2139/ssrn.3001360.

Castro, Eleno, and Randy Kotti. n.d. "Saving Democracy: Reducing Gang Influence on Political Elections in El Salvador." https://www.hks.harvard.edu/sites/default/files/degree%20programs/MPAID/files/Castro%2C%20Eleno%20%26%20Randy%20Kotti_SYPA.pdf.

Gellman, Mneesha. 2022. "The Democracy Crisis in El Salvador: An Overview (2019–2022)." *Columbia University's Center for Mexico and Central America's Regional Expert Paper Series* 4. https://ilas.columbia.edu/sites/default/files/content/CeMeCA_Paper4_Gellman_English.pdf.

Meléndez-Sánchez, Manuel, Luis A Camacho, Mollie Cohen, Ingrid Rojas, Angelo Cozzubo, Katrina Kamara, and Paige Pepitone. 2023a. "Analysis of Trends in Democratic Attitudes." *NORC at the University of Chicago*, April.

———. 2023b. "Analysis of Trends in Democratic Attitudes." *NORC at the University of Chicago*, April.

Tannenberg, Marcus. 2017. "The Autocratic Trust Bias: Politically Sensitive Survey Items and Self-Censorship." *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2980727.