

Pro Liberalism or Illiberalism? The Nature of Civic Mobilization and Economic Growth

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Abstract

This study investigates the enduring link between the nature of mobilization during democratic transitions and subsequent economic growth. Using dynamic growth regressions with fixed effects, event studies, a semiparametric model, a matching-augmented DID strategy, and instrumental variable analyses, with data from 1960 to 2020, we find that Pro-liberalism Mobilization, which respects diverse values, boosts post-transition economic growth compared to autocratic countries. In contrast, Illiberalism Mobilization, driven by autocratic tendencies, does not. This distinction leaves strong imprints not only on the formal design of political institutions but also on the prevailing norms of political behavior. It matters more for future economic growth than the violence level during the democratization process.

Keywords: Democratization, Growth, Civil Society, Nature of Mobilization, Instability, Institutions, Critical Juncture

JEL Codes: D72, D74, O43, P16, P17, P26

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1 Introduction

As [Tilly \(1995\)](#) famously analogized, democracies can crystallize through diverse pathways, just as lakes fill from assorted sources. Beyond external interventions or elite settlements, mass mobilization represents another route to regime change. This raises key questions: Might democracies born through contrasting forms of popular unrest exhibit dissimilar properties and performance?

Although prior research extensively examines the impact of transitions on democracy’s breadth, power distribution, and related institutional features ([Karl, 1990](#); [Remmer, 1990](#); [Shin, 1994](#); [Munck and Leff, 1999](#); [Field, 2004](#); [Albertus and Menaldo, 2014](#); [Cervellati and Sunde, 2014](#); [Capoccia, 2015](#); [Cervellati et al., 2015](#); [Albertus and Menaldo, 2018a](#); [Sima and Huang, 2023](#)), and explores the heterogeneous economic effects of democratization driven by factors like transition type, power structures, or populism ([Cervellati and Sunde, 2014](#); [Cervellati et al., 2014](#); [Albertus and Menaldo, 2018b](#); [Treisman, 2020](#); [Boucekkine et al., 2021](#); [Sima and Huang, 2023](#); [Funke et al., 2023](#)), the long-term economic implications of varying mobilization types during democratization remain underexplored. This gap exists because the nature of societal activation during authoritarian decline can have lasting effects, shaping post-transition institutions, behavioral patterns, and policymaking.

This paper helps address this gap by testing how the presence different strength of pro-democratic versus pro-autocratic mobilization during democratization impacts post-authoritarian growth. The analysis reveals the nature of mobilization during political openings, marked by the interplay between pro-democratic and pro-autocratic forces, has nuanced enduring impacts on stability and prosperity.

Our basic hypothesis is that the nature of mobilization during political transitions, specifically the shifting balance between forces advocating for democracy and those pushing for autocracy, shapes the distinct trajectories of young democracies. These contrasting forms of mobilization leave imprints on nascent democracies, influencing their institutional development, political culture, and long-term economic prospects. Democratization characterized by a preponderance of pro-democratic engagement and fidelity to democratic tenets (which we designate as "Pro-liberalism Mobilization") establishes the groundwork for "Pro-liberal Democracies". These systems are conducive to fostering an environment of trust and cooperation, which in turn paves the way for the establishment of robust institutions and the nurturing of peaceful political discourse. On the contrary, democratization dominated by pro-autocratic forces (which we label as "Illiberalism Mobilization")

leads to the emergence of “Illiberal Democracies”. These regimes frequently grapple with institutional erosion, and a history of violence, which hinders institutional progress and perpetuates political instability.¹ In other words, Pro-liberalism Mobilization during democratization fosters values that reinforce the democratic order, leading to faster economic growth, whereas Illiberalism Mobilization during democratization, entrenched in the value of exclusion and conflict, encounters considerable obstacles to achieving prosperity.²

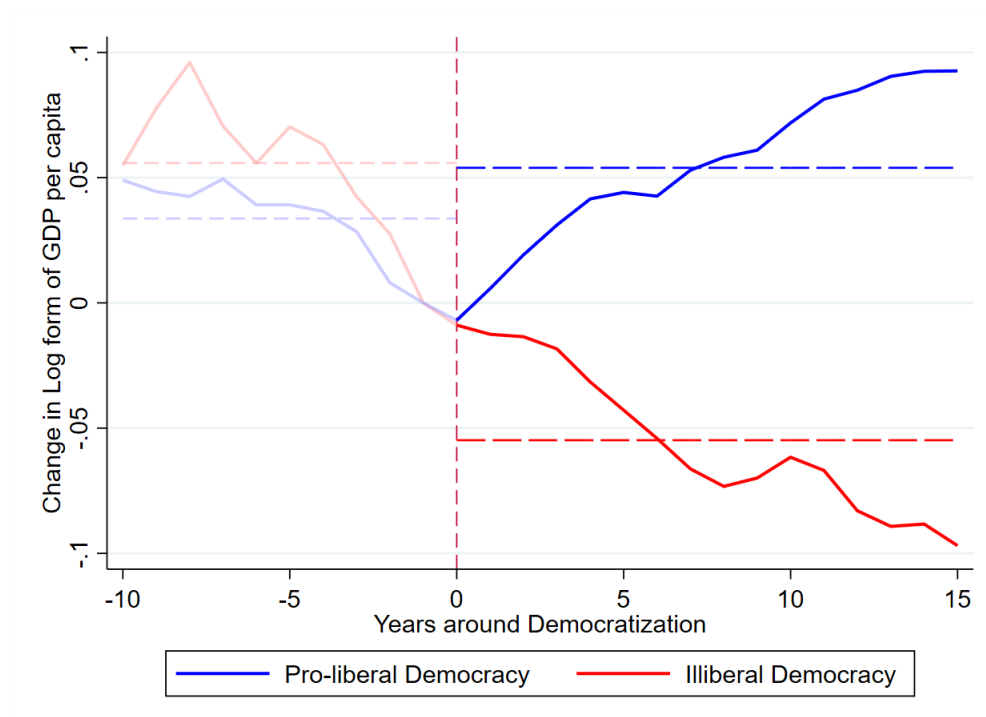
The divergent growth paths are illustrated in Figure 1, which depicts the dynamics of GDP per capita in countries that underwent Pro-liberal or Illiberal Democratization at year 0, relative to countries that remained non-democratic. The figure reveals a divergence in GDP per capita trajectories after political reforms. Pro-liberal Democracies experienced economic growth, whereas Illiberal Democracies exhibited the opposite trend. Additionally, consistent with the findings of [Acemoglu et al. \(2008\)](#); [Bruckner and Ciccone \(2011\)](#); [Acemoglu et al. \(2019\)](#), democratization is, on average, preceded by a temporary dip in GDP per capita, regardless of the democratization type. This pattern violates the parallel trends assumption underlying the difference-in-differences (DID) or panel data estimates commonly used in the literature. The observed dynamics imply that failure to properly model GDP dynamics or the propensity to democratize based on past GDP per capita may lead to biased estimates of democracy’s impact on GDP per capita. Modeling GDP dynamics would enable an investigation of whether the effect of Pro-liberal or Illiberal Democratization on GDP is short-lived or gradual.

To rigorously test our hypothesis, we leverage a comprehensive dataset encompassing 133 countries over the period 1960–2020. Our empirical evaluation hinges on several distinct methodological approaches. Firstly, employing dynamic panel data model, we demonstrate that Pro-liberal Democracies achieve significantly higher economic growth compared to autocratic regimes. Conversely, Illiberal Democracies do not exhibit superior economic performance relative to autocracies. More specifically, our preferred estimates suggest that

¹The designations "Pro-liberalism/Illiberalism Mobilization" and "Pro-liberal/Illiberal Democracy" stem from evidence suggesting that Pro-liberal Democracies, arising from Pro-liberalism mobilization during political transitions, significantly enhance political and economic liberties, as demonstrated in Section 7 and Appendix H. They also foster capitalism and free market principles, as detailed in Appendix J. In contrast, Illiberal Democracies, born from Illiberalism mobilization, exhibit minimal or no improvement in these critical areas.

²As [Besley and Persson \(2019\)](#); [Bisin and Verdier \(2023\)](#) argue that initial values set the stage for future cultural and institutional evolution.

Figure 1. log GDP per capita around Democratic Transitions for Pro-liberal (Blue) and Illiberal Democracies (Red)



Note: GDP per capita before and after a Pro-liberal/Illiberal Democratization. This figure plots GDP per capita in log points around a Pro-liberal/Illiberal democratic transition relative to countries remaining nondemocratic in the same year. We normalize log GDP per capita to 0 in the year preceding the democratization. Time (in years) relative to the year of democratization runs on the horizontal axis.

a permanent transition to a Pro-liberal Democracy would generate a long-run increase in GDP per capita by 32%, while the corresponding increase for Illiberal Democracies is merely 3%.

To enhance the robustness of these findings, we employ a myriad of analytical approaches. We initiate our inquiry with an event study analysis to assess economic trajectories surrounding democratic transitions under the parallel trends assumption. We further bolster our analysis with a semiparametric model from [Acemoglu et al. \(2019\)](#), which relaxes the linearity assumption, and a matching-augmented DID strategy as outlined by [Imai et al. \(2023\)](#), which adeptly handles time-varying confounders. These approaches are complemented by additional DID specifications from [Eberhardt \(2022\)](#) and a suite of recent estimators that accommodate heterogeneous treatment effects, contributed by [Callaway and Sant'Anna \(2021\)](#), among others. Additionally, we implement two-stage least squares (2SLS) estimations that utilize a "democratic wave" as an instrumental variable (IV). These estimations reaffirm the initial results, providing further support for the causal relationship between Pro-liberal Democracy and enhanced economic growth.

Our findings reveal a crucial insight: the nature of mobilization at the critical juncture of democratization holds profound implications for a nation's long-term growth. This raises the question: why does initial nature of mobilization matter for future growth?

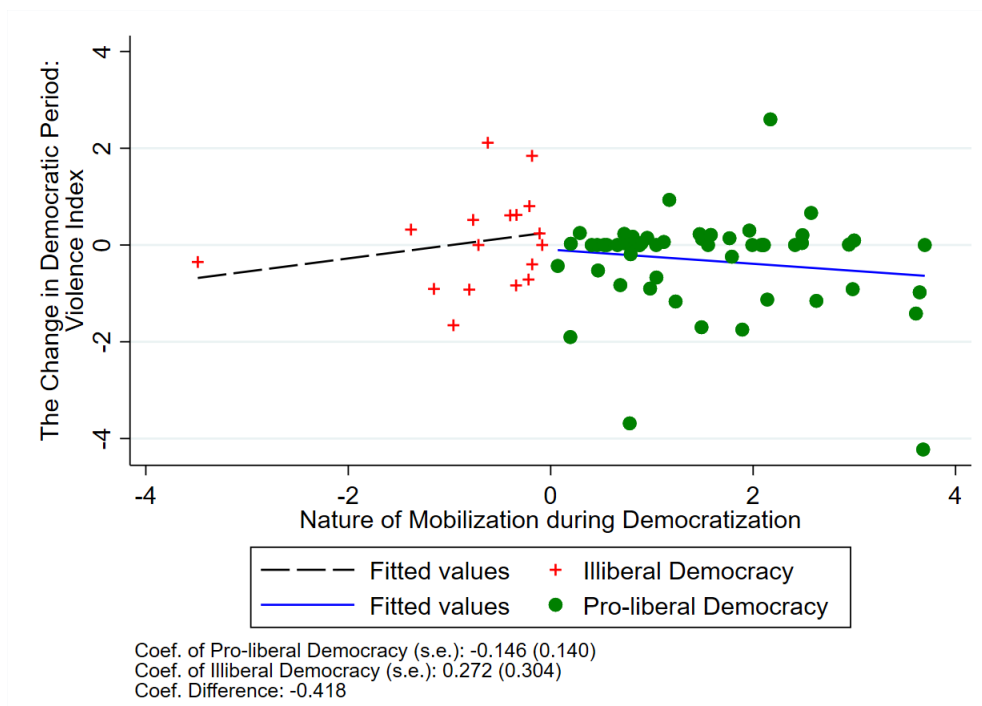
Figure 2 suggests a preliminary answer. Countries experiencing Pro-liberalism Mobilization during their democratic transition exhibit a reduction in violence afterward. Conversely, those with Illiberalism Mobilization show no such decline.³ This divergence is evident in the distinct slopes of the fitted lines for Pro-liberal and Illiberal Democracies. Further, Figure 3 graphically illustrates the dynamic divergence between these two groups concerning violence levels in comparison to contemporary autocracies. Although initial trends appear comparable, Pro-liberal Democracies exhibit a reduction in violence after democratization, whereas Illiberal Democracies experience a modest increase.⁴

We use sophisticated regressions to analyze diverse indicators beyond violence. We test two competing hypotheses. The first suggests that the impact of mobilization operates

³Our Violence Index from [Aisen and Veiga \(2013\)](#) measures assassinations, revolutions, and wars.

⁴We utilize the approach from [Acemoglu et al. \(2019\)](#) plotting pre- and post-transition violence trends for Pro-liberal Democracies, Illiberal Democracies relative to countries remaining nondemocratic in the same year. Violence levels normalize to 0 in the year before the given transition, with relative time since democratization on the horizontal axis.

Figure 2. Initial Nature of Mobilization and Violence Index

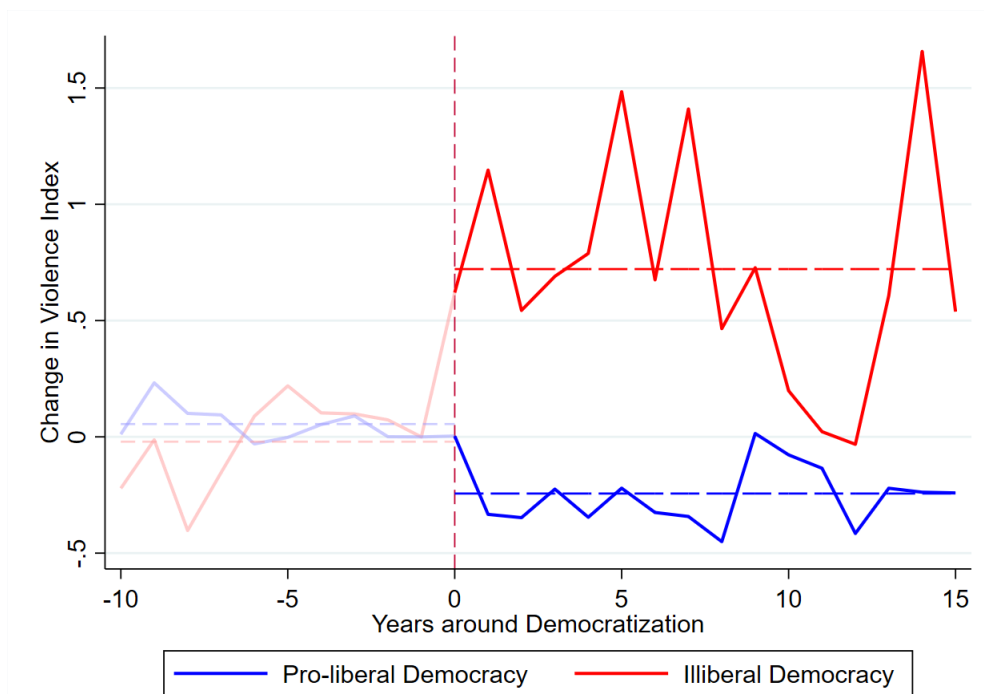


Note: The figure depicts the association between the nature of mobilization during democratic transition and subsequent changes in violence levels. The fitted lines represent the predicted trends in violence for Pro-liberal (blue line) and Illiberal Democracies (dash line). Countries experiencing Pro-liberalism Mobilization (positive value of the nature of mobilization) exhibit a marked decrease in violence following democratization (negative slope), whereas those with Illiberalism Mobilization (negative value of the nature of mobilization) show no discernible change (flattened slope).

through its influence on key institutional pillars of economic growth, such as state capacity, property rights protection, and economic freedom. The second, alternatively, highlights the role of behavioral path dependence. Our empirical findings support both hypotheses, but more strongly the latter. We show that Pro-liberalism Mobilization during democratization fosters the development of favorable institutions and norms of peaceful political behavior that enhance economic development. In contrast, Illiberalism Mobilization during transitions impedes the establishment of effective institutions, exacerbates polarizing political behavior, and constrains economic growth.

While analyzing social movements through the lens of violence (violent vs. nonviolent) is common, we also explore whether mobilization orientation - its alignment with Pro-liberalism or Illiberal - offers superior predictive power over political and economic

Figure 3. Violence Index Diverging after Democratization



Note: This figure depicts the effects of Pro-liberal (blue line) and Illiberal (red line) democratization on violence levels, estimated using a semiparametric approach with counterfactuals. The lines represent the average effect on violence levels for countries that democratized in a Pro-liberal/Illiberal way, relative to a counterfactual scenario without democratization. The horizontal axis shows time (in years) relative to the year of democratization. We normalize violence to 0 in the year preceding the democratization. Section 4.3.1 explains this approach and see Acemoglu et al. (2019) for details on this approach.

outcomes. Regression analyses corroborate that categorizing democratization episodes by mobilization orientation is a more robust approach for predicting growth, institutional outcomes, and peaceful behavior than grouping by violence.

This paper builds upon a rich body of literature addressing the multifaceted relationship between civil society, democratization, and long-term development. We resonate with the growing recognition that the nature of civil society, not just its size or presence, profoundly shapes democratic trajectories (Berman, 1997; Chambers and Kopstein, 2001; Kopecký and Mudde, 2003; Way, 2014; Acemoglu et al., 2014; Satyanath et al., 2017; Sombatpoonsiri, 2020; Grahn and Lührmann, 2021; Lorch, 2021; Bisin and Verdier, 2023; Hellmeier and Bernhard, 2023). Our central argument is that understanding the diverse trajectories initiated by Pro-liberalism and Illiberalism actors is crucial for predicting economic and

institutional development as well as peaceful behaviors. Moving beyond a simplistic focus on civil society strength, we contend that recognizing the qualitative nature of mobilization is essential.

We align with the critical juncture perspective, emphasizing the pivotal role of democratization in shaping long-term outcomes. Studies by [Cervellati et al. \(2012\)](#); [Sunde and Cervellati \(2013\)](#); [Cervellati et al. \(2014\)](#); [Besley and Persson \(2019\)](#); [Rivas \(2023\)](#); [Bisin and Verdier \(2023\)](#); [Sima and Huang \(2023\)](#) provide support for this perspective, illustrating how seemingly small differences in initial conditions can influence trajectories towards inclusivity or extractiveness. Our contribution lies in highlighting the complex dynamics of civil society mobilization within this critical window. We argue that understanding these dynamics holds the key to unlocking a future of inclusive and prosperous democracies.

This paper also contributes to the extensive literature analyzing the complex interrelations between institutions, peaceful political conduct, and democratic evolution. Numerous scholars have recognized the significance of institutions ([North, 1990](#); [Rodrik et al., 2004](#); [Acemoglu and Robinson, 2008](#); [Acemoglu et al., 2014](#)) and peaceful demeanor ([Przeworski, 1988](#); [Alesina et al., 1996](#); [Wittenberg, 2006](#); [Nunn and Wantchekon, 2011](#); [Aisen and Veiga, 2013](#); [García-Ponce and Wantchekon, 2017](#); [Acharya et al., 2017](#)) for prosperous societal outcomes. Our contribution lies in weaving these intricate threads together, demonstrating how the nature of mobilization during democratization shapes the institutional and behavioral foundation of young democracies, ultimately influencing their success or failure in achieving inclusive development and lasting peace.

Our study builds upon, yet diverges from, scholarship highlighting the advantages of nonviolent social movements in achieving political goals ([Chenoweth and Stephan, 2011](#); [Nepstad, 2011](#); [Chenoweth and Cunningham, 2013](#); [Sunde and Cervellati, 2013](#); [Celestino and Gleditsch, 2013](#); [Cervellati and Sunde, 2014](#); [Cervellati et al., 2014](#); [Bayer et al., 2016](#); [García-Ponce and Wantchekon, 2017](#); [Kadivar, 2018](#); [Kim and Kroeger, 2019](#); [Bethke and Pinckney, 2021](#); [Fetrati, 2023](#)). However, our analysis departs by emphasizing the direction of mobilization (Pro-liberalism vs. Illiberalism) as a more pivotal factor than the mere presence or intensity of violence. We find that Pro-liberalism holds greater power in shaping favorable institutions, fostering norms of peaceful political behavior, and ultimately promoting economic development. This distinction rests on a fundamental recognition: peaceful and violent methods can serve both democratic and autocratic ends. While nonviolent approaches often characterize Pro-liberalism movements, our data reveals that even violent tactics can be employed within such trajectories. Conversely, Illiberalism

movements may utilize both violent and nonviolent strategies to consolidate power and undermine democratic institutions.

The remainder of the paper proceeds as follows. The next five sections present our argument, data, estimation models, and benchmark results, along with robustness checks encompassing IV, event study analyses, as well as advanced DID techniques for estimation. Section 7 examines potential mechanisms linking democracy and growth. Section 8 discusses Pro-liberal/Illiberal and Non-violent/Violent democratization. Finally, concluding remarks are provided.

2 Argument

2.1 Nature of Civil Society Matters

While the positive association between civil society and democracy is well-established (De Tocqueville, 1835; Putnam, 1995, 2000; Grugel and Bishop, 2014), the nature of this influence remains a subject of intricate debate.⁵ Recent scholarship suggests that beyond mere size and presence, the type of civil society mobilization during and after transitions shapes distinct democratic trajectories (Berman, 1997; Chambers and Kopstein, 2001; Kopecký and Mudde, 2003; Way, 2014; Satyanath et al., 2017; Sombatpoonsiri, 2020; Grahn and Lührmann, 2021; Lorch, 2021; Bisin and Verdier, 2023; Hellmeier and Bernhard, 2023).

Consider, for instance, the National Socialist German Workers' Party's exploitation of pre-existing civil society networks to mobilize citizens for their anti-democratic agenda (Berman, 1997; Satyanath et al., 2017). This starkly illustrates the capacity of non-democratic actors to manipulate civil society and jeopardize democratic foundations. Furthermore, Lorch (2021) warns of elite capture within weakly institutionalized democracies, where clientelistic and hierarchical civil society organizations (CSOs) pose a significant threat. Their undemocratic practices can breed corruption, exacerbate resource inequality, and erode transparency, ultimately undermining democratic consolidation.

⁵Tocqueville (Encarnacion, 2000) argued that civil society functions as a training ground for democracy. Here, citizens develop and internalize democratic norms like trust, tolerance, and compromise. These "large schools" also nurture democratic leadership. Cohen and Arato (1992) posit that democratic principles practiced at the micro-level in civil society translate to social skills and trust at the macro-state level, essentially reproducing democracy. Further, civil society fosters democratic customs and social capital (Putnam, 2000; Wolfgang, 2004). Social capital, in turn, provides the moral and cultural foundation necessary for a functioning democracy.

Therefore, the nature of civil society and the types of mobilization involved are of paramount importance, although strength is still a crucial factor. We contend that the development of economics and democratic institutions depends on recognizing the diverse trajectories that Pro-liberalism and Illiberalism actors can initiate.

2.2 Democratization as a Critical Juncture

At its core, democratization represents a quest for greater citizen participation and political power. It embodies a critical juncture, a pivotal moment where political landscapes are fundamentally reshaped, new institutions erected, and governance rules rewritten. As [Capoccia \(2015\)](#) aptly note, the heightened probability of consequential choices during political transitions renders such junctures fertile ground for examining long-term implications, particularly on economic performance.

This critical lens resonates with seminal work by [Moore \(1966\)](#), highlighting how key historical moments influence a nation's trajectory. Formal theories ([Cervellati et al., 2012, 2014](#); [Besley and Persson, 2019](#); [Rivas, 2023](#); [Bisin and Verdier, 2023](#)) illuminate how seemingly small differences in initial conditions or pivotal events can nudge outcomes towards greater inclusivity or extractiveness. Empirical studies ([Sunde and Cervellati, 2013](#); [Albertus and Menaldo, 2014](#); [Cervellati and Sunde, 2014](#); [Cervellati et al., 2014](#); [Albertus and Menaldo, 2018a](#); [Sima and Huang, 2023](#)) further solidify this critical juncture perspective.

Therefore, democratization represents a critical juncture, a moment of extraordinary fluidity and potential. The choices made during this period resonate far beyond the immediate transition, shaping not only institutions and culture, but also long-term economic performance ([Bisin and Verdier, 2023](#)). Understanding the complex dynamics of civil society mobilization within this critical window holds the key to unlocking a future of inclusive and prosperous democracies.

2.3 Nature of Mobilization During Democratization and Post-transition Performance

While the presence of civil society is often lauded as a pillar of thriving democracies, a deeper understanding hinges on recognizing the dynamic nature of mobilization during and after democratization. Mere institutional structures fail to capture the nuanced ways civil society shapes regime change. Scholars like [Granovetter \(1978\)](#); [Oliver \(1993\)](#); [Diani and Della Porta \(2005\)](#); [DeNardo \(2014\)](#) highlight how protests and dissent not only expose

hidden discontent and ignite collective action under authoritarian rule, but also reveal widespread opposition and moral commitment (Kuran, 1991; Lohmann, 1994; Hellmeier and Bernhard, 2023). A diverse protest landscape brimming with various actors and tactics indicates a robust foundation of social opposition and collective agency.

However, our focus extends beyond mere presence. We argue that the qualitative nature of young democracies lies not only in establishing formal institutions, but also in the initial character of their civil society and the dynamics of mobilization during the transition. It is during this critical juncture that the trajectories of Pro-liberalism and Illiberalism Mobilization diverge, leaving distinct and enduring legacies that shape post-transition institutions, behavioral patterns, and cultural norms.

As Besley and Persson (2019); Bisin and Verdier (2023) argue, a society's initial values influence the institutions it creates, while these institutions, in turn, shape the evolution of future culture and values. This feedback loop manifests distinctly in contrasting contexts. Democracies born of Pro-liberalism Mobilization foster a culture of cooperation, compromise, and respect for opponents, nurturing Pro-liberal values that reinforce the democratic order. Conversely, those born of Illiberalism Mobilization tend to cultivate a culture of exclusion, conflict, and authoritarianism, characterized by Illiberal values that ultimately lead to institutional decay and the erosion of democratic gains.

By shifting our focus to the dynamic qualities of mobilization, we unveil a richer understanding of civil society's influence. In young democracies, the seeds of future prosperity or peril are sown not just in formal structures, but also in the nature of civil society's engagement during the pivotal moments of transition.

2.4 Possible Mechanisms: Institutions and Behavioral Patterns

The very nature of the mobilization that births a new democracy holds the key to its future trajectory. These early movements cast long shadows, shaping its path through two interlinked mechanisms: institutional and behavioral. On the institutional front, formal arrangements like property rights, and economic freedom pave the way for inclusive development. These legacies, stemming from the initial nature of mobilization, determine how resources are allocated and opportunities distributed.⁶ In particular, Illiberalism Mobilization is likely to create exclusionary institutions immediately after democratization,

⁶Emerging scholarship highlights the profound influence of early civil society mobilization on the subsequent opportunities and resource landscape for ordinary citizens within nascent democracies (Fernandes, 2015; Fishman, 2017).

reflecting their zero-sum nature. For example, they may favor resource allocation towards their own group, undermining broader economic growth. Conversely, Pro-liberalism Mobilization, by their very nature, foster inclusive institutions that benefit diverse societal groups.

While the formal institutions established at a democracy's birth are important, behavioral legacies, as explored by [Acharya et al. \(2017\)](#) and [García-Ponce and Wantchekon \(2017\)](#), hold equal weight in shaping its future. These legacies refer to the enduring influence of the founding nature of mobilization on political attitudes, collective behavior, and community norms, particularly those surrounding political expression, social movements, and tolerance. These norms, shaped by the initial nature of movement's dynamics, ultimately determine whether the young democracy leans towards inclusivity and collaboration or succumbs to the allure of autocracy. For example, Illiberalism Mobilization, marked by intolerance and violence, can sow the seeds of instability and unrest, while Pro-liberalism Mobilization, fostering tolerance and peaceful participation, paves the way for social cohesion and stability, conditions necessary for economic development. In essence, the seeds of a democracy's future are sown in the very act of its birth, with the type of mobilization acting as a crucial predictor of its success or failure.

As [Bisin and Verdier \(2023\)](#) argue, a successful transition requires more than elite turnover; it necessitates a supportive cultural and institutional landscape. Illiberal pathways hinder this fertile ground by prioritizing power consolidation over inclusive engagement, casting a long shadow on the civic opportunities available to citizens in new democracies.

2.5 Beyond Violence: Pro-liberalism/Illiberalism Mobilization

Traditional analyses of social movements in democratization often categorize them solely as "violent" or "nonviolent," potentially overlooking crucial nuances. Instead, we propose that the underlying orientation of the mobilization – Pro-liberalism or Illiberalism – offers a more powerful lens for understanding economic and political outcomes.

While Pro-liberalism movements are often nonviolent (85% in our data), and Illiberalism movements more likely to involve violence (33%), violence itself is not the key determinant. As [Yabanci \(2019\)](#); [Lorch \(2021\)](#) argue, even nonviolent movements embracing autocratic principles can erode democracy. [Sombatpoonsiri \(2020\)](#) further highlights the concept of "authoritarian civil society," where peaceful mobilization can undermine democ-

racy by promoting strongman leadership and suppressing dissent. These movements, despite their methods, prioritize order over democratic ideals, ultimately dismantling existing institutions (Kopecký and Mudde, 2003; Hadiz, 2018).

Conversely, Huntington (1993) acknowledges the potential benefits of violent pro-democratic movements.⁷ Our findings support this view, suggesting that Pro-liberalism movements, even those employing violence, can contribute positively to development.

By shifting our focus beyond the simplistic "violent vs. nonviolent" dichotomy, we gain a richer understanding of the drivers of economic and political change. The nature of mobilization, its orientation towards Pro-liberal or Illiberal, emerges as a crucial factor in shaping the trajectory of democratization.

3 Data and Descriptive Statistics

Our panel dataset draws annual observations from various sources. The primary democracy variable comes from Acemoglu et al. (2019) due to its robustness and prominence.⁸ This indicator combines data from the Freedom House Index and the Polity V project's polity2 variable. A country is coded as democratic (value = 1) if both indices classify it as "partially free/free" and polity2 is positive. When data is missing, alternative sources like Boix et al. (2013) and Cheibub et al. (2010) are used.⁹ Finally, the measure is adjusted to align with permanent democratization timings from Papaioannou and Siourounis (2008a) (PS). A democratic transition occurs when a country's annual democracy score transitions from 0 to 1. To minimize noise from temporary regime changes, a five-year smoothing window is applied.¹⁰

⁷While advocating for peaceful transitions, Huntington (1993) recognized the potential of violent pro-democratic movements as catalysts for dismantling entrenched authoritarian regimes and laying the groundwork for democracy.

⁸We updated this dataset to 2020 using data from Polity V, CGV (Cheibub et al., 2010; Bjørnskov and Rode, 2020), BMR (Boix et al., 2013), and Freedom House.

⁹For further details on the "spurious changes" addressed by Acemoglu et al. (2019) in their democracy indicator, please refer to Appendix A1 of their work. Interestingly, these adjustments appear to have minimal impact on results. While PS, CGV, and BMR democracy indicators exhibit high agreement with Acemoglu et al. (2019), they yield statistically similar findings, particularly for the preferred IV specification. Notably, all four indicators produce an identical persistence parameter with identical standard errors, suggesting remarkable robustness across alternative measures.

¹⁰The application of smoothing techniques, as commonly utilized in the scholarly works of Giavazzi and Tabellini (2005); Persson and Tabellini (2006, 2007); Papaioannou and Siourounis (2008a); Sima and Huang (2023), is a well-established practice. Given that this method impacts a limited number of countries, the core finding remains consistent even when employing the unaltered original dataset, shown in Appendix

There are well-established theories, with substantial supporting evidence, that civil society mobilization can have contradictory effects, such as promoting either democratization or autocratization (Chambers and Kopstein, 2001; Kopecký and Mudde, 2003; Satyanath et al., 2017; Sombatpoonsiri, 2020; Grahn and Lührmann, 2021; Lorch, 2021; Bisin and Verdier, 2023; Hellmeier and Bernhard, 2023). We utilize indicators of mobilization from the Varieties of Democracy (V-Dem) dataset, which uniquely distinguishes between mass mobilizations with explicitly pro-democratic aims and those with explicitly anti-democratic (pro-autocratic) aims (Coppedge et al., 2021). This distinction allows us to investigate how the two types of mobilization during democratization affect the quality of democracies after the transition. Specifically, the dataset provides estimates of latent mass mobilization favoring democracy or autocracy at the country-year level for around 180 polities since 1900. V-Dem defines mobilization as pro-democratic if it explicitly aims to advance or protect democratic institutions like free and fair elections, multiple political parties, independent courts and parliaments; or supports civil liberties including freedoms of association and speech. Mobilization is classified as pro-autocratic if it is organized explicitly to support non-democratic rulers and forms of government.¹¹ We employ the standardized interval-scale indicators of pro-democratic and pro-autocratic mobilization, with higher values denoting larger-scale mobilization for a country-year.¹²

The nature of mobilization is given by the difference between the pro-democratic and pro-autocratic indicators. We delineate a scenario as Pro-liberalism Mobilization when the metric of mobilization’s nature is positive, indicating a predominance of pro-democratic forces, as the scale of pro-democratic mobilization exceeds that of pro-autocratic mobilization. Conversely, we designate a scenario as Illiberalism Mobilization when the metric is negative, signifying a predominance of pro-autocratic forces, given that the scale of pro-autocratic mobilization surpasses that of pro-democratic mobilization.¹³

We categorize democracies into two subgroups – *Pro-liberal Democracy* and *Illiberal*

C.8.

¹¹The V-Dem codebook states mobilization is also classified as pro-autocratic if it supports leaders questioning basic democratic principles or undermining institutions like rule of law, elections, or media freedom.

¹²The standardized interval scale provides point estimates from the V-Dem measurement model (Pemstein et al., 2023) by aggregating multiple expert ratings, accounting for disagreement and errors, to produce a probability distribution over scores on a standardized scale.

¹³It is worth noting that our sample does not include instances where the value of the nature of mobilization during democratization is 0. Figure A10 and Figure A11 in Appendix A present the distributions of mobilizations during the third wave of democratization. The distribution notably indicates that in approximately one-quarter of the cases, there is a predominance of pro-autocratic mobilization.

Democracy – based on the nature of mobilization during democratic transition (t_0): Pro-liberalism Mobilization or Illiberalism Mobilization. We create two dummy variables to capture the nature of democratization. *Pro-liberal_dem_{it}* takes a value of 1 if country i transitions to democracy in year t and exhibits Pro-liberalism Mobilization ($Nature_mobilization_{i,t_0} > 0$) during the political transition (t_0). Conversely, *Illiberal_dem_{it}* equals 1 if country i becomes a democracy in year t but experiences Illiberalism Mobilization ($Nature_mobilization_{i,t_0} < 0$) during transition.¹⁴ Using this classification, our analysis reveals that 25% of cases fall under the category of Illiberal Democratization.¹⁵ Specifically:

$$Pro-liberal_dem_{it} = \begin{cases} 1 & \text{if } Democracy_{it} = 1 \text{ and } Nature_mobilization_{i,t_0} > 0, \\ 0 & \text{Otherwise;} \end{cases}$$

$$Illiberal_dem_{it} = \begin{cases} 1 & \text{if } Democracy_{it} = 1 \text{ and } Nature_mobilization_{i,t_0} < 0, \\ 0 & \text{Otherwise;} \end{cases}$$

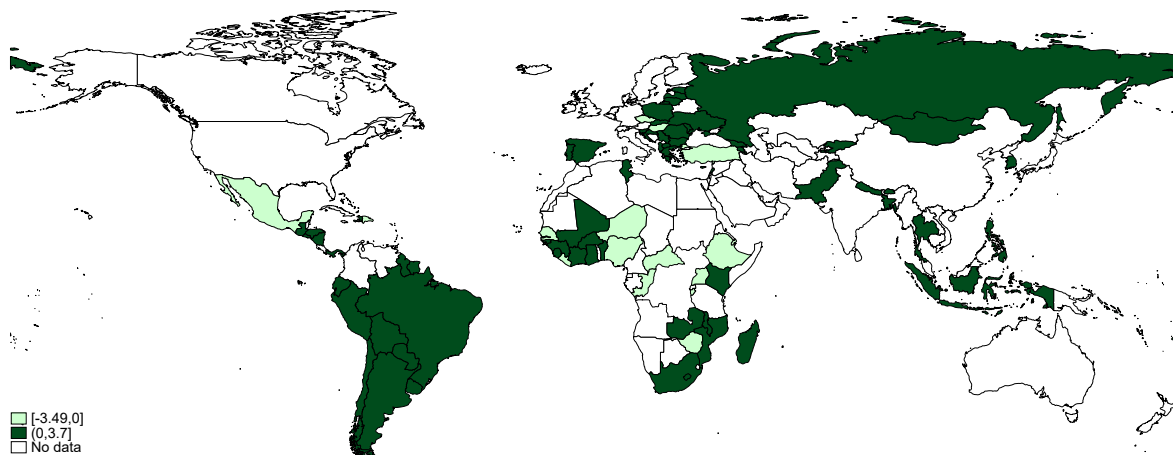
¹⁴In Appendix C.1, we also explore alternative thresholds to define an adequate level of nature of mobilization below which democracy does not benefit economic growth. To allow flexibility, we report estimation results for various cutoff values, showing that the threshold of 0 yields the most significant difference between Pro-liberal and Illiberal Democracies.

¹⁵One might question how democratization can succeed when pro-autocratic mobilization is dominant. As Hellmeier and Bernhard (2023) find, pro-autocratic mobilization tends to lower the possibility of democratization, illustrated by the successful democratization in Tunisia but failed democratization in Egypt during the Arab Spring (Ibrahim, 2015). This may partially explain why only 25% of democratization cases in our study feature dominant pro-autocratic mobilization. However, pro-autocratic mobilization does not necessarily imply the mass support for an autocratic regime per se. Rather, it suggests mobilization that endorses leaders who question fundamental democratic principles or undermine key institutions such as the rule of law, electoral processes, or media freedoms (Hellmeier and Bernhard, 2023). For example, in Indonesia, the middle class often exhibits a preference for order and stability over democratic ideals. This sentiment was exemplified by student protests against the national lottery in December 1993, revealing a yearning for change. However, the students' demands were not for a pluralistic democracy but rather for a society aligned with a purified Islamic identity, indicating a lack of inherent commitment to democratic principles (Jones, 1998). Similarly, the role of the People's Alliance for Democracy (PAD) in Thailand's 2008 democratization process is multifaceted and contentious (Mansrisuk, 2017; Sinpeng, 2021). On one hand, the PAD's demonstrations catalyzed discourse on political reform, advocating for a government that is more accountable and transparent. On the other hand, their non-violent protest methods, which leveraged the monarchy and military, demonstrated a skepticism towards democratic mechanisms. They supported the 2006 military coup and, through affiliated groups, have even promoted the cessation of elections. These actions have led to the destabilization of Thai political structures and have eroded democratic institutions, thereby compromising the tenets of democracy.

The default regime is autocracy if neither dummy equals 1. The $Nature_mobilization_{i,t_0}$ indicator is measured as the difference between pro-democratic and pro-autocratic mobilization in country i during the democratization period t_0 .¹⁶

Figure 4 maps the nature of mobilization indicator around the time of democratization for third-wave democracies. It illustrates the data coverage and variation between countries with Illiberalism Mobilization (light green) and those with Pro-liberalism Mobilization (dark green).¹⁷

Figure 4. Values of the Initial Nature of Mobilization in Third Wave Democratizing Countries Worldwide



Note: This world map illustrates the nature of mobilization around the time of democratization for countries undergoing democratic transitions during the third wave of democratization. The map depicts the variation across countries, with light green shading representing countries that experienced Illiberalism Mobilization (a nature of mobilization indicator between -3.49 and 0), and dark green shading indicating countries with Pro-liberalism Mobilization (a nature of mobilization indicator between 0 and 3.7). For countries with multiple democratic transitions, the average initial nature of mobilization is used. Gray areas represent countries with unavailable data or those that did not democratize during the third wave.

Our sample covers 133 countries, including autocratic countries and third wave democratizing countries, from 1960 to 2020. The main dependent variable, $Growth$, is the annual log difference of real per capita GDP from the 2020 edition of the World Development

¹⁶We primarily use the nature of mobilization data for the transition and prior two years, with consistent findings when utilizing solely data from the transition year or across longer timeframes, as demonstrated in Appendix C.9.6.

¹⁷For countries with multiple democratic transitions, the average initial nature of mobilization is used. The country list and corresponding initial nature of mobilization scores are provided in Appendix L.

Indicators (WDI). Democratic transitions during this period are often characterized as the third wave of democratization (Huntington, 1993), exhibiting some distinct features from earlier waves. We exclude countries that were already democratic before 1960, treating them as missing observations.

Descriptive statistics presented in Table A2 (Appendix B) indicate that Pro-liberal Democracies exhibit better institutional quality and more peaceful behavior relative to other regimes. Specifically, they are characterized by higher state capacity, stronger property rights protection, greater economic freedom, improved transparency, increased political stability, and lower levels of social unrest and violence.

4 Estimation Methods

We utilize several methods to analyze the panel dataset and explore heterogeneous democracy effects on economic growth:

4.1 Dynamic Fixed-Effect Model

We estimate the effects of Pro-liberal and Illiberal Democracies on GDP per capita growth rate using the following dynamic growth model with country and time fixed effects:

$$g_{it} = \beta_p Pro-liberal_dem_{it} + \beta_I Illiberal_dem_{it} + \sum_{j=1}^3 \alpha_j g_{it-j} + \varphi y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it}. \quad (1)$$

The dependent variable g_{it} is the annual growth rate of per capita GDP in country i and year t , defined as $g_{it} = 100 * (y_{it} - y_{it-1})$ where y is the natural log of GDP per capita.¹⁸ $Pro-liberal_dem_{it}$ and $Illiberal_dem_{it}$ indicate Pro-liberal and Illiberal Democracies, respectively. To capture non-linear conditional marginal effects, discrete categories are better than multiplicative interaction terms such as $Democracy_{i,t} * Nature_mobilization_{i,t_0}$, which imposes linear interaction effects that change at a constant rate with the moderator (Hainmueller et al., 2019).¹⁹ Our arguments suggest democracy affects institutions, behaviors,

¹⁸As discussed in Sima and Huang (2023), using either GDP per capita (Murtin and Wacziarg, 2014; Madsen et al., 2015; Acemoglu et al., 2019) or GDP per capita growth rate (Barro, 1996; Tavares and Wacziarg, 2001; Baum and Lake, 2003; Glaeser et al., 2004; Persson and Tabellini, 2006; Knutsen, 2013a) yields identical democracy coefficient estimates in this dynamic model.

¹⁹As demonstrated in Appendix C.4, our analysis unveils notable non-linear associations between the initial nature of mobilization during democratic transitions, the consequent democracy types, and future

and growth in qualitatively distinct ways contingent on the initial nature of mobilization context.²⁰ Figure 2 shows evidence of such non-linear relationships. This specification shares similarities with Persson (2005) and Sima and Huang (2023) using multiple democracy type indicators.

We capture growth dynamics via three lags of GDP per capita growth rates and a four-period lag of GDP per capita, y_{it-4} .²¹ Country fixed effects λ_i absorb time-invariant factors like geography, history and culture, while year effects δ_t account for global growth trends. The error ε_{it} includes other unobserved shocks to growth, orthogonal to democracy type conditional on controls. Standard errors are clustered by country to address serial correlation (Papaioannou and Siourounis, 2008a; Madsen et al., 2015). The coefficients of interest, denoted as β_P and β_I , can be accurately estimated through the application of the standard within estimator. This method has been shown to produce consistent estimates when compared to various alternative estimation methods, as detailed in Acemoglu et al. (2019).

4.2 Event-Study Analysis

Additionally, we conduct event study analyses examining changes in economic growth surrounding democratic transitions in this dynamic model setting. This enables assessing the comparability of treatment and control groups in the periods immediately before and after treatment (the transition itself).²² The event study regressions are specified as:

$$g_{it} = \beta_{Pe} \mathit{Pro-liberal-dem-Event}_{ie} + \beta_{Ie} \mathit{Illiberal-dem-Event}_{ie} + \sum_{j=1}^3 \alpha_j g_{it-j} + \varphi y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it}. \quad (2)$$

economic growth. The positive influence of Pro-liberal Democracies on growth is not consistent across all nature of mobilization levels, with medium nature of mobilization intensities yielding the strongest growth dividends.

²⁰Several theoretical models argue countries with initial conditions near some threshold can have divergent trajectories (Acemoglu and Robinson, 2006; Robinson, 2008; Cervellati et al., 2014; Besley and Persson, 2019; Bisin and Verdier, 2023).

²¹Including enough growth rate lags eliminates residual serial correlation, particularly the pre-transition growth dip (Papaioannou and Siourounis, 2008a; Acemoglu et al., 2019). Results are similar with more than three lags, showing in Appendix C.9.4.

²²The event studies rely on the parallel trends assumption that absent democratic transitions, growth would have evolved similarly across groups conditional on controls and fixed effects.

where β_{Pe} (β_{Ie}) is the relative time e coefficient for Pro-liberal (Illiberal) Democratization events. As in the dynamic models, we include country (δ_t) and year (λ_i) fixed effects plus control variables for growth dynamics ($\sum_{j=1}^3 \alpha_j g_{it-j} + \varphi y_{it-4}$). We define event time e (five-year periods) relative to the time of democratic transition ($e = 0$). The event indicators *Pro-liberal-dem.Event* $_{ie}$ and *Illiberal-dem.Event* $_{ie}$ equal 1 if country i is e time before or after becoming a Pro-liberal or Illiberal Democracy, respectively, at time t . We normalize the coefficients to zero in the time prior to treatment ($e = -1$) so estimated effects show changes in growth relative to the pre-treatment time. We examine a 25-year symmetric window around events ($e = -5$ to $e = +5$) to assess pre-trends and dynamic effects. Standard errors are clustered at country level.

4.3 Advanced DID Techniques

4.3.1 Beyond Linear Dynamics: A Semiparametric Approach Following [Acemoglu et al. \(2019\)](#)

Building upon [Acemoglu et al. \(2019\)](#), we employ a semiparametric approach to estimate the causal impact of democracy on GDP per capita. This method acknowledges the non-random selection into democracy, where countries transitioning might differ from non-democracies in unobserved ways that could also influence GDP per capita. The approach utilizes a treatment effects framework that models the selection process as a function of observable characteristics, particularly lagged GDP per capita, without imposing a specific structure on GDP per capita dynamics. This allows for greater flexibility in analyzing the time path of democracy’s impact on GDP per capita. The key assumption is that, conditional on lagged GDP per capita, democratizing countries don’t exhibit a different GDP per capita trend compared to non-democracies.²³ We demonstrate later that this approach effectively controls for the pre-democratization GDP per capita dip.

The semiparametric approach’s strength lies in its flexibility. It avoids imposing a linear

²³The framework involves two key steps ([Acemoglu et al., 2019](#)). First, a probit regression estimates the propensity score for a country to democratize in a given year, considering its past GDP per capita levels and other observable characteristics. This score is then used to weight observations in non-democratizing countries, creating a control group comparable to those transitioning. Second, the impact of democracy on GDP per capita is estimated by comparing the actual GDP per capita trajectory of democratizing countries to the counterfactual path they would have followed without democratization. This counterfactual path is estimated using a linear regression model for non-democracies that controls for the same observable characteristics and lagged GDP per capita used in the propensity score model.

structure on GDP per capita dynamics, enabling a more nuanced exploration of how GDP per capita evolves after democratization (Acemoglu et al., 2019). Reassuringly, the results from this semiparametric approach corroborate those obtained from dynamic linear panel models, lending credence to the positive association between Pro-liberal Democracy and economic development, as well as the negligible impact of Illiberal Democracy on GDP per capita.

4.3.2 Matching-Augmented DID for Robust Causal Inference

We complement our analysis with a matching-augmented DID approach proposed by Imai et al. (2023) to further address concerns about time-varying unobserved confounding factors, particularly relevant when studying the effect of democracy on growth. This method offers a robust approach to account for the complex dynamics and potential confounders in the data, leading to more credible causal inferences. Unlike the approach in Acemoglu et al. (2019) that models selection into democracy based on lagged GDP per capita, this approach prioritizes matching treated units (democratizing countries) with control units (non-democratizing countries) based on their treatment history (past democracy status) up to a pre-specified lag (e.g., four years). This is then refined using standard matching or weighting techniques to ensure similar covariate values between treated and control units.²⁴

4.3.3 Additional DID Specifications

We further present additional robustness checks in Appendix E.1 using alternative techniques. First, we explore the factor-augmented DID approach proposed by Eberhardt (2022) that can account for heterogeneous pre-treatment trends and endogenous selection into democracy (Chan and Kwok, 2022).

²⁴In particular, the matching-augmented DID approach by Imai et al. (2023) involves a four-step process. First, treatment units (democratizing countries) are identified. Second, for each treated unit, the algorithm searches for untreated units (non-democratizing countries) that share the same treatment history (past democracy status) up to a pre-specified lag. This creates matched sets based on similar pre-treatment trends. Third, within each set, the Mahalanobis distance metric (default) is used to assess the similarity between the treated unit and each control unit across lagged time periods. This metric accounts for correlations among variables and data scale, providing a more accurate measure of comparability. Fourth, weights are assigned to control units based on Mahalanobis distances. Units most similar to the treated unit (smallest distances) receive higher weights, while others receive 0 weight. Finally, a weighted DID analysis is conducted within each matched set, comparing the treated unit’s outcomes to the weighted average outcomes of control units before and after treatment. Averaging these weighted DID estimates across all matched sets yields the overall causal effect estimate.

Second, to allow for potential heterogeneity in treatment effects across time and countries, we report estimates from various recently developed estimators robust to such heterogeneity (Appendix E.2). These include studies by [Cengiz et al. \(2019\)](#); [Freyaldenhoven et al. \(2019\)](#); [Borusyak et al. \(2021\)](#); [Callaway and Sant’ Anna \(2021\)](#); [Sun and Abraham \(2021\)](#); [Butts and Gardner \(2021\)](#); [Dube et al. \(2023\)](#).

Reassuringly, across all specifications, the core finding remains consistent: Pro-liberal Democracies promote economic growth, while Illiberal Democracies have minimal impact.

4.4 IV Method

Reverse causality is a legitimate concern, as rising income may increase citizen demand for democracy and affect the likelihood of democratic transition. Although event study analyses show no empirical evidence of reverse causality (see Figure 6), we supplement the OLS panel regressions with 2SLS IV models using regional democratic waves as exogenous variation in domestic regime type. We follow [Dorsch and Maarek \(2019\)](#); [Acemoglu et al. \(2019\)](#) in calculating the percentage of democracies in a country’s politico-geographic region, excluding the country itself, to generate exogenous variation in its democracy variable (see Appendix G for details). To instrument the interaction term, we interact the democracy IV with the *Dem_monism*, following [Sima and Huang \(2023\)](#).

The IV approach identifies consistent estimates if the exclusion restriction holds that - conditional on controls - regional waves affect domestic growth only through domestic institutions. This restriction seems plausible. Nevertheless, we examine it in detail and include robustness checks addressing potential violations.

5 Baseline Results and Robustness Checks: Nature of Mobilization During Democratization as Grouping Indicator

Estimation results based on Equation (1) are shown in Table 1, using average nature of mobilization over the transition and prior two years to categorize Pro-liberal versus Illiberal Democracies. The baseline regression result, shown in Column (1), demonstrates that the Pro-liberal Democracy coefficient is 0.994 and significant at 1%, while the Illiberal Democracy coefficient is small at 0.100 and insignificant. More importantly, the estimated coefficient on the Pro-liberal Democracy variable is statistically significantly different from the coefficient on the Illiberal Democracy variable. Furthermore, the long-run GDP growth

effects are 32% for Pro-liberal transitions but only 3% for Illiberal transitions.²⁵ This large discrepancy across new democracies highlights the importance of carefully differentiating regimes. Our findings suggest that democracies lacking a strong “spirit of democracy,” as indicated by a positive value for the nature of mobilization during democratization, do not experience significant growth benefits. This aligns with theoretical models that highlight the critical role of a robust civil society in successful democratization processes (Besley and Persson, 2019; Bisin and Verdier, 2023).²⁶

A potential concern is whether the general state of the nature of mobilization, rather than its nature during the transition period, exerts the true influence. To address this, we first create a dummy variable that takes a value of 1 if the nature of mobilization indicator is above 0 (indicating pro-democratic mobilization exceeds pro-autocratic mobilization) for each country and year, and 0 otherwise. Column (2) presents the growth regression results by controlling for this dummy, showing a highly significant coefficient of 1.185 for Pro-liberal Democracy and an insignificant coefficient of 0.118 for Illiberal Democracy, with a highly significant difference between the two.²⁷ The negative coefficient associated with the mobilization dummy might initially appear counterintuitive. However, this likely reflects the destabilization that can accompany high levels of ongoing mobilization (beyond the initial transition period). To account for this possibility, Column (3) directly controls for the level of the nature of mobilization indicator in each year, leading to a slight amplification of the differences in growth outcomes between Pro-liberal and Illiberal Democracies. Notably, the coefficient of the nature of mobilization indicator itself is negative, aligning with the negative effects of the dummy variable observed in the previous column. With the similar concern, we also control for the lagged dummy variable and level of the nature of mobilization at the past year prior to democratization (Columns (4)–(5)).²⁸ The

²⁵The long-run growth rate hinges on the estimated coefficient for the fourth lag of GDP per capita (log), which is -3.104, shown in Appendix C.1. The derivation of the formula that quantifies the impact on long-run growth is meticulously detailed in Appendix F.

²⁶Appendix C.1 explores the impact of using alternative thresholds to define the initial nature of mobilization for democracy categorization. Our analysis reveals that a threshold of 0 (percentile 25) yields the most pronounced effect size, as it maximizes the difference in growth outcomes between Pro-liberal and Illiberal Democracies.

²⁷Including this dummy leads to a reduced sample size. This stems from the fact that while Pro-liberal and Illiberal Democracy utilize initial nature of mobilization to categorize countries, some autocratic regimes lack mobilization data and are included. The dummy variable we construct here automatically excludes these countries due to missing data.

²⁸We construct the variables using data from the four preceding years. Our results are robust to alternative lag specifications (available upon request).

results remain consistent and suggest the importance of nature of mobilization during the transition itself.

Our baseline regression emphasizes the crucial role of initial conditions at democratization and utilize the nature of mobilization during the political transition as the starting point, contrasting with prior studies by [Acemoglu et al. \(2019\)](#); [Eberhardt \(2022\)](#) that employ variables in a fixed year as the initial conditions for democracies. To verify the critical role of the transition year, we conduct a placebo test. Democracies are categorized into Pro-liberal and Illiberal based on the nature of mobilization in a fixed year (e.g., 1970) and then further divided by the nature of mobilization during their actual transition. Two subgroups present internal conflicts: Pro-liberal Democracy in the baseline but Illiberal using the information in the fixed year, and vice versa. These conflicting classifications allow us to compare their effects. The results in Column (6) reveal that the “fake” categorization based on the information in the fixed year loses explanatory power. The coefficient for “Pro-liberal Democracy in the baseline but Illiberal using the fixed year...” is positive and significant, while the coefficient for the reversed categorization remains insignificant.

These analyses solidify the robustness of our baseline results regarding the differential growth effects of Pro-liberal and Illiberal Democracies. The findings hold even when controlling for current or past nature of mobilization or using an alternative initial condition (nature of mobilization in a fixed year). This reinforces the significance of the “nature of mobilization” during the transition period for subsequent growth trajectories.²⁹

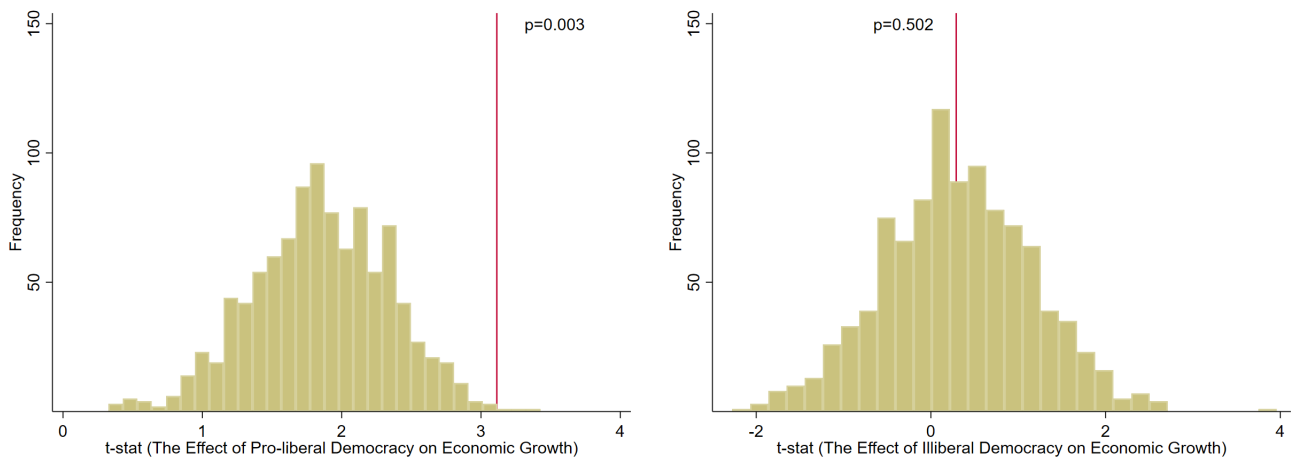
We further explore the role of civil society during the political transition by employing an alternative measure: the characteristics of civil society organization (CSO) anti-system movements from the V-Dem dataset, focusing on democratic (`v2csanmvch_4`) and anti-democratic (`v2csanmvch_5`) characteristics. Similar to the nature of mobilization, a positive difference between democratic and anti-democratic movements defines a Pro-liberal Democracy, while a negative difference indicates an Illiberal Democracy. Column (7) displays results consistent with our baseline finding, where Pro-liberal Democracies exhibit positive and significant growth effects, whereas Illiberal Democracies do not.

²⁹Appendix C.2 investigates the utility of distinct indicators for pro-democratic and pro-autocratic mobilization in delineating Pro-liberal from Illiberal Democracies. The analysis indicates that pro-democratic mobilization is not a robust predictor of economic growth disparities. However, the growth differential between Pro-liberal and Illiberal Democracies is accentuated when pro-autocratic mobilization during the transition is taken into account. This suggests that reduced pro-autocratic mobilization during democratization correlates positively with economic growth prospects.

5.1 An Alternative Placebo Test: Transition Timing Matters

Empirically, the democratization process often unfolds over multiple years, whereas our data captures a single transition year. To assess whether this temporal discrepancy affects our results, we conduct a placebo test in which a random year within the 10-year window surrounding the true democratization year is designated as the fake transition year for categorizing Pro-liberal and Illiberal Democracies. Repeating the analysis 1,000 times yields placebo growth effects plotted in Figure 5, with true effects marked by the red line, clearly distinct from the placebo distribution. This confirms the recorded transition year is a critical juncture playing a distinct role for subsequent growth. In contrast, most fake Illiberal Democracy coefficients spread randomly around the true effect remaining insignificant. So the actual transition year does not stand out from nearby years for Illiberal Democracies.

Figure 5. Estimates from Randomly Assigned Transition Years versus Actual Data



Note: The left figure depicts the distribution of placebo t-statistics estimating the effect of Pro-liberal Democracy on economic growth, obtained by randomly assigning a false democratization year within a 10-year window around the true transition. The vertical red line marks the actual estimated effect ($p = 0.003$), clearly distinct from the placebo distribution, indicating that the recorded transition year plays a critical role in subsequent growth for Pro-liberal democracies. The right figure presents the analogous placebo distribution for Illiberal Democracies, where the actual estimated effect ($p = 0.502$) is indistinguishable from the placebo estimates.

5.2 Controlling for Democratic Stock and Formats

Another conjecture is that while transition-period nature of mobilization is critical, institutional quality or peaceful behavior may improve over time through democratic learning-by-doing. Could poor initial nature of mobilization effects in Illiberal Democracies dissipate? To assess this, we control for democratic capital using the stock measure from [Gerring et al. \(2005\)](#), equal to a country’s annual Polity2 score since 1900 with a 5% depreciation rate, updated to 2020. As shown in column (1) of [Table 2](#), the Pro-liberal and Illiberal Democracy coefficients remain similar to the baseline estimate around 1.165 and 0.110, while the insignificant democratic capital coefficient is near zero.

The literature also examines whether specific democratic institutions like presidentialism or proportional representation matter more than the democracy-autocracy distinction overall ([Persson, 2005](#)). [Table 2](#) controls for various institutional combinations, with the Pro-liberal and Illiberal Democracy effects remaining similar while institutional formats do not consistently affect growth, except for negative effects of majoritarian and proportional systems. The results demonstrate democracy’s growth effects are dominated by the Pro-liberal – Illiberal distinction rather than specific democratic formats.

5.3 Alternative Democracy Indicators

The impact of democracy on economic growth remains a contentious topic, partly due to the sensitivity of empirical results to the chosen democracy measure ([Gründler and Krieger, 2021, 2022](#)). Democracies encompass diverse institutions, making their quantification and cross-country comparison challenging. To address this concern, we assess the robustness of our findings to alternative democracy indicators ([Table 3](#)).³⁰

Initially, we replicate the analysis using the binary democracy variable from the [Boix et al. \(2013\)](#) ([Column \(1\)](#)). Pro-liberal Democracies exhibit a significantly positive growth effect, while Illiberal Democracies are associated with negative growth. Similar results are obtained with the binary democracy variable from [Cheibub et al. \(2010\)](#); [Bjørnskov and Rode \(2020\)](#) ([Column \(2\)](#)).

Next, we employ the Polity V dataset, defining democracies as countries with a Polity 2 score exceeding 0 (following [Persson and Tabellini \(2007\)](#) and [Acemoglu et al. \(2019\)](#)).³¹

³⁰Due to limited data availability before 1972, the corresponding result using the Freedom House data is presented in [Appendix C.8](#).

³¹The reduced sample size in the robustness check primarily arises from missing Polity data for small countries. Additionally, using a stricter democracy threshold ($\text{Polity2} > 5$) yields a similar result ([Appendix](#)

Pro-liberal Democracies remain positively associated with growth, while Illiberal Democracies show no significant effect (Column (3)).

Furthermore, we utilize the PS data set (Papaioannou and Siourounis, 2008b), which considers only enduring transitions to democracy.³² This excludes many Illiberal Democracies due to their brief lifespans and frequent reversals to autocracy. The coefficient for Illiberal Democracy is insignificant, while the significantly positive effect of Pro-liberal Democracy persists (Column (4)). This suggests that even for well-established democracies, the nature of mobilization during the transition period has a lasting impact on growth.

We extend the robustness check by constructing separate categories of Pro-liberal and Illiberal Democracies using alternative data sources (Columns (5)–(9)). These include the Machine Learning Democracy Index (Gründler and Krieger, 2021),³³ Episodes of Regime Transformation (ERT) dataset (Maerz et al., 2023),³⁴ Lexical Index (Skaaning et al., 2015),³⁵ and Electoral Democracy and Liberal Democracy variables from the V-Dem project.³⁶ Across all specifications, Pro-liberal Democracies exhibit substantial and favorable impacts on growth, whereas Illiberal Democracies correlate with adverse effects, occasionally reaching statistical significance. Furthermore, these disparities between the groups persist as statistically significant.

5.4 Robustness Checks in the Appendix

Appendix C presents a comprehensive set of robustness checks that reinforce the baseline findings on the distinct impacts of Pro-liberal and Illiberal Democracies on economic growth. Adjusting the classification threshold for these democracy types based on the

C.8).

³²We employ the 2015 update of the PS dataset (Pozuelo et al., 2016) to account for recent political shifts and corrected classifications.

³³The Machine Learning Dichotomous Democracy Index from Gründler and Krieger (2021) is used.

³⁴The V-Dem Episodes of Regime Transformation (ERT) dataset (Maerz et al., 2023) differentiates between democratization episodes and democratic regime changes. A democratization episode requires a small positive change and a substantial cumulative change in the V-Dem polyarchy index over the episode’s duration.

³⁵We construct a dichotomous democracy variable from the Lexical Index in Skaaning et al. (2015). A country is coded as a democracy (1) if it has “Minimally competitive elections,” “Male or female suffrage,” or “Universal suffrage,” and 0 otherwise.

³⁶We construct dichotomous democracy variables from the V-Dem electoral democracy and liberal democracy indices. We rely on their ordinal versions, coding countries as democracies (1) if they are “Minimally Democratic” or “Democratic,” and 0 otherwise.

nature of mobilization does not alter the observed patterns, underscoring the stability of the classification method. The positive correlation between Pro-liberal Democracy and growth is consistently significant across an extended timeframe, contrasting with the negligible impact of Illiberal Democracy. Non-linear interaction models suggest that transitions to Pro-liberal Democracy with intermediate levels of mobilization are most beneficial for growth.

The robustness of the baseline model is further confirmed by the stability of findings upon excluding outlier observations and countries with fewer than 20 observations to mitigate Nickell bias. Persisting disparities between Pro-liberalism and Illiberal Democracy effects despite growth covariates inclusion imply mechanisms beyond standard explanations. A generalized model supports the baseline assumption of equal but opposite effects for democratization and its reversal. Alternative categorization strategies, including different Polity score cutoffs and Freedom House data, consistently align with the baseline findings.

In addition, the findings are robust to adjustments in sample size and end year, as well as to additional checks for special-case robustness, transition frequency, growth lag structure, and political institution quality. Excluding specific countries, periods, regions, outliers, or varying model specifications does not qualitatively change the conclusions.

In summary, the robustness checks consistently demonstrate that Pro-liberal Democracy positively influences economic growth, while the effects of Illiberal Democracy remain uncertain. The findings are resilient to various methodological adjustments and controls, reinforcing the study's conclusions with a high degree of confidence.

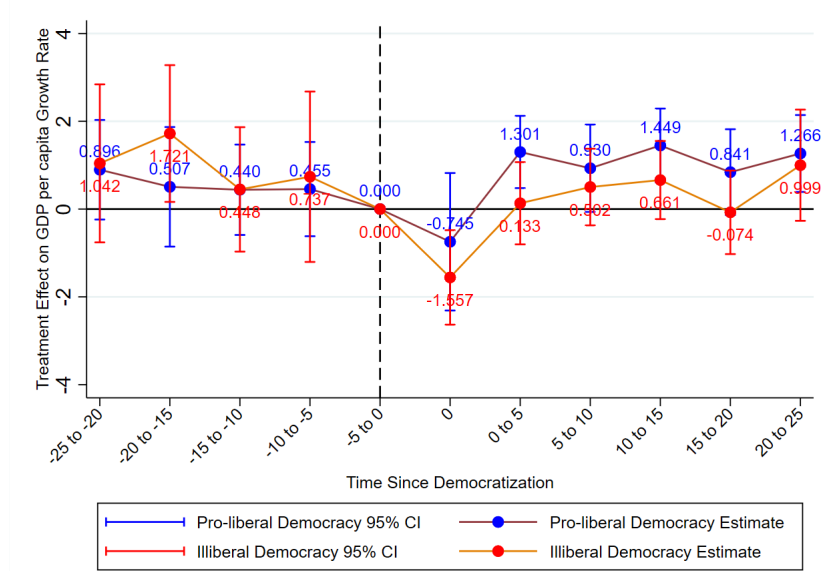
6 Alternative Techniques to Estimate

6.1 Event-Study Analysis

Building on Equation (2), we leverage event study plots to visually assess the comparability of treatment (democratization) and control (non-democratization) groups before and after the event. Figure 6 presents event study plots for both Pro-liberal and Illiberal Democracies, depicting their relative economic growth compared to non-democratic states in the twenty-five years preceding and following democratization. Regression coefficients with 95% confidence intervals are plotted across treatment leads and lags (i.e., five-year periods leading up to and following democratization), marked by the vertical spike at "0"

representing the year of democratization.

Figure 6. Event Study Plots of Pro-liberal (Blue) and Illiberal (Red) Democracy’s Effects on Economic Growth



Note: This figure depicts the estimated differences in economic growth between Pro-liberal democratic states (blue) and non-democratic states, as well as between Illiberal democratic states (red) and non-democratic states, before and after democratic transitions. The plot displays regression coefficients with 95% confidence intervals for the treatment leads and lags, which represent five-year periods leading up to and following Pro-liberal or Illiberal democratization. The regression specification includes fixed effects and controls for growth dynamics and the fourth lag of GDP per capita, as described in Equation (2). The diverging patterns for Pro-liberal and Illiberal Democracies relative to non-democracies reveal distinct economic growth trajectories associated with the nature of mobilization during democratization.

Figure 6 reveals that, prior to democratization, the pre-treatment dynamics of Pro-liberal (blue line) and Illiberal (red line) democracies closely resemble those of autocracies, with almost all coefficients hovering around zero and insignificant within the confidence intervals. Following the transition, however, a clear divergence emerges for Pro-liberal Democracies. The significantly positive coefficient after the initial dip in the democratization year indicates a growth-promoting effect, contrasting starkly with Illiberal Democracies, which display no discernible difference from autocracies in post-transition growth patterns.

These findings align with our earlier arguments, suggesting that the nature of mobilization during democratization plays a crucial role in shaping subsequent economic trajectories. Pro-liberal Democracies, characterized by broad-based participation and compromise,

appear to foster environments conducive to sustained growth, while Illiberal Democracies, often lacking these features, may not exhibit similar positive outcomes.

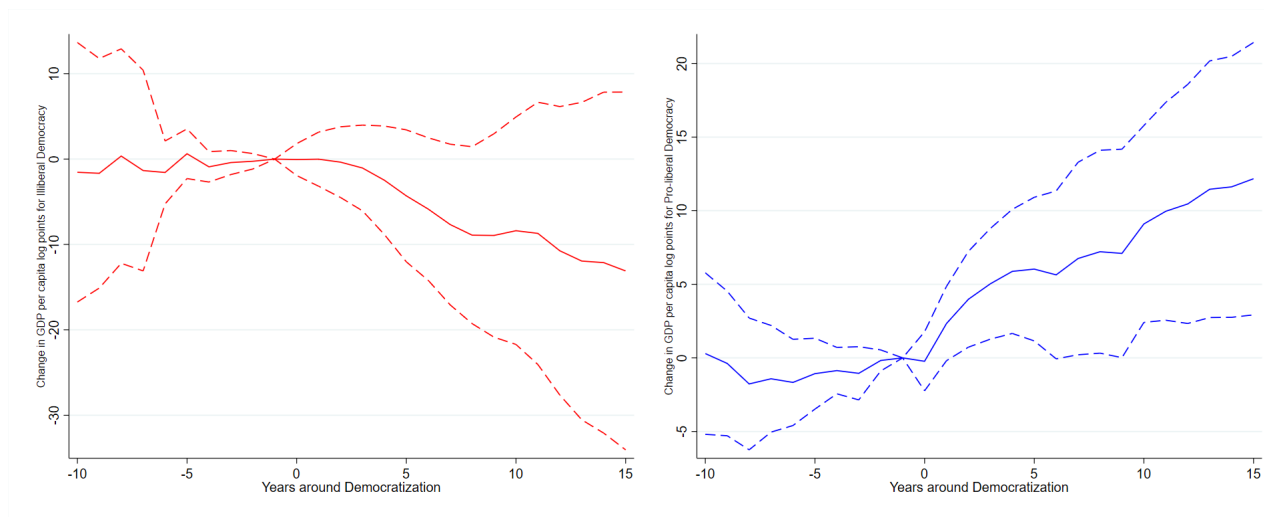
6.2 Semiparametric Estimates Following [Acemoglu et al. \(2019\)](#)

In Section 5, we employed a dynamic (linear) panel model to control for growth dynamics. While this approach enabled us to account for the confounding influence of the GDP per capita dip observed in Figure 1 and compute the cumulative effects of a permanent democratic transition on GDP per capita, it is fundamentally grounded in the linearity assumption. The linearity assumption imposes restrictive conditions, including the requirement that the effects of transitions to and from democracy be equal in absolute value. Furthermore, it constrains the time pattern of democracy’s cumulative effects on GDP per capita, derived by extrapolating the linear GDP per capita process into the future. Despite being closely related to the commonly used empirical model in the literature and facilitating efficient estimation under its maintained assumptions, the dynamic linear panel approach lacks flexibility in capturing potential non-linearities in the relationship between democracy and economic development.

Building on [Acemoglu et al. \(2019\)](#), this subsection employs an alternative approach to estimate the causal impact of democracy on economic growth. We acknowledge the potential non-random selection into democracy. Countries transitioning to democracy might differ from those remaining non-democratic in unobserved characteristics that could also influence economic growth. To address this concern, we adopt a semiparametric treatment effects framework. This framework models the selection into democracy as a function of observable characteristics, particularly lags of GDP per capita. Importantly, it avoids specifying a parametric model for the dynamics of GDP per capita, allowing for greater flexibility in estimating the impact of democracy on GDP per capita over time. The key identifying assumption is that, conditional on past GDP per capita levels, countries transitioning to democracy do not exhibit a different long-run GDP per capita trajectory compared to non-democracies.

The approach involves two key steps to estimate the causal impact of democracy on GDP per capita. In the first stage, a probit model predicts the propensity score, the probability of a country transitioning to democracy in a given year. This score is based on past GDP per capita and other observable characteristics. Propensity scores then weight observations in non-democracies, creating a control group comparable to democratizing

Figure 7. Semiparametric Estimates of the over-time Effects of Illiberal (Red) and Pro-liberal (Blue) Democracy on the log of GDP per capita



Note: This figure depicts the effects of Pro-liberal (blue line) and Illiberal (red line) democratization on log GDP per capita, estimated using a semiparametric approach with counterfactuals. The lines represent the average effect on GDP for countries that democratized in a Pro-liberal/Illiberal way, relative to a counterfactual scenario without democratization (dashed lines indicate 95% confidence intervals). The horizontal axis shows time (in years) relative to the year of democratization. We normalize log GDP per capita to 0 in the year preceding the democratization. The estimates control for pre-existing GDP per capita trends by assuming a linear counterfactual model. See [Acemoglu et al. \(2019\)](#) for details on this approach.

countries. In the second stage, we estimate the treatment effect by contrasting the actual GDP per capita trajectory of democratizing countries with the counterfactual path they would have followed absent democratization. This counterfactual is derived from a linear regression model for non-democracies that controls for the same covariates used in the propensity score model.

Figure 7 presents the estimated effects of Illiberal and Pro-liberal Democratization on GDP per capita (log points) using an inverse-propensity-score reweighting approach. Estimates are plotted for lags (s) ranging from -10 to 15 years, with $s = 0$ corresponding to the year of democratization. The negative lag estimates serve as a specification test, as they should be unaffected by subsequent democratization. The blue line depicts the gradual increase in GDP per capita following Pro-liberal Democratization, while the red line indicates a contrasting decline in GDP per capita after Illiberal Democratization. Notably, the pre-democratization trends ($s < 0$) show no significant difference between the two groups, reassuring our identification strategy.

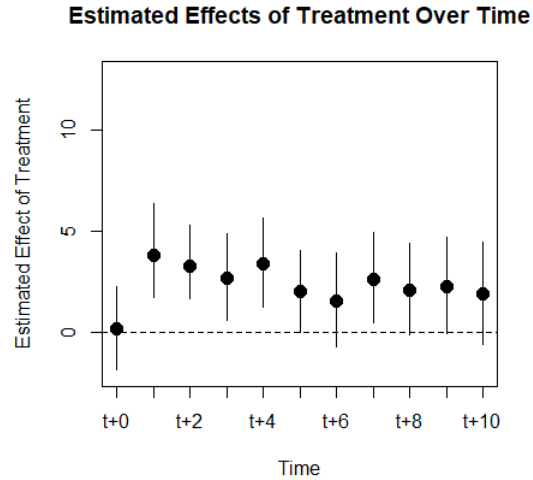
6.3 Matching-Augmented DID

We leverage a matching framework proposed by [Imai et al. \(2023\)](#) to further address concerns about time-varying unobservables, particularly relevant when studying the causal effect of democracy on economic growth. This approach complements traditional fixed-effects and DID models by constructing matched treatment and control groups with identical pre-treatment histories (up to a specified lag). Applied to the democracy-growth question, this matching method offers a robust approach to account for complex data dynamics and potential confounders, yielding more reliable causal inferences.

The matching procedure operates as follow. First, for each country experiencing democratization (treated), we identify control observations (untreated) from the same period with identical pre-treatment democracy status for a predefined lag (default: 4 years). This ensures the control countries mirror the treated country’s democratic history up to the democratization event. Second, we refine the matched sets using standard methods (Mahalanobis distance preferred) to balance observed covariates between treated and control units. This step mitigates potential biases arising from confounding factors. Finally, we estimate the Average Treatment Effect on the Treated (ATT) using a DID approach. This estimator controls for time trends and compares the outcomes of treated and control groups before and after democratization.

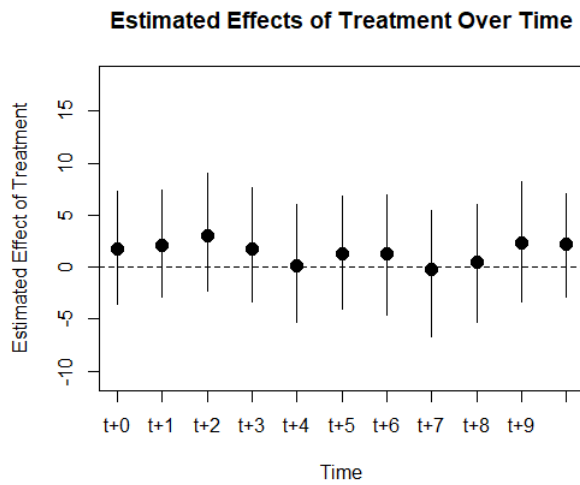
We employ the *PanelMatch* R package ([Imai et al., 2023](#)) with default options to estimate the effects of Pro-liberal and Illiberal Democratization on GDP per capita growth rates over the 10-year period following the transition. [Figure 8](#) depicts the matching estimates for Pro-liberal Democratization, while [Figure 9](#) illustrates the estimates for Illiberal Democratization. Our findings indicate that the point estimates for Pro-liberal Democratization are significantly positive over almost the entire 10-year period. In contrast, the estimated effects of Illiberal Democratization hover around zero throughout the same timeframe.

Figure 8. Estimated Average Effects of Pro-liberal Democracy on Growth



Note: The estimates are based on a matching method that adjusts for treatment and covariate histories during the 4-year pre-treatment period. The figure shows the average effects of Pro-liberal Democratization for the 10 years following the transition ($t=0,1,\dots,10$), with 95% asymptotic confidence intervals represented by vertical bars.

Figure 9. Estimated Average Effects of Illiberal Democracy on Growth



Note: The estimates are based on a matching method that adjusts for treatment and covariate histories during the 4-year pre-treatment period. The figure shows the average effects of Illiberal Democratization for the 10 years following the transition ($t=0,1,\dots,10$), with 95% asymptotic confidence intervals represented by vertical bars.

6.4 Other DIDs

Appendix E.1 explores alternative specifications to address potential concerns. First, we employ the factor-augmented DID approach of Eberhardt (2022) to account for heterogeneous pre-treatment trends and endogenous selection into democracy. Second, we present estimates from recent treatment effect heterogeneity-robust estimators (Cengiz et al., 2019; Freyaldenhoven et al., 2019; Borusyak et al., 2021; Callaway and Sant’ Anna, 2021; Sun and Abraham, 2021; Butts and Gardner, 2021; Dube et al., 2023) in Appendix E.2. Reassuringly, these extensions consistently reveal a positive association between Pro-liberal Democracy and economic development, with minimal impact from Illiberal Democracy.

6.5 Endogeneity Concerns and Instrumental Variables

The dynamic panel model employed here relies on the assumption that, after controlling for country and time fixed effects, past growth rates, and GDP per capita levels, a country’s political regime choice is independent of other unobserved variables influencing growth. While intuitively sensible, this assumption is not infallible.³⁷ Political and economic forces often intertwine and evolve concurrently, particularly during democratization processes. Consequently, isolating a purely causal effect of democracy proves challenging due to the difficulty of identifying truly exogenous IVs.

One viable source of exogenous variation in democratic transitions lies in the phenomenon of regional waves of democratization and autocratic reversals, as documented by Acemoglu et al. (2019); Dorsch and Maarek (2019). We construct an IV based on the average level of democratic indicators in a country’s designated region (regional information derived from Acemoglu et al. (2019)).³⁸ Two lagged average level of democratic indicators are employed to instrument for a specific country’s democracy level. Our exclusion restriction hinges on the assumption that regional waves significantly influence democratization without being directly driven by regional trends in future GDP per capita.

The primary threat to the validity of this IV approach arises from the potential correlation between regional GDP per capita and regional democracy, independent of a country’s

³⁷We acknowledge the potential for endogeneity bias due to factors like visionary leaders simultaneously driving growth and democratic adoption. For example, if historically, talented individuals in autocracies received Western education and subsequently implemented democratic reforms, growth and democracy might appear interconnected solely due to leader characteristics.

³⁸In our sample, constructing regional averages based solely on countries sharing similar initial political institutions (autocracies or democracies) is equivalent to considering all countries in the same region due to our sample restrictions.

internal democratic impact on its own GDP per capita. To mitigate this concern and ensure our results are not driven by these regional trends, we present estimates both with and without controlling for various other factors that might also exhibit spatial spillover effects within regions.

The second-stage results obtained from the 2SLS estimator are presented in Panel A of Table 4. We specifically instrument for *Democracy* and the interaction term *Democracy * Illiberal_dem*, which captures the differential growth effects between Pro-liberal and Illiberal Democracies.³⁹ The table reports coefficients for Democracy (equivalent to Pro-liberal Democracy), Interaction (representing the effect difference between Pro-liberal and Illiberal Democracy), and Illiberal Democracy (calculated as the difference between Democracy and Interaction). The corresponding first-stage results are shown in Panels B1 and B2 of Table 4.

Employing two lagged IVs (*DemIV^F* and *InteractionIV*) for democracy and its interaction, the baseline 2SLS estimate (column (1)) reveals a larger and statistically significant unconditional effect of democratic transitions, representing the impact of Pro-liberal Democracy in this context. The positive and significant difference between Pro-liberal and Illiberal Democracy effects exceeds those from the OLS regression, aligning with findings in relevant literature (Madsen et al., 2015; Acemoglu et al., 2019). The Hansen test shows no evidence of misspecification, and Kleibergen-Paap statistics demonstrate strong instrument validity (Stock et al., 2002). These IV analyses bolster our argument that the impact of democracy on growth hinges on the nature of mobilization during democratization.

Columns (2)–(8) explore the robustness of our results to potential violations of the exclusion restriction using time-varying covariates. The primary concern involves correlated regional economic shocks that might simultaneously influence democratization and GDP per capita. We follow Acemoglu et al. (2019) and address this by incorporating initial development level controls in column (2)⁴⁰, post-socialist transition controls in column (3)⁴¹, unobserved regional heterogeneity in column (4)⁴², observable regional shocks in

³⁹Detailed steps for generating the IVs are provided in Appendix G.

⁴⁰Interactions between GDP quintiles in 1960 (as the proxies of initial development level) and year dummies account for common shocks related to initial development across regions.

⁴¹Interactions with a Soviet/satellite country dummy and year dummies for 1989-1992 ensure results are not driven by geographically concentrated transitions from socialism.

⁴²Region-specific trends control for unobserved regional variations, supporting the lack of correlation between regional democratization waves and other regional trends.

column (5)⁴³, and spatially correlated GDP per capita and shocks in columns (6)–(7)⁴⁴.⁴⁵

Across these specifications, the overall pattern in the IV results remains consistent with the baseline findings: positive and significant estimated effects for Pro-liberal Democracy, while those for Illiberal Democracy remain small and insignificant in most cases. This robustness suggests that the dynamic panel model provides a reliable framework to estimate the effects of democratic types on growth, largely unaffected by endogeneity concerns.⁴⁶

7 Unveiling the Mechanisms: Behavioral and Institutional Pathways

With a robust relationship demonstrated between the nature of mobilization during democratization and later economic growth, an imperative question emerges: what are the mechanisms through which mobilization dynamics impose durable effects? We now probe the potential channels underpinning this association.

As discussed in Section 2, democratic transitions represent more than a regime shift; they trigger a cultural transformation. We emphasize the enduring impact of civil society and mobilization patterns during this period on the nascent democracy’s formal institutions and practices. Two distinct mechanisms are considered: behavioral path dependence and institutional path dependence.⁴⁷

The first mechanism centers on the persistence of political cultures. Drawing on [Acharya et al. \(2017\)](#), we conceptualize behavioral path dependence as a process where past political attitudes, collective behavior, and community norms perpetuate divergent political cultures over time. In our context, we hypothesize that Illiberalism Mobilization during democratization might entrench political violence, amplifying the risk of post-transition instability and unrest. This could stem from its potential to legitimize anti-democratic tactics and facilitate the spread of violence. Conversely, Pro-liberalism Mobilization might foster a civil society and democratic norms by normalizing mutual tolerance among opposing parties.

⁴³Average GDP per capita and trade share within each initial regime cell are included.

⁴⁴Column (6) models spatially correlated GDP per capita based on inter-country distance. Column (7) incorporates inverse-distance-weighted GDP per capita and democracy in other countries.

⁴⁵For a more comprehensive discussion of these issues, please refer to Section V of [Acemoglu et al. \(2019\)](#).

⁴⁶Having said that, these results are better interpreted cautiously in terms of causality.

⁴⁷For more nuanced discussions on institutional versus behavioral mechanisms underlying historical legacies, see [Wittenberg \(2006\)](#); [Numm and Wantchekon \(2011\)](#); [Acharya et al. \(2017\)](#).

The second mechanism focuses on the evolution of post-transition institutions. We examine how these institutions, shaped by the nature of mobilization, influence economic development. Illiberalism Mobilization, characterized by its "zero-sum" nature, may have limited or no impact on fostering inclusive institutions during the post-transition period. In contrast, Pro-liberalism Mobilization, with its emphasis on broad participation and compromise, might lay the groundwork for inclusive institutions. In essence, the quality of institutions established in the wake of democratization, shaped by the prevailing mobilization patterns, could explain subsequent economic performance.

We explore these conjectures within a dynamic panel model that examines the differential impact of Pro-liberal and Illiberal Democracies on key institutional and behavioral variables denoted by m_{it} .

$$m_{it} = \beta_P \text{Pro-liberal_dem}_{it} + \beta_I \text{Illiberal_dem}_{it} + \sum_{j=1}^4 \alpha_j m_{it-j} + \sum_{j=1}^4 \varphi_j y_{it-j} + \lambda_i + \delta_t + \varepsilon_{it}. \quad (3)$$

To capture the dynamic nature of each variable, we control for its four lagged levels, four lagged GDP, country fixed effects, and year fixed effects. Estimation follows the within estimator approach employed in [Acemoglu et al. \(2019\)](#) and [Sima and Huang \(2023\)](#).

7.1 Superior Peaceful Conduct and Institutional Development in Pro-liberal Democracies

We operationalize our hypotheses as follows. First, we examine the heterogeneous impacts of democracy types, determined by the nature of mobilization during transition, on indicators capturing conflict across various intensities, ranging from mild political polarization to more severe violence. An effective democracy should facilitate peaceful resolution of societal conflicts.⁴⁸ Excessive instability signifies a less functional political regime.⁴⁹

Table 5 reports such mechanism results. Column (1) reveals that supporters of opposing camps are more likely to engage in friendly rather than hostile interactions in Pro-liberal Democracies, as measured by the V-Dem political polarization indicator (extent to which political differences affect social relationships beyond political discussions). This effect is

⁴⁸The impact of violence or political turmoil during transitions on subsequent growth has been explored by [Huntington \(1993\)](#), [Cervellati and Sunde \(2014\)](#), and [Pozuelo et al. \(2016\)](#) among others.

⁴⁹Detailed information on data sources for all indicators is provided in Appendix K.

absent in Illiberal Democracies. We further explore the differential impacts on key mobilization components - mobilization for democracy and mobilization for autocracy. The results (columns (2)–(3)) suggest that only Pro-liberal Democracies significantly reduce both types of mobilization, implying their ability to alleviate societal discontent and lessen reliance on mass mobilization.⁵⁰ Column (4) examines the impact on a more intense conflict: political violence from V-Dem (use of physical force by non-state actors for political objectives). The contrast is stark, with a substantial reduction in political violence under Pro-liberal Democracies but a slight increase under Illiberal ones. Additional conflict variables from [Aisen and Veiga \(2013\)](#) are utilized: Violence Index (measuring assassinations, revolutions, and wars) and Regime Instability Index (capturing frequencies of constitutional changes, coups, cabinet/executive changes, and regime crises). As shown in columns (5)–(6), significant reductions occur only in Pro-liberal Democracies. This pattern holds true for the final column measuring societal instability, where social unrest ([Acemoglu et al., 2019](#)) is a binary variable indicating the presence of unrest in a given year.

Second, we investigate the heterogeneous impacts of democracy types on growth-enhancing institutions. Besides examining institutions like transparency index, state capacity, property rights protection, and economic freedom index, we also explore the differential effects on five democratic quality dimensions: electoral, liberal, participatory, deliberative, and egalitarian.

Table 6 reports institution mechanisms results. Column (1) reports the differential effects of Pro-liberal and Illiberal Democracies on transparency measured by HRV index ([Hollyer et al., 2014](#)), an objective transparency measure based on the quality of data reported to international organizations, which is a good predictor of a country’s law and order and bureaucratic quality. This pattern is reinforced by column (2), which employs the V-Dem political corruption measure as the dependent variable.

Subsequently, we examine the heterogeneous roles of democracies on state capacity, defined as the ability of governments to effectively implement policies and achieve goals such as providing security, public goods, and rule of law. Utilizing the dataset from [Hanson and Sigman \(2021\)](#) that captures the multidimensionality of state capacity across three dimensions – extractive, coercive, and administrative – the results in column (3) indicate

⁵⁰[Kopecký and Mudde \(2003\)](#) argues that successful mobilization by a particular social group or network should follow by demobilization (potentially accompanied by the incorporation of its leaders into the state apparatus). This does not signify the demise of civil society as a whole, but rather the (often temporary) demobilization of a specific segment. Other segments of civil society may remain largely unaffected by these events, or even become more active in response.

that Pro-liberal Democracy can dramatically enhance state capacity, although Illiberal Democracy also shows limited improvements.

We then examine property rights protections, another institution integral to economic growth, using the degree of private property rights enjoyment from V-Dem data. As shown in column (4), the emergence of Pro-liberal Democracy substantially strengthens property rights protections, whereas Illiberal Democracy generates no improvements on this key institution.

Next, we analyze an institution measure directly related to economic growth: the Economic Freedom Index, a composite encompassing trade freedom, government size, regulatory efficiency, property rights, and access to sound money (Krieger and Meierrieks, 2016; Kotschy and Sunde, 2017).⁵¹ As shown in column (5), the index is significantly higher in Pro-liberal Democracies, while no difference exists between Illiberal Democracies and autocracies. In the final five columns, we explore the heterogeneous effects of democracies on five democracy quality measures from V-Dem: electoral, liberal, participatory, deliberative, and egalitarian. We find that Pro-liberal Democracy confers greater, robust democracy quality across dimensions.⁵²

In summary, the results in Table 5 and Table 6 show no significant relationship between Illiberal Democracy and behavioral outcomes, nor meaningful impacts on growth-enhancing institutions. However, Pro-liberal Democracy can dramatically cultivate behavioral patterns that sustain political inclusion. In other words, Pro-liberal Democracy can directly resolve conflicts between political rivals (Przeworski, 1988). Additionally, Pro-liberal Democracy also substantially improves growth-enhancing institutions like transparency, state capacity, property rights, and economic freedom. These findings confirm our hypothesis that the nature of mobilization during political transitions significantly impacts behavior patterns and institutional quality for years following democratization. Specifically, Illiberalism Mobilization during democratization indicates that the masses have not sufficiently embedded the spirit of democracy to effectively exercise their promised power, and consequently, new institutions and behaviors do not facilitate their interests through

⁵¹To maximize sample size, we construct a new economic freedom index incorporating data from the 1960s. Results remain similar when restricting data to post-1970 periods.

⁵²Boese-Schlösser and Eberhardt (2023) highlight the importance of democratic pillars such as freedom of expression, electoral integrity, and legislative-executive balance for the long-run economic growth. As detailed in Appendix I, we reveal that while Pro-liberal Democracies exhibit a consistent and sustained trajectory of improvement, Illiberal Democracies face significant challenges in achieving long-term, meaningful progress in these areas.

economic growth.⁵³

7.2 Dissecting the Mechanisms: Behavior, Institutions, and Growth

Having established the differential growth impacts of Pro-liberal and Illiberal Democracies, we delve deeper to identify the specific behavioral and institutional channels underlying these relationships. Which institutional or behavioral factors hold the greatest sway over growth? Can our mechanism variables effectively capture the distinct growth effects of each democracy type?

To address these questions, we augment the baseline growth model by incorporating behavioral or institutional quality indicators (m_{it}):

$$g_{it} = \beta_P \text{Pro-liberal_dem}_{it} + \beta_I \text{Illiberal_dem}_{it} + \gamma m_{it} + \sum_{j=1}^3 \alpha_j g_{it-j} + \varphi y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it}.$$

Table 7 explores the heterogeneous effects of democracy by introducing these behavioral indicators individually. All instability and behavioral variables exhibit significant negative impacts on growth. When incorporated into the growth regressions, these variables substantially absorb the growth effect of Pro-liberal Democracies, particularly for political polarization, pro-autocratic mobilization, violence index, and regime instability index. This confirms their role as key channels through which democracy influences growth, aligning with the theory of [Bisin and Verdier \(2023\)](#).

Similarly, Table 8 examines the heterogeneous effects by including individual institutional indicators. After controlling for each institutional indicator, only state capacity and economic freedom index significantly reduce the growth effect of Pro-liberal Democracies (columns (3) and (5)).⁵⁴ Interestingly, controlling for democratic quality indicators amplifies the positive and significant effects of Pro-liberal Democracies while leaving Illiberal Democracy effects unchanged. Furthermore, the difference in impacts between these two

⁵³To enhance the robustness of our mechanism analysis, we have integrated a variety of supplementary methodologies within Appendix H. This includes the application of an IV technique, which is delineated in Section 6.5 to mitigate endogeneity concerns. We have also executed a split-sample analysis, aligning with the procedural framework set forth by [Dorsch and Maarek \(2019\)](#), to isolate and evaluate the distinct effects within different subsets of our data. Furthermore, we have incorporated a semiparametric estimation approach, as presented by [Acemoglu et al. \(2019\)](#), to afford a more refined analysis of the underlying mechanisms.

⁵⁴The positive growth effects of economic freedom and state capacity align with relevant literature (e.g., [De Haan and Sturm \(2000\)](#); [Sturm and De Haan \(2001\)](#); [De Haan and Sturm \(2003\)](#); [Sturm and De Haan \(2005\)](#); [De Haan et al. \(2006\)](#); [Knutson \(2013b\)](#); [Hanson \(2014\)](#); [Dincecco and Katz \(2016\)](#); [Geloso and Salter \(2020\)](#)).

types widens. These results suggest that even within similar de jure institutional frameworks, our classification strategy captures how elites and the public utilize these institutions in practice, and these de facto institutional dynamics become crucial for economic performance. These findings resonate with theories of elite persistence in [Acemoglu and Robinson \(2008\)](#).

8 Beyond Violence: The Enduring Impact of Mobilization Orientation

While analyzing social movements through the lens of violence (violent vs. non-violent) provides a familiar framework, it risks overlooking valuable insights into their influence on democratization. We propose that the orientation of mobilization, whether Pro-liberalism or Illiberalism, offers a more powerful lens for predicting political and economic outcomes.

Our analysis of democracies classified by the nature of mobilization during democratization indicates a stark contrast: Pro-liberalism movements utilize non-violent campaign tactics in 85% of cases (NAVCO 1.3 data from [Chenoweth and Shay \(2020\)](#)), whereas Illiberalism movements exhibit a significant incidence of violence (33%). Our aim is to demonstrate that focusing solely on violence overlooks the critical point that both peaceful and coercive methods can serve either democratic or autocratic ends.⁵⁵

We categorize non-violent and violent democratization using the NAVCO 1.3 dataset, encompassing all Third Wave democratization cases.⁵⁶ Building on the previous models, we estimate regressions for economic growth and key mediating mechanisms, focusing on those significantly explaining growth effects (Table 9, Panel A). Non-violent democratiza-

⁵⁵[Sombatpoonsiri \(2020\)](#) introduces the concept of “authoritarian civil society,” where nonviolent mobilization can undermine democracy by promoting strongman figures and suppressing dissent. Despite their peaceful appearance, these movements prioritize order and obedience over democratic values, contributing to dismantling existing democratic institutions ([Kopecký and Mudde, 2003](#); [Hadiz, 2018](#)). Conversely, [Huntington \(1993\)](#) acknowledges potential benefits from violent pro-democratic movements. While advocating peaceful transitions, he suggests that in certain contexts, violence serves as a necessary catalyst for dismantling authoritarian regimes and establishing democratic foundations. Our study supports this view, finding that Pro-liberalism movements, including violent ones, can contribute positively to economic and political development.

⁵⁶Our approach to identifying the transition scenario differs slightly from prior studies. We utilize campaign data from the transition year and the preceding three years. This extended timeframe captures information from well-known cases, such as the Czech Republic (1993) and Mongolia (1993), which would be omitted with a shorter window (e.g., one or two years around democratization). Additionally, we exclude cases lacking information on violent or nonviolent campaigns during democratization, typically associated with elite-driven democratization.

tion exhibits a statistically significant positive association with growth, while the effect of violent democratization is insignificant, although it is marginally significant and positive. However, both violent and non-violent democratization significantly affect most mechanism regressions. This suggests that the violence/non-violence dimension might not effectively categorize the growth effects and main mechanisms of different democracy types, although it effectively distinguishes democratic qualities across five dimensions (Table 10), aligning with prior literature (Cervellati et al., 2014; García-Ponce and Wantchekon, 2017; Kadivar, 2018; Bethke and Pinckney, 2021; Fetrati, 2023).

Replicating our previous analysis, we run growth and key mechanism regressions using the same sample but categorizing countries by Pro-liberal and Illiberal Democracy (Panel B of Table 9). The findings reaffirm those from earlier sections.

Furthermore, to validate the critical role of our grouping strategy, we consider two dimensions: Pro-liberal/Illiberal and Non-violent/Violent. This allows us to identify four subgroups: Pro-liberal and Non-violent Democracy, Illiberal and Violent Democracy, Non-violent but Illiberal Democracy, and Violent but Pro-liberal Democracy. By comparing them in a "horse race" regression, we can assess the superiority of our strategy.

If our approach holds greater merit, the coefficient of Violent but Pro-liberal Democracy should exhibit significant positive effects on growth, reduced instability, and improved institutional quality. Panel C of Table 9 confirms this prediction. The distinction between Pro-liberal and Illiberal Democracy proves more robust in predicting economic growth than that of Non-violent and Violent Democracy. For instance, countries categorized as Pro-liberal but Violent Democracy exhibit similar coefficients to those with Pro-liberal and Non-violent Democracy. Conversely, Illiberal Democracy, even in its Non-violent form, hinders growth. Even more compelling, the coefficient of Violent but Pro-liberal Democracy suggests the favorable influences on peaceful behaviors and institutions, while that of Non-violent but Illiberal Democracy remains insignificant or even worse in some cases.

Our findings elevate Pro-liberalism Mobilization as a crucial determinant of positive outcomes, surpassing a simplistic focus on violence. This shift rests on a fundamental reality: violence does not exclusively define the path towards democracy or autocracy. Peaceful methods often define pro-democratic movements, yet our data reveal that even violent tactics can find expression within such trajectories. Conversely, pro-autocratic forces can wield both violence and non-violence to consolidate power and dismantle democratic institutions. This nuanced approach highlights that the essence of mobilization – namely, its underlying goals and societal orientation – matters far more for long-term political and

economic trajectories than the mere presence or absence of violence.⁵⁷

9 Concluding Remarks

This study investigates the enduring link between the nature of civil society pressures and mobilization during democratic transitions and subsequent economic growth. We find that these historically decisive interactions imprint not only on the formal design of political institutions but also on the prevailing norms of peaceful political behavior. We demonstrate that democratization accompanied by dominant pro-democratic mobilization leads to faster economic growth compared to autocracies. Conversely, countries experiencing dominant pro-autocratic mobilization exhibit stagnant growth trajectories. This disparity arises from the characteristics of mobilization during the transition period. Dominant pro-democratic movements foster a more cooperative political environment, which in turn facilitates economic activity. In contrast, dominant pro-autocratic movements fail to establish such foundations, hindering long-term growth. Using our novel indicator of the nature of mobilization, we classify 25% of democratization cases since 1960 as Illiberal Democracies.

The influence of mobilization transcends the presence or absence of violence. Dominant pro-democratic movements foster a more cooperative political environment, reduce social tensions, and establish institutions conducive to economic activity. In contrast, dominant pro-autocratic movements leave a legacy of instability and weak institutions that impede long-term growth. These findings align with arguments emphasizing the critical role of civil society (Skocpol, 1979; Rueschemeyer et al., 1992; Berman, 1997; Chambers and Kopstein, 2001; Kopecký and Mudde, 2003; Satyanath et al., 2017; Sombatpoonsiri, 2020; Grahn and Lührmann, 2021; Lorch, 2021) and its decisive influence at critical junctures (Bisin and Verdier, 2023).

Our results offer valuable insights for policymakers. Recognizing the importance of the nature of mobilization during transitions, international actors can prioritize strategies that bolster civil society and pro-democratic protest movements. Such efforts can ultimately

⁵⁷Sima and Huang (2023) classify democracies as "Strong" or "Weak" based on the level of economic development during their political transition, which determines their capacity to promote growth post-transition. In Appendix D, we further find that economic prosperity is realized only when economic development and nature of mobilization are aligned during democratization. Countries with adequate development but dominant pro-autocratic mobilization, or lacking development despite dominant pro-democratic mobilization, do not show significant economic improvements.

contribute to a more stable and prosperous future for transitioning countries.

Future research avenues include identifying more precise criteria to assess a country's readiness for Pro-liberal Democracy, examining the links between the nature of mobilization and specific democratization formats, and exploring methods to assist Illiberal Democracies in improving their governance and institutional frameworks.

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Table 1. Effects of Democracy on Growth: Baseline and Robustness Checks

Dependent Variable: Growth Rate	(1)	(2)	(3)	(4)	(5)	(6)	(7)
						Compare: Use Fixed Year to Group Dem.	Alternative Nature of Civil Society to Group Dem.
Pro-liberal Democracy (β_P)	0.994*** (0.319)	1.185*** (0.351)	1.253*** (0.373)	1.114*** (0.350)	1.199*** (0.394)		0.941*** (0.321)
Illiberal Democracy (β_I)	0.100 (0.344)	0.118 (0.341)	0.107 (0.351)	0.098 (0.340)	0.099 (0.341)		0.383 (0.322)
Dummy: Mob. for Democracy Dominant (Current Year)		-0.602** (0.245)					
Nature of Mob. (Current Year)			-0.346*** (0.108)				
Dummy: Mob. for Autocracy Dominant (Lagged Year)				-0.381 (0.245)			
Nature of Mob. (Lagged Year)					-0.222* (0.120)		
Both Pro-liberal Democracy						0.798** (0.342)	
Both Illiberal Democracy						0.190 (0.344)	
Pro-liberal Democracy in Baseline but Illiberal Democracy using Fixed Year...						0.995** (0.386)	
Illiberal Democracy in Baseline but Pro-liberal Democracy using Fixed Year...						-0.079 (0.398)	
Coef. Test (p-value): $\beta_P = \beta_I$	0.0144	0.00629	0.00599	0.00936	0.00787		0.0777
Countries	133	130	130	130	130	108	133
Observations	5,697	5,567	5,567	5,558	5,558	4,965	5,697
Adjusted R^2	0.191	0.192	0.194	0.189	0.189	0.151	0.190

Note: A full set of country and year fixed effects are controlled in all specifications, as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 2. Effects of Democracy on Growth: Controlling Democratic Stock and Formats

Dependent Variable: Growth Rate	(1)	(2)	(3)	(4)	(5)
Pro-liberal Democracy (β_P)	1.165*** (0.353)	1.475*** (0.517)	0.961* (0.543)	1.395** (0.619)	1.430** (0.634)
Illiberal Democracy (β_I)	0.110 (0.322)	0.319 (0.492)	0.049 (0.482)	0.319 (0.502)	0.271 (0.472)
Democratic Stock	-0.003 (0.003)				-0.002 (0.004)
Majoritarian		-1.145** (0.528)		-1.380** (0.550)	-1.345** (0.553)
Proportional		-0.898* (0.486)		-0.935* (0.475)	-0.858* (0.481)
Mixed Election System		0.011 (0.748)		-0.107 (0.759)	-0.042 (0.776)
Parliamentary			0.565 (0.593)	0.999 (0.649)	1.025 (0.659)
Presidential			-0.361 (0.337)	-0.449 (0.340)	-0.395 (0.343)
Semi-Presidential			-0.198 (0.263)	-0.051 (0.250)	-0.066 (0.252)
Coef. Test (p-value): $\beta_P = \beta_I$	0.00738	0.0495	0.123	0.0997	0.0873
Countries	124	130	130	130	121
Observations	5,378	4,052	4,052	4,052	3,876
Adjusted R^2	0.188	0.188	0.187	0.188	0.188

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3. Effects of Democracy on Growth: Alternative Democracy Indicators

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Democracy Indicators to construct Democracy Dummy in Acemoglu et al. (2019)				Alternative Democracy Datasets				
	BMR	CGV	Polity IV	PS	Machine Learning Index	ERT	Lexical Democracy	Electoral Democracy	Liberal Democracy
Pro-liberal Democracy (β_P)	0.607* (0.312)	0.821*** (0.305)	0.609** (0.290)	0.928** (0.395)	0.768** (0.298)	0.312 (0.288)	0.696*** (0.262)	0.526 (0.326)	0.098 (0.389)
Illiberal Democracy (β_I)	-0.610* (0.365)	0.098 (0.304)	0.207 (0.595)	0.248 (0.553)	-0.058 (0.381)	-0.589* (0.316)	-0.199 (0.372)	-0.851** (0.403)	-1.560*** (0.311)
Coef. Test (p-value): $\beta_P = \beta_I$	0.00437	0.0585	0.483	0.285	0.0465	0.0175	0.0279	0.00560	0.000284
Countries	125	134	115	163	131	135	128	140	144
Observations	5,479	5,910	4,782	6,622	5,619	5,930	5,743	6,210	6,368
Adjusted R^2	0.181	0.188	0.169	0.180	0.169	0.195	0.186	0.194	0.194

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 4. Effects of Democracy on Growth: Instrumental Variables

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Baseline	GDP in 1960 Quintiles \times Year Effect	Soviet Dummies	Regional Trends	Regional GDP and Trade	Spatial Lag of GDP	Spatial Lags of GDP and Democracy
Panel A. 2SLS Estimates with Fixed Effects							
Pro-liberal Democracy/Democracy	1.791** (0.770)	1.812** (0.908)	1.262* (0.703)	2.226** (0.965)	1.434* (0.835)	1.861** (0.785)	2.267** (1.042)
Illiberal Democracy	0.460 [0.525]	1.079 [0.109]	0.340 [0.620]	0.768 [0.390]	0.789 [0.406]	0.539 [0.465]	0.728 [0.363]
Diff. (Pro-liberal Dem-Illiberal Dem)	-1.332* (0.697)	-0.733 (0.638)	-0.922 (0.627)	-1.458 (0.912)	-0.645 (0.843)	-1.322* (0.709)	-1.538* (0.838)
Hansen Test (p-value)	0.267	0.413	0.306	0.232	0.577	0.274	0.420
F-stat. in the First Stage:							
IV for Democracy	20.17	17.72	19.94	16.07	22.77	14.43	11.25
IV for Interaction	23.45	20.10	23.36	25.28	21.20	17	12.79
Partial R^2 for Dem. (p-value)	0.128	0.137	0.126	0.0778	0.135	0.129	0.129
Partial R^2 for Interaction (p-value)	0.481	0.500	0.481	0.487	0.482	0.483	0.484
Countries	133	61	133	133	130	133	133
Observations	5,651	3,342	5,651	5,651	5,190	5,651	5,651
Panel B1. First-Stage Estimates for Democracy							
L. <i>DemIV</i> ^F	0.389** (0.157)	0.169 (0.254)	0.385** (0.157)	0.316* (0.161)	0.439** (0.170)	0.376** (0.155)	0.341** (0.163)
L2. <i>DemIV</i> ^F	0.300* (0.155)	0.599** (0.250)	0.297* (0.155)	0.256* (0.143)	0.312* (0.161)	0.310** (0.153)	0.347** (0.157)
L. <i>InteractionIV</i>	1.388*** (0.220)	1.342*** (0.285)	1.391*** (0.220)	1.384*** (0.222)	1.352*** (0.227)	1.386*** (0.219)	1.385*** (0.220)
L2. <i>InteractionIV</i>	-0.836*** (0.250)	-0.783*** (0.287)	-0.833*** (0.249)	-0.821*** (0.229)	-0.834*** (0.269)	-0.836*** (0.250)	-0.836*** (0.249)
Panel B2. First-Stage Estimates for Interaction							
L. <i>DemIV</i> ^F	-0.057 (0.047)	-0.079 (0.073)	-0.057 (0.047)	-0.083 (0.051)	-0.067 (0.047)	-0.066 (0.048)	-0.052 (0.043)
L2. <i>DemIV</i> ^F	-0.058 (0.040)	-0.057 (0.059)	-0.060 (0.040)	-0.012 (0.042)	-0.044 (0.041)	-0.051 (0.039)	-0.033 (0.039)
L. <i>InteractionIV</i>	1.812*** (0.200)	1.789*** (0.231)	1.813*** (0.200)	1.810*** (0.199)	1.779*** (0.204)	1.811*** (0.199)	1.805*** (0.198)
L2. <i>InteractionIV</i>	-0.490*** (0.165)	-0.455** (0.194)	-0.490*** (0.165)	-0.473*** (0.154)	-0.479*** (0.169)	-0.490*** (0.165)	-0.490*** (0.165)

Note: All columns present results using the 2SLS method. A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5. Potential Mechanisms: Behaviors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable:	Political Polarization	Mass Mobilization for Democracy	Mass Mobilization for Autocracy	Political Violence	Violence Index	Regime Instability Index	Social Unrest
Pro-liberal Democracy (β_P)	-0.090*** (0.020)	-0.231*** (0.041)	-0.134*** (0.029)	-0.114*** (0.029)	-0.234*** (0.075)	-0.461*** (0.153)	-0.154*** (0.029)
Illiberal Democracy (β_I)	0.007 (0.033)	-0.060 (0.061)	-0.058 (0.050)	0.029 (0.047)	0.131 (0.121)	-0.135 (0.271)	0.044 (0.061)
Coef. Test (p-value): $\beta_P = \beta_I$	0.00744	0.00990	0.168	0.00500	0.00393	0.238	0.00218
Countries	130	130	130	130	114	115	126
Observations	5,543	5,543	5,543	5,543	2,621	2,660	3,852
Adjusted R^2	0.191	0.191	0.191	0.191	0.191	0.191	0.191

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 6. Potential Mechanisms: Quality of Institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent Variable:	Transparency (HRV Index)	Political Corruption	State Capacity	Property Rights	Economic Freedom Index	Electoral Democracy Index	Liberal Democracy Index	Participatory Democracy Index	Deliberative Democracy Index	Egalitarian Democracy Index
Pro-liberal Democracy (β_P)	0.070** (0.032)	-0.007** (0.003)	0.046*** (0.009)	0.006** (0.003)	0.042*** (0.010)	0.071*** (0.008)	0.055*** (0.007)	0.035*** (0.004)	0.051*** (0.007)	0.034*** (0.005)
Illiberal Democracy (β_I)	-0.007 (0.034)	-0.003 (0.004)	0.026** (0.010)	0.001 (0.003)	0.011 (0.016)	0.046*** (0.007)	0.034*** (0.006)	0.022*** (0.004)	0.034*** (0.006)	0.021*** (0.003)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0999	0.454	0.110	0.159	0.0794	0.00102	0.00154	0.00164	0.0115	0.00402
Countries	94	129	126	130	116	130	130	130	130	130
Observations	2,362	5,369	4,787	5,543	4,459	5,541	5,513	5,541	5,541	5,541
Adjusted R^2	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 7. Effects of Democracy on GDP Growth: Controlling for Behavior Channel

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pro-liberal Democracy (β_P)	0.594 (0.376)	0.772** (0.346)	0.566 (0.406)	0.734** (0.341)	0.540 (0.516)	0.525 (0.509)	0.812** (0.363)
Illiberal Democracy (β_I)	0.103 (0.366)	-0.049 (0.339)	-0.033 (0.359)	0.151 (0.344)	0.134 (0.722)	0.082 (0.560)	0.275 (0.496)
Political Polarization	-0.614*** (0.172)						
Mass Mobilization for Democracy		-0.780*** (0.139)					
Mass Mobilization for Autocracy			-0.525*** (0.188)				
Political Violence				-0.567*** (0.162)			
Violence Index					-1.070*** (0.221)		
Regime Instability Index						-0.709*** (0.114)	
Social Unrest							-1.634*** (0.302)
Coef. Test (p-value): $\beta_P = \beta_I$	0.245	0.0434	0.176	0.125	0.617	0.525	0.317
Countries	130	130	130	130	115	115	127
Observations	5,567	5,567	5,567	5,567	2,748	2,770	4,003
Adjusted R^2	0.196	0.201	0.194	0.196	0.198	0.201	0.197

Note: A full set of country and year fixed effects are controlled, as well as three lags of growth rates and the fourth lag of GDP per capita in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 8. Effects of Democracy on GDP Growth: Controlling for Institutional Quality

Dependent Variable: GDP Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Pro-liberal Democracy (β_P)	1.228*** (0.385)	0.957*** (0.321)	0.654* (0.368)	1.022** (0.391)	0.515* (0.268)	1.886*** (0.447)	1.618*** (0.412)	1.614*** (0.403)	1.471*** (0.397)	1.680*** (0.410)
Illiberal Democracy (β_I)	-0.203 (0.620)	0.041 (0.349)	-0.080 (0.379)	0.087 (0.351)	0.176 (0.351)	0.573 (0.367)	0.387 (0.364)	0.379 (0.355)	0.338 (0.365)	0.419 (0.364)
Transparency (HRV Index)	0.602*** (0.202)									
Political Corruption		-0.337 (1.185)								
State Capacity			1.691*** (0.473)							
Property Rights				0.346 (1.202)						
Economic Freedom Index					0.941*** (0.226)					
Electoral Democracy Index						-2.881*** (0.872)				
Liberal Democracy Index							-2.173** (0.928)			
Participatory Democracy Index								-2.973** (1.183)		
Deliberative Democracy Index									-1.627** (0.794)	
Egalitarian Democracy Index										-3.328** (1.296)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0526	0.0153	0.0830	0.0218	0.384	0.00283	0.00366	0.00340	0.00654	0.00366
Countries	94	129	126	130	122	130	130	130	130	130
Observations	2,649	5,477	4,858	5,567	4,684	5,567	5,547	5,567	5,567	5,567
Adjusted R^2	0.157	0.190	0.176	0.191	0.198	0.193	0.192	0.192	0.192	0.192

Note: A full set of country and year fixed effects are controlled, as well as three lags of growth rates and the fourth lag of GDP per capita in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 9. Four Types of Democracies on GDP Growth and Main Mechanisms

Dependent Variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Growth Regression	Political Polarization	Mobilization for Autocracy	Political Violence	Regime Instability Index	Social Unrest	State Capacity	Property Rights	HRV Index
Non-violent Democracy	0.671* (0.373)	-0.068*** (0.024)	-0.114*** (0.034)	-0.067* (0.035)	-0.386** (0.187)	-0.094*** (0.035)	0.036*** (0.011)	0.001 (0.003)	0.023 (0.037)
Violent Democracy	0.740 (0.511)	-0.148*** (0.037)	-0.139** (0.063)	-0.105 (0.067)	-0.468 (0.473)	-0.128* (0.076)	0.053*** (0.010)	0.013*** (0.004)	0.169*** (0.052)
Pro-liberal Democracy	0.893** (0.364)	-0.113*** (0.025)	-0.149*** (0.039)	-0.114*** (0.039)	-0.479** (0.195)	-0.151*** (0.031)	0.044*** (0.011)	0.004 (0.003)	0.080* (0.047)
Illiberal Democracy	-0.045 (0.461)	0.011 (0.037)	-0.039 (0.059)	0.058 (0.047)	0.002 (0.467)	0.079 (0.072)	0.021 (0.014)	0.001 (0.003)	-0.014 (0.042)
Pro-liberal and Non-violent Democracy	0.902** (0.407)	-0.096*** (0.026)	-0.142*** (0.040)	-0.106*** (0.038)	-0.430** (0.199)	-0.150*** (0.033)	0.040*** (0.013)	0.002 (0.003)	0.051 (0.051)
Illiberal and Violent Democracy	0.502 (1.330)	-0.013 (0.048)	-0.039 (0.120)	0.046 (0.039)	0.314 (0.873)	-0.057 (0.185)	0.032 (0.024)	0.008 (0.006)	0.107 (0.078)
Non-violent but Illiberal Democracy	-0.228 (0.424)	0.013 (0.044)	-0.041 (0.067)	0.060 (0.059)	-0.297 (0.460)	0.123* (0.073)	0.019 (0.016)	-0.000 (0.003)	-0.041 (0.044)
Violent but Pro-liberal Democracy	0.812* (0.440)	-0.198*** (0.051)	-0.180*** (0.060)	-0.159* (0.092)	-0.708* (0.396)	-0.147*** (0.059)	0.061*** (0.008)	0.015*** (0.006)	0.193*** (0.061)
Countries	104	101	101	101	89	99	99	101	76
Observations	4,370	4,242	4,242	4,242	2,049	2,980	3,693	4,242	1,869

Note: A full set of country and year fixed effects are controlled in all specifications. Column (1) includes three lags of growth rates and the fourth lag of GDP per capita. Four lags of dependent variables and GDP per capita are controlled in each regression reported in columns (2)–(9). Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 10. Four Types of Democracies on Alternative Mechanisms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Economic Freedom Index	Violence Index	Political Corruption	Electoral Democracy Index	Liberal Democracy Index	Participatory Democracy Index	Deliberative Democracy Index	Egalitarian Democracy Index
Panel A: Only Non-violent VS. Violent Democracy								
Non-violent Democracy	0.029** (0.012)	-0.209*** (0.065)	-0.008* (0.004)	0.069*** (0.010)	0.055*** (0.009)	0.035*** (0.006)	0.054*** (0.009)	0.034*** (0.006)
Violent Democracy	0.085*** (0.015)	-0.146 (0.299)	0.004 (0.005)	0.050*** (0.013)	0.036*** (0.011)	0.024*** (0.006)	0.036*** (0.010)	0.019*** (0.005)
Panel B: Only Pro-liberal VS. Illiberal Democracy, Same Sample								
Pro-liberal Democracy	0.049*** (0.012)	-0.258*** (0.092)	-0.007 (0.004)	0.073*** (0.011)	0.058*** (0.009)	0.037*** (0.006)	0.056*** (0.010)	0.034*** (0.006)
Illiberal Democracy	0.007 (0.022)	0.158 (0.163)	-0.002 (0.005)	0.046*** (0.008)	0.035*** (0.007)	0.022*** (0.004)	0.035*** (0.007)	0.022*** (0.004)
Panel C: Both Non-Violent VS. Violent; Pro-liberal VS. Illiberal Democracy								
Pro-liberal and Non-violent Democracy	0.040*** (0.013)	-0.244*** (0.062)	-0.008 (0.005)	0.076*** (0.012)	0.062*** (0.010)	0.039*** (0.007)	0.059*** (0.011)	0.037*** (0.008)
Illiberal and Violent Democracy	0.061*** (0.019)	0.382*** (0.122)	0.019* (0.011)	0.021*** (0.004)	0.008** (0.004)	0.010*** (0.003)	0.012** (0.006)	0.010*** (0.003)
Non-violent but Illiberal Democracy	-0.009 (0.028)	-0.066 (0.236)	-0.009** (0.004)	0.054*** (0.009)	0.044*** (0.007)	0.026*** (0.005)	0.043*** (0.008)	0.026*** (0.005)
Violent but Pro-liberal Democracy	0.094*** (0.018)	-0.335 (0.321)	-0.001 (0.003)	0.062*** (0.015)	0.047*** (0.012)	0.029*** (0.007)	0.045*** (0.011)	0.022*** (0.006)
Countries	90	88	100	101	101	101	101	101
Observations	3,445	2,021	4,091	4,240	4,212	4,240	4,240	4,240

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Online Appendix for

“Pro Liberalism or Illiberalism? The Nature of Civic Mobilization and Economic Growth”

Di Sima and Fali Huang

May, 2024

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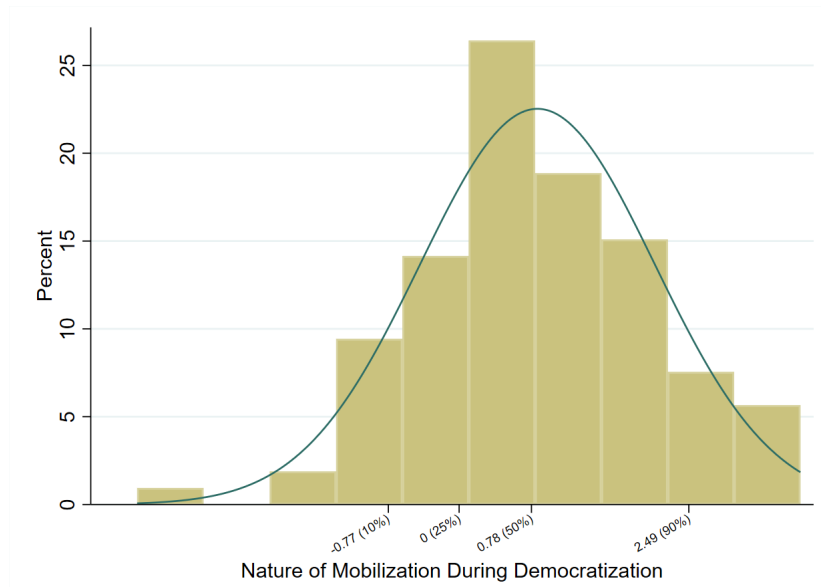
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Figure A10. Distribution of the Nature of Mobilization During Democratization



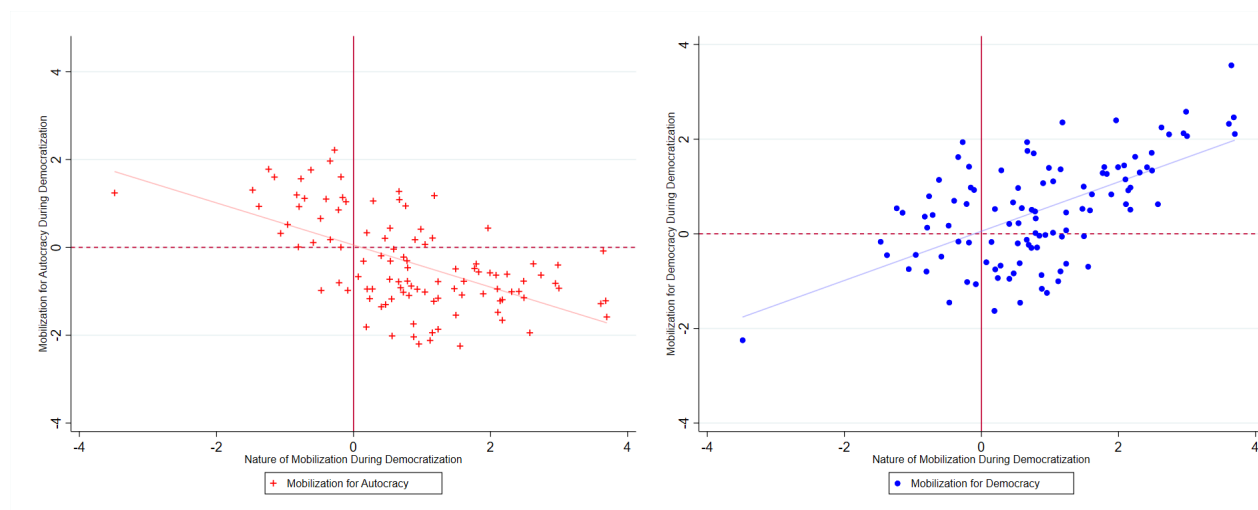
Note: This figure presents the distribution of the nature of mobilization indicator during the third wave of democratization. The x-axis represents value of nature of mobilization, with positive values indicating pro-democratic tendencies and negative values indicating pro-autocratic leanings. The y-axis shows the percentage of cases observed at each level of the nature of mobilization. The distribution reveals that pro-autocratic mobilization (negative values) is a dominant characteristic in 25% of the cases.

A Distribution of Mobilizations During Democratization

Figure A10 depicts the nature of mobilization during the third wave of democratization. Interestingly, the distribution reveals that pro-autocratic mobilization is dominant in 25% of cases, while a large share of cases cluster around 0 on the nature of mobilization scale.

Figure A11 delves deeper into the relationship between pro-democratic/pro-autocratic mobilization and nature of mobilization during transitions. The figure reveals a distinct pattern. When pro-autocratic mobilization is dominant (negative nature of mobilization score), we observe high levels of pro-autocratic mobilization (positive scale on the y-axis) that often coincide with relatively high levels of pro-democratic mobilization (also positive on the y-axis). Conversely, when pro-democratic mobilization is dominant (positive nature of mobilization score), particularly with scores of nature of mobilization close to zero,

Figure A11. Relationship between Initial Nature of Mobilization and Initial Mobilization for Democracy/Autocracy



Note: This figure explores the relationship between the nature of mobilization during democratization and the levels of pro-democratic and pro-autocratic mobilization. The left panel displays a negative association between the nature of mobilization index (x-axis) and pro-autocratic mobilization (y-axis, represented by red plus signs). When pro-autocratic mobilization dominates (negative values of the nature of mobilization), particularly around zero, there are typically high levels of both pro-autocratic and pro-democratic mobilization, indicating the co-existence of competing forces. The right panel shows a positive relationship between the nature of mobilization index and pro-democratic mobilization (y-axis, represented by blue circles). When pro-democratic mobilization prevails (positive values of nature of mobilization), particularly around zero, there are relatively low levels of both pro-autocratic and pro-democratic mobilization. This pattern suggests that as pro-democratic mobilization becomes more pronounced, the opposition from pro-autocratic forces diminishes. The contrasting dynamics revealed in the two panels highlight the intricate interplay between the nature of mobilization and the intensity of pro-democratic and pro-autocratic movements during democratic transitions.

there are low levels of pro-autocratic mobilization (negative on the y-axis) accompanied by relatively low levels of pro-democratic mobilization (negative on the y-axis).

B Descriptive Statistics

Significant differences between the two types of democracies are evident in Table A2, which presents descriptive statistics on key economic, demographic, institutional, and behavioral variables separately for Pro-liberal Democracies, Illiberal Democracies, and autocracies. On average, Pro-liberal democracies exhibit superior human capital development, more market reforms, greater openness to trade, and higher income, and investment. As ex-

pected, the quality of institutions and behavior patterns in Pro-liberal Democracies appear better, as indicated by stronger state capacity, improved property rights protections, greater economic freedom, more transparency, higher political stability, and less social unrest and violence.

C Further Growth Regressions and Robustness

C.1 Using Different Values of Nature of Mobilization as Grouping Indicator

Estimation results based on Equation (1) are shown in Table A3, using average nature of mobilization over the transition and prior two years with different cutoffs to categorize Pro-liberal versus Illiberal Democracies. In Column (3), with the threshold set at the 25th percentile (p25) and the value of the nature of mobilization at 0, the coefficient for Pro-liberal Democracy is 0.994 and significant at the 1% level. In contrast, the coefficient for Illiberal Democracy is 0.100 and not statistically significant. This large discrepancy across new democracies highlights the importance of carefully differentiating regimes. Without an appropriate “spirit of democracy” as measured by the nature of mobilization, adopting democracy does not benefit growth. These empirical estimates are consistent with theoretical models that emphasize the crucial importance of the nature of civil society in the process of democratization (Besley and Persson, 2019; Bisin and Verdier, 2023).

Results are similar with the 20th or 15th percentile thresholds in the first two columns. As the cutoff increases, the difference diminishes and loses significance. At the limit using a single democracy indicator as in Acemoglu et al. (2019) in the last column, the estimates converge to the average effect.

C.2 Different Values of Alternative Indicators as Grouping Indicator

We define the nature of mobilization in the main paper as the difference between mobilization for democracy and mobilization for autocracy. We use each of these indicators with different cutoffs separately to categorize Pro-liberal and Illiberal Democracy, and display the results in Panel A and B in Table A4.⁵⁸ These results suggest that mobilization for

⁵⁸For clarity, we now measure "mobilization for autocracy" on a reversed scale, where higher values signify lower levels of pro-autocratic mobilization. This aligns with our interpretation of the indicator and simplifies comparisons.

democracy is not a good criterion to distinguish Pro-liberal and Illiberal Democracy, as it does not imply that more mobilization for democracy during the transition period leads to higher economic growth. On the other hand, the difference in growth between Pro-liberal and Illiberal Democracy is more evident when we use mobilization for autocracy during democratization to classify democracy, indicating that lower mobilization for autocracy (or higher of this reversed indicator) during democratization fosters growth, although this difference is less clear than the one based on the nature of mobilization. Therefore, the results in Panel A and B support our grouping strategy. That is, it is not the mobilization for democracy or autocracy per se, but rather the relative strength of mobilization for democracy and autocracy, or the nature of mobilization, that has a lasting impact on growth in the post-transition period.

Furthermore, instead of using the standardized scale of mobilization to construct the nature of mobilization in the main paper, we also use the original scale of mobilization for democracy and autocracy with 5 levels, where 0 indicates no events and 4 indicates many large-scale and small-scale events, to construct the nature of mobilization.⁵⁹ Panel C uses this alternative form of the nature of mobilization as the grouping indicator, and shows that the effects of Pro-liberal Democracy are consistently positive and significant, while the effects of Illiberal Democracy are insignificant when the threshold is low, although the differences are not significant for all thresholds. This suggests that the standardized scale of the indicator can better capture the nature of mobilization.

In addition, to construct a new indicator that captures the nature of civil society, we use the characteristics of CSO anti-system movements from V-Dem. We focus on two characteristics: democratic and anti-democratic. A CSO anti-system movement is democratic if most disinterested observers regard it as willing to abide by the rules of the democratic game, respect constitutional provisions or electoral outcomes, and relinquish power (under democratic auspices). Conversely, a CSO anti-system movement is anti-democratic if most disinterested observers regard it as unwilling to abide by the rules of the democratic game, disrespect constitutional provisions or electoral outcomes, and/or retain power (under democratic auspices). The nature of civil society is then defined by the difference between democratic CSO movement and anti-democratic CSO movement, similar to how we construct the nature of mobilization. Panel D displays the results, showing that the pattern exists for almost all cutoff levels from the 15th to the 40th percentile, where

⁵⁹The V-Dem dataset employs a linear transformation to convert its underlying measurement model estimates back to an ordinal scale, providing interval-level data.

the coefficients of Pro-liberal Democracy are always positive and significant (from 0.860 in Column (1) to 0.982 in Column (7)), while those of Illiberal Democracy are not statistically different from 0 when the thresholds are lower than the 45th percentile. These empirical estimates suggest that democracies without an adequate spirit of democracy among the masses are unlikely to improve economic growth. Moreover, in line with the results using the nature of mobilization, the divergent effects on growth by the nature of civil society are mainly driven by pro-autocratic civil society. Panel E shows the results.

C.3 Alternative Democracy Indicators and A Longer Time Period

To enhance robustness, we employ real GDP per capita data from [Fariss et al. \(2022\)](#), spanning 1789-2019. We construct separate measures of Pro-liberal and Illiberal Democracy from various established indices: CGV (1945-2020), Polity V (1789-2020), ML Democracy Index (1919-2019), ERT (1789-2020), and the V-Dem project's Electoral Democracy and Liberal Democracy index (1789-2020). Results are presented in Table [A5](#).

While Pro-liberal Democracy exhibits a significantly positive association with growth, the effects of Illiberal Democracy are insignificantly positive, with occasional estimation imprecision. However, the difference in growth effects between the two democracy types is statistically insignificant across most cases. This is unsurprising given our deviation from [Johnson et al. \(2013\)](#) by using a GDP per capita measure derived from a latent variable model incorporating multiple sources and adjustments for purchasing power parity (PPP) over time and across countries. As [Acemoglu et al. \(2019\)](#) caution, such PPP adjustments may introduce non-trivial measurement errors, necessitating cautious interpretation of these results.

C.4 Beyond Binary Classifications

Instead of employing separate dummy variables for Pro-liberal and Illiberal Democracies, we explore an alternative approach by interacting the "Democracy" indicator with the "nature of mobilization" at the time of democratization. This generates two coefficients: one for "Democracy" itself and another for its interaction term.

Table [A6](#) presents the results in column (1). Both coefficients are positive, but only the "Democracy" coefficient is statistically significant. This implies a positive effect close to 0 value of the "nature of mobilization" (corresponding to the 25th percentile), aligning with our baseline findings. The insignificant interaction term suggests a non-linear relationship,

where higher initial nature of mobilization levels do not necessarily translate to stronger economic performance.

Column (2) introduces the interaction term squared, but again, only the "Democracy" coefficient remains significant. While the interaction squared term is negative, it lacks statistical significance. This hints at a potentially larger democratic effect for intermediate levels of initial nature of mobilization.

To further explore this non-linearity, we construct three democracy dummies: Illiberal Democracy, Medium Pro-liberal Democracy (defined by "nature of mobilization" cutoffs of 0 and P70), and High Pro-liberal Democracy (defined by "nature of mobilization" beyond the cutoff of P70). Column (3) displays the corresponding growth regression results, reaffirming the previous observations. Medium Pro-liberal Democracy exhibits a larger and significant effect than High Pro-liberal Democracy. Notably, this non-linear and significant relationship is exclusive to Pro-liberal Democracies.

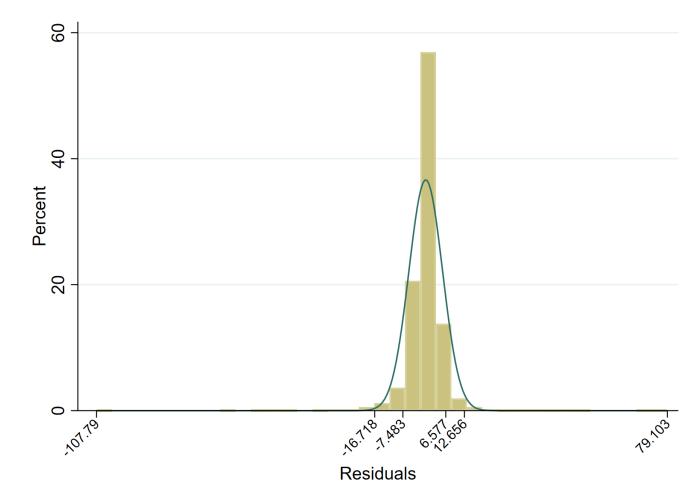
These analyses reveal crucial non-linear relationships between the nature of mobilization, democracy types, and subsequent economic growth. Our findings suggest that the positive impact of Pro-liberal Democracy is not uniform across all nature of mobilization levels, with intermediate levels potentially yielding the strongest growth benefits. This underscores the importance of considering non-linear effects in understanding the complex interplay between mobilization dynamics and democratic consolidation.

C.5 Mitigating the Impact of Outliers

Figure A12 reveals the presence of outlier observations in the growth residual distribution from our baseline regression. The lowest value (-107.79) falls far below the 1st percentile (-16.718), while the highest (79.103) significantly exceeds the 99th percentile (12.656). The 5th and 95th percentiles sit at -7.483 and 6.577, respectively. To assess the influence of these extremes, we re-run the baseline regression using subsets of observations with standardized residuals falling within different percentile ranges, from the 1st (p1) to the 99th (p99). Table A7 presents the results.

Dropping a small number of outliers (column (1)) yields patterns similar to the baseline, and this consistency persists as we remove more extreme observations (columns (2)–(6)). This robustness to outlier removal strengthens our confidence in the baseline findings.

Figure A12. Growth Residual Distribution



Note: This figure presents the distribution of residuals from our baseline regression analysis. The horizontal axis depicts the residuals, while the vertical axis shows the percentage of cases observed at each level of the residual. The distribution reveals the presence of potential outliers. The lowest residual (-107.79) falls well below the 1st percentile (-16.718), and the highest residual (79.103) considerably exceeds the 99th percentile (12.656). The 5th and 95th percentiles are located at -7.483 and 6.577, respectively.

C.6 Controlling for Economic and Demographic Factors

Although incorporating additional controls is often useful for enhancing robustness, introducing extraneous covariates risks biasing and obfuscating the true causal impact (Angrist and Pischke, 2008). Therefore, while expanded models may not fully capture the entire growth impact of democracy, comparing them to our baseline specification can shed light on potential mediating mechanisms.

Table A8 presents results incorporating standard growth covariates (Papaioannou and Siourounis, 2008a; Barro, 2013; Acemoglu et al., 2019), including trade share, investment rate, inflation, government spending, and enrollment rates across various education levels. Additionally, fertility rate and life expectancy are included. Four lags of each covariate are used to capture dynamic processes.

The overall patterns and coefficient magnitudes remain largely consistent with the baseline across all columns, except when controlling for secondary school enrollment rates. In Column (6), the coefficient for Pro-liberal Democracy weakens and become less significant, indicating that human capital, particularly at the mid-skill level, is a crucial channel

through which democracy influences growth. The effect of Illiberal Democracy becomes significant after controlling for government spending, as shown in Column (4), though its magnitude remains smaller than that of Pro-liberal Democracy. This suggests that government spending is a key channel through which Illiberal Democracy impairs economic performance. The Pro-liberal Democracy coefficient varies from 0.646 (in column (6) with secondary enrollment control) to 1.371 (in column (2) with investment control), all statistically significant. Illiberal Democracy coefficients range from -0.882 (column (7), tertiary enrollment control) to 0.617 (column (4), government spending control).

These findings underscore the robustness of the distinct growth effects associated with Pro-liberal versus Illiberal Democracy, further suggesting that these effects cannot be fully explained by standard economic and demographic conditions.

C.7 Distinguishing Democratization and Reversals

Our baseline regression implicitly assumes equal magnitudes, albeit opposite signs, for the effects of democratization and its reversal. To validate this assumption, we consider a generalized model:

$$g_{it} = \beta_P \text{Pro-liberalDem}_{it} + \gamma_P \text{Pro-liberal_Reversal}_{it} + \beta_I \text{IlliberalDem}_{it} + \gamma_I \text{Illiberal_Reversal}_{it} + \sum_{j=1}^3 \alpha_j g_{it-j} + \varphi y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it},$$

where *Pro-liberalDem*, *IlliberalDem*, *Pro-liberal_Reversal*, *Illiberal_Reversal* denote the cumulative counts of Pro-liberal Democratization, Illiberal Democratization, and their respective reversals for country *i* at time *t*. Assessing whether $\beta_P + \gamma_P = 0$ and $\beta_I + \gamma_I = 0$ helps us determine if their effects indeed possess the same magnitude but opposite signs.

Column (1) in Table A9, presenting results from this generalized model, confirms that both conditions hold. This finding supports the validity of our initial assumption and enhances the reliability of our estimates.

C.8 Alternative Grouping Strategies for Pro-liberal and Illiberal Democracy

Column (2) in Table A9 offers additional robustness checks on our baseline result using an alternative grouping strategy. We utilize the original democracy data from Acemoglu et al. (2019) (updated to 2020) without applying a five-year smoothing window. The resulting

patterns align with those presented in the baseline table. Column (3) uses a higher Polity score cutoff (5) to define the democracy dummy, as adopted in other studies (Glaeser et al., 2007; Polity, 2014). The Pro-liberal Democracy coefficients remain significantly positive, while the estimated growth effect of Illiberal Democracy is significant but negative. Column (4) utilizes Freedom House data to construct the dichotomous democracy indicator. While positive but statistically insignificant effects are observed for Pro-liberal Democracy and negligible and insignificant effects for Illiberal Democracy, these findings might arise due to data limitations.

C.9 Further Scrutiny: Examining Specific Scenarios and Alternative Specifications

C.9.1 Special-Case Robustness Checks

Table A10 presents various robustness checks commonly employed in the literature. Excluding countries with fewer than 20 observations (column (1)) yields nearly identical results, mitigating concerns about Nickell bias.⁶⁰ Column (2) incorporates region-year fixed effects, while column (3) controls for country-specific time trends. Column (4) includes interactions between a "Soviet-related countries" dummy and year dummies for 1989–1992 (the period of transition for these countries). In all cases, the estimated coefficients remain stable.

Dropping outliers in growth rates (defined as observations below the 5th or above the 95th percentile of standardized residuals) in column (5) renders the Illiberal Democracy effect insignificant (0.102) while preserving the positive and significant effect of Pro-liberal Democracy (0.626). The final column includes all controls from previous columns, with similar results persisting.

C.9.2 Regional and Temporal Sensitivity

Recent studies (Colagrossi et al., 2020) suggest that the democracy-growth nexus hinges on specific regions and time periods. To address this concern, we first examine whether our findings are driven by democratization in particular regions (particularly low-inequality, formerly Communist countries). Table A11 presents results obtained by excluding regions

⁶⁰The Nickell bias, arising from a lack of strict exogeneity in dynamic panel models (Nickell, 1981; Alvarez and Arellano, 2003), diminishes significantly when the time horizon exceeds 20 periods (Judson and Owen, 1999). This robustness check adheres to this requirement, mitigating concerns about this bias.

one at a time. The conditional results remain consistent in magnitude, suggesting that the relationship represents a broad general pattern across democratization episodes.

Table [A12](#) further assesses robustness to specific time periods by excluding 10-year segments at a time. The results again hold.

C.9.3 Varying Transition Frequency

Table [A13](#) explores robustness to different numbers of transitions. Column (2) focuses on countries experiencing multiple transitions and remaining autocratic throughout, finding insignificant coefficients for both Pro-liberal and Illiberal Democracy. This is unsurprising, as repeated transitions imply regime instability which can hinder economic growth. It also suggests that our baseline findings are primarily driven by countries undergoing a single transition. Column (3) confirms this by considering only countries with a single transition and remaining autocratic, and the pattern persists. Column (4) further restricts the analysis to single-transition cases, again yielding consistent results.

C.9.4 Lag Structure of Growth

The baseline regression employs three lags of the growth rate. Table [A14](#) explores robustness by incorporating additional lags (6, 9, 12, and 15). The results remain qualitatively similar. Notably, the Illiberal Democracy effect becomes negative with more lags.

C.9.5 Quality of Political Institutions

Table [A15](#) examines the influence of de jure political institution quality (proxied by Polity or Freedom House scores normalized between 0 and 1) during democratic periods on the economic growth performance of Pro-liberal and Illiberal Democracy. This is achieved by interacting the democracy quality indicator with the democracy dummies. Our findings remain valid, and the impact of Pro-liberal Democracy even strengthens, aligning with Table 8's results using five V-Dem democracy quality measures.

C.9.6 Alternative Transition Year Measurement

Our baseline regression uses the average nature of mobilization in the democratization year and the preceding two years to categorize Pro-liberal and Illiberal Democracy. Table [A16](#) employs the average nature of mobilization within different time ranges around the

transition point (specified in each column) for categorization. The results closely resemble the benchmark.

C.9.7 Changes in the Sample: Number of Time Series Observations or End Year

Following [Eberhardt \(2022\)](#) recommendations, we conduct robustness checks by altering the sample size, including the number of time series observations and the sample's end year. This ensures our findings are not overly sensitive to minor changes in the dataset.

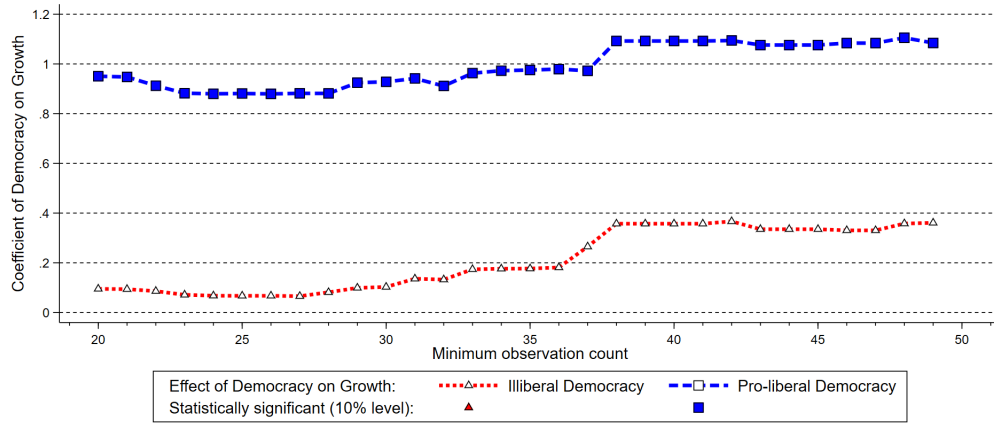
Initially, we exclude countries based on their observation counts, T_i , as fewer observations might amplify individual economic shocks. This is crucial because fewer observations often correspond to fewer observations in democratic contexts. Although we use a dynamic model to capture economic performance dips before and after democratization, incorrect model specifications might bias the estimations. Analyzing the evolution of estimates as we limit the sample to countries with increasing minimum observation counts helps mitigate these issues.

Figure [A13](#) shows the baseline model results for the sample reduction by observation counts. In the plot, filled (hollow) squares/triangles indicate statistically significant (insignificant) differences from 0 at the 10% level for Pro-liberal/Illiberal Democracy effects. The x-axis represents the minimum observation count T_i required for inclusion, while the y-axis shows the estimated Pro-liberal/Illiberal Democracy coefficient (in percent). Our results exhibit robustness, as Pro-liberal Democracy effects remain significant and Illiberal Democracy effects remain insignificant despite the exclusion of some observations.

Our data spans 1960-2020, including the global financial crisis, a potentially influential shock.⁶¹ To assess its impact, we conduct a robustness check by progressively excluding later years (Figure [A14](#)). The estimated effects of Pro-liberal Democracy remain remarkably stable and statistically significant throughout, with the sole exception of 1997. This suggests the financial crisis and post-crisis dynamics do not significantly influence our findings.

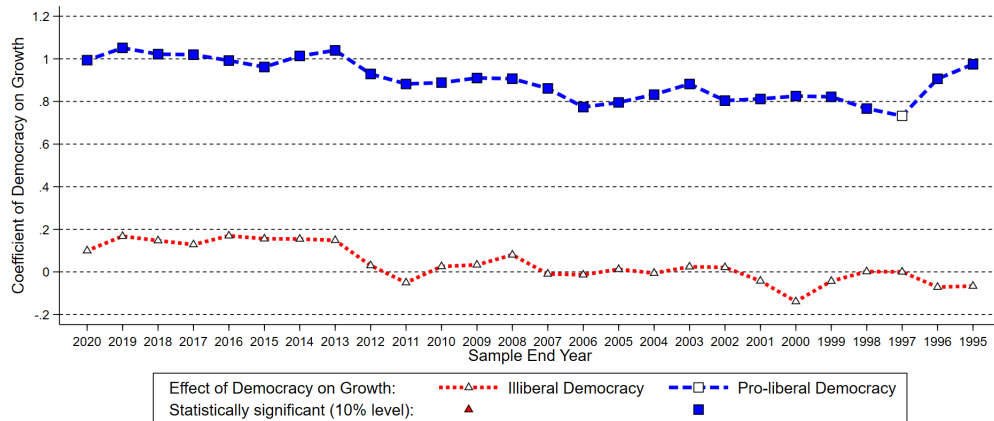
⁶¹Recent work by [Broderick et al. \(2020\)](#); [Young \(2022\)](#) has underscored the fragility of statistical inference in numerous applications, which frequently rely on a limited number of observations.

Figure A13. Effects of Pro-liberal and Illiberal Democracies on Growth: Change in the Number of Time Series Observations



Note: This figure explores the impact of sample size on the estimated effects of Pro-liberal and Illiberal Democracies on growth. Filled (white) squares/triangles denote statistically significant (insignificant) coefficients at the 10% level. The x-axis shows the minimum number of observations required for inclusion.

Figure A14. Effects of Pro-liberal and Illiberal Democracies on Growth: Change in the End Year of the Sample



Note: This figure examines the sensitivity of growth effects of Pro-liberal and Illiberal Democracies to the sample end year. Filled (white) squares/triangles indicate statistically significant (insignificant) coefficients at the 10% level. The leftmost estimates replicate Table 1, column (1). The x-axis shows the end year of the sample period..

D Further Democracy Categorization

[Sima and Huang \(2023\)](#) categorize democracies as "Strong" or "Weak" based on their economic development level at the time of political transition, which subsequently influences their ability to foster growth post-transition. They find that democracy facilitates growth only in countries that have already attained adequate development at the time of transition (labeled as "Strong Democracy"). Without appropriate development, democracy does not improve growth (labeled as "Weak Democracy"). We replicate their results using an updated dataset, as shown in column (1) of Table [A17](#).

Furthermore, we find that economic prosperity following political transition manifests only when economic development and the nature of mobilization are aligned during democratization, as evidenced in column (4) of Table [A17](#). Notably, countries with adequate development during democratization but with dominant pro-autocratic mobilization (Strong but Illiberal Democracy), such as Mexico, and countries lacking adequate development during democratization despite dominant pro-democratic mobilization (Weak but Pro-liberal Democracy), like Benin, do not exhibit significant economic improvements.

E Alternative Techniques to Estimate Growth Effects

E.1 Using Method from [Eberhardt \(2022\)](#): The Idea of the Principal Component DID

We explore the method of [Eberhardt \(2022\)](#), which leverages the idea of the principal component DID to account for unobserved heterogeneity and heterogeneous treatment effects. This approach captures strong cross-sectional dependence through common factors with country-specific loading ([Eberhardt, 2022](#)). We implement a factor-augmented DID, including common factors estimated from the control group in regressions for treated countries to address potential selection bias.⁶²

We slightly modify the models in [Eberhardt \(2022\)](#) for countries experiencing regime change (Pro-liberal Democracy to autocracy or vice versa). We estimate a static regression model with country and year fixed effects (captured by cross-sectional averages) and

⁶²This approach is flexible and can model unobserved heterogeneity effectively. The implementation is straightforward: each "treated" country regression is augmented with common factor proxies estimated from the control group of countries that never transitioned into democracy. These factors, in combination with country-specific parameters, provide a great deal of flexibility in modeling unobserved heterogeneity.

common factors to control for unobserved heterogeneity:

$$y_{it} = \alpha_i + \theta_i \text{Pro-liberal-dem}_{it} + \beta_i' X_{it} + \delta_i^y \bar{y}_t + \delta_i^{X'} \bar{X}_t + \varepsilon_{it},$$

where y is per capita GDP (in logs and multiplied by 100), Pro-liberal-dem is the Pro-liberal Democracy dummy, and X is a set of additional controls (gross investment share of GDP and trade openness). \bar{y} and \bar{X} are the cross-section averages of the observed variables but for those countries which never experienced Pro-liberal Democracy during the sample period (the control group).

The dynamic version of the above Equation is specified as follows:

$$y_{it} = \alpha_i + \theta_i^* \text{Pro-liberal-dem}_{it} + \beta_i^{*'} X_{it} + \sum_{\ell=0}^{p-1} \omega_{i\ell}^D \Delta \text{Pro-liberal-dem}_{i,t-\ell} + \sum_{\ell=0}^{p-1} \omega_{i\ell}^{X'} \Delta X_{i,t-\ell} + \sum_{\ell=0}^{p_{\bar{y}}} \delta_{i\ell}^{*y} \bar{y}_{t-\ell} + \sum_{\ell=0}^{p_{\bar{X}}} \delta_{i\ell}^{*X'} \bar{X}_{t-\ell} + \varepsilon_{it},$$

where the terms involving sums capture the short-run effects, while θ_i^* and β_i^* represent the long-run coefficients for Pro-liberal Democracy and additional controls on income per capita, respectively. These long-run estimates, indicated with stars, differ in interpretation from those in the Equation describing the static regression model.

The sums in the second line account for the multi-factor error structure using cross-sectional averages from countries that never experienced democracy during the sample period. This ‘‘CS-DL’’ approach, adapted from [Chan and Kwok \(2022\)](#), is convenient as it allows the estimation of the long-run democracy coefficient, θ_i^* , in a single step, unlike the two-step error-correction specification.

Following [Chudik and Pesaran \(2015\)](#), we set $p_{\bar{y}} = 0$ and $p = p_{\bar{X}} = \text{int}(T^{1/3}) = 3$, where T is the time dimension of the panel. We focus on average estimates of $\hat{\theta}_i^*$ in the dynamic model, interpreted as ATET estimates, and use robust regression ([Hamilton, 1992](#)) to compute outlier-resistant means. Country-specific ITET estimates $\hat{\theta}_i^*$ are employed. Inference for all ‘Mean Group’ estimates is based on non-parametric standard errors ([Pesaran and Smith, 1995](#)).

Observed covariates X are not included in the ‘plain vanilla’ implementation of [Chan and Kwok \(2022\)](#); however, the covariate cross-sectional averages from the control sample, \bar{y} and \bar{X} , are always included. For comparison, we also estimate simple Mean Group models ([Pesaran and Smith, 1995](#)) excluding the cross-sectional averages in the dynamic version of the Equation.

Similarly, we conducted regressions for another type of democracy using the following

models:

$$\begin{aligned}
y_{it} &= \alpha_i + \theta_i \text{Illiberal_dem}_{it} + \beta_i' X_{it} + \delta_i^y \bar{y}_t + \delta_i^{X'} \bar{X}_t + \varepsilon_{it}, \\
y_{it} &= \alpha_i + \theta_i^* \text{Illiberal_dem}_{it} + \beta_i^{*'} X_{it} + \sum_{\ell=0}^{p-1} \omega_{i\ell}^D \Delta \text{Illiberal_dem}_{i,t-\ell} + \sum_{\ell=0}^{p-1} \omega_{i\ell}^{X'} \Delta X_{i,t-\ell} \\
&\quad + \sum_{\ell=0}^{p_{\bar{y}}} \delta_{i\ell}^{*y} \bar{y}_{t-\ell} + \sum_{\ell=0}^{p_{\bar{X}}} \delta_{i\ell}^{*X'} \bar{X}_{t-\ell} + \varepsilon_{it},
\end{aligned}$$

Using these regression models, we replicated Table 1 from [Eberhardt \(2022\)](#), and the results are reported in [A18](#). These results align with our baseline model estimates. Specifically, we present robust mean estimates (ATET) for two specifications of two heterogeneous estimators. The first two columns display the 'plain vanilla' models, which do not include the observed values for gross investment share of GDP and trade openness. The final two columns include these variables. The MG estimator is a simple 'mean group' estimator that excludes cross-sectional averages, while the C&K MG estimator follows [Chan and Kwok \(2022\)](#), which is the preferred approach. All results are long-run estimates derived from the dynamic specification.

E.2 Using Recent DID techniques to Explore the Growth Effects

We primarily rely on single coefficient estimates from a two-way fixed effects (TWFE) specification in the main analysis. Although TWFE regressions are widely used for panel data, they have been shown to deliver consistent estimates only under relatively strong assumptions about homogeneity in treatment effects ([De Chaisemartin and d'Haultfoeuille, 2020](#); [Borusyak et al., 2021](#); [Callaway and Sant' Anna, 2021](#); [Goodman-Bacon, 2021](#); [Sun and Abraham, 2021](#)). Specifically, as demonstrated by [Goodman-Bacon \(2021\)](#), the treatment effect estimate obtained from a TWFE model is a weighted average of all possible 2×2 DID comparisons between groups of units treated at different points in time. If treatment effects are homogeneous across treated groups and over time, the TWFE estimator is consistent for the ATT. Conversely, if treatment effects are heterogeneous across groups or time, the TWFE estimator does not deliver consistent estimates for the ATT. The TWFE specification tends to estimate an average of treatment effects that over-weights short-run effects and under-weights long-run effects ([Borusyak et al., 2021](#)).

To allow for heterogeneity in treatment effects across time and treated units, we present estimations generated by a set of recently proposed estimators that are robust to treatment effect heterogeneity, including [Cengiz et al. \(2019\)](#); [Freyaldenhoven et al. \(2019\)](#);

Borusyak et al. (2021); Callaway and Sant’ Anna (2021); Sun and Abraham (2021); Butts and Gardner (2021); Dube et al. (2023). We report the DID estimators using these methods, displayed in Figure A15. In particular, we show estimates from the two-way fixed effects single coefficient model, Cengiz et al. (2019); De Chaisemartin and d’Haultfoeuille (2020); Borusyak et al. (2021); Callaway and Sant’ Anna (2021); Sun and Abraham (2021); Butts and Gardner (2021); Dube et al. (2023); Freyaldenhoven et al. (2019). Note that the methods except "ols", "fect", and "lpsdid" can only be used in a staggered treatment setting. We use a subsample where only always autocratic countries (control group) and countries that were once democratized without reversal (treated group) are included. For comparison, OLS result using this subsample is also reported. These results demonstrate a consistent pattern: Pro-liberal Democracy promotes growth, while Illiberal Democracy has little positive impact.

F Calculating Long-Run Growth Impact

Our study employs the following growth regression model:

$$g_{it} = \beta_P \text{Pro-liberal_dem}_{it} + \beta_I \text{Illiberal_dem}_{it} + \alpha_1 g_{it-1} + \alpha_2 g_{it-2} + \alpha_3 g_{it-3} + \varphi y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it}.$$

To quantify the long-run growth impact of democracy, we substitute $g_{it} = 100(y_{it} - y_{it-1})$ into the above equation and re-arrange:

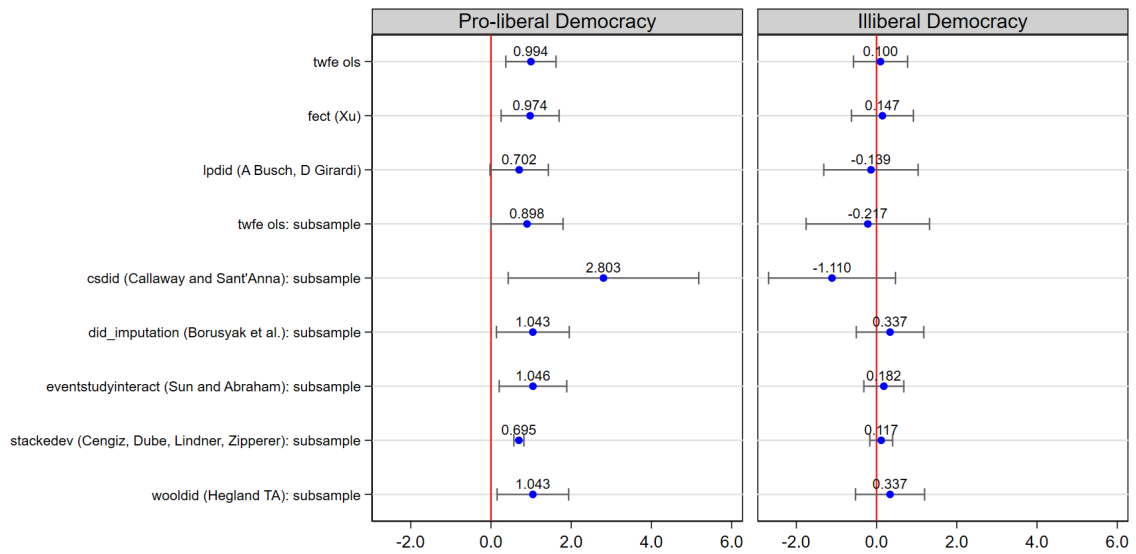
$$100y_{it} = \beta_P \text{Pro-liberal_dem}_{it} + \beta_I \text{Illiberal_dem}_{it} + 100(1 + \alpha_1)y_{it-1} + 100(\alpha_2 - \alpha_1)y_{it-2} + 100(\alpha_3 - \alpha_2)y_{it-3} + (\varphi - 100\alpha_3)y_{it-4} + \lambda_i + \delta_t + \varepsilon_{it}.$$

Assuming convergence to long-run equilibrium income levels (y_P^* for Pro-liberal Democracy and y_M^* for Illiberal Democracy) as t approaches infinity, the long-run growth effect of Pro-liberal Democracy is:

$$\text{LongEffect}_{\text{Pro-liberal_dem}} = 100(y_P^* - y_0) = \frac{100\hat{\beta}_P}{100 - 100(1 + \hat{\alpha}_1 + \hat{\alpha}_2 - \hat{\alpha}_1 + \hat{\alpha}_3 - \hat{\alpha}_2 + 0.01\hat{\varphi} - \hat{\alpha}_3)} = \frac{100\hat{\beta}_P}{-\hat{\varphi}} = \frac{100\hat{\beta}_P}{|\hat{\varphi}|},$$

where $\hat{\beta}_P$ is the estimated coefficient for Pro-liberal Democracy and $\hat{\varphi}$ is the estimated coefficient for the fourth-lagged GDP per capita (always negative). Similarly, the long-run

Figure A15. Effects of Pro-liberal and Illiberal Democracies on Growth: Alternative DID Estimators



Note: This figure presents the estimated effects of Pro-liberal and Illiberal Democracy on subsequent economic growth using various estimators: Two-Way Fixed Effects (TWFE) with OLS (twfe) and alternative methods from the literature, including [Liu et al. \(2024\)](#) (fect); [Busch and Girardi \(2023\)](#) (lpdid); [Callaway and Sant'Anna \(2021\)](#) (csdid); [Borusyak et al. \(2021\)](#) (did_imputation); [Sun and Abraham \(2021\)](#) (eventstudyinteract); [Cengiz et al. \(2019\)](#) (stackeddev); and [Hegland \(2023\)](#) (wooldid). Note that methods beyond twfe, fect, and lpdid require a staggered treatment setting. To accommodate this, the analysis also use a subsample of countries: those consistently autocratic (control) and those that underwent a single, irreversible democratization (treated). OLS results with this subsample are included for comparison. The dependent variable is the growth rate. The figure displays the estimated coefficients for Pro-liberal and Illiberal Democracy, along with their 95% confidence intervals. All models control for three lagged growth rates, the fourth lag of log GDP per capita, country fixed effects, and year fixed effects. Standard errors are clustered at the country level.

growth effect of Illiberal Democracy is:

$$LongEffect_{Illiberal_dem} = 100(y_I^* - y_0) = \frac{100\hat{\beta}_I}{-\hat{\varphi}} = \frac{100\hat{\beta}_I}{|\hat{\varphi}|}.$$

These expressions reveal that the long-run growth impacts of both types of democracy are directly proportional to their estimated coefficients and inversely proportional to the absolute value of the coefficient for the fourth-lagged GDP per capita.

G IVs for Growth Regressions

To address potential endogeneity concerns in our growth regressions, we construct instrumental variables based on regional democratization waves. For each country i belonging to region r , we mathematically define $Democracy_{it}^{F,IV}$, which is the average level of democracy among other countries in the same region at time t (excluding country i), normalized by the number of countries in the region minus 1, and $Interaction_{it}^{F,IV}$, which is the product of $Democracy_{it}^{F,IV}$ and the Illiberal Democracy indicator for country i at time t :

$$Democracy_{it}^{F,IV} = \frac{1}{N_{rt} - 1} \sum_{j \neq i, i \in R, j \in R} Democracy_{jt},$$

$$Interaction_{it}^{F,IV} = Democracy_{it}^{F,IV} * Illiberal_dem_{jt}.$$

These instruments capture the regional context of democratization while being plausibly uncorrelated with country-specific shocks that might affect growth.

H Strengthening the Mechanism Analysis: Further Robustness Checks

H.1 IV Method: Behavioral and Institutional Channels

To bolster our mechanism analysis, we leverage the IV approach outlined in Section 6.5. Applying the IV method with behavioral and institutional channel indicators yields results consistent with those OLS ones (Table A19). However, support for institutional channels weakens somewhat (Table A20).

H.2 Split-Sample Analysis

Further corroborating our findings, we adopt the split-sample regression approach used by [Dorsch and Maarek \(2019\)](#) for both Pro-liberal and Illiberal Democracy. This analysis utilizes behavior and institution indicators from the main paper (Table [A21](#) and Table [A22](#)). we find similar results where various instability institutions, state capacity, and economic freedom are key mechanisms underlying the effect of Pro-liberal Democracy on growth.

H.3 Semiparametric Estimates on Mechanisms

Figure [A16](#) and Figure [A17](#) depict the estimated effects of Pro-liberal and Illiberal Democracy on behaviors using the inverse-propensity-score reweighting approach from [Acemoglu et al. \(2019\)](#) for $s = -10, -9, \dots, 15$, with $s = 0$ corresponding to the year of democratization. The estimates for negative values of s serve as a specification test, as they should not be affected by subsequent democratization. The blue line plots the estimated effects of Pro-liberal Democratization on behaviors over time, while the red line plots the estimated effects of Illiberal Democratization. Reassuringly, we observe no differential trend in behaviors before Pro-liberal/Illiberal Democratization in most cases. Thereafter, there is a gradual improvement in peaceful behaviors in Pro-liberal Democracies, but no improvements in Illiberal Democracies in most cases.

Figure [A18](#) and Figure [A19](#) depict the effects of Pro-liberal and Illiberal Democracy on institutions using an inverse-propensity-score reweighting approach ([Acemoglu et al., 2019](#)). The x-axis (s) represents the relative time to democratization, with $s = 0$ marking the year of transition. Estimates for negative s values serve as a pre-treatment check. The blue line shows a gradual improvement in institutions following Pro-liberal Democracy, while the red line shows no improvement after Illiberal Democracy. This suggests a positive causal effect of Pro-liberal Democracy on institutional development.

Figure A16. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Mechanism: Behaviors (Part A)



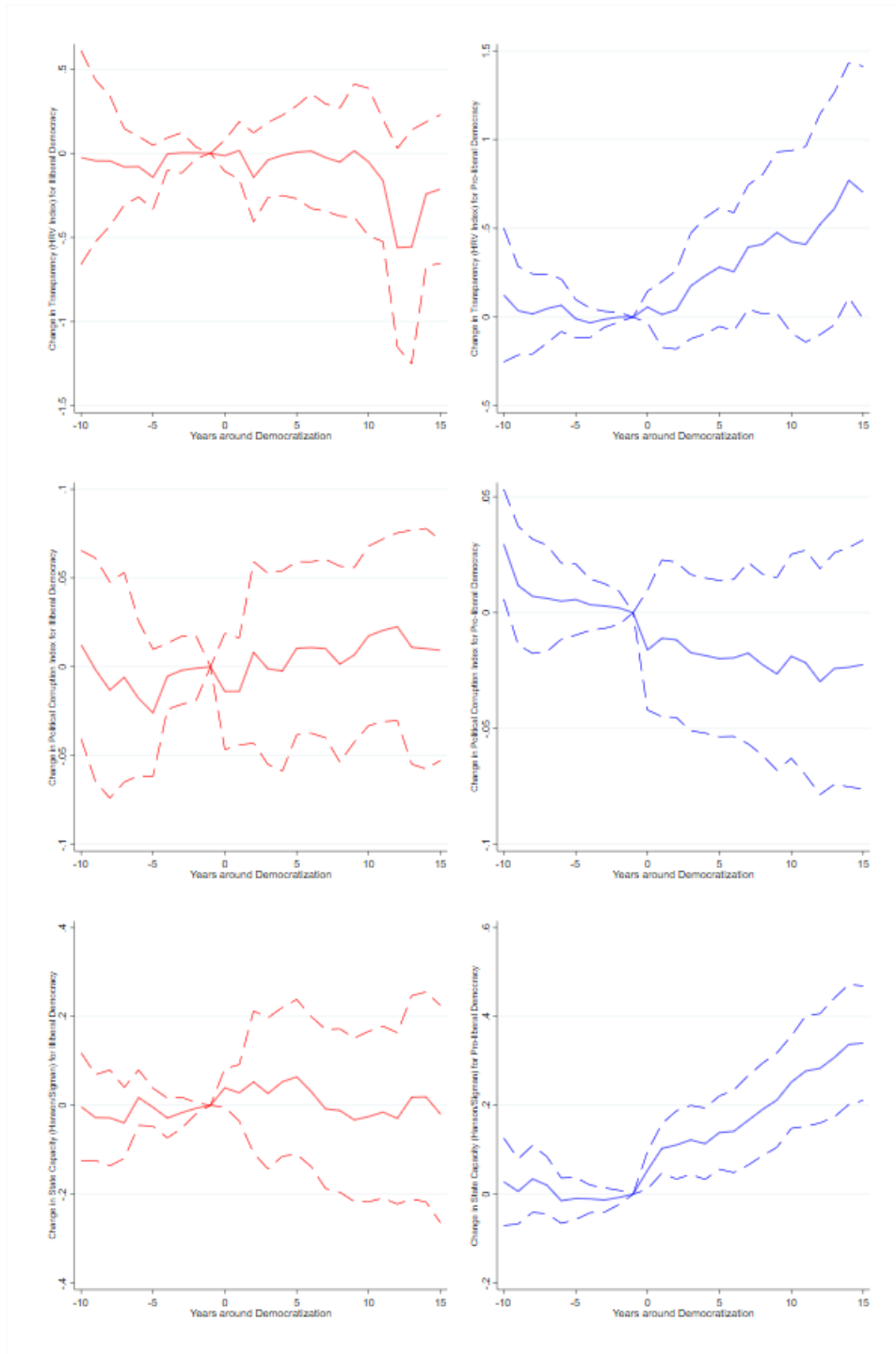
Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on behaviors (Political Polarization, Mass Mobilization for Democracy, Mass Mobilization for Autocracy, and Political Violence), obtained using a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on behaviors. The blue (red) line plots the estimated average effect on behaviors in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each behavior variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of behaviors dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A17. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Mechanism: Behaviors (Part B)



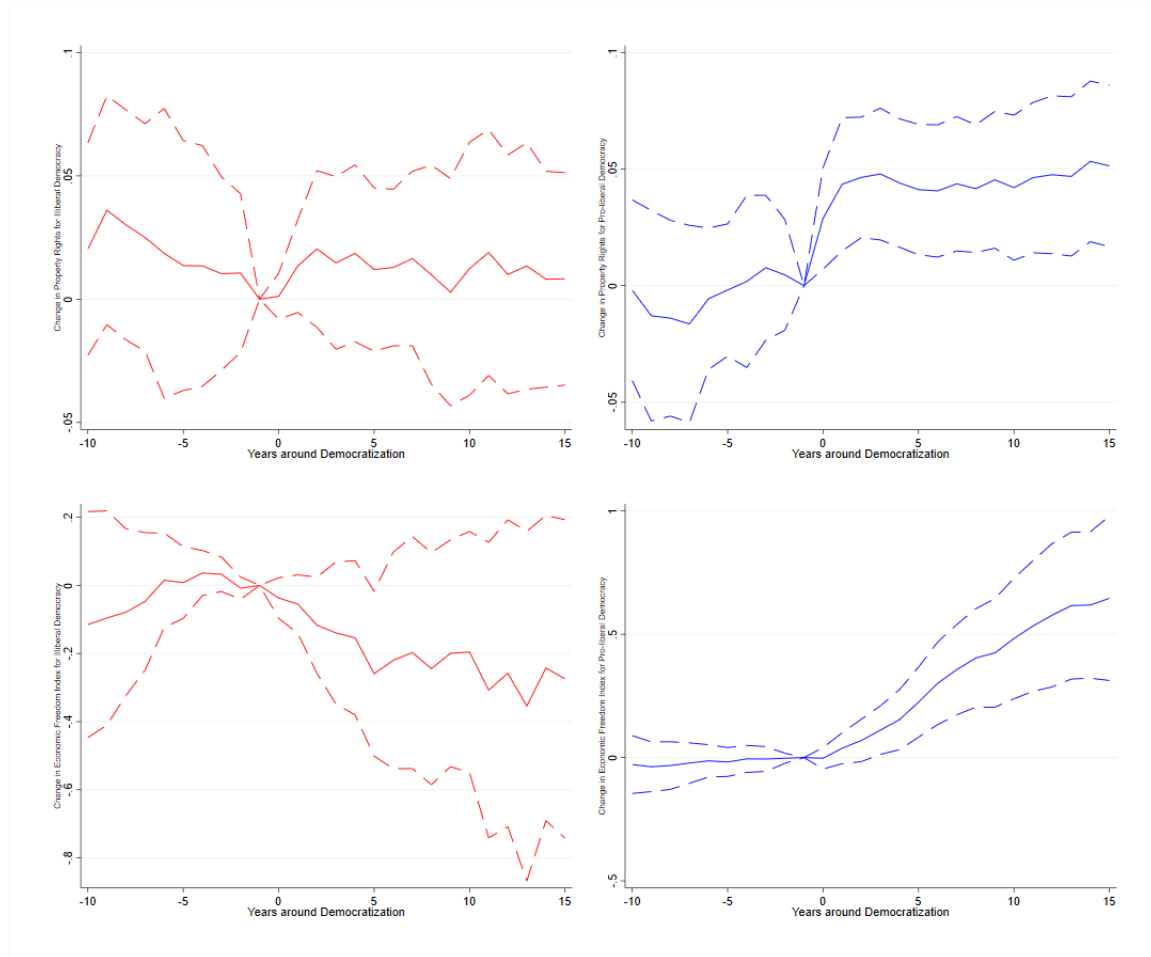
Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on behaviors (Violence Index, Regime Instability Index, and Social Unrest), obtained with a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on behaviors. The blue (red) line plots the estimated average effect on behaviors in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each behavior variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of behaviors dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A18. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Mechanism: Institutions (Part A)



Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on institutions (Transparency [HRV Index], Political Corruption, State Capacity), obtained using a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on institutions. The blue (red) line plots the estimated average effect on institutions in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each institution variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of institutions dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A19. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Mechanism: Institutions (Part B)



Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on institutions (Property Rights, Economic Freedom Index), obtained with a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on institutions. The blue (red) line plots the estimated average effect on institutions in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each institution variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of institutions dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

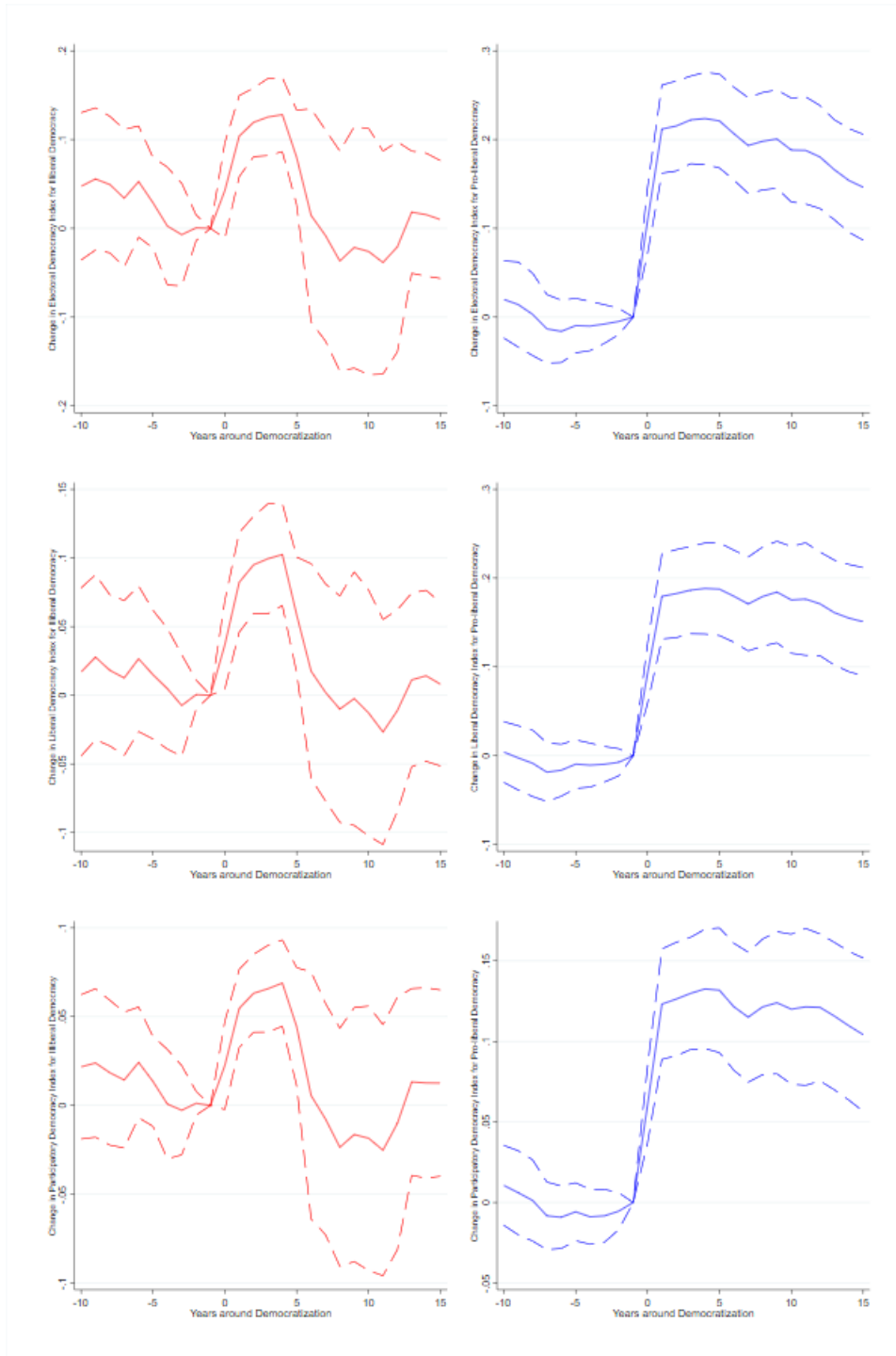
Building on [Acemoglu et al. \(2019\)](#), [Figure A20](#) and [Figure A21](#) explore the impact of Pro-liberal and Illiberal Democracy on democratic quality using inverse-propensity-score reweighting. The x-axis (s) represents the relative time to democratization ($s = 0$ being the transition year). Estimates for negative s values serve as a pre-treatment check. The blue line shows a substantial improvement in quality of democracy following Pro-liberal Democracy. In contrast, the red line suggests initial gains in quality of democracy after Illiberal Democracy, often followed by a decline. This implies Pro-liberal Democracy fosters sustainable improvements in democratic quality.

[Table A23](#) summarizes the estimates by reporting the average effect over different time horizons using the inverse-propensity-score reweighting approach from [Acemoglu et al. \(2019\)](#), where columns (1)–(4) present the effects of Pro-liberal Democracy on mechanisms, including behaviors and institutions, and columns (5)–(8) report the effects of Illiberal Democracy. The estimates confirm the lack of significant effects before Pro-liberal/Illiberal Democratization on all indicators measuring mechanisms, such as behaviors and institutions, providing reassurance. Additionally, they show that after Pro-liberal Democratization, peaceful behaviors and institutions significantly improve, whereas after Illiberal Democratization, there is no or weak improvement in peaceful behaviors and institutions.

I Effects on the Crucial Components of Democracy

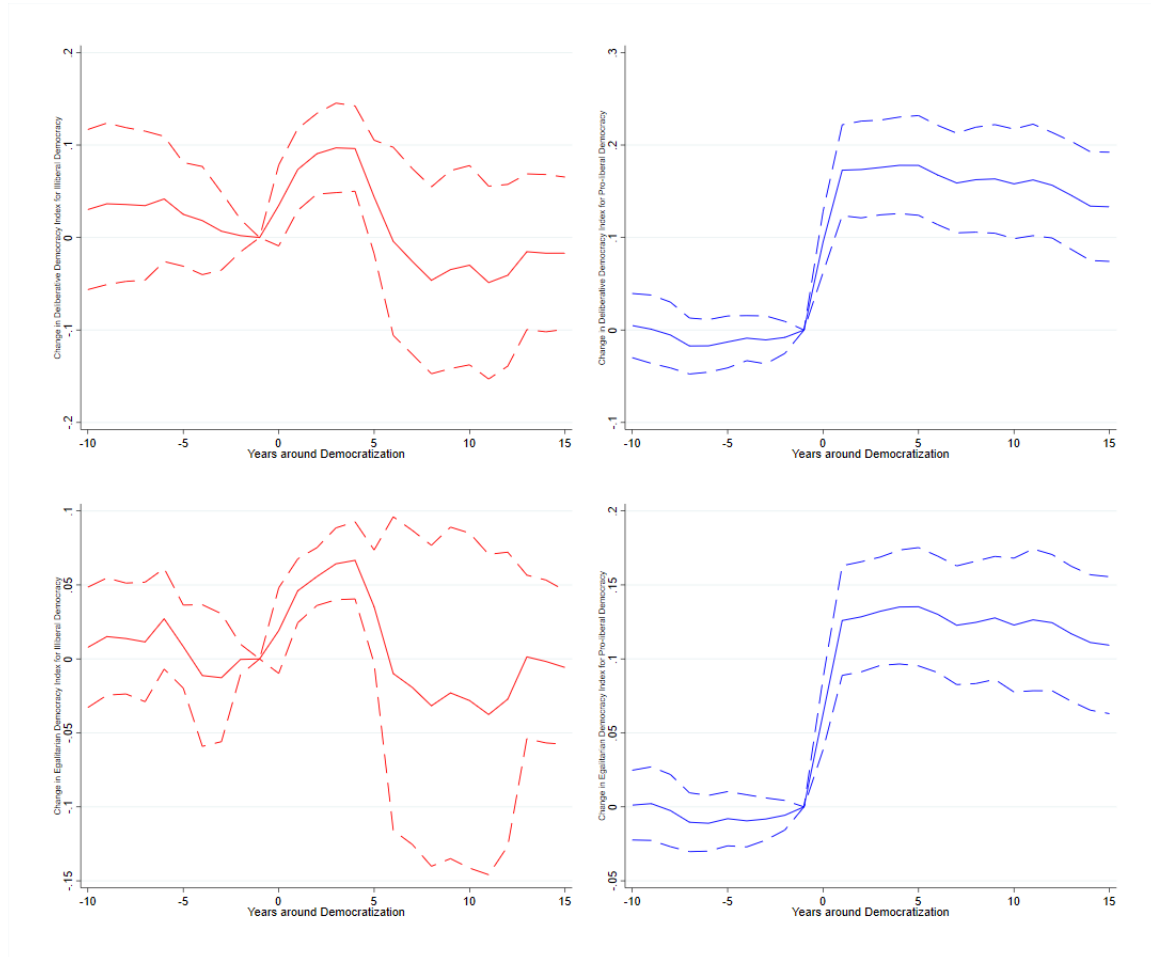
[Boese-Schlusser and Eberhardt \(2023\)](#) explores the democratic components that significantly contribute to economic growth. They employ the variables from V-Dem and find that freedom of expression, clean elections, and legislative-executive constraints are the primary drivers of long-run development. We have identified relatively limited improvements in these crucial components under Illiberal Democracy from OLS regressions, as shown in [Table A24](#). The reason is that the improvements are unsustainable during post-Illiberal Democratization, often followed by a regression shortly after an initial period of improvement, as depicted in [Figure A22](#), which uses the non-parametric method from [Acemoglu et al. \(2019\)](#).

Figure A20. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Quality of Democracy: Part A



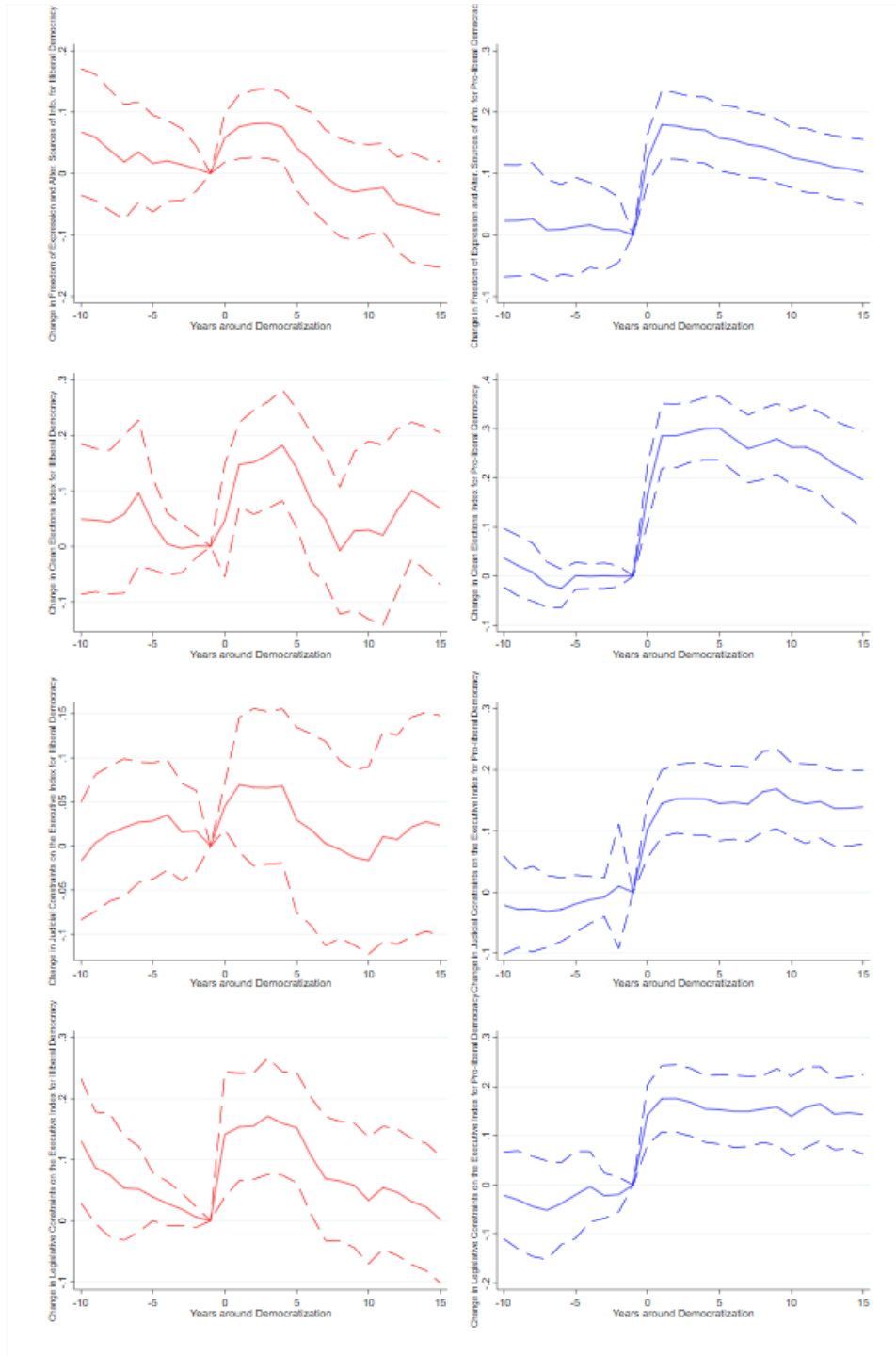
Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on the quality of democracy indicators (Electoral Democracy Index, Liberal Democracy Index, Participatory Democracy Index), obtained using a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on institutions. The blue (red) line plots the estimated average effect on institutions in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each quality of democracy variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of institutions dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A21. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on Quality of Democracy: Part B



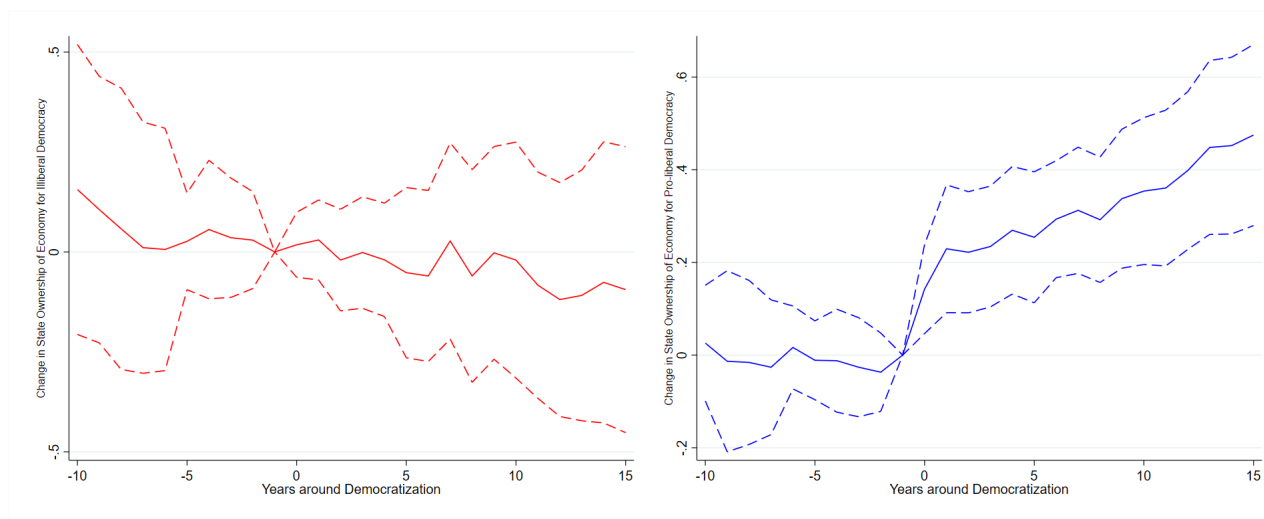
Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on quality of democracy indicators (Deliberative Democracy Index, Egalitarian Democracy Index), obtained with a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on institutions. The blue (red) line plots the estimated average effect on institutions in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each quality of democracy variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of institutions dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A22. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on the Crucial Components of Democracy



Note: Semiparametric estimates of the over-time effects of Pro-liberal/Illiberal Democracy on crucial components of democracy, including the Alternative Sources of Information Index, Clean Elections Index, Judicial Constraints on the Executive Index, and Legislative Constraints on the Executive Index, obtained using a regression model to estimate counterfactuals. This figure plots semiparametric estimates of the effect of Pro-liberal (blue)/Illiberal (red) democratization on democracy components. The blue (red) line plots the estimated average effect on behaviors in countries that Pro-liberal (Illiberal) democratized. Time (in years) relative to the year of democratization runs on the horizontal axis. We normalize each component of democracy variable to 0 in the year preceding the democratization. The estimates are obtained by assuming and estimating a linear model for counterfactual outcomes, which we use to control for the influence of behaviors dynamics, as explained in full detail by [Acemoglu et al. \(2019\)](#).

Figure A23. Semiparametric Estimates of the over-time Effects of Pro-liberal (Blue) and Illiberal (Red) Democracy on State Ownership of the Economy



Note: Semiparametric estimates depict the over-time effects of Pro-liberal/Illiberal Democracy on the State Ownership of Economy indicator, which measures the extent of government control over capital in various sectors. Higher values signify less state ownership. The figure plots semiparametric estimates of the effect of Pro-liberal/Illiberal Democratization on state ownership. The blue (red) line represents the estimated average effect for countries that underwent Pro-liberal (Illiberal) democratization. The horizontal axis indicates time (in years) relative to democratization. We normalize the State Ownership of Economy indicator to 0 in the year preceding the democratization. These estimates are derived from a linear model for counterfactual outcomes, controlling for behavioral dynamics, as detailed by [Acemoglu et al. \(2019\)](#).

J Effects on the State Ownership of Economy

"Liberalism" emphasizes individual rights and freedoms, contingent on respecting others' rights. It aligns with democratic values such as civil rights, political freedom, constitutional government, and legal equality. Key tenets of liberalism, including capitalism and free markets, also resonate with our regression analysis findings (see Figure A23), which utilize the non-parametric method from [Acemoglu et al. \(2019\)](#). The State Ownership of Economy indicator, extracted from V-Dem, measures government control over capital in industrial, agricultural, and service sectors. Higher values denote less direct state ownership or control. The graph indicates that Pro-liberal Democracy (blue) enhances the free-market system, whereas Illiberal Democracy (red) does not.

K Data Sources

Our empirical analysis draws upon a rich dataset encompassing diverse sources:

Indicators from V-Dem: Mobilization for democracy, Mobilization for autocracy, CSO anti-system Movement Character (Democratic, Anti-democratic), Political Polarization, Political Violence, Political Corruption, Property Rights, Electoral Democracy Index, Liberal Democracy Index, Participatory Democracy Index, Deliberative Democracy Index, Egalitarian Democracy Index, the Alternative Sources of Information Index, Clean Elections Index, Judicial Constraints on the Executive Index, Legislative Constraints on the Executive Index, State Ownership of Economy, and Region (Politico-Geographic, 10 levels).

Indicators from World Development Indicators (2020 Edition): Enrollment Rates, Fertility Rate, GDP per capita, Government Spending (Share of GDP), Inflation Rate, Investment Rate, Life Expectancy, Mortality Rate, Regional Area (WDI), Trade Share of GDP.

Indicators from Quality of Government Data Set: HRV (Transparency) Index, Economic Freedom, Forms of Democracy⁶³, Regional Area (QOG).

Indicators from PWT 9.0: Human Capital Index, Physical Capital, Population, TFP.

The Indicator from [Fariss et al. \(2022\)](#): Real GDP per capita.

State Capacity is extracted from [Hanson and Sigman \(2021\)](#).

Indicators from [Acemoglu et al. \(2019\)](#): Democracy, Market Reform Index, Social Unrest, Tax Revenue, Regional Area.

Indicators from [Aisen and Veiga \(2013\)](#): Human Capital per capita, Physical Capital per capita, Regime Instability Index2, Violence Index2.

Alternative Democracy indicators are from [Boix et al. \(2013\)](#), [Cheibub et al. \(2010\)](#); [Bjørnskov and Rode \(2020\)](#), [Papaioannou and Siourounis \(2008b\)](#), Polity V, Machine Learning Democracy Index ([Gründler and Krieger, 2021](#)), Episodes of Regime Transformation (ERT) dataset ([Maerz et al., 2023](#)), and Lexical Index ([Skaaning et al., 2015](#)).

Democratic Capital (Democratic Stock) is extracted from [Gerring et al. \(2005\)](#).

Indicators from NAVCO 1.3 data ([Chenoweth and Shay, 2020](#)): Violent and Non-violent Movement.

⁶³We combine Regime Institutions ([Cheibub et al., 2010](#)), Political System (The Database of Political Institutions), and Institution ([Bormann and Golder, 2013](#)) to construct dummy variables of Parliamentary Democracy, Mixed (semi-presidential) democracy and Presidential democracy. Electoral System ([Bormann and Golder, 2013](#)) and Electoral Family ([Norris, 2009](#)) are used to generate three dummy variables to represent Majoritarian Election System, Proportional Election System, and Mixed System.

L The List of Countries at Democratic Transition

Table A1. The List of Countries Ranked by Nature of Mobilization at Democratic Transition in 1960–2020

Country	Dem. Period	Nature of Mob. at Transition	Percentile (%)	Country	Dem. Period	Nature of Mob. at Transition	Percentile (%)	Country	Dem. Period	Nature of Mob. at Transition	Percentile (%)
Uganda	1980-1984	-3.486	1	Armenia	1998-2020	0.460	35	Albania	1997-2020	1.490	70
Burundi	2003-2013	-1.472	1	Cyprus	1974-2020	0.468	36	Pakistan	1972-1976	1.494	71
Turkey	1983-2015	-1.380	2	Slovak Republic	1993-2020	0.528	37	Slovenia	1992-2020	1.555	72
Thailand	2008-2013	-1.238	3	Mali	2013-2019	0.533	38	Zambia	1991-2020	1.582	73
Dominican Republic	1978-2020	-1.153	4	Sierra Leone	2001-2020	0.539	39	Pakistan	2008-2020	1.610	74
Liberia	2004-2020	-1.063	5	Fiji	1990-2005	0.556	40	Bolivia	1982-2020	1.767	75
Congo, Rep	1992-1996	-0.961	6	Solomon Islands	2004-2020	0.563	41	Haiti	1994-1999	1.790	76
Niger	2010-2020	-0.829	7	Tunisia	2011-2020	0.587	42	Lebanon	2005-2018	1.827	77
Comoros	1990-1994	-0.804	8	Latvia	1993-2020	0.659	43	South Africa	1994-2020	1.893	78
Senegal	2000-2020	-0.794	9	Burkina Faso	2015-2020	0.664	44	Argentina	1983-2020	1.963	79
Central African Republic	1993-2002	-0.766	10	Indonesia	1999-2020	0.669	45	Malawi	1994-2020	1.992	80
Hungary	1990-2020	-0.714	11	Mozambique	1994-2018	0.688	46	Benin	1991-2020	2.080	81
Lesotho	1993-1997	-0.621	12	Pakistan	1988-1998	0.727	47	Madagascar	1993-2008	2.099	82
Djibouti	1999-2009	-0.587	13	Poland	1990-2020	0.732	48	Mongolia	1993-2020	2.107	83
Niger	1999-2008	-0.481	14	Cote d'Ivoire	2012-2018	0.760	49	Peru	1980-1991	2.171	84
Guinea-Bissau	2005-2011	-0.471	15	Nicaragua	1990-2017	0.781	50	Lithuania	1993-2020	2.140	84
Turkey	1973-1979	-0.400	16	Estonia	1992-2020	0.786	51	Madagascar	2011-2020	2.172	85
Mexico	1997-2020	-0.342	17	Ukraine	1994-2020	0.790	51	Nepal	2006-2020	2.241	86
Niger	1991-1995	-0.338	17	Ecuador	1979-2020	0.810	52	Kyrgyz Republic	2010-2019	2.308	87
Lesotho	1999-2020	-0.276	18	Croatia	2000-2020	0.843	53	Thailand	1992-2005	2.414	88
Ethiopia	1995-2009	-0.219	19	Cabo Verde	1991-2020	0.875	54	Bulgaria	1991-2020	2.482	89
Guatemala	1966-1973	-0.210	20	Peru	1963-1967	0.879	55	Brazil	1985-2020	2.488	90
Nigeria	1979-1983	-0.184	21	Nepal	1991-2001	0.898	56	Honduras	1982-2018	2.573	91
Zimbabwe	1978-1986	-0.183	22	North Macedonia	1991-2020	0.930	57	Spain	1978-2020	2.625	92
Nigeria	1999-2020	-0.158	23	Guyana	1992-2020	0.954	58	Armenia	1991-1995	2.736	93
Turkey	1961-1970	-0.109	24	Greece	1975-2020	0.983	59	Russian Federation	1993-2003	2.947	94
Czech Republic	1993-2020	-0.084	25	Uruguay	1985-2020	1.042	60	Mali	1992-2011	2.984	95
Peru	1993-2020	0.070	26	Thailand	1978-1990	1.045	61	Korea, Rep	1988-2020	2.998	96
Comoros	2002-2017	0.145	27	Panama	1994-2020	1.118	62	Philippines	1987-2020	3.609	97
Bhutan	2008-2020	0.188	28	Seychelles	2016-2020	1.151	63	Portugal	1976-2020	3.645	98
Chile	1990-2020	0.195	29	Guinea-Bissau	2010-2020	1.153	64	El Salvador	1982-2020	3.680	99
Georgia	1995-2020	0.199	30	Guatemala	1986-2020	1.172	65	Ghana	1996-2020	3.696	100
Fiji	2014-2020	0.237	31	Serbia	2000-2020	1.180	66				
Bangladesh	2009-2017	0.277	32	Kenya	2002-2020	1.234	67				
Bangladesh	1991-2006	0.288	33	Guinea-Bissau	2014-2020	1.234	67				
Romania	1990-2020	0.404	34	Moldova	1994-2020	1.234	67				
Suriname	1991-2020	0.405	34	Paraguay	1993-2020	1.472	69				

Note: Nature of mobilization constructed by mobilization for democracy and autocracy, which are from V-Dem.

Table A2. Summary Statistics

Variable	Pro-liberal Democracy			Illiberal Democracy			Autocracy			Pro-liberal – Illiberal	
	Obs.	Mean	(Std.)	Obs.	Mean	(Std.)	Obs.	Mean	(Std.)	Mean	p-value
Economic & Demographic											
Indicators											
GDP per capita Growth (%)	1,785	2.202	4.619	370	1.605	3.766	3,867	1.508	7.455	0.60	0.01
GDP per Capita (2020 US\$)	1,793	6,445	6,490	372	4,451	4,652	3,958	5,058	10,414	1993.86	0.00
Tax Revenue (% GDP)	666	0.163	0.0695	191	0.165	0.119	3,096	0.158	0.0942	0.00	0.65
Government Spending (% GDP)	1,664	14.83	4.600	325	14.61	7.552	3,528	15.09	7.152	0.22	0.25
Investment (% GDP)	1,682	23.66	7.939	342	21.71	10.02	3,490	22.65	10.37	1.95	0.00
Trade (% GDP)	1,714	74.80	35.88	329	65.61	41.09	3,660	70.26	51.79	9.19	0.00
TFP	1,243	0.604	0.195	312	0.622	0.250	2,280	0.673	0.316	-0.02	0.91
Human Capital index	1,529	2.414	0.621	354	1.997	0.732	3,611	1.699	0.546	0.42	0.00
Physical Capita per	1,376	0.187	0.305	323	0.0831	0.117	2,599	0.0949	0.164	0.10	0.00
Child Mortality Rate	1,805	41.92	44.06	386	87.78	66.46	4,843	105.5	84.79	-45.86	0.00
Fertility Rate	1,805	2.853	1.492	386	4.184	1.982	5,468	4.716	1.966	-1.33	0.00
Market Reforms Index	860	57.68	21.42	195	43.44	25.76	3,469	22.01	23.25	14.24	0.00
Mechanism Indicators											
Political Polarization	1,805	-0.162	1.174	386	0.278	1.216	4,729	0.276	1.383	-0.44	0.00
Mobilization for Democracy	1,805	-0.0275	1.158	386	0.295	0.962	4,721	-0.599	1.455	-0.32	0.00
Mobilization for Autocracy	1,805	-1.252	0.809	386	0.540	0.977	4,723	0.352	1.329	-1.79	0.00
Political violence	1,805	-0.659	1.424	386	0.0408	1.542	4,729	-0.0597	1.461	-0.70	0.00
Political Corruption	1,796	0.510	0.269	386	0.598	0.220	4,489	0.614	0.239	-0.09	0.00
Violence Index	519	0.120	1.485	127	0.767	1.773	3,201	0.181	1.544	-0.65	0.00
Regime Instability Index	521	0.108	1.206	128	0.510	1.449	3,255	0.0663	1.636	-0.40	0.00
Social Unrest	1,125	0.236	0.425	261	0.372	0.484	3,724	0.291	0.454	-0.14	0.00
State Capacity	1,493	0.519	0.717	341	0.261	0.846	4,257	-0.207	0.648	0.26	0.00
Transparency (HRV Index)	899	2.230	2.106	220	1.458	2.678	1,795	-0.0139	1.518	0.77	0.00
Property Rights	1,805	0.802	0.145	386	0.687	0.205	4,761	0.475	0.257	0.12	0.00
Economic Freedom	1,648	6.548	0.981	350	5.934	1.100	3,252	5.313	1.112	0.61	0.00

Note: See the text and Appendix for the description of the variables and their corresponding sources. T-tests are used to compare whether the differences between Pro-liberal and Illiberal Democracy groups are significantly different with zero.

Table A3. Effects of Democracy on Growth: Using Initial Nature of Mobilization with Different Cutoffs

Dependent Variable:	Nature of Mobilization in Political Transition Period as Cutoffs						No Grouping
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Growth Rate	p15	p20	p25	p30	p35	p40	
Pro-liberal Democracy (β_P)	0.827*** (0.308)	0.925*** (0.313)	0.994*** (0.319)	0.859*** (0.296)	0.886*** (0.301)	0.881*** (0.309)	
Illiberal Democracy (β_I)	0.534 (0.426)	0.181 (0.345)	0.100 (0.344)	0.637 (0.459)	0.601 (0.422)	0.637 (0.395)	
Democracy							0.797*** (0.291)
GDP Growth First Lag	0.136* (0.072)	0.135* (0.072)	0.135* (0.072)	0.136* (0.072)	0.136* (0.072)	0.136* (0.072)	0.136* (0.072)
GDP Growth Second Lag	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)	0.047*** (0.017)
GDP Growth Third Lag	0.042** (0.018)	0.042** (0.018)	0.042** (0.018)	0.042** (0.018)	0.042** (0.018)	0.042** (0.018)	0.042** (0.018)
GDP Fourth Lag	-3.097*** (0.585)	-3.100*** (0.585)	-3.104*** (0.587)	-3.097*** (0.585)	-3.096*** (0.585)	-3.099*** (0.586)	-3.093*** (0.584)
Coef. Test (p-value): $\beta_P = \beta_I$	0.516	0.0411	0.0144	0.607	0.469	0.514	-
Countries	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Adjusted R^2	0.190	0.190	0.191	0.190	0.190	0.190	0.190

Note: A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A4. Effects of Democracy on Growth: Alternative Nature of Mobilization Indicators

Dependent Variable: Growth Rate	(1) p15	(2) p20	(3) p25	(4) p30	(5) p35	(6) p40	(7) p45	(8) p50
Panel A: Mobilization for Democracy								
Pro-liberal Democracy (β_P)	0.626** (0.278)	0.574** (0.278)	0.585** (0.282)	0.666** (0.290)	0.682** (0.294)	0.701** (0.298)	0.660** (0.303)	0.657** (0.315)
Illiberal Democracy (β_I)	1.950*** (0.640)	2.107*** (0.560)	1.752*** (0.511)	1.245** (0.515)	1.148** (0.500)	1.031** (0.462)	1.091** (0.431)	1.024*** (0.390)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0267	0.00228	0.00930	0.232	0.328	0.458	0.301	0.346
Countries	133	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Panel B: Reversed Mobilization for Autocracy								
Pro-liberal Democracy (β_P)	0.802*** (0.305)	0.846*** (0.312)	0.938*** (0.319)	0.907*** (0.322)	0.964*** (0.326)	0.978*** (0.339)	1.047*** (0.355)	1.056*** (0.374)
Illiberal Democracy (β_I)	0.774 (0.482)	0.622 (0.414)	0.400 (0.365)	0.538 (0.362)	0.487 (0.341)	0.522 (0.322)	0.489 (0.308)	0.556* (0.307)
Coef. Test (p-value): $\beta_P = \beta_I$	0.954	0.586	0.144	0.309	0.160	0.167	0.0959	0.161
Countries	133	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Panel C: Nature Mobilization, Alternative Variable Form								
Pro-liberal Democracy (β_P)	0.813*** (0.305)	0.813*** (0.305)	0.844*** (0.310)	0.729** (0.291)	0.729** (0.291)	0.719** (0.307)	0.719** (0.307)	0.719** (0.307)
Illiberal Democracy (β_I)	0.738 (0.478)	0.738 (0.478)	0.663 (0.424)	0.943** (0.441)	0.943** (0.441)	0.893** (0.379)	0.893** (0.379)	0.893** (0.379)
Coef. Test (p-value): $\beta_P = \beta_I$	0.873	0.873	0.662	0.596	0.596	0.624	0.624	0.624
Countries	133	133	133	133	133	133	133	133
Obs.	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Panel D: Nature of Civil Society								
Pro-liberal Democracy (β_P)	0.860*** (0.302)	0.941*** (0.321)	0.941*** (0.321)	0.936*** (0.319)	0.939*** (0.327)	0.978*** (0.334)	0.982*** (0.346)	0.889*** (0.332)
Illiberal Democracy (β_I)	0.321 (0.481)	0.383 (0.322)	0.383 (0.322)	0.403 (0.320)	0.510 (0.319)	0.480 (0.308)	0.517* (0.302)	0.688* (0.350)
Coef. Test (p-value): $\beta_P = \beta_I$	0.240	0.0777	0.0777	0.0822	0.165	0.103	0.148	0.570
Countries	133	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Panel E: Reversed Pro-autocratic Civil Society								
Pro-liberal Democracy (β_P)	0.893*** (0.307)	0.924*** (0.320)	1.007*** (0.334)	1.007*** (0.334)	0.994*** (0.339)	0.993*** (0.358)	0.923** (0.370)	0.986*** (0.371)
Illiberal Democracy (β_I)	0.224 (0.405)	0.323 (0.334)	0.330 (0.327)	0.330 (0.327)	0.427 (0.321)	0.523* (0.303)	0.666** (0.297)	0.613** (0.296)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0830	0.0773	0.0521	0.0521	0.0995	0.176	0.449	0.271
Countries	133	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A5. Effects of Democracy on Growth Over a Longer Time: Various Democracy Indicators

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)
	CGV	Polity IV	Machine Learning Index	ERT	Electoral Democracy	Liberal Democracy
Pro-liberal Democracy (β_P)	0.450*** (0.138)	0.279* (0.165)	0.328*** (0.116)	0.199** (0.098)	0.278*** (0.100)	0.232** (0.101)
Illiberal Democracy (β_I)	0.023 (0.133)	0.248 (0.174)	0.118 (0.186)	0.065 (0.146)	0.140 (0.201)	0.318 (0.267)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0226	0.836	0.313	0.325	0.464	0.725
Countries	139	127	139	159	162	165
Observations	8,980	7,320	9,184	13,396	13,617	13,876
Adjusted R^2	0.638	0.655	0.628	0.631	0.632	0.629

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses.
 * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A6. Effect of Democracy on GDP Growth: Interaction with Initial Nature of Mobilization

	(1)	(2)	(3)	(4)
Dependent Variable: Growth Rate	Full Sample			Only Pro-liberal Democracy and Autocracy
Democracy	0.745** (0.321)	0.750** (0.321)		1.356*** (0.496)
<i>Interaction</i>	0.048 (0.125)	0.104 (0.245)		-0.260 (0.192)
<i>Interaction</i> ²		-0.024 (0.085)		
Middle Pro-liberal Democracy			1.311*** (0.384)	
High Pro-liberal Democracy			0.648* (0.335)	
Illiberal Democracy			0.112 (0.347)	
Countries	133	133	133	112
Observations	5,697	5,697	5,697	4,732
Adjusted R^2	0.190	0.190	0.191	0.199

Note: Nature of mobilization at democratization time is used to construct the interaction term for the third-wave democratic countries. In the third column, two cutoffs, 0 and $P70$ of nature of mobilization during democratization, are used to built these three democracy dummies. A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A7. Effects of Pro-liberal and Illiberal Democracies on GDP Growth: No Extreme Observations

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable: Growth	Dropping Extreme Observations with Residuals outside Specified Ranges					
	P1-P99	P5-P95	P10-P90	P15-P85	P20-P80	P25-P75
Pro-liberal Democracy (β_P)	0.621*** (0.221)	0.626*** (0.190)	0.503*** (0.143)	0.527*** (0.101)	0.591*** (0.094)	0.582*** (0.074)
Illiberal Democracy (β_I)	-0.102 (0.274)	0.102 (0.246)	0.109 (0.280)	0.117 (0.216)	0.134 (0.225)	0.057 (0.179)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0105	0.0510	0.162	0.0757	0.0488	0.00526
Countries	133	133	133	133	133	133
Observations	5,585	5,129	4,559	3,989	3,419	2,849
Adjusted R^2	0.323	0.476	0.597	0.688	0.770	0.834

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A8. Effects of Pro-liberal and Illiberal Democracies on GDP Growth: Controlling Economic and Demographic Variables

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Adding Covariates:	Log of Trade Share	Log of Investment Rate	Log of Inflation Rate	Log of Gov Spending	Log of Primary Enrollment	Log of Secondary Enrollment	Log of Tertiary enrollment	Fertility Rate	Log of Life Expectancy
Pro-liberal Democracy (β_P)	1.318*** (0.403)	1.371*** (0.358)	0.752** (0.288)	1.370*** (0.374)	1.018*** (0.281)	0.646* (0.331)	0.978** (0.383)	0.956*** (0.323)	0.994*** (0.316)
Illiberal Democracy (β_I)	0.358 (0.399)	0.374 (0.348)	-0.166 (0.390)	0.617* (0.342)	-0.218 (0.427)	-0.478 (0.507)	-0.882 (0.641)	0.145 (0.348)	0.087 (0.346)
Covariate First Lag	3.023*** (0.649)	1.371*** (0.578)	-0.255 (0.155)	0.083 (1.270)	-1.309 (1.921)	1.717 (1.740)	-0.061 (1.185)	1.058 (1.490)	-13.116 (10.382)
Covariate Second Lag	-1.845 (1.235)	-1.269* (0.664)	-0.042 (0.144)	-0.401 (1.371)	0.441 (2.560)	-3.318 (2.333)	-0.558 (1.288)	1.078 (2.018)	17.456*** (5.542)
Covariate Third Lag	-0.031 (0.695)	0.713 (0.735)	-0.007 (0.118)	-0.240 (0.937)	-0.630 (2.844)	1.366 (2.490)	-0.770 (1.429)	-1.365 (1.156)	-0.040 (3.921)
Covariate Fourth Lag	-0.353 (0.395)	-0.328 (0.465)	0.151 (0.101)	-0.290 (0.525)	1.305 (2.615)	0.021 (1.638)	1.401* (0.758)	-1.021 (0.682)	-2.169 (3.517)
Sum of Covariate Coefficients	0.794	0.487	-0.153	-0.848	-0.193	-0.216	0.0126	-0.249	2.132
p-value (Covariate)	0.325	0.223	0.368	0.0572	0.727	0.657	0.978	0.129	0.241
Coef. Test (p-value): $\beta_P = \beta_I$	0.0446	0.0190	0.0325	0.0674	0.00491	0.0384	0.00712	0.0255	0.0160
Countries	129	127	132	129	128	122	117	133	133
Observations	5,110	4,858	4,008	4,949	3,828	2,774	2,505	5,672	5,689
Adjusted R^2	0.188	0.213	0.237	0.177	0.288	0.281	0.332	0.193	0.195

Note: In each column, four lags of the covariate specified in each column label are controlled, and the sum of their coefficients is reported as well as the p-value for joint significance. A full set of country and year fixed effects are controlled, as well as three lags of growth rates and the fourth lag of GDP per capita in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A9. Effect of Pro-liberal Democracy vs Illiberal Democracy on Growth: Miscellaneous

Dependent Variable: Growth	(1)	(2)	(3)	(4)
	Consider Reversals	use Dem. without 5-yr Stability to Categorize	use Dem. from Polity IV (>5) to Categorize	use Dem. from FH to Categorize
Pro-liberal Democracy (β_P)		0.971*** (0.310)	0.682** (0.286)	0.404 (0.417)
Illiberal Democracy (β_I)		0.095 (0.360)	-0.937** (0.383)	0.037 (0.450)
<i>Pro – liberalDem: β_P</i>	1.024*** (0.342)			
<i>Pro – liberal_Reversal: γ_P</i>	-0.703* (0.399)			
<i>IlliberalDem: β_I</i>	0.100 (0.334)			
<i>Illiberal_Reversal: γ_I</i>	-0.186 (0.641)			
Coef.Test (p-value): $\beta_P = \beta_I$	0.0119	0.0237	0.000229	0.480
Coef.Test (p-value): $\beta_P + \gamma_P = 0$	0.454			
Coef.Test (p-value): $\beta_I + \gamma_I = 0$	0.870			
Countries	133	133	125	104
Observations	5,697	5,703	5,261	3,218
Adjusted R^2	0.190	0.191	0.174	0.159

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A10. Effects of Pro-liberal and Illiberal Democracies on GDP Growth: Special Cases

Dependent Variable: Growth Rate	(1)	(2)	(3)	(4)	(5)	(6)
	At Least 20 Obs.	Region \times Year FE	Country linear Trends	Soviet Dummies	Outlier Excluded	Consider All Situations in (1)–(5)
Pro-liberal Democracy (β_P)	0.990*** (0.319)	1.024*** (0.325)	1.131*** (0.373)	0.896*** (0.305)	0.626*** (0.190)	0.766*** (0.256)
Illiberal Democracy (β_I)	0.099 (0.344)	0.418 (0.395)	-0.266 (0.383)	0.136 (0.328)	0.102 (0.246)	0.173 (0.244)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0147	0.139	0.00711	0.0275	0.0510	0.0660
Countries	129	133	133	133	133	129
Observations	5,658	5,697	5,697	5,697	5,129	5,095
Adjusted R^2	0.192	0.222	0.234	0.193	0.476	0.526

Note: Column (1) excludes countries with less than 20 observations of the dependent variable. Column (2) adds Region \times Year FE. Column (3) adds country linear trends. Column (4) adds interactions between a dummy for Soviet-related countries and dummies for the years 1989, 1990, 1991, and post-1992. Column (5) removes observations with a standardized residual estimated below percentile 5 or above percentile 95. In Column (6), all factors are controlled. A full set of country and year fixed effects are controlled, as well as three lags of growth rates and the fourth lag of GDP per capita in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A11. Effects of Pro-liberal and Illiberal Democracy on GDP Growth: Different Regions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All Regions	No East Asia & Pacific	No Europe & Central Asia	No Latin America & Caribbean	No Middle East & North Africa	No North America	No South Asia	No Sub-Saharan Africa (SSA)	No Ex-soviet
Dependent Variable: Growth									
Pro-liberal Democracy (β_P)	0.994*** (0.319)	1.207*** (0.344)	0.966*** (0.327)	1.009*** (0.359)	0.836*** (0.308)	0.994*** (0.319)	1.028*** (0.334)	0.992*** (0.419)	0.956*** (0.311)
Illiberal Democracy (β_I)	0.100 (0.344)	0.259 (0.429)	0.196 (0.336)	-0.041 (0.359)	0.017 (0.331)	0.100 (0.344)	0.131 (0.348)	0.230 (0.737)	0.183 (0.314)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0144	0.0411	0.0320	0.00884	0.0136	0.0144	0.0150	0.291	0.0224
Countries	133	116	101	114	116	133	127	91	118
Observations	5,697	4,955	4,679	4,668	5,003	5,697	5,464	3,716	5,268
Adjusted R^2	0.191	0.178	0.148	0.186	0.266	0.191	0.191	0.212	0.156

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A12. Effects of Pro-liberal and Illiberal Democracy on GDP Growth: Different Time Periods

	(1) All Time Periods	(2) No 1960–1970	(3) No 1970–1980	(4) No 1980–1990	(5) No 1990–2000	(6) No 2000–2010	(7) No 2010–2020
Dependent Variable: Growth							
Pro-liberal Democracy (β_P)	0.994*** (0.319)	1.097*** (0.325)	1.186*** (0.348)	0.994** (0.400)	0.859*** (0.328)	0.993*** (0.353)	0.910** (0.355)
Illiberal Democracy (β_I)	0.100 (0.344)	-0.170 (0.345)	0.295 (0.392)	0.184 (0.392)	0.198 (0.409)	0.164 (0.393)	0.033 (0.443)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0144	0.000751	0.0443	0.0552	0.0955	0.0498	0.0565
Countries	133	133	133	133	133	133	131
Observations	5,697	5,372	5,007	4,846	4,593	4,404	4,263
Adjusted R^2	0.191	0.195	0.204	0.191	0.207	0.164	0.191

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A13. Effects of Pro-liberal/Illiberal Democracy on GDP Growth: Different Transition Scenario

	(1) Baseline	(2) Only Always Autocratic Countries and Countries with Transition Time ≥ 2	(3) Only Always Autocratic Countries and Countries with 1 Transition Time	(4) Only Countries with 1 Transition Time
Dependent Variable: Growth Rate				
Pro-liberal Democracy (β_P)	0.994*** (0.319)	0.249 (0.433)	1.187*** (0.388)	1.793*** (0.359)
Illiberal Democracy (β_I)	0.100 (0.344)	-0.083 (0.459)	-0.034 (0.555)	0.508 (0.483)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0144	0.517	0.0387	0.0198
Countries	133	64	117	69
Observations	5,697	2,710	4,889	2,987
Adjusted R^2	0.191	0.150	0.191	0.293

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A14. Effects of Democracy on Growth: Controlling Different Lags of Growth

	(1) 3 lags	(2) 6 lags	(3) 9 lags	(4) 12 lags	(5) 15 lags
Dependent Variable: Growth Rate					
Pro-liberal Democracy (β_P)	0.994*** (0.319)	1.053*** (0.347)	1.295*** (0.365)	1.186*** (0.386)	1.322*** (0.409)
Illiberal Democracy (β_I)	0.100 (0.344)	0.026 (0.335)	-0.101 (0.351)	-0.159 (0.436)	-0.190 (0.486)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0144	0.00511	0.000603	0.00661	0.00703
Countries	133	131	131	131	131
Observations	5,697	5,341	4,976	4,606	4,229
Adjusted R^2	0.191	0.193	0.194	0.200	0.222

Note: A full set of country and year fixed effects are controlled in all specifications. Different lags of growth rates specified in each column are controlled in regressions. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A15. Effects of Pro-liberal and Illiberal Democracies on GDP Growth: Interacted with Democracy Quality

Dependent Variable: Growth Rate	(1)	(2)
	Interacted with Democracy Quality Specified in Each Column	
	Normalized Polity	Normalized Freedom House
Pro-liberal Democracy Interacted	1.195***	1.510***
with Democracy Quality (β_P)	(0.414)	(0.524)
Illiberal Democracy Interacted	0.000	-0.244
with Democracy Quality (β_I)	(0.487)	(0.636)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0197	0.00927
Countries	127	130
Observations	5,179	5,039
Adjusted R^2	0.178	0.196

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A16. Effects of Democracy on Growth: Average Nature of Mobilization around Transition in Different Windows

Dependent Variable: Growth	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Average Nature of Mobilization around Democratization						
	Only At Transition Year	[-1, 0]	Baseline [-2,0]	[-3,0]	[-4,0]	[-5,0]	[-6,0]	[-7,0]	[-8,0]
Pro-liberal Democracy (β_P)	0.855*** (0.316)	0.949*** (0.317)	0.994*** (0.319)	1.014*** (0.320)	1.002*** (0.322)	1.030*** (0.321)	0.954*** (0.322)	0.979*** (0.324)	0.979*** (0.330)
Illiberal Democracy (β_I)	0.570 (0.412)	0.259 (0.376)	0.100 (0.344)	0.079 (0.329)	0.212 (0.339)	0.270 (0.339)	0.458 (0.339)	0.419 (0.336)	0.511 (0.329)
Coef. Test (p-value): $\beta_P = \beta_I$	0.505	0.0770	0.0144	0.00709	0.0252	0.0249	0.136	0.0927	0.155
Countries	133	133	133	133	133	133	133	133	133
Observations	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
Adjusted R^2	0.190	0.190	0.191	0.191	0.191	0.191	0.190	0.190	0.190

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A17. Effects of Democracy on Growth: Pro-liberal/Illiberal Democracy vs Strong/Weak Democracy

Dependent Variable: Growth Rate	(1)	(2)	(3)	(4)
		Same Sample Size		
Strong Democracy (β_S)	0.981*** (0.335)	0.979*** (0.335)		
Weak Democracy (β_W)	0.240 (0.353)	0.231 (0.352)		
Pro-liberal Democracy (β_P)			0.989*** (0.321)	
Illiberal Democracy (β_I)			0.083 (0.347)	
Pro-liberal and Strong Democracy				1.121*** (0.354)
Illiberal and Weak Democracy				-0.246 (0.456)
Strong but Illiberal Democracy				0.309 (0.462)
Weak but Pro-liberal Democracy				0.492 (0.419)
Coef. Test (p-value): $\beta_{P(S)} = \beta_{I(W)}$	0.0619	0.0593	0.0138	
Countries	125	124	124	124
Observations	5,520	5,480	5,480	5,480

Note: A full set of country and year fixed effects are controlled in all specifications as well as three lags of growth rates and the fourth lag of GDP per capita. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A18. Effects of Pro-liberal/Illiberal Democracies on log GDP per capita—Dynamic Specification (Long-run Estimates)

Dependent Variable: GDP per capita	(1)	(2)	(3)	(4)
	Plain vanilla: MG	Plain vanilla: C&K MG	With covariates: MG	With covariates: C&K MG
Panel A: Effect of Pro-liberal Democracy on log GDP per capita				
Pro-liberal Democracy	29.701*** (4.199)	11.213*** (2.707)	16.835*** (3.719)	11.355*** (2.562)
Observations	2418	2418	2418	2418
Countries	54	54	54	54
Democratisations	65	65	65	65
Reversals	27	27	27	27
Avg Years in Dem	26.1	26.1	26.1	26.1
RMSE	23.647	8.965	12.082	5.432
Parameters estimated	4	13	12	21
Minimum T	27	27	27	27
Panel B: Effect of Illiberal Democracy on log GDP per capita				
Illiberal Democracy	-2.592 (8.849)	-0.006 (3.644)	-3.059 (7.174)	-3.668 (3.081)
Observations	799	799	799	799
Countries	16	16	16	16
Democratization	23	23	23	23
Reversals	18	18	18	18
Avg Years in Dem	22.6	22.6	22.6	22.6
RMSE	26.151	10.611	10.813	5.643
Parameters estimated	4	13	12	21
Minimum T	28	28	28	28

Note: The table presents robust mean estimates from heterogeneous panel estimators for the role of Pro-liberal (Panel A) and Illiberal (Panel B) democracy on GDP per capita: (1) and (3) simple Mean Group estimator, (2) and (4) Chan and Kwok (C&K) DID Mean Group estimator — all are estimated using least squares. We hold the sample fixed across the four specifications. All estimates presented are long-run (ATET) estimates for the causal effect of Pro-liberal and Illiberal Democracy on income per capita (in percent), derived from a CS-DL model (Chudik and Pesaran, 2015). The models in (3) and (4) include gross investment ratio and trade/GDP as additional covariates. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A19. Potential Mechanisms Using the IV Method: Behaviors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable:	Political Polarization	Mass Mobilization for Democracy	Mass Mobilization for Autocracy	Political Violence	Violence Index	Regime Instability Index	Social Unrest
Pro-liberal Democracy/Democracy	-0.220*** (0.080)	-0.441*** (0.114)	-0.262** (0.120)	-0.331*** (0.082)	-0.189 (0.137)	-0.561** (0.262)	-0.144** (0.073)
Illiberal Democracy	-0.0716 [0.246]	-0.180 [0.101]	-0.0798 [0.473]	-0.0554 [0.486]	0.204 [0.459]	-0.0121 [0.981]	0.0522 [0.682]
Diff. (Pro-liberal Dem-Illiberal Dem)	0.149** (0.065)	0.261*** (0.100)	0.183 (0.114)	0.275*** (0.073)	0.393 (0.256)	0.549 (0.508)	0.196* (0.111)
Hansen Test (p-value)	0.310	0.462	0.0465	0.253	0.493	0.424	0.240
F-stat. in the First Stage:							
IV for Democracy	15.75	19.63	13.73	17.89	32.25	24.13	19.61
IV for Interaction	25.46	23.40	25.76	24	13.58	7.265	14.04
Partial R^2 for Dem. (p-value)	0.107	0.123	0.0836	0.116	0.191	0.182	0.148
Partial R^2 for Interaction (p-value)	0.480	0.480	0.480	0.481	0.276	0.248	0.414
Countries	130	130	130	130	114	115	126
Observations	5,500	5,500	5,500	5,500	2,600	2,638	3,826

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A20. Potential Mechanisms Using the IV Method: Quality of Institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent Variable:	Transparency (HRV Index)	Political Corruption	State Capacity	Property Rights	Economic Freedom Index	Electoral Democracy Index	Liberal Democracy Index	Participatory Democracy Index	Deliberative Democracy Index	Egalitarian Democracy Index
Pro-liberal Democracy/Democracy	0.479** (0.211)	-0.010 (0.007)	0.089** (0.024)	0.007 (0.008)	0.132*** (0.027)	0.187*** (0.071)	0.120** (0.051)	0.100*** (0.038)	0.101*** (0.038)	0.068** (0.030)
Illiberal Democracy	0.166* [0.0601]	0.00229 [0.764]	0.0588** [0.0155]	-0.00326 [0.488]	0.0892*** [0.00797]	0.103** [0.0132]	0.0604** [0.0347]	0.0517** [0.0130]	0.0561** [0.0145]	0.0351** [0.0254]
Diff. (Pro-liberal Dem-Illiberal Dem)	-0.313* (0.171)	0.012* (0.006)	-0.030 (0.023)	-0.010 (0.006)	-0.043 (0.034)	-0.084** (0.034)	-0.060** (0.026)	-0.048** (0.020)	-0.045** (0.020)	-0.033** (0.016)
Hansen Test (p-value)	0.0724	0.697	0.390	0.504	0.886	0.654	0.887	0.873	0.636	0.829
F-stat. in the First Stage:										
IV for Democracy	7.018	14.64	19.02	16.48	18.36	11.65	11.13	12.57	11.54	14.11
IV for Interaction	15.04	23.57	18.59	24.76	21.89	26.27	25.30	25.86	26.35	25.53
Partial R^2 for Dem. (p-value)	0.100	0.110	0.133	0.114	0.128	0.0541	0.0583	0.0596	0.0561	0.0627
Partial R^2 for Interaction (p-value)	0.451	0.478	0.454	0.480	0.478	0.486	0.485	0.486	0.485	0.485
Countries	94	129	126	130	116	130	130	130	130	130
Observations	2,358	5,344	4,760	5,500	4,443	5,498	5,470	5,498	5,498	5,498

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A21. Potential Mechanisms on Behavior Indicators Using Method in Dorsch and Maarek (2019)

Dependent Variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Political Polarization	Mass Mobilization for Democracy	Mass Mobilization for Autocracy	Political Violence	Political Corruption	Violence Index	Regime Instability Index	Social Unrest
Democracy	-0.001 (0.037)	-0.031 (0.052)	-0.013 (0.039)	0.015 (0.049)	-0.008 (0.005)	0.128 (0.144)	-0.220 (0.225)	0.026 (0.062)
Countries	104	104	104	104	103	87	89	91
Observations	2,466	2,466	2,466	2,466	2,387	1,462	1,484	1,789
Adjusted R^2	0.963	0.889	0.951	0.954	0.986	0.761	0.160	0.258
				Illiberal Democracy				
Democracy	-0.092*** (0.029)	-0.352*** (0.065)	-0.186*** (0.043)	-0.120*** (0.042)	-0.008** (0.004)	-0.271*** (0.101)	-0.780*** (0.294)	-0.196*** (0.052)
Countries	104	104	104	104	103	76	76	92
Observations	3,075	3,075	3,075	3,075	2,981	1,132	1,149	1,994
Adjusted R^2	0.943	0.739	0.874	0.932	0.978	0.760	0.144	0.296
				Pro-liberal Democracy				

Note: Four lags of dependent variables as well as four lags of GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A22. Potential Mechanisms on Institution Indicators Using Method in Dorsch and Maarek (2019)

Dependent Variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	Transparency (HRV Index)	State Capacity	Property Rights	Economic Freedom Index	Electoral Democracy Index	Liberal Democracy Index	Participatory Democracy Index	Deliberative Democracy Index	Egalitarian Democracy Index	
Democracy	0.023 (0.035)	0.032** (0.013)	0.003 (0.003)	0.002 (0.014)	0.057*** (0.012)	0.044*** (0.012)	0.028*** (0.007)	0.039*** (0.012)	0.025*** (0.007)	
Countries	64	98	104	83	104	104	104	104	104	
Observations	996	2,193	2,466	1,825	2,464	2,450	2,464	2,464	2,464	
Adjusted R^2	0.978	0.975	0.988	0.989	0.965	0.975	0.978	0.971	0.981	
				Pro-liberal Democracy						
Democracy	0.017 (0.037)	0.047*** (0.014)	0.007 (0.004)	0.047*** (0.013)	0.074*** (0.010)	0.060*** (0.008)	0.039*** (0.005)	0.056*** (0.008)	0.038*** (0.006)	
Countries	71	101	104	95	104	104	104	104	104	
Observations	1,362	2,592	3,075	2,625	3,075	3,061	3,075	3,075	3,075	
Adjusted R^2	0.973	0.979	0.975	0.985	0.963	0.972	0.976	0.966	0.981	

Note: Four lags of dependent variables as well as four lags of GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A23. Semiparametric Estimates of the Effect of Pro-liberal/Illiberal Democratization on Mechanisms (Behaviors and Institutions): Using Inverse-Propensity-Score Reweighting

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Pro-liberal Democracy Average Effects on Mechanisms from				Illiberal Democracy Average Effects on Mechanisms from			
	-5 to -1 Years	0 to 4 Years	5 to 9 Years	10 to 14 Years	-5 to -1 Years	0 to 4 Years	5 to 9 Years	10 to 14 Years
Mechanisms: Behaviors								
Political Polarization	0.018 [0.033]	-0.277*** [0.082]	-0.306*** [0.092]	-0.402*** [0.116]	-0.042 [0.037]	0.092 [0.143]	0.054 [0.094]	-0.017 [0.135]
Mass Mobilization for Democracy	-0.037 [0.061]	-0.453*** [0.119]	-0.501*** [0.142]	-0.633*** [0.179]	-0.043 [0.047]	0.137 [0.150]	0.007 [0.154]	0.103 [0.153]
Mass Mobilization for Autocracy	0.087 [0.054]	-0.378*** [0.073]	-0.332*** [0.083]	-0.337*** [0.114]	-0.008 [0.063]	-0.168 [0.144]	-0.075 [0.182]	0.04 [0.179]
Political Violence	0.040 [0.051]	-0.325*** [0.113]	-0.383*** [0.108]	-0.498*** [0.157]	0.000 [0.038]	0.170 [0.196]	0.301 [0.224]	0.460** [0.229]
Violence Index	0.039 [0.093]	-0.278* [0.169]	-0.363 [0.306]	-0.238 [0.560]	0.089 [0.168]	0.383* [0.218]	0.472* [0.251]	-0.882 [0.785]
Regime Instability Index	0.149 [0.227]	0.273 [0.256]	-0.141 [0.320]	-0.038 [0.483]	-0.106 [0.167]	0.665** [0.282]	1.105*** [0.406]	0.134 [0.384]
Social Unrest	0.013 [0.023]	-0.093* [0.051]	-0.071 [0.066]	-0.102 [0.081]	0.012 [0.041]	0.138** [0.058]	0.150* [0.088]	0.050 [0.095]
Mechanisms: Institutions								
Transparency (HRV Index)	-0.012 [0.026]	0.102 [0.100]	0.358** [0.181]	0.560* [0.290]	-0.031 [0.042]	-0.033 [0.085]	-0.014 [0.165]	-0.320* [0.185]
Political Corruption	0.002 [0.003]	-0.014 [0.016]	-0.022 [0.018]	-0.024 [0.024]	-0.007 [0.007]	-0.004 [0.022]	0.008 [0.025]	0.018 [0.028]
State Capacity	-0.008 [0.011]	0.101*** [0.032]	0.170*** [0.048]	0.292*** [0.061]	-0.011 [0.010]	0.037 [0.058]	0.005 [0.088]	-0.012 [0.104]
Property Rights	0.002 [0.010]	0.042*** [0.013]	0.043*** [0.014]	0.048*** [0.016]	0.006 [0.011]	0.012 [0.011]	0.008 [0.018]	0.007 [0.026]
Economic Freedom	-0.006 [0.018]	0.075* [0.039]	0.344*** [0.090]	0.569*** [0.139]	0.013 [0.023]	-0.104 [0.065]	-0.237 [0.155]	-0.291 [0.211]
Electoral Democracy	-0.006 [0.008]	0.195*** [0.023]	0.204*** [0.027]	0.175*** [0.029]	0.006 [0.018]	0.097*** [0.018]	0.001 [0.051]	-0.015 [0.050]
Liberal Democracy	-0.007 [0.007]	0.165*** [0.023]	0.180*** [0.027]	0.168*** [0.030]	0.004 [0.013]	0.079*** [0.016]	0.009 [0.034]	-0.005 [0.036]
Participatory Democracy	-0.006 [0.005]	0.114*** [0.016]	0.123*** [0.020]	0.118*** [0.023]	0.003 [0.008]	0.052*** [0.009]	-0.001 [0.028]	-0.008 [0.031]
Deliberative Democracy	-0.008 [0.008]	0.158*** [0.024]	0.167*** [0.027]	0.152*** [0.029]	0.015 [0.018]	0.075*** [0.022]	-0.014 [0.047]	-0.025 [0.049]
Egalitarian Democracy	-0.006 [0.005]	0.116*** [0.017]	0.128*** [0.020]	0.120*** [0.023]	-0.002 [0.011]	0.045*** [0.010]	-0.013 [0.045]	-0.024 [0.043]

Note: This table presents semiparametric estimates of the effect of a Pro-liberal/Illiberal Democratization on mechanisms over different time horizons, indicated in the column label. The estimates obtained via inverse-propensity-score reweighting. We report robust standard errors obtained via bootstrapping. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A24. Effects of Pro-liberal and Illiberal Democracy on Crucial Components of Democracy

	(1)	(2)	(3)	(4)
	Dependent Variable: Components of Democracy ...			
	Alternative Sources of Information index	Clean Elections Index	Legislative Constraints on the Executive Index	Judicial Constraints on the Executive Index
Pro-liberal Democracy (β_P)	0.045*** (0.008)	0.099*** (0.014)	0.045*** (0.008)	0.053*** (0.010)
Illiberal Democracy (β_I)	0.026*** (0.007)	0.065*** (0.013)	0.031*** (0.011)	0.044*** (0.012)
Coef. Test (p-value): $\beta_P = \beta_I$	0.0123	0.0124	0.171	0.416
Countries	130	130	130	130
Observations	5,543	5,543	5,521	5,063
Adjusted R^2	0.969	0.944	0.969	0.960

Note: Four lags of dependent variables and GDP per capita are controlled in each regression. A full set of country and year fixed effects are controlled in all specifications. Robust standard errors clustered at the country level are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.