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Democratic Backsliding and Recovery

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Democratic Backsliding and Recovery

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Abstract

Why does democratic backsliding often reverse rather than culminate in durable autocracy? Using V-Dem data for 202 countries over 1900–2024, this paper shows that the apparent durability advantage of autocracy largely disappears once historical composition is taken into account. It further shows that political polarization disproportionately destabilizes democracies relative to autocracies. Event-study evidence indicates that polarization rises before democratic collapse and declines following democratization. A simple political-economy framework rationalizes these patterns through endogenous demand for centralized authority under democratic instability and subsequent backlash against concentrated power.

Keywords: democratic backsliding, autocracy, polarization, regime survival

JEL Codes: C41, D72, P16

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1. Introduction

Recent years have witnessed a pronounced wave of democratic backsliding, often described as a new phase of global autocratization. Yet the longer historical record reveals a more nuanced pattern: many episodes of democratic erosion are followed by renewed democratization. The interwar collapse of European democracies was followed by postwar democratic expansion, and many authoritarian regimes established during the Cold War later gave way to democratic transitions. This recurring cycle raises a central empirical question: why do democracies sometimes give way to autocracy, and why do such reversals so often prove temporary?

Using V-Dem data for 202 countries over 1900–2024, this paper delivers two central findings. First, the widely held view that autocracies are more durable than democracies is largely driven by historical composition: once regimes are compared within similar historical eras, autocratic spells exhibit higher termination risk. Second, political polarization is a distinctly democratic vulnerability: it strongly predicts democratic breakdown but is far less associated with autocratic collapse. Event-study evidence further shows that polarization rises before democratic collapse and declines following democratization.

These results also point to distinct sources of fragility across regime types. Democracies appear especially vulnerable to polarization and conflict that strain electoral governance, whereas autocracies face longer-run risks associated with coercion, predation, and internal decay. The broader historical pattern is therefore not one of one-sided authoritarian resilience, but of shifting institutional advantages across political environments and over time.

To interpret these patterns, we develop a simple two-period political-economy framework in which citizens choose between democratic and autocratic institutions. In polarized democracies, policy volatility, distributive conflict, and ineffective governance increase the appeal of centralized rule despite the costs of repression and expropriation. Yet authoritarian rule contains the seeds of its own fragility: once in power, an autocrat may use concentrated authority opportunistically, leading citizens to prefer a return to democracy. Regime change is therefore dynamic. The same forces that generate support for autocracy under one set of conditions may later restore support for democracy. Taken together, the evidence suggests that regime durability depends less on an intrinsic democratic–authoritarian ranking than on how different institutions respond to polarization and changing historical environments.

We formalize this mechanism in a baseline model where polarization raises the welfare costs of democratic instability. Because citizens do not initially observe the autocrat's type, autocracy may be chosen ex ante yet reversed ex post once predatory behavior is revealed. We then extend the framework to weak-institution environments in which political competition takes the form of costly intergroup struggle. In such settings, the appeal of autocracy rises further because centralized rule can avoid wasteful conflict.

This paper contributes to three strands of literature. First, it relates to research on democratic backsliding and polarization (Arbatli and Rosenberg, 2021; Berman, 2019; Lührmann and Lindberg, 2019; Svolik, 2019) by providing new evidence on the dynamic relationship between polarization, democratic erosion, and democratic recovery. Second, it contributes to the political-economy literature on institutional choice and commitment (Acemoglu and Robinson, 2006; Besley and Persson, 2011) by interpreting autocracy as an endogenous response to democratic instability. Third, it contributes to empirical work on regime durability (Boese et al., 2021; Geddes, Wright, and Frantz, 2018; Przeworski et al., 2000; Svolik, 2012) by showing that apparent autocratic longevity partly reflects historical composition rather than a general persistence advantage.

The rest of the paper proceeds as follows. Section 2 reviews major historical waves of democracy and autocracy, with particular attention to Brazil as an illustrative case. Section 3 presents the theoretical framework. Section 4 provides the empirical analysis. Section 5 concludes.

2. Historical Motivation: Regime Waves and Democratic Recovery

The modern history of political regimes does not follow a simple linear progression from autocracy to democracy, nor a monotonic drift toward authoritarian persistence. Instead, the twentieth and early twenty-first centuries are characterized by repeated waves of democratic expansion, democratic breakdown, and subsequent democratic recovery. This broader pattern motivates the paper's central question: if autocracy is inherently more durable than democracy, why have so many authoritarian episodes later given way to renewed democratization?

The interwar period provides the classic example of democratic collapse. Across Europe and beyond, many fragile democracies succumbed to authoritarian rule amid economic crisis, political fragmentation, and rising polarization. Yet the postwar decades saw a substantial reversal. Defeated fascist regimes were replaced by democracies, and democratic institutions consolidated

across much of Western Europe and other regions. Later, authoritarian regimes established during the Cold War also proved far from permanent. Southern Europe democratized in the 1970s, Latin America in the 1980s, and post-communist countries in the 1990s experienced another major democratic wave.

These historical reversals suggest that the observed longevity of autocratic regimes may partly reflect the environments in which they emerged rather than a universal institutional advantage. Many twentieth-century autocracies arose in periods marked by war, weak state capacity, limited democratic norms, and low income levels—conditions that differed sharply from those facing later democratic regimes. Comparisons that ignore historical composition may therefore overstate the intrinsic persistence of autocracy.

Brazil offers a compact illustration of these dynamics. Its twentieth-century history alternated between electoral competition and authoritarian rule. The oligarchic First Republic collapsed in 1930 and was followed by the Estado Novo dictatorship under Getúlio Vargas (1937–1945). Democracy returned after World War II, but rising polarization and institutional conflict preceded the 1964 military coup. The military regime endured until gradual liberalization culminated in democratization during the 1980s. Since the 1988 Constitution, Brazil has remained democratic despite renewed polarization and institutional strain. Brazil thus reflects the broader historical pattern of democratic erosion followed by democratic recovery rather than permanent authoritarian replacement.

This historical perspective motivates the empirical analysis that follows. We examine whether autocracy is in fact more durable than democracy once historical context is taken into account, whether polarization affects regime survival asymmetrically, and whether transitions into and out of democracy exhibit systematic polarization dynamics.

3. A Simple Political-Economy Framework

This section develops a simple political-economy framework to interpret the empirical patterns documented below. The central tradeoff is between democratic accountability and authoritarian order. Democracy allows citizens to replace poorly performing leaders, but when political polarization is high it can also generate policy volatility, distributive conflict, and ineffective governance. Autocracy can reduce these costs by concentrating authority, yet centralized power

creates risks of repression and opportunistic extraction. The framework is intentionally parsimonious: its purpose is to organize a set of empirically testable predictions.

3.1. Model setup

Consider an economy operating over two time periods, t=1,2, whose population is divided into two internally homogeneous groups or camps, indexed J, J=L,R, distinguished by period policy preferences, $0 < p_L < p_R$:

(1) $u_{Jt} = \overline{u} - E(\pi_t - p_J)^2, J = L, R$

where $\overline{u}$ is a large constant, π is the policy choice, and the difference $\Delta = p_R - p_L$ captures the degree of polarization in the economy. We will assume for simplicity that the two groups are of equal size.

In each period, there is also an autocrat, who is partly benevolent with respect to policy choices and partly self-interested, with period utility:

(2) $v_t = u_{Lt} + u_{Rt} + \lambda s(r_t) - r_t$

Where λ is the weight of the self-interested component; s is the amount of resources the autocrat expropriates, and r_t – the cost of his repression effort used to this end; s is an increasing and concave function. We assume that the autocrat's identity is not known to the rest, so that λ is ex ante distributed according to a known distribution cdf F in the interval $[0, \infty)$.

We then write individual period utilities:

(3) $U_{Jt} = \overline{u} - E(\pi_t - p_J)^2 - s(r_t)A_t$

where $A_t = 1$ when autocrat is in power and $A_t = 0$ when democracy prevails in period t; and the autocrat's utility is

(4) $V_t = [u_{Lt} + u_{Rt} + \lambda s(r_t) - r_t]A_t$

By extension, abstracting from intertemporal discounting for simplicity, lifetime utilities of the individuals and the autocrat are, respectively:

(5) $\sum_1^2 U_{Jt}$ and $\sum_1^2 V_t$

In each period, the political system is either democracy ($A_t = 0$) or autocracy ($A_t = 1$). Under the former, in this baseline variation policy is determined through legislative bargaining

whereby an individual representing a group is selected at random to make a binding policy proposal. Under autocracy, the autocrat selects policy in any period he is in power. Additionally, he sets the amount of repression as follows. If in power in period 2, he selects the repression level for the period. If in power in period 1, the autocrat chooses durable repression capacity that carries into period 2 unless removed. The idea here is that the means of repression (police force, surveillance apparatus etc.) are durable, unless eliminated by force. The citizens determine at the beginning of a period the policymaking regime – democracy or autocracy. If they choose autocracy in period 1, the autocrat selects the level of repression. Upon observing the selected level of repression by the autocrat, the citizens then can forcibly remove him and institute a democracy for period 2, upon which period 2's outcome is determined.[1] We will be interested in the subgame perfect equilibrium.

3.2. Analysis

We begin with the observation that, to the extent democracy prevails in period t=1,2, legislative bargaining leads to $\pi_t(A_t = 0) = p_J$ or p_{-J} with probability 0.5 each, implying the expected utility levels of

(6) $U_{Jt}(A_t = 0) = u_{Jt}(A_t = 0) = \overline{u} - 0.5\Delta^2$

In contrast, under autocracy, $\pi_t(A_t = 1) = \frac{p_L + p_R}{2}$, and

(7) $u_{Jt}(A_t = 1) = \overline{u} - \left(\frac{\Delta}{2}\right)^2 = \overline{u} - 0.25\Delta^2 > u_{Jt}(A_t = 0) = \overline{u} - 0.5\Delta^2$

This illustrates the potential advantage of autocracy in generating policy stability.

Consider the one-period maximizer of $\lambda s(r_t) - r_t$, given by the first order condition $\lambda s'(r) - 1 = 0$, or explicitly,

(8) $r^*(\lambda) = s'^{-1}\left(\frac{1}{\lambda}\right)$;

it increases in λ, the value placed by the autocrat on expropriation. In the absence of any strategic consideration, this is the extent of repression chosen by the autocrat; in particular, to the extent that he is for the first time in power in the last second period, this level will be set.

[1] We for simplicity assume away the cost of such action as it is immaterial qualitatively.

We then obtain the following result whose proof is in the appendix.

Lemma 1. When $\lambda > \overline{\lambda}$, the autocrat prefers to expropriate his first best amount and be removed from power; when $\underline{\lambda} < \lambda < \overline{\lambda}$, he prefers to expropriate the maximal amount that leaves him in place, $\underline{r}$; when $\lambda < \underline{\lambda}$, he again expropriates the first best amount (and stays in power).

The following table summarizes the utility levels in each of the two periods for each of the two population groups for the above three intervals:

Table 1. Summary of Utility Levels

	1	2
$\lambda > \overline{\lambda}$	$\overline{u} - 0.25\Delta^2 - s(r^*(\lambda))$	$\overline{u} - 0.5\Delta^2$
$\underline{\lambda} < \lambda < \overline{\lambda}$	$\overline{u} - 0.25\Delta^2 - s(\underline{r})$	$\overline{u} - 0.25\Delta^2 - s(\underline{r})$
$\lambda < \underline{\lambda}$	$\overline{u} - 0.25\Delta^2 - s(r^*(\lambda))$	$\overline{u} - 0.25\Delta^2 - s(r^*(\lambda))$

Integrating, we obtain the following lifetime expected utility levels:

(9) $\sum_1^2 U_{Jt}(A_1 = 1) = \int_{\overline{\lambda}}^{\infty}\left[\overline{u} - 0.25\Delta^2 - s\left(r^*(\lambda)\right) + \overline{u} - 0.5\Delta^2\right]dF(\lambda) + \int_{\underline{\lambda}}^{\overline{\lambda}}\left[\overline{u} - 0.25\Delta^2 - s\left(\underline{r}\right) + \overline{u} - 0.25\Delta^2 - s\left(\underline{r}\right)\right]dF(\lambda) + \int_0^{\underline{\lambda}}[\overline{u} - 0.25\Delta^2 - s\left(r^*(\lambda)\right) + \overline{u} - 0.25\Delta^2 - s(r^*(\lambda))]dF(\lambda) =$

$$2\overline{u} - 0.25\Delta^2 + \int_{\overline{\lambda}}^{\infty}\overline{(u} - 0.25\Delta^2)\, dF(\lambda) - \int_{\overline{\lambda}}^{\infty}\left[\, s\left(r^*(\lambda)\right)\right]dF(\lambda) - \int_{\underline{\lambda}}^{\overline{\lambda}}\left[2s\left(\underline{r}\right)\right]dF(\lambda) - \int_0^{\underline{\lambda}}[2s\left(r^*(\lambda)\right)]dF(\lambda)$$

To proceed, we assume that polarization level is large so that, to the extent democracy prevails in period 1, it will be replaced by autocracy in period 2; then the resulting expected utility levels are:

$$(10)\ \sum_1^2 U_{Jt}(A_1 = 0) = \overline{u} - 0.5\Delta^2 + \overline{u} - 0.25\Delta^2 - E_\lambda s\left(r^*(\lambda)\right) = \overline{2u} - 0.75\Delta^2 - E_\lambda s\left(r^*(\lambda)\right)$$

Comparison between (9) and (10) reveals that, for sufficiently high polarization levels the former dominates. We then summarize:

Proposition 1. (i) If democracy prevails in period 1 – which is the case when the degree of polarization is sufficiently small - the citizens prefer it to continue into period 2. (ii) For sufficiently high polarization levels, the choice of autocracy in period 1 is favored over democracy by the citizens. In period 2, autocracy will be replaced by democracy for all realizations $\lambda > \overline{\lambda}$, or with probability 1-F($\overline{\lambda}$).

This main result identifies polarization and autocrat's expropriation as two main factors behind the support for the two regimes. It, in particular, indicates that, provided that the polarization level in the economy is high enough, and to the extent the autocrat turns out to be sufficiently self-interested, although initially installed, he will be then replaced by a democracy. In this sense, democracy is more persistent than autocracy.

3.3. Extension: Intergroup Struggle

We now consider an alternative mechanism that determines the policy outcome under democracy. Instead of legislative bargaining we now focus on (potentially violent) struggle between the groups expending resources in order to affect the outcome. As will be elaborated upon later, this is particularly pertinent to the first autocracy period between the two World Wars. Thus, let x_J denote the resource effort of group J; we will assume that it is determined collectively by the group's members. To simplify, we will assume a unit marginal cost of effort. The probability of policy outcome p_J is

$$(11) \quad P\left(x_J, x_{-J}\right) = \frac{{x_J}^{\varepsilon}}{{x_J}^{\varepsilon} + {x_{-J}}^{\varepsilon}}$$

where $0 < \varepsilon \leq 1$, the elasticity of "winning" the favored outcome, is interpreted as the opposite of institutional quality: the higher ε the larger is the payoff from wasteful intergroup struggle. As is shown in the appendix, we then have:

Proposition 2. Lower institutional quality increases the relative attractiveness of autocracy by raising the costs of democratic conflict.

This result complements the previous one by introducing a third dimension of regime comparison: institutional quality. It is especially relevant for understanding the first interwar autocratic wave, marked by two central features. First, intense intergroup conflict accompanied severe ideological polarization, as radical Left and Conservative forces clashed—often violently—in countries such

as Italy, Spain, and Germany. Second, democratic institutions were fragile, having only recently emerged after franchise expansion and World War I.

The Weimar Republic is a canonical example of how polarization combined with weak institutions generated instability and violent street politics. Conservative elites viewed Adolf Hitler and the Nazi Party as vehicles for restoring order. Italy offers another illustration. Universal male suffrage was introduced in 1912, but democratic institutions remained underdeveloped and state capacity weak. The fragmented 1919 election, combined with postwar discontent, further eroded support for the existing order. Presenting himself as a national unifier, Benito Mussolini argued that only dictatorship could restore Italy's honor and stability; in 1922 he was appointed prime minister (Gentile, 2005; Lyttelton, 1987).

4. Empirical Evidence on Democratic Persistence and Regime Change

This section evaluates the model's main implications using global historical data. We examine relative regime durability, the asymmetric role of polarization, transition dynamics, repression, and institutional quality. Our objective is not causal identification, but to assess whether broad historical regularities align with the mechanisms highlighted by the theory. While the paper does not claim a single quasi-experimental design, credibility comes from the convergence of multiple approaches: nonparametric duration evidence, pooled and separate hazard models, event-study timing patterns, and within-country switcher comparisons.

4.1. Data, Measurement, and Econometric Approach

Our empirical analysis uses Version 15 of the Varieties of Democracy (V-Dem) dataset, covering 202 countries from 1900 to 2024. We collapse V-Dem's four-category Regimes of the World classification into a binary regime indicator: democracy (electoral and liberal democracy) and autocracy (electoral and closed autocracy). This aggregation matches the model's central distinction between regimes with and without meaningful electoral accountability. We adopt this simplification because the theory's predictions are formulated at the democracy-versus-autocracy level, and the four-category alternative would substantially reduce statistical power in the duration models. The cleaned country-year panel contains 19,581 observations. Regime spells are defined as consecutive years within the same binary regime category. A spell ends when a country transitions to the alternative regime type and is otherwise right censored in 2024. The resulting duration sample contains 468 spells: 190 democratic and 278 autocratic. The main covariates are

political polarization (V-Dem IRT measure), log GDP per capita, log population, fiscal capacity, regional democracy share excluding the country itself, and historical-period indicators. Appendix table A1 contains descriptive statistics.

We use Kaplan–Meier and Nelson–Aalen estimators for nonparametric comparisons, parametric duration models for robustness, and Cox proportional hazards models as the main specification.[2] Additional specifications include period controls, stratified hazards, and country frailty terms to address historical heterogeneity and persistent country differences.

4.2. Relative Regime Persistence

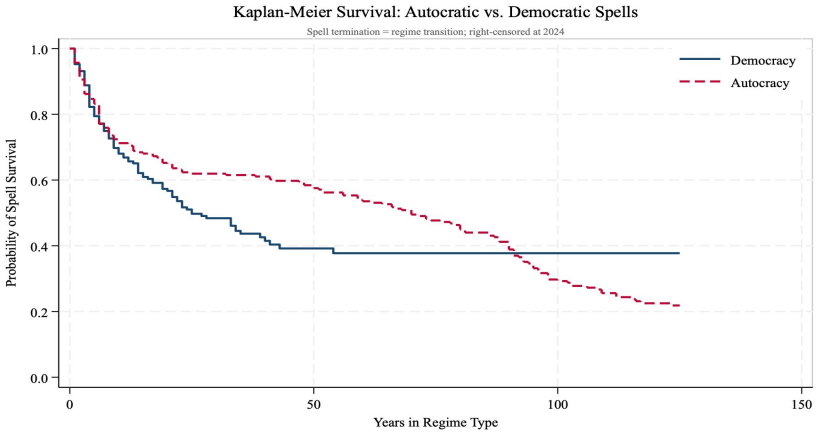
We begin with unconditional comparisons of democratic and autocratic spells. Non-parametric Kaplan-Meier estimates indicate longer median autocratic durations than democratic durations (Table 2 and Figure 1). However, conventional equality-of-survival tests do not reject the null at standard significance levels. Accordingly, the unconditional median gap should be interpreted as descriptive rather than decisive evidence of greater autocratic durability.

Table 2. Non-Parametric Survival Comparison: Democratic vs. Autocratic Spells

	Median (yrs)	95% CI	Test Statistic	p-value
Democracies	25	19–40	Log-rank: 2.69	0.101
Autocracies	70	52–86	WBG: 3.04	0.081

KM median survival times with 95% CIs. Log-rank and Wilcoxon-Breslow-Gehan (WBG) tests for equality of survivor functions. N=468 spells (190 democratic, 278 autocratic). V-Dem v15, 1900–202

Figure 1



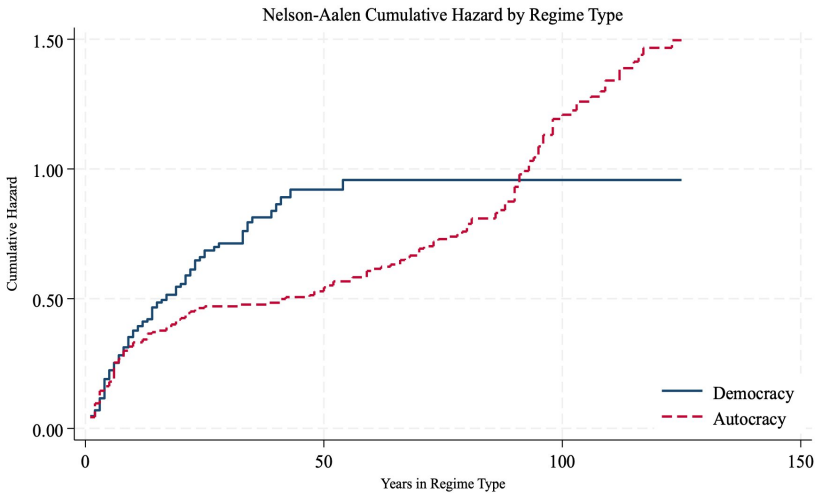
[2] It should be noted that we apply Bonferroni tests and conclude that our findings are robust to standard corrections for multiple specifications and testing.

Kaplan-Meier survival curves for autocratic and democratic spells. Spell termination is defined as a transition to the opposite regime type; spells are right censored at 2024. The democratic curve displays a steep early decline followed by a pronounced plateau; the autocratic curve declines more gradually throughout without a comparable plateau.

The shape of the survivor functions is more informative than the medians alone. Democratic spells exhibit higher early attrition but substantially flatter hazards among long-lived regimes, consistent with democratic consolidation.

Figure 2 presents the Nelson-Aalen cumulative hazard estimates, which formalize the hazard crossing implied by the KM curves. Democratic cumulative hazard exceeds autocratic through approximately year forty-five, reflecting early-spell democratic fragility. The trajectories then converge, and beyond year ninety, the autocratic cumulative hazard curve lies above the democratic one, a reversal indicating that among long-running spells, democracies exit at lower instantaneous rates than autocracies. This pattern is consistent with a consolidation interpretation: surviving democracies may develop institutional depth, elite acceptance of electoral norms, and citizen identification with democratic rules that increasingly anchor the regime, while long-running autocracies face a sustained self-termination risk[3].

Figure 2



Nelson-Aalen cumulative hazard by regime type. Democratic hazard exceeds autocratic through year 45; trajectories cross beyond year 90, after which long-surviving autocracies face higher exit risk than long-surviving democracies. This pattern is consistent with a two-stage consolidation mechanism

[3] We note that the number of spells at risk beyond year ninety is somewhat small, and the crossing should be interpreted with caution given the wide confidence bands at those durations.

Table 3 reports parametric survival models across five distributional assumptions. The autocracy coefficient is negative in the Weibull AFT specification (−0.079), indicating shorter predicted duration for autocratic spells, and positive but small and insignificant in the log-logistic (0.045) and log-normal (0.058) AFT specifications. In both PH specifications, exponential and Gompertz, the autocracy coefficient is positive, consistent with weakly higher hazard. None attain statistical significance; the data do not support a systematic autocratic durability advantage once covariates are controlled[4].

Table 3. Parametric Survival Models: Regime Persistence Comparison

	Weibull	**Log-Log**	**Log-Norm**	**Exponential**	**Gompertz**
Autocracy (1=Aut)	−0.079	0.045	0.058	0.081	0.058
	(0.195)	*(0.171)*	*(0.155)*	*(0.197)*	*(0.206)*
Polarization (IRT)	−0.079	−0.136*	−0.152	0.081	0.082
	(0.069)	*(0.081)*	*(0.095)*	*(0.069)*	*(0.073)*
Ln GDP per Capita (lag)	0.218**	0.187	0.152	−0.223**	−0.216**
	(0.099)	*(0.124)*	*(0.144)*	*(0.105)*	*(0.108)*
Fiscal Capacity (IRT)	−0.009	0.032	0.069	0.009	0.012
	(0.087)	*(0.110)*	*(0.129)*	*(0.088)*	*(0.092)*
Regional Democracy Share	0.016	−0.136	−0.219	−0.018	−0.007
	(0.345)	*(0.346)*	*(0.350)*	*(0.348)*	*(0.365)*
Cold War Dummy	2.208***	2.208***	2.039***	−2.219***	−2.459***
	(0.179)	*(0.196)*	*(0.199)*	*(0.196)*	*(0.305)*
Observations	421	421	421	421	421
Parameterization	AFT	AFT	AFT	PH	PH
*AFT models: coefficients are log-time ratios. PH models: coefficients are log-hazard ratios. Standard errors clustered by country. *p < 0.10, **p < 0.05, ***p < 0.01.*					

[4] The parametric models in Table 3 serve as distributional robustness checks; the Gompertz specification achieves the best fit by AIC/BIC and yields substantively identical coefficient estimates, confirming that results are not driven by functional form.

An important predictor in all five specifications is the Cold War dummy, with a log-time ratio of approximately 2.2 in AFT models, which underlines how historical period conditions dominate the raw distributional comparison. This dummy captures several structural changes and the fact that post-1945 spells have less time to terminate before right-censoring in 2024. Because this single variable absorbs a very significant variation, the interpretation of the remaining coefficients in these specifications should be understood as conditional on the historical environment proxied by it. This motivates the period-controlled Cox analysis below.

Table 4 reports pooled Cox models. Unconditionally, autocratic spells exhibit a modest survival advantage (column 1), but this disappears once controls are added and reverses after accounting for historical period composition (column 2). Within comparable eras, autocratic spells display significantly higher exit hazards than democratic spells (columns 3 and 4). Polarization is strongly associated with democratic exits but only weakly with autocratic exits, while more democratic regional environments stabilize democracies and destabilize autocracies (columns 5 and 6). These patterns are consistent across alternative specifications.

The regional democracy main effect indicates lower democratic exit hazards in more democratic regions, while the Aut × Regional Democracy Share interaction implies that autocratic spells face sharply higher exit hazards in democracy-rich regional environments. These asymmetric associations mirror the separate-sample results reported in Table 5, with polarization acting as a regime-specific source of democratic fragility and regional democratic diffusion acting as a regime-specific source of autocratic instability. As observational estimates these coefficients should not be interpreted causally; however, the convergence of the pooled-interaction specification with the separate-sample Cox models in Table 5 strengthens confidence that the documented asymmetries are robust features of the data rather than artifacts of any single specification.

Table 4. Pooled Cox Proportional Hazard Models: Regime Spell Persistence

	Bivariate	**Controls**	**Period FE**	**Stratified**	**+ Pol. Int.**	**Full Int.**
Autocracy (1=Aut)	0.812*	1.042	1.647***	1.869***	1.070	0.244***
	(0.099)	*(0.190)*	*(0.276)*	*(0.315)*	*(0.176)*	*(0.059)*
Polarization		1.076	1.071	1.026	1.412***	1.415***
		(0.077)	*(0.073)*	*(0.067)*	*(0.167)*	*(0.164)*

Aut × Polarization					0.673***	0.655***
					(0.076)	*(0.072)*
Aut × Reg. Dem. Share						24.922***
						(12.481)
ln(GDP per capita)		0.814**	0.674***	0.695***	0.820*	0.769**
		(0.085)	*(0.067)*	*(0.063)*	*(0.087)*	*(0.081)*
Fiscal capacity		1.028	0.978	0.992	1.044	1.058
		(0.096)	*(0.084)*	*(0.076)*	*(0.105)*	*(0.107)*
Regional dem. share		0.978	0.800	0.734	1.086	0.242***
		(0.320)	*(0.248)*	*(0.227)*	*(0.346)*	*(0.087)*
Cold War overlap		0.119***	0.020***	0.001***	0.124***	0.173***
		(0.037)	*(0.006)*	*(0.001)*	*(0.038)*	*(0.056)*
Interwar period			1.575**			
			(0.355)			
Cold War period			19.592***			
			(6.106)			
Post-Cold War			1.008			
			(0.205)			
Observations	468	421	421	421	421	421

Hazard ratios throughout. HR > 1 indicates faster spell exit (lower persistence). Standard errors clustered by country in parentheses. Col. (4) uses period-stratified baseline hazards. Cols. (5) and (6) include interaction terms between regime type and polarization/regional democracy. *p < 0.10, **p < 0.05, ***p < 0.01.

The large period-dummy coefficients in Column 3 underscore the importance of historical composition. The Aut × Regional Democracy Share interaction in Column 6 merits closer scrutiny given its large magnitude. Because the regional democracy share is bounded on [0, 1], the interaction's effect on relative hazards is itself bounded in practice. The implied ratio of autocratic to democratic hazards at a given regional democracy share x is $0.244 \times 24.922x$: at $x = 0$ (a region with no democratic neighbors), the ratio is 0.244, so autocracies face lower exit hazards than democracies; at $x = 0.5$ the ratio is 1.22; at $x = 1$ (a fully democratic neighborhood) the ratio is 6.08. The crossover point, where autocratic and democratic spells face equal exit hazards, occurs at $x \approx 0.44$, well within the observed range of the covariate. The large coefficient therefore does not imply an implausibly large effect on hazards but rather captures the full range of asymmetry across the support of regional democracy share.[5] The convergence of estimates across three

[5] The pattern is corroborated by methodologically distinct estimates. The separate-sample Cox models in Table 5 report regional democracy hazard ratios of 0.360 for democratic spells and 2.989 for autocratic spells thus identifying the same direction of asymmetry through within-sample estimation that does not rely on the interaction specification. The ratio of these multipliers (2.989/0.360 = 8.3) is of the same order of magnitude as the interaction-

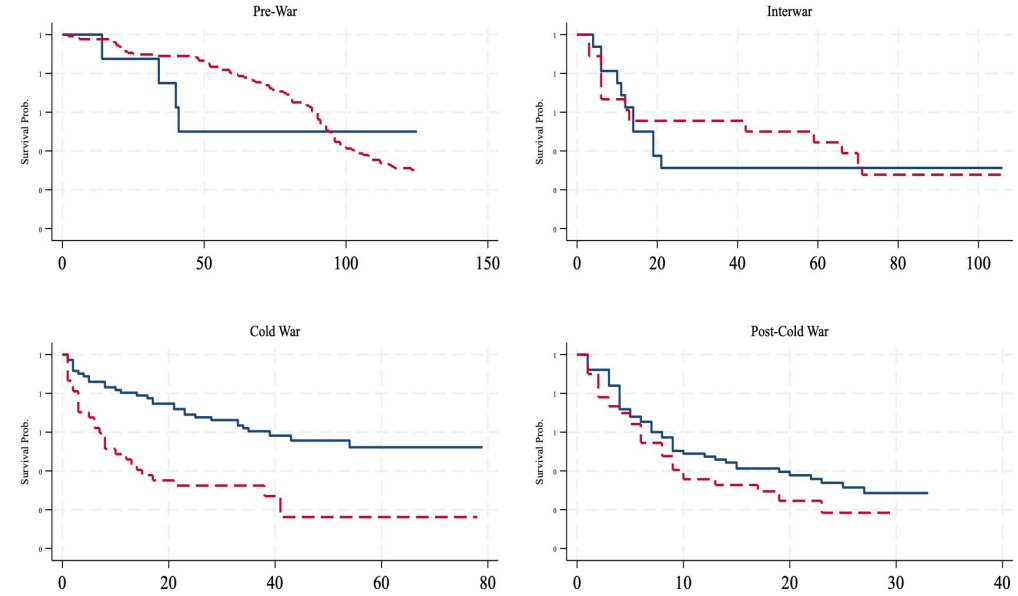
methodologically distinct approaches namely, pooled interactions, separate-sample models, and within-country switcher-sample estimates, indicates that the asymmetric neighborhood effect is a genuine feature of the data rather than an artifact of the interaction specification6.

4.3. Period Heterogeneity and the Democratic Advantage Over Time

Figure 3 decomposes Kaplan-Meier survival curves by historical period, revealing a coherent historical narrative that runs contrary to a simple story of consistent autocratic durability. In the Pre-War era (1900–1913), autocratic spells exhibit clearly higher survival probability throughout the observed window, a reflection of a political landscape in which democracy was rare and institutionally immature. The Interwar period (1919–1938) shows near-equal initial decline, with autocracies retaining a modest right-tail advantage, likely capturing the distinctive fragility of newly established Central and Eastern European democracies under conditions of economic crisis and fascist mobilization.

Figure 3

Kaplan-Meier Survival by Historical Period



Solid = Democracy; Dashed = Autocracy

based estimate implied by Column 6 at the top of the regional-democracy distribution. The switcher-sample estimates in Table 7 (separate Cox columns) reproduce the asymmetry: HR = 0.359 for democratic spells and HR = 2.363 for autocratic spells, both statistically significant despite the more restrictive sample of 359 spells.

[6] As the interaction specification is sensitive to the covariate distribution and to potential multicollinearity between the main effects and their product, we regard the separate-sample estimates in Tables 5 and 7 as the primary evidence for the regime-specific neighborhood effect, and the pooled-interaction specification in Table 4 Column 6 as a complement that permits inference within a single baseline hazard.

Kaplan-Meier survival curves by historical period. Solid lines: democratic spells; dashed lines: autocratic spells. Pre-War and Interwar periods favor autocracies; Cold War and Post-Cold War periods favor democracies, with the reversal concentrated precisely in the eras covering the past eight decades.

The Cold War era (1946–1991) marks the first structural reversal. Democratic survival curves lie substantially above autocratic curves throughout the observed window, with democratic spells plateauing near 0.50 while autocratic survival falls sharply toward 0.17. The Post-Cold War period (1992–2024) sustains the democratic advantage despite compressed duration distributions from the large cohort of third-wave transitional regimes formed after 1991. Two of the four historical periods, the Cold War and Post-Cold War eras, together spanning 1946 to the present, show consistent democratic survival advantages.

This advantage apparent is not a feature of the full historical record but of the modern political world; it is a broad historical pattern that appears to have emerged and strengthened over the course of the twentieth century. Once historical-period composition is considered, the relative ranking shifts. In Cox specifications with period fixed effects, autocratic spells exhibit higher exit hazards than democratic spells. This result is consistent with the interpretation that part of the apparent autocratic durability in raw data reflects the favorable survival environment of earlier eras rather than an intrinsic persistence advantage of autocratic institutions. Substantively, the evidence points to a two-stage interpretation. Democracies are vulnerable when newly created, but surviving democracies become increasingly durable. Autocracies may survive for long periods in some contexts, yet do not display the same consolidation pattern once comparable historical environments are considered.

4.4. Mechanism I: Polarization and Democratic Fragility

We next examine whether polarization is associated with regime survival asymmetrically across regime types, as the model predicts. Separate hazard models show that higher political polarization is strongly associated with greater democratic exit risk, while the corresponding association for autocratic spells is small and statistically weak. This pattern is closely aligned with the theory. In democratic systems, polarization is associated with impeded coalition formation, intensified distributive conflict, reduced acceptance of electoral defeat, and weakened support for institutional constraints. Each of these channels is associated with higher probability of democratic breakdown.

In autocracies, polarization may matter politically, but it need not generate the same immediate threat to regime continuity because incumbents are less dependent on competitive electoral turnover. This is shown in Table 5.

Table 5. Separate Cox Models: Heterogeneous Fragility Mechanisms

	Democracy	**Autocracy**	**Dem. + FE**	**Aut. + FE**
Polarization (IRT)	1.555***	0.909	1.507***	0.918
	(0.172)	*(0.066)*	*(0.165)*	*(0.069)*
Ln GDP per Capita (lag)	0.595***	0.937	0.599***	0.823
	(0.090)	*(0.117)*	*(0.092)*	*(0.101)*
Fiscal Capacity (IRT)	0.805*	1.210	0.783*	1.207*
	(0.098)	*(0.141)*	*(0.102)*	*(0.132)*
Regional Democracy Share	0.360**	2.989***	0.356***	2.616**
	(0.143)	*(1.194)*	*(0.139)*	*(1.009)*
Cold War Dummy	0.361***	0.124***	0.115**	0.029***
	(0.103)	*(0.053)*	*(0.113)*	*(0.011)*
Interwar Entry			1.684*	1.268
			(0.522)	*(0.381)*
Cold War Entry			2.986	21.344***
			(3.146)	*(9.976)*
Post-CW Entry			0.848	0.857
			(0.293)	*(0.214)*
Observations	176	245	176	245

*Hazard ratios reported. Models share no common baseline hazard and do not constitute a direct persistence comparison. Standard errors clustered by country. *p < 0.10, **p < 0.05, ***p < 0.01.*

Political polarization displays the starkest asymmetry. In the democratic spell model, the polarization hazard ratio is 1.555 ($p < 0.01$): a one-unit increase in the IRT polarization measure is associated with a fifty-five percent higher instantaneous democratic exit hazard. In the autocratic spell model, the polarization hazard ratio is 0.909, statistically indistinguishable from unity. This asymmetry is consistent with the theoretical mechanism. Regional democracy share displays an equally striking asymmetry in the opposite direction: it is associated with a sixty-four percent

lower democratic exit hazard (HR = 0.360, $p < 0.05$) and a nearly three-fold higher autocratic exit hazard (HR = 2.989, $p < 0.01$). As the global democratic stock has expanded over the twentieth century, the regional democracy share has increased for most countries, a trend that the model suggests would simultaneously reinforce democratic persistence and erode autocratic stability. The income asymmetry completes the picture: log GDP per capita carries HR = 0.595 ($p < 0.01$) for democracies but HR = 0.937 (p = n.s.) for autocracies; a pattern consistent with the finding of Przeworski et al. (2000), suggesting that the democratic persistence advantage may widen as income rises. Across specifications, increases in polarization are associated with economically large increases in democratic hazard rates. While these associations do not establish causality, the magnitude and robustness of the specifications suggest that polarization is an important correlate of democratic fragility, as the model predicts.

4.5. Event Study: Polarization Dynamics Around Regime Transitions

The survival analysis shows that polarization is an important predictor of democratic fragility. We complement this evidence with an event-study design tracing polarization around regime transitions and testing whether polarization rises before democratic collapse and declines around democratization.

We estimate the following specification separately for each transition type:

$$(12) \qquad y_{it} = \sum\{k \neq -1\} \beta k \cdot 1[kit = k] + \alpha_i + \gamma_t + \varepsilon_{it}$$

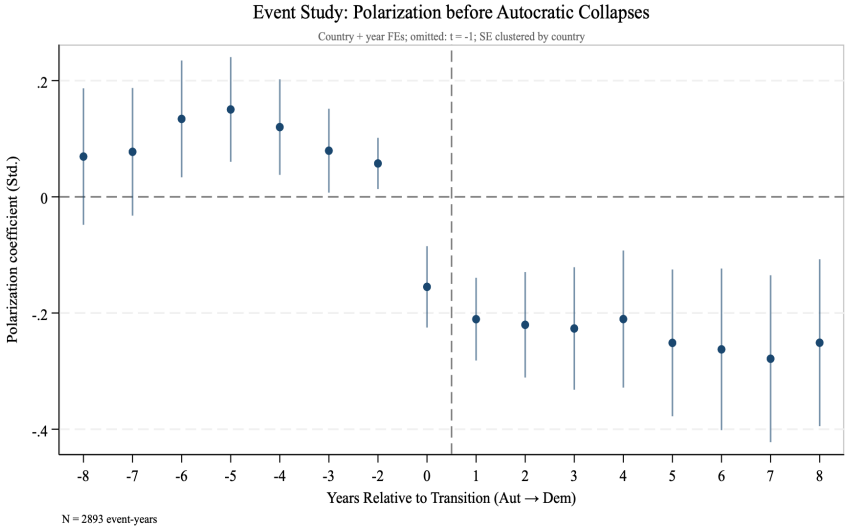
where y_{it} is the standardized V-Dem polarization measure (v2cacamps) for country i in year t, k_{it} denotes the number of years between year t and the transition event for country i, α_i and γ_t are country and year fixed effects, and the omitted category is k = -1. Standard errors are clustered by country[7].

Figure 4 presents event-study coefficients for autocracy-to-democracy transitions. The pre-transition coefficients are uniformly positive and importantly, there are no discernible pre-trends in the lead coefficients, and a joint test of equality across the pre-transition window cannot be rejected. Beginning at t = 0, the coefficients drop sharply to approximately -0.15 and continue declining to around -0.25 to -0.28 standard deviations in the post-transition window, where they

[7] The event window spans eight years before and after each transition, yielding 2,893 event-years for autocracy-to-democracy transitions (184 events) and 1,570 event-years for democracy-to-autocracy transitions (101 events).

remain strongly significant through t = 8. The flat pre-trend and sharp break at the transition year is consistent with a causal interpretation: democratization reduces political polarization, with the effect persisting and, if anything, deepening over the subsequent years. This is consistent with the model's prediction that the removal of an autocrat and restoration of democratic competition diminish the societal divisions that sustained autocratic rule.

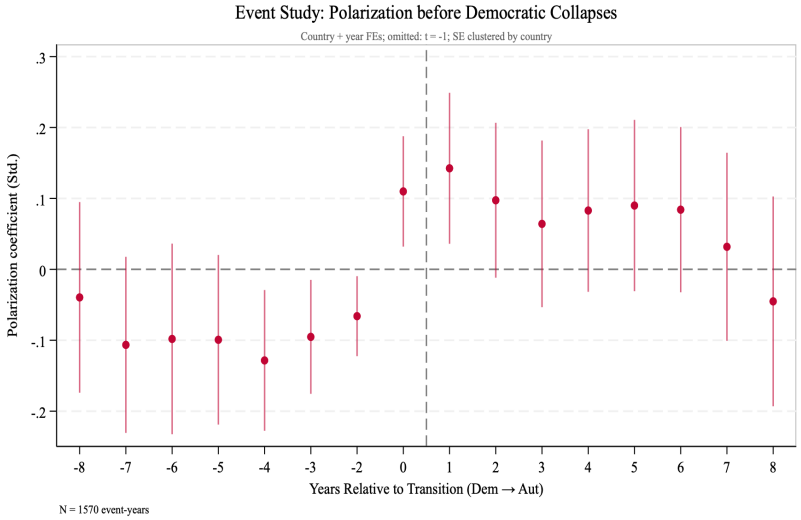
Figure 4



Event-study coefficients: standardized polarization around autocracy-to-democracy transitions. Country and year fixed effects absorbed; omitted category t = -1; standard errors clustered by country. N = 2,893 event-years (184 transitions). Polarization is elevated pre-transition and drops sharply at t = 0, remaining significantly negative through t = +8.

Figure 5 shows that democracy-to-autocracy transitions are consistent with the theory that rising polarization precedes democratic breakdown, although the parallel-trends assumption does not hold. The post-transition coefficients for democratic collapses should be interpreted as describing the trajectory of polarization conditional on transition.

Figure 5

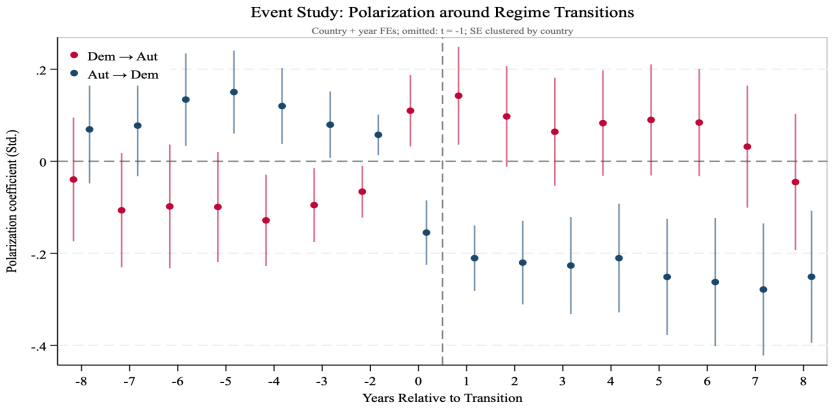


Event-study coefficients: standardized polarization around democracy-to-autocracy transitions. Country and year fixed effects absorbed; omitted category t = -1; standard errors clustered by country. N = 1,570 event-years (101 transitions). Polarization rises in the pre-transition window and remains elevated post-transition.

Figure 6 overlays both transition types. The trajectories diverge symmetrically around the transition year. This divergence is consistent with the core mechanism of the model, in which high polarization increases the relative appeal of centralized rule (Proposition 1). For autocratic collapses the decline in polarization can be attributed to the regime transition itself. For democratic collapses, pre-trend precludes a symmetric causal claim but is fully consistent with the model's prediction that mounting polarization accompanies the erosion of democratic governance. In short, the political conditions preceding and following each type of transition are qualitatively distinct, consistent with the theoretical claim that polarization operates as a regime-specific vulnerability8.

[8] Event-study coefficients with standard errors are available upon request. Raw polarization levels around transitions display qualitatively identical patterns without regression adjustment.

Figure 6

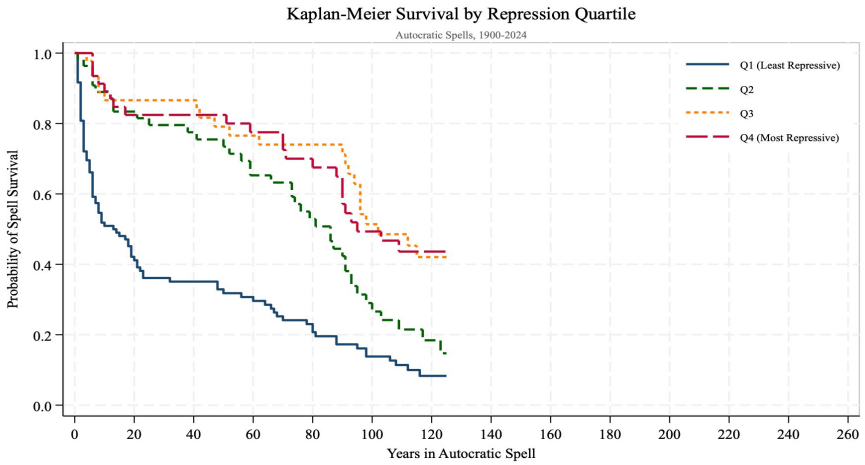


Event-study comparison: standardized polarization coefficients around autocracy-to-democracy (blue) and democracy-to-autocracy (red) transitions. The two series display a mirror-image pattern, with polarization declining around democratization and rising around autocratization. Country and year fixed effects; omitted category t = -1; standard errors clustered by country.

4.6. Mechanism II: Repression and Autocratic Self-Termination

The theory further predicts that repression involves an intertemporal tradeoff for autocrats. Some repression may deter challengers and extend regime survival, but excessive repression can provoke backlash, elite defections, coordination among opponents, or costly resistance. Beyond relative persistence, an autocrat must choose between a preferred repression level determined by self-interest and a 'second-best' level that maintains power, with this optimization problem (Lemma 1) generating a non-monotonic relationship between repression and autocratic durability. Figure 7 presents Kaplan-Meier survival curves for autocratic spells stratified by repression quartile, providing support for this mechanism.

Figure 7



Kaplan-Meier survival curves for autocratic spells by repression quartile (Q1 = least repressive, Q4 = most repressive). Least-repressive autocracies (Q1) exhibit the highest early exit rate, collapsing sharply within the first two decades. Q2–Q4 show progressively higher survival, consistent with a non-monotonic relationship between repression and autocratic durability. Sample: autocratic spells, 1900–2024.

The Q1 (least repressive) survival function collapses most rapidly, with median spell duration of approximately eight years — compared to seventy-five to ninety-five years for Q2–Q4. The non-monotonic pattern between Q3 and Q4 is consistent with the theory that excessive repression ultimately elevates exit risk relative to moderate repression. Table 6 formalizes this through Cox models on autocratic spells.

Table 6. Cox Proportional Hazard Models: Repression and Autocratic Spell Duration

	Linear	**Quadratic**	**Period FE**	**Strat. CW**	**Quartile HRs**	**TVC**
Repression (IRT)	0.572***	0.576***	0.610***	0.560***		0.569***
	(0.071)	*(0.058)*	*(0.054)*	*(0.053)*		*(0.087)*
Repression Squared		1.219***	1.207***	1.233***		1.475***
		(0.062)	*(0.054)*	*(0.061)*		*(0.122)*
Ln GDP per Capita	0.992	1.025	0.843	1.001	0.960	0.982
	(0.124)	*(0.129)*	*(0.100)*	*(0.129)*	*(0.119)*	*(0.122)*
Ln Population	0.976	0.960	0.855***	0.954	0.964	0.962

	(0.051)	*(0.054)*	*(0.051)*	*(0.054)*	*(0.051)*	*(0.053)*
Regional Dem. Share	2.809***	2.781***	1.703*	3.201***	2.996***	2.994***
	(1.044)	*(1.067)*	*(0.545)*	*(1.212)*	*(1.159)*	*(1.051)*
Cold War Dummy	0.176***	0.194***	0.026***	1.000	0.142***	0.173***
	(0.076)	*(0.081)*	*(0.011)*	*(.)*	*(0.061)*	*(0.073)*
Q2 vs Q1					0.694*	
					(0.143)	
Q3 vs Q1					0.373***	
					(0.095)	
Q4 vs Q1					0.435***	
					(0.114)	
Rep x log(t)						1.055
						(0.051)
Rep² x log(t)						0.899**
						(0.039)
Observations	250	250	250	250	250	1458
*Hazard ratios reported (Column 6 reports raw coefficients for the TVC terms). Autocratic spells only. Turning point via delta method: 1.392 (95% CI: 0.730-2.055). Standard errors clustered by country. *p < 0.10, **p < 0.05, ***p < 0.01.*						

Table 6 confirms a non-monotonic relationship between repression and autocratic survival. Higher repression is associated with lower exit risk at low to moderate levels, but this effect weakens and eventually reverses at high levels. The same pattern appears in alternative specifications[9].

4.7. Mechanism III: Institutional Quality and the Polarization-Democracy Link

Proposition 2 predicts that weaker institutional quality raises the relative appeal of autocracy by increasing the costs of wasteful intergroup struggle under democracy. We test this prediction using annual panel data with country and year fixed effects, regressing the annual change in the V-Dem Liberal Democracy Index on standardized polarization, an institutional quality index, and their

[9] Table A1 in the Appendix confirms the pattern across six distributional specifications. In all AFT models, the linear repression coefficient is positive, and the squared term is negative. In both PH specifications, the signs are reversed under the PH parameterization and yield statistically significant estimates for both terms.

interaction. Table 7 examines whether institutional quality moderates the relationship between polarization and democratic change. Stronger institutions are positively associated with democratic improvement, especially within autocracies. This is consistent with Proposition 2: when institutions better contain political conflict, the relative appeal of authoritarian centralization declines.10

Table 7. Panel Fixed-Effects Models: Polarization, Institutions, and Annual Change in LDI

	Polarization	Institutions	Full Sample	Democracies	Autocracies
Polarization (Std.)	−0.0044***		−0.0019**	0.0027	−0.0065***
	(0.0007)		*(0.0008)*	*(0.0057)*	*(0.0013)*
Inst. Quality (Std.)		0.0097***	0.0090***	0.0141*	0.0092***
		(0.0008)	*(0.0009)*	*(0.0083)*	*(0.0013)*
Polarization x Inst. Quality			−0.0001	−0.0016	−0.0048***
			(0.0007)	*(0.0038)*	*(0.0013)*
Ln GDP per Capita (lag)	−0.0021**	−0.0027***	−0.0030***	−0.0106*	−0.0001
	(0.0009)	*(0.0010)*	*(0.0010)*	*(0.0054)*	*(0.0009)*
Ln Population	0.0026***	0.0017	0.0024**	−0.0024	−0.0024*
	(0.0010)	*(0.0010)*	*(0.0011)*	*(0.0053)*	*(0.0014)*
Regional Dem. Share	0.0007	−0.0047*	−0.0052*	−0.0202***	−0.0040
	(0.0024)	*(0.0027)*	*(0.0026)*	*(0.0054)*	*(0.0040)*
Cold War Dummy	0.0158***	0.0155***	0.0160***	0.0406***	0.0182***
	(0.0051)	*(0.0052)*	*(0.0053)*	*(0.0130)*	*(0.0058)*
Observations	14,932	14,124	13,919	4,566	9,353
Country FE	Yes	Yes	Yes	Yes	Yes

[10] The significant negative interaction implies that the marginal effect of polarization on democratic change varies systematically with institutional context: at the lowest institutional quality values (around two standard deviations below the mean), the marginal effect of polarization is approximately zero or weakly positive, while at higher institutional quality, polarization is associated with substantially less democratic progress, reaching approximately -0.016 at two standard deviations above the mean.

Year FE	Yes	Yes	Yes	Yes	Yes
*Dependent variable: annual change in V-Dem Liberal Democracy Index. Standard errors clustered by country. *p < 0.10, **p < 0.05, ***p < 0.01.*					

4.8. Within-Country Comparisons

We next restrict the sample to countries that experienced at least one democratic and one autocratic spell. This switcher design differences out time-invariant country characteristics that may jointly influence regime type and duration, such as geography, colonial legacy, or deep institutional traits. Within this more demanding sample, the unconditional persistence comparison remains statistically weak, reinforcing the conclusion that autocracies are not systematically more durable once composition effects are addressed. More importantly, the core asymmetry in mechanisms survives: polarization remains strongly associated with democratic exits and far less so with autocratic exits, while democratic regional environments continue to protect democracies and erode autocracies. The autocracy coefficient is statistically insignificant in all three pooled specifications. Results shown in Table 8 indicate that the unconditional null persists under this more demanding sample restriction, though it does not address time-varying confounders.[11]

Table 8. Within-Country Switcher Sample

	Pooled Cox	**Weibull AFT**	**Gamma Frailty**	**Sep. Cox Dem**	**Sep. Cox Aut**
Autocracy (1=Aut)	1.111	0.841	1.072		
	(0.192)	*(0.145)*	*(0.182)*		
Polarization (IRT)	1.100	0.922	1.125*	1.534***	0.934
	(0.069)	*(0.046)*	*(0.068)*	*(0.171)*	*(0.063)*
Ln GDP per Capita (lag)	0.844	1.215**	0.823*	0.599***	1.164
	(0.095)	*(0.114)*	*(0.091)*	*(0.090)*	*(0.196)*

[11] In the separate within-switcher Cox models, polarization is associated with a fifty-three percent higher democratic exit hazard (HR = 1.534, p < 0.01) while having a sub-unity, insignificant association with autocratic hazard (HR = 0.934, p = 0.307). Regional democracy share is associated with substantially lower democratic exit hazard (HR = 0.359, p < 0.01) and substantially higher autocratic exit hazard (HR = 2.363, p < 0.05). These asymmetries are preserved in the within-switcher sample, reinforcing their interpretation as reflecting regime-specific associations rather than cross-country differences.

Fiscal Capacity (IRT)	0.901	1.097	0.894	0.809*	0.979
	(0.068)	*(0.072)*	*(0.062)*	*(0.098)*	*(0.084)*
Regional Democracy Share	0.854	1.106	0.847	0.359***	2.363**
	(0.266)	*(0.337)*	*(0.243)*	*(0.142)*	*(0.908)*
Cold War Dummy	0.153***	6.006***	0.150***	0.363***	0.181***
	(0.044)	*(0.882)*	*(0.029)*	*(0.104)*	*(0.073)*
Observations	359	359	359	173	186
*Switcher sample: countries with spells of both regime types. Gamma frailty in Column 3 accounts for within-country heterogeneity. *p < 0.10, **p < 0.05, ***p < 0.01.*					

5. Concluding Remarks

This paper shows that the apparent durability advantage of autocracy largely disappears once historical composition is taken into account, while political polarization remains a distinctly democratic source of fragility. Across countries over 1900–2024, unconditional comparisons often favor autocracy, but within comparable political eras autocratic regimes exhibit significantly higher termination risk than democratic regimes. Democratization is also followed by meaningful declines in political polarization. A simple political-economy framework helps explain these regularities.

The evidence also reveals systematic asymmetries in regime fragility. Political polarization is strongly associated with democratic breakdown, but far less with autocratic collapse. Repression, in turn, appears to be associated with longer authoritarian spells only up to a point, after which greater coercion is associated with higher exit risk. Institutional quality is positively associated with democratic progress, particularly within autocracies, where weaker institutions amplify the negative association of polarization with democratization. These patterns support the paper's central argument that democracies are especially vulnerable to instability associated with polarization and conflict, whereas autocracies face longer-run risks associated with predation, coercive overreach, and internal decay.

The theoretical framework helps organize these findings by showing how autocracy may arise endogenously when democratic politics becomes sufficiently costly, yet later unravel once concentrated power is used opportunistically. Regime change is therefore not well understood as

a one-time historical break or purely exogenous shock; rather, it is a dynamic process shaped by the interaction between political conflict, institutional performance, and the incentives of those who govern. These findings carry direct contemporary relevance. In many societies, rising polarization and declining policy effectiveness may increase public support for concentrated executive authority. Yet the historical record also cautions against deterministic pessimism. Democratic erosion is often reversible, and democratic resilience can re-emerge when the forces sustaining authoritarian rule weaken.

APPENDIX

I. Model Proofs

Proof of Lemma 1. If democracy prevails in period 1, then the citizens have to make the choice between letting it continue into period 2 or putting an autocrat at helm. In the latter case, their expected utilities are:

$U_{J2}(A_2 = 1/A_1 = 0) = \overline{u} - 0.25\Delta^2 - E_\lambda s(r^*(\lambda))$

And this option is favored whenever

$U_{J2}(A_2 = 1/A_1 = 0) = \overline{u} - 0.25\Delta^2 - E_\lambda s(r^*(\lambda)) > U_{J2}(A_2 = 0) = \overline{u} - 0.5\Delta^2$, or when

(A1) $\quad 0.25\Delta^2 > E_\lambda s(r^*(\lambda))$.

In other words, if the gain from policy stability ushered by the autocrat exceeds the expected loss of resources due to expropriation. The lifetime utility level of each of the citizen groups is

$$(A2) \quad \sum_1^2 U_{Jt}(A_1 = 0) = \overline{u} - 0.5\Delta^2 + Max\,\{U_{J2}(A_2 = 1/A_1 = 0), U_{J2}(A_2 = 0/A_1 = 0)\}$$

Suppose, in contrast, that autocracy is in place in period 1. The policy choice of the autocrat then is the mid-point of the ideal policies of the two groups as was argued above. If the autocrat's chosen amount of expropriation – which lasts into period 2 if he stays in power, by assumption – exceeds the policy benefit he delivers, he will be removed; this is the case when $0.25\Delta^2 < s(r)$. Let $\underline{r}$ be the extent of repression by the autocrat making the citizens indifferent between removing the autocrat or leaving him in place, i.e., $0.25\Delta^2 = s(\underline{r})$. If $r^*(\lambda) < \underline{r}$, then the autocrat will select his favored level of repression and be reinstalled for the second period – this is the case when λ is small enough. If, in contrast, $r^*(\lambda) > \underline{r}$, then the autocrat faces the choice of either selecting $r^*(\lambda)$ and be removed or committing to $\underline{r}$ and stay in power in period 2; we let $\underline{\lambda}$ denote the cutoff level, i.e., one satisfying $r^*(\underline{\lambda}) = \underline{r}$.

In the former case, his lifetime utility is

$$(A3) \quad V_1 = u_{L1} + u_{R1} + \lambda s(r^*(\lambda)) - r^*(\lambda) = 2\overline{u} - 0.5\Delta^2 + \lambda s(r^*(\lambda)) - r^*(\lambda)$$

whereas in the latter case, it is

$$(A4) \quad V_1 + V_2 = u_{L1} + u_{R1} + \lambda s(\underline{r}) - \underline{r} + u_{L2} + u_{R2} + \lambda s(\underline{r}) - \underline{r} = 4\overline{u} - \Delta^2 + 2(\lambda s(\underline{r}) - \underline{r})$$

And the former option is preferred whenever

$2\overline{u} - 0.5\Delta^2 + \lambda s(r^*(\lambda)) - r^*(\lambda) > 4\overline{u} - \Delta^2 + 2(\lambda s(\underline{r}) - \underline{r})$

Or, when

$$(A5) \quad 2\overline{u} - 0.5\Delta^2 < \lambda s\left(r^*(\lambda)\right) - r^*(\lambda) - 2(\lambda s(\underline{r}) - \underline{r})$$

Differentiation of the right hand side in (A5) with respect to λ and employing the envelope theorem reveals that it equals $s\left(r^*(\lambda)\right) - 2s(\underline{r})$, which increases in λ; it is negative for $r^*(\lambda) = 2s(\underline{r})$, and positive when λ is large enough.

Proof of Proposition 2.

We rewrite the expected utility under democracy (skipping the period subscript for brevity):

$$(A6) \quad U_J(A_t = 0) = -x_J + \frac{{x_J}^{\varepsilon}}{{x_J}^{\varepsilon} + {x_{-J}}^{\varepsilon}} \cdot \overline{u} + \frac{{x_{-J}}^{\varepsilon}}{{x_J}^{\varepsilon} + {x_{-J}}^{\varepsilon}} [\overline{u} - \Delta^2] = -x_J + \overline{u} - \frac{{x_{-J}}^{\varepsilon}}{{x_J}^{\varepsilon} + {x_{-J}}^{\varepsilon}} \Delta^2$$

The first order conditions with respect to struggle efforts are:

$$(A7) \quad \frac{\partial U_J(A_t = 0)}{\partial x_J} = -1 + \frac{{x_{-J}}^{\varepsilon}}{{x_J}^{\varepsilon} + {x_{-J}}^{\varepsilon}} \Delta^2 = 0$$

The solution of which yields the equilibrium and resulting utility values:

$$(A8) \quad x_J = x_{-J} = \frac{\varepsilon}{4}; \; U_J(A_t = 0) = -\frac{\varepsilon}{4} + \overline{u} - 0.5\Delta^2$$

Comparing (A8) with (6), the utility levels under legislative bargaining and without intergroup struggle, we observe that (A8) is smaller and decreases in ε; recalling our interpretation of ε, it follows that the relative advantage of democracy increases in institutional quality.

II. Appendix Tables

Table A1. Summary Statistics

Variable	N	Mean	SD	Min	Max
Liberal Democracy Index (LDI)	19,355	0.252	0.250	0.005	0.897
Annual Change in LDI (ΔLDI)	19,168	0.002	0.032	-0.493	0.742
Autocracy (1=Aut, 0=Dem)	19,581	0.737	0.440	0.000	1.000
Political Polarization (IRT)	19,099	-0.183	1.376	-3.804	3.933
Institutional Quality [0–1]	16,815	0.503	0.284	0.014	0.985
Repression, reversed IRT	19,581	-0.106	1.514	-3.346	3.725
Fiscal/State Capacity (IRT)	18,283	0.469	1.393	-3.257	3.150
Ln GDP per Capita	15,478	2.231	1.116	-0.416	5.572
Ln Population	15,494	6.430	1.708	1.074	11.907
Regional Democracy Share	19,572	0.263	0.340	0.000	1.000
Cold War Dummy (1947–1991)	19,581	0.361	0.480	0.000	1.000
Spell Duration (years)	468	41.840	41.968	1.000	125.000
Spell Exit Event (1=transition)	468	0.609	0.489	0.000	1.000
Autocracy (1=Aut, 0=Dem)	468	0.594	0.492	0.000	1.000
Spell-Mean Polarization (IRT)	464	-0.013	1.175	-3.132	3.376
Spell-Mean Repression (IRT)	468	-0.651	1.278	-3.258	3.430
Spell-Mean Ln GDP per Capita	432	2.328	0.907	0.452	4.974
Spell-Mean Ln Population	431	6.427	1.718	1.870	11.855
Spell-Mean Fiscal Capacity (IRT)	456	0.732	1.205	-2.805	3.150
Spell-Mean Institutional Quality	467	0.574	0.240	0.038	0.983
Spell-Mean Regional Dem. Share	468	0.386	0.328	0.000	1.000
Cold War Overlap (any year)	468	0.547	0.498	0.000	1.000

Switcher Country	468	0.855	0.353	0.000	1.000

Table A2. Parametric Robustness: Non-Monotonic Repression

	Cox PH	Weibull AFT	Log-Log AFT	LogNorm AFT	Gompertz PH	Exp PH
Repression (IRT)	−0.551***	0.414***	0.478***	0.518***	−0.530***	−0.472***
	(0.101)	*(0.085)*	*(0.082)*	*(0.080)*	*(0.102)*	*(0.088)*
Repression Squared	0.198***	−0.147***	−0.176***	−0.162***	0.167***	0.156***
	(0.050)	*(0.038)*	*(0.041)*	*(0.038)*	*(0.045)*	*(0.040)*
Ln GDP per Capita	0.025	−0.032	−0.123	−0.179	0.027	0.031
	(0.126)	*(0.098)*	*(0.131)*	*(0.131)*	*(0.128)*	*(0.114)*
Ln Population	−0.041	0.034	−0.016	−0.046	−0.037	−0.039
	(0.056)	*(0.042)*	*(0.051)*	*(0.058)*	*(0.056)*	*(0.049)*
Regional Dem. Share	1.023***	−0.880***	−1.213***	−1.186***	1.127***	0.956***
	(0.384)	*(0.308)*	*(0.294)*	*(0.295)*	*(0.378)*	*(0.324)*
Cold War Dummy	−1.639***	1.433***	1.335***	1.222***	−2.127***	−1.441***
	(0.416)	*(0.254)*	*(0.268)*	*(0.247)*	*(0.433)*	*(0.277)*
Observations	250	250	250	250	250	250

*Coefficients reported (not hazard or time ratios). AFT models: positive linear and negative squared coefficients indicate the non-monotonic pattern. PH models: negative linear and positive squared indicate the same pattern under hazard parameterization. Standard errors clustered by country. *p < 0.10, **p < 0.05, ***p < 0.01.*

References

Acemoglu, Daron, and James A. Robinson. (2006). *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.

Anderson, Michael L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. *Journal of the American Statistical Association*, 103(484), 1481–1495.

Arbatli, Ekim, and Dina Rosenberg, 2021, "United We Stand, Divided We Rule: How Political Polarization Erodes Democracy." *Democratization* 28, 285–307.

Berman, S., 2019, *Democracy and Dictatorship in Europe: From the Ancien Régime to the Present Day*, Oxford University Press.

Besley, Timothy, and Torsten Persson. (2011). *Pillars of Prosperity: The Political Economics of Development Clusters*. Princeton: Princeton University Press.

Boese, V. A., Edgell, A. B., Hellmeier, S., Maerz, S. F., and Lindberg, S. I. (2021). How democracies prevail: Democratic resilience as a two-stage process. *Democratization,* 28(5), 885–907.

Boix, Carles. (2003). *Democracy and Redistribution*. Cambridge: Cambridge University Press.

Cheibub, José Antonio. (2007). *Presidentialism, Parliamentarism, and Democracy*. Cambridge: Cambridge University Press.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, et al. (2024). *V-Dem Codebook v15*. Varieties of Democracy Institute, University of Gothenburg.

Dixit, Avinash K. (2009). Governance institutions and economic activity. *American Economic Review*, 99(1), 5–24.

Geddes, Barbara, Joseph Wright, and Erica Frantz. (2018). *How Dictatorships Work: Power, Personalization, and Collapse*. Cambridge: Cambridge University Press.

Gentile, E. 2005, The Origins of Fascist Ideology, 1918–1925, NY.

Graham, Matthew H., and Milan W. Svolik. (2020). Democracy in America? Partisanship, polarization, and the robustness of support for democracy in the United States. *American Political Science Review*, 114(2), 392–409.

Huntington, Samuel P. (1991). *The Third Wave: Democratization in the Late Twentieth Century*. Norman: University of Oklahoma Press.

Levitsky, Steven, and Daniel Ziblatt. (2018). *How Democracies Die*. New York: Crown.

Lührmann, Anna, and Staffan I. Lindberg. (2019). A third wave of autocratization is here: What is new about it? *Democratization*, 26(7), 1095–1113.

Lyttelton, A., 1987, *The Seizure of Power: Fascism in Italy, 1919–1929, Princeton University Press.*

Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. (2000). *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*. Cambridge: Cambridge University Press.

Svolik, M. W. (2012). *The Politics of Authoritarian Rule*. Cambridge: Cambridge University Press.

Svolik, M. W. (2008). Authoritarian reversals and democratic consolidation. *American Political Science Review,* 102(2), 153–168.

Svolik, M. W. (2019). Polarization versus democracy. *Journal of Democracy*, 30(3), 20–32.