

THE ELECTORAL CONSEQUENCES OF EXOGENOUS SHOCKS

PSYCHOLOGICAL, SOCIOECONOMIC, AND
INSTITUTIONAL PATHWAYS INFLUENCING VOTING BEHAVIOR



Nima Taheri Hosseinkhani

Contents

1	Introduction	4
2	Conceptual Foundations	7
2.1	Defining Sudden Exogenous Shocks	7
2.1.1	Characteristics and Typologies	7
2.1.2	Distinguishing Exogenous from Endogenous Events	9
2.1.3	Temporal and Spatial Dimensions	11
2.2	Theoretical Perspectives on Political Behavior	12
2.2.1	Classical Theories of Voting Behavior	12
2.2.2	Psychological Models of Political Response	14
2.2.3	Socioeconomic and Institutional Influences	16
2.3	Frameworks for Understanding Event Impact	18
2.3.1	Crisis and Shock Theories	18
2.3.2	Collective Action and Social Capital	20
2.3.3	Policy Feedback and Political Adaptation	22
3	Historical and Contemporary Contexts	24
3.1	Prevalence of Shocks in Recent History	24
3.2	Societal and Political Vulnerabilities	26
3.3	Comparative Overview Across Regions and Regimes	29
4	Mechanisms Linking Shocks to Voting Behavior	31
4.1	Psychological Mechanisms	31
4.1.1	Trauma and Emotional Response	31
4.1.2	Risk Perception and Political Attitudes	33
4.1.3	Social Identity and Group Dynamics	34
4.2	Socioeconomic Mechanisms	36
4.2.1	Resource Disruption and Economic Hardship	36

4.2.2	Displacement and Population Mobility	39
4.2.3	Community Resilience and Recovery Capacity	41
4.3	Institutional and Political Mechanisms	43
4.3.1	Government Response and Accountability	43
4.3.2	Media Coverage and Information Flow	45
4.3.3	Policy Change and Institutional Trust	46
5	Short-term Effects on Voting Behavior	49
5.1	Immediate Electoral Participation	49
5.1.1	Voter Turnout Dynamics	49
5.1.2	Barriers to Participation	51
5.1.3	Mobilization and Demobilization Factors	53
5.2	Electoral Preferences and Support Shifts	55
5.2.1	Reward and Punishment of Incumbents	55
5.2.2	Issue Salience and Agenda Setting	57
5.2.3	Shifts in Partisan Alignment	59
6	Long-term Effects on Political Engagement	61
6.1	Persistence of Behavioral Change	61
6.1.1	Temporal Patterns and Decay of Effects	61
6.1.2	Intergenerational Transmission	63
6.1.3	Cumulative Impact of Multiple Shocks	65
6.2	Evolution of Political Preferences	67
6.2.1	Changes in Policy Demands	67
6.2.2	Reconfiguration of Political Cleavages	69
6.2.3	Emergence of New Political Actors	71
6.3	Transformation of Civic and Social Capital	73
6.3.1	Collective Action and Volunteering	73
6.3.2	Trust in Institutions and Social Networks	75

6.3.3	Formation of Grassroots Movements	77
7	Moderating and Mediating Factors	79
7.1	Role of Pre-existing Social Capital	79
7.2	Institutional Quality and Governance	81
7.3	Media Environment and Communication	83
7.4	Demographic and Cultural Variables	85
8	Broader Implications for Democratic Systems	88
8.1	Resilience and Adaptability of Political Institutions	88
8.2	Impacts on Political Representation	90
8.3	Challenges for Policy Design and Crisis Management	92
9	Conclusion	94
10	Declarations	96

The Electoral Consequences of Sudden Exogenous Shocks: Psychological, Socioeconomic, and Institutional Pathways Influencing Voting Behavior

Nima Taheri Hosseinkhani

nzt0048@auburn.edu

July 22, 2025

1 Introduction

Sudden, external shocks such as natural disasters and terrorist attacks have repeatedly demonstrated their capacity to disrupt established political equilibria and influence voting behavior in both immediate and protracted timeframes. These events, by their very nature, introduce exogenous variation into the political landscape, often catching both policymakers and the electorate unprepared and forcing rapid reassessment of priorities and allegiances (Aragonès & Ponsatí, 2022). The unpredictability of such shocks means that they can displace ongoing policy debates, compelling political actors to respond to newly salient issues that dominate public discourse. The psychological mechanisms underlying voter responses to these shocks are multifaceted. Fear, heightened risk perception, and a collective need for reassurance can drive individuals toward more punitive or security-oriented policy preferences (Balcells & Torrats-Espinoza, 2018)(Masiero & Santarossa, 2021). For instance, after high-profile terrorist attacks or catastrophic natural disasters, there is frequently an observable increase in public concern for safety and a corresponding shift in support for policies perceived as addressing these anxieties (Balcells & Torrats-Espinoza, 2018). This psychological response is

not always rationally tethered to the actual performance of politicians; rather, it may be shaped by symbolic acts or narratives constructed around the event itself (Rubin, 2020)(Masiero & Santarossa, 2021). Rubin (Rubin, 2020) outlines that disaster-driven political narratives often emphasize symbolic gestures over substantive policy changes, influencing electoral dynamics through emotional resonance rather than concrete legislative outcomes. Socioeconomic factors also play a significant role in mediating the impact of external shocks on electoral decisions. Disasters can exacerbate existing vulnerabilities within affected communities, altering perceptions of government competence and responsiveness. In some cases, voters may reward incumbents who are seen as effectively managing disaster prevention or recovery efforts; in others, failures in crisis management can erode trust and prompt electoral punishment (Morvan & Paty, 2023)(Pinto, 2023). The literature suggests that the visibility of government action, whether real or perceived, can be as influential as its effectiveness. Masiero et al. (Masiero & Santarossa, 2021) argue that when local politicians lack genuine power to address large-scale catastrophes, voter decisions may hinge more on communication strategies than on substantive outcomes. Institutional mechanisms further shape how these shocks translate into changes in voting behavior. Political parties are compelled to adjust their platforms in response to shifts in voter preferences triggered by crises (Aragonès & Ponsatí, 2022). The equilibrium between competing parties is disrupted as they seek to realign with the new priorities of the electorate. This process is not instantaneous; legislative responses often lag behind public sentiment due to procedural delays and the time required for reliable information about losses or impacts to become available. Elliott et al. (Elliott et al., 2023) indicate that while senators' environmental voting patterns are responsive to extreme climate-related disasters within their constituencies, this responsiveness emerges only after a considerable delay. The rally-effect provides another lens through which to interpret short-term shifts in political attitudes following dramatic events. In times of crisis, citizens tend to coalesce around familiar institutions or prominent leaders, temporarily increasing approval ratings for incumbents or central government figures. Hoes et al. (Hoes et al., 2024) highlight that during uncertain periods following terrorist attacks, voters may prioritize visibility and familiarity over ideological proximity

when choosing whom to support. Empirical studies have sought to disentangle these complex pathways by examining specific case studies across different contexts. For example, research on the aftermath of the 2011 Great East Japan Earthquake demonstrates how natural disasters can trigger both increased political participation and shifts in electoral outcomes linked to perceptions of government performance during reconstruction efforts (Pinto, 2023). Similarly, analyses of terrorist attacks reveal heterogeneous effects depending on factors such as attack motives and media coverage, with some evidence suggesting increased support for right-leaning parties under certain conditions (Baccini et al., 2021)(Fujiwara et al., 2016). It is important to recognize that not all observed changes in voting behavior can be attributed solely to rational evaluations of policy performance or institutional responses. Emotional reactions induced by weather events or disasters may also influence individual choices at the ballot box through mechanisms such as risk aversion or cognitive dissonance (Liao & Junco, 2022)(Fujiwara et al., 2016). However, Liao et al. (Liao & Junco, 2022) caution that while emotions play a role, they do not fully account for observed differences based on incumbents' policy stances. Taken together, these findings underscore the intricate interplay between psychological impulses, socioeconomic realities, institutional structures, and narrative framing in shaping how populations respond electorally to sudden external shocks. Each mechanism contributes uniquely depending on context and timing; understanding their relative importance remains a central challenge for scholars investigating the political consequences of crises (Elliott et al., 2023)(Hoes et al., 2024)(Baccini et al., 2021)(Balcells & Torrats-Espinoza, 2018)(Aragonès & Ponsatí, 2022)(Morvan & Paty, 2023)(Liao & Junco, 2022)(Pinto, 2023)(Rubin, 2020)(Fujiwara et al., 2016)(Masiero & Santarossa, 2021).

2 Conceptual Foundations

2.1 Defining Sudden Exogenous Shocks

2.1.1 Characteristics and Typologies

Sudden exogenous shocks, such as natural disasters and terrorist attacks, are characterized by their abrupt onset, unpredictability, and external origin relative to the political system or electoral process. These events are typically not the result of endogenous political dynamics but rather arise from outside the immediate control of policymakers or voters. Their defining features include a lack of anticipation, rapid development, and significant disruption to societal routines and expectations (Aragonès & Ponsatí, 2022). The exogeneity of such shocks is crucial: while some geographic areas may be more prone to certain hazards (e.g., earthquakes or floods), the specific timing and magnitude of these events remain largely outside the influence of elected officials, distinguishing them from policy-driven crises or economic downturns that may be partially attributed to government action (Heersink et al., 2022)(Novaes & Schiumerini, 2022). Typologically, sudden exogenous shocks can be grouped into several broad categories based on their nature and origin. Natural disasters encompass phenomena such as earthquakes, floods, hurricanes, tsunamis, and other extreme weather events. These are typically physical in origin and can vary in scale from localized incidents to large-scale catastrophes affecting entire regions or countries (Masiero & Santarossa, 2021). Another major category includes human-induced shocks like terrorist attacks or large-scale industrial accidents. While these may have intentional human agency behind them, they share with natural disasters the property of being external to the regular functioning of political institutions and often occur without warning (Hoes et al., 2024)(Aragonès & Ponsatí, 2022). A further distinction within typologies concerns the temporal characteristics of shocks. Some events are singular and acute, such as a major earthquake or a high-profile terrorist attack, while others may be chronic or repeated over time, for example recurring floods or ongoing security threats. The timing relative to electoral cycles is also significant; shocks occurring close to elections may have different effects on voter behavior compared to those happening

well in advance (Jusko & Spác, 2024). The severity and scope of impact, ranging from minor disruptions to catastrophic loss of life and infrastructure, also contribute to how these events are classified and studied. From an institutional perspective, sudden exogenous shocks disrupt established equilibria in party competition and policy-making. They force political actors to respond rapidly to altered voter preferences and new societal priorities (Blumenau & Lauderdale, 2018)(Aragonès & Ponsatí, 2022). The literature suggests that these disruptions can lead parties to realign their policy positions in response to shifts in public mood triggered by the shock event (Meyerrose & Watson, 2024)(Aragonès & Ponsatí, 2022). In some cases, such as after terrorist attacks or major disasters, there is evidence for a "rally effect," where public approval for incumbent leaders or institutions temporarily increases due to heightened needs for reassurance and collective identity (Hoes et al., 2024). However, this effect is not universal; it depends on factors such as perceived government performance during crisis management and the visibility of political actors in media coverage. Psychological mechanisms underpinning responses to sudden exogenous shocks include heightened risk perception, fear, anxiety, and a search for stability. These emotional responses can drive voters toward incumbents if they perceive them as capable crisis managers or toward challengers if incumbents are seen as ineffective (Masiero & Santarossa, 2021). Socioeconomic mechanisms involve changes in material well-being resulting from disaster impacts, such as loss of property or livelihoods, which can alter voting preferences through both rational evaluation of government performance and misattribution of blame or credit for outcomes beyond politicians' control (Pinto, 2023)(Novaes & Schiumerini, 2022). Institutional mechanisms further mediate the effects of shocks through electoral rules, media systems, and patterns of party competition. For instance, majoritarian electoral systems may incentivize greater responsiveness among legislators facing affected constituencies compared to proportional representation systems (Meyerrose & Watson, 2024). Media coverage amplifies certain narratives about politician performance during crises, shaping public perceptions even when actual capacity for response is limited at local levels (Masiero & Santarossa, 2021). In summary, sudden exogenous shocks are defined by their abruptness, unpredictability, externality relative to politics, and capacity

for widespread disruption. Their typologies span natural versus human-induced origins; acute versus chronic temporal patterns; varying degrees of severity; and differential proximity to electoral cycles. The pathways through which they affect voting behavior are multifaceted, encompassing psychological reactions, socioeconomic consequences, institutional adaptations, and depend on both objective characteristics of the shock itself and subjective interpretations by affected populations (Hoes et al., 2024)(Meyerrose & Watson, 2024)(Masiero & Santarossa, 2021)(Aragonès & Ponsatí, 2022)(Heersink et al., 2022)(Novaes & Schiumerini, 2022)(Jusko & Spác, 2024).

2.1.2 Distinguishing Exogenous from Endogenous Events

Distinguishing between exogenous and endogenous events is essential for understanding how sudden shocks influence voting behavior. Exogenous events are those that originate outside the political system and are not directly caused by political actors or institutions. Examples include natural disasters such as earthquakes, floods, or extreme weather events, as well as terrorist attacks or other unexpected crises. These shocks are typically characterized by their unpredictability and lack of direct connection to government actions or policy decisions (Aragonès & Ponsatí, 2022)(Ashworth et al., 2023). In contrast, endogenous events arise from within the political system itself, often resulting from policy failures, administrative decisions, or deliberate actions by political agents. The distinction is not always clear-cut. For instance, while a natural disaster like heavy rainfall may initially appear exogenous, the subsequent governmental response, such as disaster relief allocation, can introduce endogenous elements into the analysis. Fukumoto and Kikuta highlight that while weather events themselves can be treated as exogenous "natural experiments," the distribution of disaster relief is often influenced by political considerations, such as targeting supportive constituencies or rewarding partisan strongholds (Fukumoto & Kikuta, 2024). This interplay complicates causal inference because voters may respond both to the uncontrollable event and to the perceived effectiveness or fairness of governmental intervention. Rubin outlines a related challenge: separating the direct impact of an exogenous shock (e.g., a flood) from voters' retrospective evaluations

of government performance in managing its consequences. Voters may attribute blame or credit based on their perceptions of policy adequacy, early warning systems, or infrastructure resilience. Thus, even when an event is exogenous in origin, its political ramifications can be shaped by endogenous factors linked to governance quality (Rubin, 2020). Ashworth et al. state that empirical studies often use exogenous shocks to test voter rationality under the assumption that rational voters should not punish incumbents for events beyond their control. However, they argue that even rational voters might update their beliefs about incumbent competence based on how these actors handle unforeseen crises. The informativeness of an event, how much it reveals about incumbent quality, can drive changes in electoral outcomes regardless of whether the shock was exogenous (Ashworth et al., 2023). This perspective suggests that the boundary between exogeneity and endogeneity is partly determined by voter interpretation and information processing. Aragonès and Ponsatí further emphasize that sudden external shocks disrupt established equilibria in party competition by shifting voter preferences unexpectedly. Political parties must then adapt their policy positions in response to these altered preferences, which introduces additional layers of endogeneity into what began as an exogenous disturbance (Aragonès & Ponsatí, 2022). The dynamic adjustment process underscores how initial external shocks can set off a cascade of endogenous responses within the political system. In sum, distinguishing exogenous from endogenous events requires careful attention to both the source of the shock and the subsequent chain of political reactions it triggers. While natural disasters and terrorist attacks may serve as paradigmatic examples of exogenous shocks due to their unpredictability and independence from political agency (MARSH, 2023), their downstream effects on voting behavior are frequently mediated by institutional responses and public perceptions thereof (Rubin, 2020)(Fukumoto & Kikuta, 2024). This complexity necessitates rigorous methodological approaches to isolate causal pathways and avoid conflating direct effects with those arising from strategic adaptation or retrospective evaluation within the political sphere.

2.1.3 Temporal and Spatial Dimensions

Temporal and spatial dimensions are central to understanding the impact of sudden exogenous shocks, such as natural disasters or terrorist attacks, on voting behavior. Temporally, the effects of these shocks can manifest both immediately and over extended periods, with the timing of exposure relative to electoral cycles playing a significant role in shaping political responses. For instance, events that occur closer to an election may exert a stronger influence on voter turnout and party support due to heightened salience and emotional arousal among the electorate (Robbins et al., 2013)(MARSH, 2023). Robbins et al. (Robbins et al., 2013) indicate that recency amplifies the psychological impact of traumatic events, potentially increasing anxiety or civic engagement, which in turn can alter participation rates. Marsh outlines that temporal proximity to an election conditions whether trauma encourages or discourages electoral participation, suggesting that the immediacy of a shock can either mobilize or demobilize voters depending on contextual factors (MARSH, 2023). Long-term consequences are also evident, as demonstrated by studies examining historical shocks. Exposure to severe events during formative periods, such as in-utero malnutrition during the Dutch Famine, has been linked to persistent changes in political preferences and insurance demand decades later (Pahontu et al., 2024a)(Pahontu et al., 2024b). These findings highlight that temporal distance does not necessarily attenuate all effects; rather, some shocks leave enduring imprints on cohorts directly affected by them. Spatially, the geographic distribution of a shock determines which populations are exposed and thus who is most likely to experience changes in political attitudes or behaviors. The spatial reach of an event, whether localized (e.g., a tornado affecting a single municipality) or widespread (e.g., a national economic crisis), shapes both the intensity and heterogeneity of its political consequences (Liao & Junco, 2022)(Masiero & Santarossa, 2021). Liao and Ruiz Junco show that natural disasters not perceived as climate-related have distinct electoral impacts depending on their location and perceived relevance, with challengers benefiting more in areas directly affected by such events (Liao & Junco, 2022). Masiero and Santarossa emphasize that spatial spillover effects must be accounted for when assessing political outcomes following geographically bounded

shocks like earthquakes; neighboring regions may experience indirect influences through migration or shared media coverage (Masiero & Santarossa, 2021). The interaction between temporal and spatial dimensions further complicates the analysis. For example, repeated or overlapping disasters within short time frames can overwhelm local institutions' capacity for clientelist mobilization, leading to nonlinear relationships between disaster severity and political outcomes (Birch & i Coma, 2023). Birch and Martinez i Coma argue that while increased numbers of affected individuals may initially provide more opportunities for parties to engage in clientelism, extreme severity or rapid succession of crises can strain resources beyond what parties can leverage for electoral gain. Moreover, institutional mechanisms mediate how temporal and spatial characteristics translate into political behavior. Fieldhouse et al. demonstrate that sustained campaign periods allow for interpersonal influence and turnout cascades across social networks, with discussions about politics spreading more widely when shocks are recent and locally salient (Fieldhouse et al., 2016). This suggests that both when and where a shock occurs interact with existing social structures to shape collective responses. In sum, analyzing sudden exogenous shocks requires careful attention to their timing relative to elections (temporal dimension) as well as their geographic scope (spatial dimension). Both aspects jointly determine which populations are exposed, how long effects persist, and through which psychological or institutional pathways these effects manifest in voting behavior (Pahontu et al., 2024a)(Fieldhouse et al., 2016)(Liao & Junco, 2022)(Masiero & Santarossa, 2021)(Birch & i Coma, 2023)(Robbins et al., 2013)(MARSH, 2023).

2.2 Theoretical Perspectives on Political Behavior

2.2.1 Classical Theories of Voting Behavior

Classical theories of voting behavior have long provided the foundational frameworks for understanding how individuals make electoral choices. These theories typically emphasize the interplay between social, psychological, and rational factors in shaping voter decisions. Sociological models, for instance, highlight the significance of social group affiliations, such

as class, religion, and community ties, in influencing political attachments and voting patterns. According to, these attachments are not merely transient preferences but are deeply rooted in the social context in which individuals are embedded. Early socialization experiences reinforce partisan loyalties that persist over time and guide both turnout and party choice. The social-psychological approach, exemplified by the Michigan school, extends this perspective by focusing on the development of party identification as a central determinant of voting behavior. This identification is seen as a product of long-term psychological attachment to a political party, often shaped by family influence and early life experiences. Fieldhouse et al. state that such attachments act as perceptual screens through which voters interpret political information, thereby stabilizing electoral choices even in the face of external shocks. Rational choice models offer a contrasting viewpoint by positing that individuals engage in a cost-benefit analysis when deciding whether to vote and for whom. The instrumental model suggests that voters weigh the expected utility of their participation against its costs, with turnout occurring only if perceived benefits outweigh these costs. However, given the low probability that any single vote will be decisive, rational choice theorists often struggle to explain high levels of turnout observed in many democracies. Interpersonal mobilization theories introduce another layer by considering how social networks can directly encourage or discourage participation. Mobilization may occur through increased interest in politics or through direct appeals from friends and acquaintances to participate in elections (Fieldhouse et al., 2016). Even seemingly minor factors, such as having someone to accompany an individual to the polling station, can tip the balance between voting and abstaining. Beyond these core frameworks, classical theories also recognize the role of institutional trust and civic engagement in shaping electoral participation. Shineman (Shineman, 2018) outlines that higher levels of trust in government correlate with greater likelihood of engaging in institutionalized forms of participation like voting or supporting political parties. Conversely, low trust may drive citizens toward non-institutionalized actions such as protests or boycotts. Participation itself is theorized to have an educative effect: engaging in democratic processes can enhance civic-mindedness and reinforce democratic values over time. The interaction between voters

and policymakers is another crucial aspect addressed by classical theories. Elections are conceptualized as strategic interactions where voter preferences influence policy outcomes and vice versa (Liberini et al., 2017). Understanding how voters form their choices is therefore essential for predicting both electoral results and subsequent policy decisions. Classical approaches also acknowledge that external shocks, such as natural disasters or sudden economic downturns, can disrupt established patterns of behavior by altering perceptions of need, fairness, or government performance (Bechtel & Mannino, 2022)(Carlin et al., 2014). While these events may temporarily shift voting behavior through heightened salience or emotional responses, underlying social identities and psychological attachments often continue to exert a stabilizing influence. In sum, classical theories provide a multifaceted lens for analyzing voting behavior by integrating sociological context, psychological predispositions, rational calculations, interpersonal influences, institutional trust, and strategic interactions between voters and policymakers (Fieldhouse et al., 2016)(Liberini et al., 2017)(Shineman, 2018). This comprehensive perspective remains indispensable for interpreting both routine electoral dynamics and responses to extraordinary external shocks.

2.2.2 Psychological Models of Political Response

Psychological models of political response emphasize the centrality of emotions, cognitive appraisals, and behavioral adaptations in shaping how individuals react to sudden external shocks such as natural disasters or terrorist attacks. These models posit that emotional reactions are not merely byproducts of such events but serve as key mediators between the external shock and subsequent political behavior. Emotions like fear, anxiety, anger, and enthusiasm are triggered by conscious or pre-conscious appraisals of disruptive events. These affective states influence political judgment and decision-making by altering attention, motivation, and perceived stakes in the political process (Vasilopoulou & Wagner, 2020). For instance, terrorist attacks are theorized to heighten anxiety and fear among the public, which in turn increases scrutiny of political actors and motivates greater interest in electoral participation. The widespread media coverage of such violent events amplifies their psychological impact,

making them salient threats to personal and collective security. This heightened sense of threat can mobilize individuals who might otherwise remain politically disengaged (Robbins et al., 2013)(Montjoy & Chervenak, 2020). The experience of a traumatic event disrupts established cognitive schemata, mental frameworks that individuals use to interpret the world. In the aftermath, people must reconstruct these schemata through processes characterized by stress or growth/resilience. Posttraumatic stress responses often manifest as distressing memories, avoidance behaviors, increased distrust, negative emotions (such as fear or anger), and social withdrawal. These symptoms are associated with poorer health outcomes and can reduce the likelihood of participating in voting or other forms of civic engagement (MARSH, 2023). However, not all psychological responses are demobilizing; some individuals may experience posttraumatic growth or resilience that enhances their engagement with political life. The asymmetry between contexts of political advantage and disadvantage is also crucial for understanding behavioral outcomes. When individuals perceive themselves as advantaged, such as learning their votes are overweighted due to institutional manipulation, they tend to experience positive emotions like joy or enthusiasm. This sense of security can demobilize further participation because the outcome appears predetermined in their favor. Conversely, those who perceive themselves at a disadvantage may be more likely to experience anger or fear, potentially motivating increased participation as a means to counteract perceived threats or injustices (Izatt, 2025). Extraordinary events disrupt routine patterns of information processing. Under normal circumstances, most people rely on cognitive shortcuts such as partisanship or social identity to navigate complex political information. However, when confronted with significant shocks like natural disasters or terrorist attacks, anxiety levels rise and individuals become more attentive and accuracy-motivated in their reasoning (Montjoy & Chervenak, 2020). This shift leads them to seek out new information and reconsider established beliefs about government performance and policy priorities. The timing and frequency of external shocks further modulate psychological responses. Sudden one-time events have a pronounced mobilizing effect on electoral participation compared to repeated exposures, which may lead to habituation rather than sustained engagement (Jusko & Spác,

2024). The proximity of an intervention or shock to an election also intensifies its behavioral impact; events occurring closer to election day elicit stronger manifestations of predicted behavior changes. Institutional context interacts with psychological mechanisms by conditioning how individuals interpret their own position within the political system. Manipulated institutions create distinct environments where some voters feel secure in their advantage while others perceive existential threats to their interests (Izatt, 2025). These perceptions shape emotional experiences, ranging from enthusiasm among those who feel protected by institutional arrangements to anger among those who feel marginalized, and ultimately influence whether individuals choose to participate politically. In summary, psychological models underscore that emotional reactions, shaped by cognitive appraisals of threat or opportunity, mediate the relationship between external shocks and political behavior. The interplay between individual-level psychological processes and broader institutional contexts determines whether such shocks result in mobilization or demobilization within affected populations (Vasilopoulou & Wagner, 2020)(Izatt, 2025)(Robbins et al., 2013)(Montjoy & Chervenak, 2020).

2.2.3 Socioeconomic and Institutional Influences

Socioeconomic and institutional factors fundamentally shape how populations respond to sudden external shocks such as natural disasters or terrorist attacks, influencing both the immediate and enduring patterns of voting behavior. The socioeconomic context determines not only the material impact of a shock but also the interpretive frameworks through which citizens assess government performance and assign political responsibility. Natural disasters, for instance, often generate significant flows of resources from international and national actors to affected regions. These resource transfers can create opportunities for rent-seeking and clientelism, particularly in settings where informational asymmetries allow local officials to appropriate aid with limited oversight. The supply-side mechanism posits that political leaders may strategically allocate disaster relief to consolidate support or reward loyal constituencies, while demand-side dynamics suggest that citizens facing acute need may become more sus-

ceptible to clientelist exchanges in the aftermath of a disaster (Birch & i Coma, 2023). This duality highlights how socioeconomic vulnerability interacts with institutional arrangements to mediate the political consequences of external shocks. Institutional structures, especially those governing electoral systems and coalition formation, further modulate these effects. In democracies characterized by large winning coalitions, leaders are incentivized to distribute resources broadly to maintain support. When disasters affect substantial segments of the population, failures in preparedness or relief allocation can erode trust in incumbents and prompt electoral punishment. Selectorate theory suggests that the size of the winning coalition directly influences leaders' incentives: larger coalitions necessitate more inclusive policies, making it difficult for leaders to rely solely on targeted patronage (Gallego, 2015). Conversely, in autocratic or personalist regimes with smaller coalitions, resource distribution can be more narrowly focused, potentially muting broad-based electoral repercussions. The nature of post-disaster recovery also plays a critical role in shaping political attitudes. Empirical evidence indicates that discrepancies in reconstruction speed and management, rather than direct economic losses, are key drivers behind shifts in support for right-wing authoritarianism following earthquakes (Cerqua et al., 2023). Where reconstruction is perceived as efficient and inclusive, public discontent may be mitigated; conversely, slow or inequitable recovery processes can fuel resentment and alter voting preferences. Electoral systems themselves create distinct incentives for politicians' responsiveness to local economic shocks. Majoritarian systems amplify the effects of small vote swings on seat allocation, thereby increasing politicians' sensitivity to localized economic disruptions such as import shocks or natural disasters. This mechanical property induces shifts in elite ideology as representatives seek to align with changing constituent demands. The authors of (Meyerrose & Watson, 2024) indicate that institutions magnify the effect of economic shocks on legislator ideology by structuring how votes translate into political power. Socioeconomic context also interacts with cultural factors when external shocks intersect with issues like immigration. For example, immigration shocks have been shown to increase populist voting primarily in areas with historically low levels of immigration exposure, suggesting that pre-existing social structures condition the

receptivity of populations to new threats or changes (Levi et al., 2024). This underscores the importance of considering both material conditions and cultural legacies when analyzing political responses to external events. Furthermore, disaster relief funds are not only susceptible to corruption but their appropriation is closely linked with broader patterns of governance quality. International aid flows following disasters are particularly vulnerable when oversight mechanisms are weak or when central-local relations lack transparency (Birch & i Coma, 2023). Such institutional weaknesses can exacerbate inequalities in recovery outcomes and reinforce cycles of mistrust between citizens and state authorities. In sum, socioeconomic vulnerabilities, shaped by wealth distribution, prior exposure to risk, and local economic structures, interact dynamically with institutional features such as electoral rules, coalition size, and governance quality. These interactions determine whether external shocks translate into increased support for incumbents through effective relief provision or trigger backlash due to perceived mismanagement or exclusionary practices. The heterogeneity observed across cases reflects not only differences in shock magnitude but also the underlying architecture of political institutions and social relations within affected communities (Gallego, 2015)(Cerqua et al., 2023)(Birch & i Coma, 2023)(Meyerrose & Watson, 2024).

2.3 Frameworks for Understanding Event Impact

2.3.1 Crisis and Shock Theories

Crisis and shock theories provide a conceptual lens for analyzing how sudden, exogenous events, such as natural disasters, terrorist attacks, or large-scale protests, can disrupt established patterns of political behavior and influence electoral outcomes. These frameworks posit that external shocks act as catalysts, altering the informational environment, psychological states, and institutional dynamics that shape voter decision-making. A central tenet of these theories is that crises function as nonspatial valence shocks, fundamentally shifting the perceived desirability of the status quo and increasing the latitude for policy change. When a crisis occurs, the status quo becomes less attractive to both voters and policymakers, making alternative proposals more viable and increasing the agenda-setting power of political actors

(Blumenau & Lauderdale, 2018). This dynamic is not limited to legislative behavior; it extends to mass electoral responses as well. The worse the perceived valence of current conditions following a shock, the greater the potential for significant shifts in voting preferences. From a psychological perspective, crises can heighten risk perception and emotional arousal among affected populations. For example, terrorist attacks are theorized to target not only direct victims but also broader audiences with the intention of producing widespread political change. The literature suggests that such events can alter turnout by influencing voters' sense of security and urgency. While some research indicates that terrorist incidents may not always achieve their intended effect on aggregate turnout, they do impact participation in theoretically predictable ways (Robbins et al., 2013). Natural disasters represent another class of exogenous shocks with complex effects on voting behavior. Economic voting theory posits that rational voters reward or punish incumbents based on their management of both positive and negative events. In this context, disasters serve as tests of government competence: effective relief efforts can bolster support for incumbents, while perceived failures may erode trust and shift preferences toward challengers (Baccini & Leemann, 2021). However, these effects are mediated by institutional factors such as the level at which elections are held (national versus local) and the degree to which recovery resources are controlled by central authorities (Cerqua et al., 2023). The persistence of crisis-induced behavioral changes is also addressed within shock theories. Empirical evidence demonstrates that transitory shocks, such as unexpected increases in voting costs due to adverse weather, can have lasting consequences through habit formation mechanisms. A temporary decrease in turnout during a crisis can reduce future participation rates by weakening individuals' voting habits (Fujiwara et al., 2016). This finding underscores how short-term disruptions may propagate into long-term shifts in democratic engagement. Socioeconomic mechanisms further complicate the relationship between crises and electoral outcomes. Compound disasters that inflict substantial financial losses can diminish resources available for clientelist exchanges and necessitate novel governance strategies. The COVID-19 pandemic exemplifies how initial support for incumbents during a crisis may give way to disillusionment as deprivation intensifies over

time (Birch & i Coma, 2023). These patterns highlight the importance of temporal dynamics in understanding crisis effects. Protests constitute another form of destabilizing event capable of influencing subsequent electoral behavior. The efficacy and signaling effects generated by large-scale demonstrations depend on both organizational features and contextual political opportunities. Notably, exposure to protest activity has been linked to changes in voter turnout and preferences even among those not directly participating in demonstrations (Castro & Retamal, 2023). This suggests that crises can exert broad attitudinal impacts through social diffusion processes. Finally, information shocks, such as those arising from election results or media coverage during crises, can recalibrate self-reported vote intentions by providing new cues about party viability or policy congruence (Gerling & Kellermann, 2022). Voters' preferences regarding disaster response policies may diverge from actual government actions, especially when relief allocations are influenced by partisan considerations rather than public need (Bechtel & Mannino, 2022). Such incongruence between mass preferences and elite decisions can itself become a source of further political dissatisfaction following a shock. In sum, crisis and shock theories emphasize multidimensional pathways through which sudden external events reshape electoral landscapes. These include psychological responses to threat or uncertainty, socioeconomic disruptions affecting resource flows and clientelism, institutional constraints on policy adaptation, habit formation processes influencing turnout persistence, and informational cascades altering perceptions of party competence or policy fit (Castro & Retamal, 2023)(Robbins et al., 2013)(Baccini & Leemann, 2021)(Fujiwara et al., 2016)(Cerqua et al., 2023)(Birch & i Coma, 2023)(Blumenau & Lauderdale, 2018)(Gerling & Kellermann, 2022)(Bechtel & Mannino, 2022). By integrating these mechanisms, scholars gain a richer understanding of how acute shocks reverberate through democratic systems.

2.3.2 Collective Action and Social Capital

Collective action and social capital are central to understanding how communities respond to sudden, external shocks such as natural disasters or terrorist attacks. The literature demonstrates that the presence and quality of social capital, defined as the networks, norms, and

trust that facilitate coordination and cooperation, can significantly shape both immediate and long-term collective responses to such events. In contexts where social capital is robust, individuals are more likely to engage in cooperative behavior, which can manifest as increased political participation or community-driven recovery efforts following a disaster. The theoretical framework linking environmental shocks to collective action posits that the probability of adverse events influences individuals' willingness to cooperate. When the likelihood of experiencing "bad times" rises, people may perceive greater benefits in acting collectively, especially if they believe others will also contribute to communal efforts. This dynamic is not static; it evolves based on agents' beliefs about the proportion of cooperators within their group and their assessment of environmental volatility. Under certain conditions, even individuals who might otherwise act in their own self-interest can shift toward collective strategies by adopting behavioral protocols akin to Kantian ethics, thereby overcoming classic free-rider problems. Empirical evidence from Japan illustrates that areas historically affected by natural disasters exhibit higher levels of trust and political engagement today. This suggests a long-term persistence of social capital formed through shared adversity. The data further indicate that local variations in social capital can mediate the impact of disasters on political participation: communities with stronger networks are more likely to mobilize collectively in response to external shocks. However, this relationship is nuanced. While high levels of bonding social capital, connections among similar individuals, can enhance internal solidarity, they may also create exclusionary tendencies that hinder broader collective action across diverse groups. Bridging social capital, which links disparate segments of society, appears more conducive to effective collective responses after disruptive events. The interaction between collective action and institutional frameworks is also significant. For example, when government policies lower the cost of monitoring and enforcing cooperation among potential defectors, overall levels of collective action can improve. This insight aligns with findings that suggest policy interventions aimed at strengthening social capital can have lasting effects on community resilience and political engagement. Natural disasters do not only affect those directly exposed; their sociopolitical consequences can spill over into neighboring regions

through shared networks and information flows. The mechanisms underlying these spillovers often involve both formal institutions and informal support systems rooted in social capital. In some cases, strong support networks can buffer the negative impacts of disasters by providing resources and emotional support, thereby reducing the need for punitive political responses against incumbents or institutions perceived as ineffective. It is important to recognize that the effects of collective action and social capital are heterogeneous across different contexts. Some studies report increased turnout and engagement following disasters, while others observe withdrawal or apathy depending on local governance structures and pre-existing trust levels. These mixed outcomes underscore the importance of considering both psychological factors, such as trust and perceived efficacy, and structural variables like network density when analyzing post-shock political behavior. In summary, the interplay between collective action and social capital provides a nuanced lens for interpreting how populations navigate external shocks. Theoretical models highlight the conditional nature of cooperation under uncertainty, while empirical studies reveal persistent legacies of trust and engagement shaped by historical experiences with adversity (Pinto, 2023). This body of work suggests that enhancing social capital may be a key strategy for promoting resilient collective responses in the face of future crises.

2.3.3 Policy Feedback and Political Adaptation

Policy feedback and political adaptation are central to understanding how sudden external shocks, such as natural disasters or terrorist attacks, reshape the political landscape. These events disrupt established patterns of political behavior and institutional response, often compelling both voters and political actors to reassess their preferences, strategies, and policy positions. The feedback mechanisms that emerge from these disruptions can be traced through several interconnected pathways. First, extraordinary events act as catalysts for heightened emotional engagement among the electorate. According to, such shocks are characterized by their capacity to elicit strong affective responses, fear, anger, or enthusiasm, which in turn influence the likelihood of individuals updating their prior opinions and forming new

preferences. This emotional arousal is not uniform; it is conditioned by pre-existing identities and prior political alignments. For instance, the Brexit referendum functioned as a positional issue that consolidated new identities (e.g., ‘Leave’ vs. ‘Remain’), which then shaped subsequent attitude formation and evaluative biases. In contrast, natural disasters or terrorist attacks are typically valence issues that generate widespread negative affect with less polarization along partisan lines (Vasilopoulou & Wagner, 2020). The process of policy feedback operates through both direct and indirect channels. On one hand, affected populations may demand immediate government intervention or compensation in response to perceived losses or insecurity. This demand for social protection is particularly pronounced among individuals exposed to economic shocks such as unemployment or wage loss, who subsequently increase their support for redistributive parties. The insurance logic outlined by Pahontu et al. (Pahontu et al., 2024a) suggests that exposure to risk heightens preferences for policies that mitigate future uncertainty. On the other hand, policymakers themselves are not passive recipients of public sentiment but adapt strategically to external shocks. Calca and Gross argue that government parties are especially sensitive to exogenous events outside their control, such as economic crises or natural catastrophes, and tend to react swiftly by adjusting policy positions or emphasizing new issues in order to maintain office-seeking objectives. Opposition parties may adopt a more cautious approach, sometimes opting for a ‘wait and see’ strategy rather than immediate adaptation. The character of the shock, its severity, unpredictability, and salience, determines the urgency and scope of these adaptations (Calca & Gross, 2019). Empirical evidence supports the notion that mass preferences over disaster relief are closely aligned with actual policy outcomes. Bechtel et al. demonstrate that citizens allocate more relief aid to areas experiencing greater damage or socioeconomic disadvantage, and this pattern is mirrored in federal relief distributions. Policymakers’ incentives for re-election drive them to respond in ways congruent with voter preferences even when operating under different institutional constraints (Bechtel & Mannino, 2022). This alignment exemplifies a feedback loop where public opinion shapes policy outputs, which in turn reinforce or recalibrate voter expectations. Political adaptation also manifests at the party level through

shifts in policy stances following major shocks. For example, after environmental disasters like Fukushima, some European parties radically altered their positions on nuclear energy while others remained static (Calca & Gross, 2019). Such divergence highlights how external shocks can serve as critical junctures prompting rapid realignment among some actors while leaving others unchanged. Furthermore, external shocks can alter the competitive dynamics between parties by making certain issues more salient or by shifting the ideological terrain on which competition occurs. Meyerrose et al. (Meyerrose & Watson, 2024) note that localized import shocks not only increase protectionist sentiment but also make broader economic concerns about compensation and redistribution more prominent in legislative debates. These changes may be especially pronounced in competitive electoral districts where politicians have stronger incentives to adapt ideologically. The psychological mechanisms underlying these processes are complex. Emotional reactions triggered by extraordinary events can prompt voters to reconsider previous choices if those emotions conflict with established party loyalties or prior voting behavior (Vasilopoulou & Wagner, 2020). At times, identity-based mobilization emerges when traumatic events are racialized or otherwise politicized by media framing, as seen in Marsh's analysis of Hurricane Katrina's impact on Black voter turnout (MARSH, 2023). In summary, policy feedback loops generated by external shocks operate through dynamic interactions between public opinion, party strategy, institutional incentives, and emotional responses. Political adaptation is thus not merely reactive but involves anticipatory adjustments aimed at maintaining legitimacy and electoral viability in an environment marked by uncertainty and rapid change (Calca & Gross, 2019)(Ahlquist et al., 2020).

3 Historical and Contemporary Contexts

3.1 Prevalence of Shocks in Recent History

Sudden, external shocks have been a recurring feature in recent history, shaping political landscapes across diverse contexts. Extraordinary events such as natural disasters, terrorist attacks, pandemics, and economic crises have punctuated the last decades with significant

frequency and impact. These shocks are characterized by their unpredictability and exogeneity, often arising independently of domestic political actors' decisions and exerting profound effects on societies and their institutions. The global financial crisis of 2008–2009 stands as a paradigmatic example of an external shock with far-reaching consequences for European parties and economies. Its sudden onset, originating from the collapse of Lehman Brothers in the United States, reverberated through international financial systems, affecting investment rates, consumer prices, and the stability of banks across Europe (Calca & Gross, 2019). Natural disasters have also been prevalent in recent history, with earthquakes, floods, hurricanes, and other extreme weather events occurring with increasing regularity. The literature documents numerous cases where such disasters have affected electoral cycles. For instance, the 2012 Emilian earthquake in Italy provided a natural experiment to assess the impact of seismic shocks on voting behavior (Cerqua et al., 2023). Similarly, Japan has experienced several major earthquakes over the past decades; these events have allowed researchers to analyze their effects on electoral outcomes at both local and national levels (Pinto, 2023). Floods in Germany, specifically those in Saxony and Bavaria in 2002 and 2013, have been studied for their influence on voter turnout during federal and state elections. These examples illustrate that natural disasters are not isolated incidents but rather recurrent phenomena that intersect with political processes. Terrorist attacks represent another category of extraordinary shocks that have marked recent history. The 2004 Madrid train bombings serve as a salient case where a single event mobilized segments of the electorate who were previously less likely to participate in politics (Santana et al., 2020). Such attacks often generate immediate emotional responses among citizens and can lead to shifts in party loyalties or increased political engagement among specific groups (Vasilopoulou & Wagner, 2020)(Santana et al., 2020). The September 11 attacks in the United States similarly had enduring effects on public opinion and political alignments well beyond their immediate aftermath (Vasilopoulou & Wagner, 2020). Pandemics constitute yet another form of widespread shock with both health-related and sociopolitical ramifications. The COVID-19 pandemic is a contemporary example that has disrupted electoral processes globally. It is widely recognized as an unexpected exter-

nal shock that has influenced not only public health systems but also patterns of political participation and trust in government institutions (Santana et al., 2020)(Duch et al., 2025). The pandemic's impact has varied across countries depending on institutional arrangements and government responses; nevertheless, its prevalence underscores the ongoing relevance of studying such shocks. The frequency of these events is further underscored by their collective dimension: they often prompt societies to confront fundamental questions about values, governance, and social solidarity (Vasilopoulou & Wagner, 2020). While some shocks are localized, such as region-specific earthquakes or floods, others like economic crises or pandemics possess nation-wide or even global reach. This breadth amplifies their potential to affect large populations simultaneously. From an empirical perspective, researchers have developed sophisticated methodologies to identify causal impacts of these shocks on electoral outcomes. For example, difference-in-differences frameworks leveraging natural experiments, such as municipalities affected versus unaffected by earthquakes, have become standard tools for isolating the effects of such events from confounding factors (Masiero & Santarossa, 2021). These approaches highlight not only the prevalence but also the analytical tractability of studying shocks within contemporary political science. In sum, recent history is replete with instances where sudden external shocks have intersected with electoral politics. Whether through natural disasters like earthquakes and floods (Pinto, 2023)(Santana et al., 2020)(Cerqua et al., 2023), terrorist attacks such as those witnessed in Madrid or New York (Vasilopoulou & Wagner, 2020), pandemics like COVID-19 (Santana et al., 2020)(Duch et al., 2025), or economic crises exemplified by 2008–2009 (Calca & Gross, 2019), these events continue to shape voting behavior through complex psychological, socioeconomic, and institutional mechanisms. Their recurrence affirms their significance as objects of scientific inquiry into how societies respond politically to unforeseen disruptions.

3.2 Societal and Political Vulnerabilities

Societal and political vulnerabilities play a crucial role in shaping how populations respond to sudden, external shocks such as natural disasters or terrorist attacks. The degree of vulnerabil-

ity is not uniform across societies; rather, it is mediated by preexisting social, economic, and institutional structures that influence both the immediate and enduring effects of such events on electoral behavior. One key dimension of vulnerability arises from the spatial distribution of attitudes and traits within a society. When certain regions are characterized by deep geographic cleavages, whether due to historical, cultural, or economic factors, the impact of an external shock can be amplified. In these contexts, high or growing salience of specific issues interacts with entrenched local differences, leading to increased spatial polarization. This polarization is further reinforced by tendencies toward conformity within discussion networks, where social pressures may drive individuals to align with prevailing local opinions even if this entails significant personal or collective costs (Chua et al., 2021). The interplay between conformity incentives and the heterogeneity of responses across different population segments underscores the complexity of societal vulnerabilities. Economic conditions constitute another axis along which vulnerabilities manifest. Societies with pronounced disparities in income or access to resources often experience differentiated impacts from external shocks. For instance, when a financial crisis or natural disaster disproportionately affects a subset of voters, such as those exposed to currency fluctuations or localized environmental hazards, their altered economic interests can translate into shifts in policy preferences and voting behavior. These effects are particularly salient when the shock occurs immediately before major elections, as was observed in the Polish case where an exogenous financial event shifted electoral support away from incumbents and potentially altered parliamentary outcomes (Ahlquist et al., 2020). The specificity and timing of such shocks highlight how institutional features like fixed electoral calendars can interact with societal vulnerabilities to produce significant political consequences. Institutional arrangements at the municipal or community level also modulate vulnerability. The presence or absence of formal prevention strategies, such as natural hazard prevention plans (NHPPs), reflects both past exposure to shocks and the capacity for collective action. Municipalities that have experienced multiple disasters are more likely to implement preventive measures, often through inter-municipal cooperation and dedicated funding mechanisms (Morvan & Paty, 2023). However, a substantial proportion of municipi-

palities remain unprepared despite prior shocks, indicating persistent institutional weaknesses that exacerbate vulnerability. The psychological dimension is equally significant. Traumatic events can engender pro-social behaviors that enhance civic engagement and accountability pressures on political elites. Yet, these positive effects are contingent upon the availability of economic resources necessary for sustained participation in democratic processes. In resource-constrained settings, the capacity for civic engagement may be undermined, limiting the potential for shocks to catalyze improvements in governance quality (Fair et al., 2017). Media framing and public attribution further shape political vulnerabilities following external shocks. When governments are perceived as responsible for inadequate disaster response, such as deficient evacuation plans or flawed information-sharing, the resulting loss of public trust can have lasting electoral repercussions. The temporal proximity between the shock and subsequent elections also matters; immediate post-disaster elections tend to magnify political consequences compared to those held after a longer interval (Rubin, 2020). Social capital emerges as a mitigating factor against vulnerability. Regions characterized by higher levels of social capital often exhibit greater resilience in terms of political participation and turnout even during periods marked by general declines in engagement (Pinto, 2023). This suggests that robust networks of trust and reciprocity can buffer societies against some negative effects of external shocks on democratic processes. Finally, contextual factors influence how voters interpret economic fluctuations resulting from exogenous events. Voters who attribute economic variation primarily to domestic politicians rather than uncontrollable external forces are more likely to hold incumbents accountable at the polls (Duch & Rice, 2010). This attribution process is shaped by individual beliefs about government competence as well as broader informational environments. Taken together, these insights illustrate that societal and political vulnerabilities are multifaceted constructs shaped by geography, economics, institutions, psychology, media narratives, social capital, and attribution processes. Each dimension interacts dynamically with external shocks to produce heterogeneous patterns of electoral response across time and space (Chua et al., 2021)(Ahlquist et al., 2020)(Morvan & Paty, 2023)(Rubin, 2020)(Pinto, 2023)(Fair et al., 2017)(Duch & Rice, 2010).

3.3 Comparative Overview Across Regions and Regimes

Comparing the influence of sudden external shocks such as natural disasters or terrorist attacks on voting behavior across different regions and political regimes reveals a complex interplay of psychological, socioeconomic, and institutional mechanisms. In established Western democracies, the response to such shocks is often mediated by both economic and cultural ideological dimensions. For instance, in France's polarized multi-party system, import shocks and other exogenous events can shift mainstream political elites' positions along both economic and cultural axes. The economic left-right divide is complemented by a cultural dimension where attitudes toward immigration, nationalism, and cosmopolitanism become salient. The presence of extremist challengers further mediates these responses, with far-right competition pushing cultural ideology rightward while far-left competition can induce a leftward shift, particularly among left-wing legislators (Meyerrose & Watson, 2024). This demonstrates that electoral systems and party competition structure the pathways through which shocks translate into ideological repositioning. In contrast, under authoritarian regimes, the mechanisms differ substantially. Natural disasters may serve to reinforce incumbent power rather than catalyze protest or opposition. Evidence from Brazil's 1982 elections during a prolonged drought indicates that adverse weather conditions led to a reduction in protest votes against the military dictatorship. Here, rather than mobilizing dissent, hardship appeared to suppress opposition activity and consolidate regime stability (Baerlocher et al., 2024). This pattern suggests that in autocratic contexts, state control over information and resources can be leveraged to mitigate the destabilizing potential of external shocks. The psychological impact of shocks also varies by context. In democratic settings like Chicago, perceived threats, such as those related to racial composition, can drive shifts in turnout and voting preferences even when instrumental motivations are weak. The removal of an outgroup led to reduced turnout and less racially conservative voting among whites, indicating that psychological perceptions of threat play a significant role independent of direct economic or political incentives (Enos, 2016). Meanwhile, in European cases following natural disasters or economic crises, there is evidence that non-authoritarian individuals may temporarily adopt more right-wing authoritarian at-

titudes post-disaster. This effect appears robust even when regional redistribution policies are implemented, suggesting that acute shocks can override longer-term policy interventions in shaping voter sentiment (Cerqua et al., 2023). Institutional factors such as electoral rules further mediate these effects. Majoritarian versus proportional systems can condition how trade or disaster-related shocks affect party positioning and voter alignment. For example, competitive majoritarian elections may amplify leftward shifts in response to trade shocks among mainstream parties but only if extremist competition is absent or weak (Meyerrose & Watson, 2024). Additionally, government parties tend to be more responsive to external shocks than opposition parties due to their need to maintain legitimacy and support; however, this responsiveness is constrained by their reluctance to alienate core supporters (Calca & Gross, 2019). Socioeconomic context also plays a crucial role. In developed democracies with consistent individual turnout patterns across elections, exogenous events like flooding can be isolated for their marginal impact on voting using lagged dependent variable models (Fair et al., 2017). However, in less developed polities where turnout consistency is lower, attributing changes directly to external shocks becomes more challenging. The literature also highlights the importance of government performance evaluations following disasters. Voters may punish incumbents if they perceive incompetence or inadequate disaster response but can also reward effective management. For instance, after severe flooding or tornadoes in the United States, incumbents lost support when disaster declarations were absent but gained when their response was viewed favorably (Bovan et al., 2018). These findings underscore that attribution of responsibility, whether for prevention or relief, is central to electoral consequences. Furthermore, regional differences within countries matter: senators from midwestern and northeastern U.S. states were more likely to vote for pro-environmental legislation after climate-related disasters with high casualties in their constituencies. However, these effects tended to be short-lived as attention shifted elsewhere (Elliott et al., 2023). This temporal dynamic suggests bounded rationality among both voters and legislators. Finally, comparative studies stress the unpredictability of retrospective voting after disasters due to variations in timing of elections, competitiveness, socioeconomic heterogeneity across

regions, and dominant post-disaster political discourses. Introducing an intermediate variable capturing prevailing political narratives helps explain why similar shocks yield divergent electoral outcomes across contexts (Rubin, 2020). Taken together, these findings illustrate that while sudden external shocks universally disrupt established patterns of voting behavior, their specific effects are shaped by regime type (democratic vs authoritarian), institutional arrangements (electoral systems), socioeconomic conditions (development level), psychological mechanisms (perceived threat), government performance evaluations (attribution of responsibility), and regional variation within countries (Meyerrose & Watson, 2024)(Elliott et al., 2023)(Enos, 2016)(Fair et al., 2017)(Baerlocher et al., 2024)(Calca & Gross, 2019)(Bovan et al., 2018)(Cerqua et al., 2023)(Rubin, 2020).

4 Mechanisms Linking Shocks to Voting Behavior

4.1 Psychological Mechanisms

4.1.1 Trauma and Emotional Response

Trauma and emotional responses are central to understanding how sudden, external shocks such as natural disasters or terrorist attacks influence voting behavior. When individuals are exposed to violence or disaster, either directly or indirectly, the psychological aftermath can be profound and multifaceted. Recent research highlights that direct exposure to traumatic events often motivates individuals to participate in politics as a means of coping with trauma, expressing discontent, or attempting to address the root causes of their victimization. This activation effect is not limited solely to those who have been personally affected; even those who witness or learn about such events may experience heightened perceptions of vulnerability, which can also mobilize them politically (Balcells & Torrats-Espinoza, 2018). The emotional landscape following a shock is complex. Anger, fear, anxiety, and a sense of injustice are common reactions that can serve as catalysts for political engagement. For example, anger has been identified as a particularly potent motivator for political participation, driving individuals to seek change through electoral channels. The mobilizing power of anger is es-

pecially relevant in contexts where institutions are perceived as suppressive or unresponsive. In these situations, emotions do not merely reflect individual psychological states but become collective forces that shape group-level patterns of engagement and abstention. However, the relationship between trauma-induced emotions and political action is not uniform across all groups. The nature and intensity of emotional responses can vary depending on pre-existing social identities, prior experiences with institutions, and the perceived legitimacy of the political system. Some groups may channel their trauma into increased turnout or activism, while others may withdraw from participation due to feelings of helplessness or alienation (Izatt, 2025)(Balcells & Torrats-Espinoza, 2018). This heterogeneity underscores the importance of considering both individual-level psychological mechanisms and broader social dynamics when analyzing post-shock electoral behavior. Moreover, the temporal dimension of trauma's impact on voting should be considered. While some studies suggest that deviations from traditional voting patterns following disasters or violent shocks may persist for several election cycles, these effects are rarely permanent (Montjoy & Chervenak, 2020). Over time, emotional responses may attenuate as communities recover and new issues emerge on the political agenda. Nonetheless, in the immediate aftermath of a shock, heightened emotions can significantly alter both who participates in elections and how they vote. Institutional context further mediates the translation of trauma into electoral behavior. In environments where opportunities for meaningful participation are limited or where institutional manipulation is salient (such as gerrymandering), emotional responses like anger may be channeled primarily into voting rather than other forms of engagement. Conversely, in more open systems with robust avenues for civic action, trauma might spur a wider array of participatory behaviors. The interplay between trauma and emotion thus operates through multiple pathways: it shapes individual motivation to engage politically; it influences collective patterns of turnout and abstention; and it interacts with institutional structures to determine the forms that participation takes. Understanding these mechanisms is essential for explaining why external shocks sometimes lead to surges in political activity among affected populations while at other times result in disengagement or apathy (Izatt, 2025)(Balcells & Torrats-Espinoza, 2018)(Montjoy

& Chervenak, 2020).

4.1.2 Risk Perception and Political Attitudes

Risk perception is a central psychological mechanism through which sudden external shocks, such as natural disasters or terrorist attacks, shape political attitudes and ultimately influence voting behavior. The experience of a shock can heighten individuals' sense of vulnerability and uncertainty, leading to shifts in how risks are evaluated and managed at both the personal and collective level. Emotional responses, such as anxiety, fear, or anger, are often triggered by these events and play a significant role in shaping subsequent political cognition. For instance, heightened perceived threat following traumatic events has been shown to reduce support for civil liberties and alter long-term attitudes toward government policies (Robbins et al., 2013). These emotional reactions are not uniform; rather, they interact with pre-existing psychological dispositions and socialization experiences. The intergenerational transmission of risk preferences further complicates the relationship between risk perception and political attitudes. Evidence suggests that children's risk aversion is strongly associated with that of their parents, indicating that early-life experiences and upbringing contribute to relatively stable trajectories of political involvement (Pahontu et al., 2024a). Material conditions during youth, including exposure to traumatic events or economic hardship, can have lasting effects on risk preferences and thus on patterns of political engagement (Pahontu et al., 2024b). This socialization process means that populations exposed to repeated shocks may develop distinct collective attitudes toward risk management and policy preferences. Individual differences in risk tolerance also correlate with support for specific political movements. Panunzi et al. state that individuals who are more risk-loving are more likely to lean toward populist parties. This association becomes even stronger among those who exhibit extreme risk-seeking behavior. When controlling for other individual characteristics, the effect persists, suggesting that willingness to accept uncertainty or disruption is linked to openness toward anti-establishment or radical alternatives (Panunzi et al., 2020). Such findings highlight the importance of considering heterogeneity in psychological traits when analyzing electoral responses to shocks.

Moreover, the salience of risk following a disaster or attack can shift public attention toward issues of security, competence, and crisis management. The way in which citizens perceive governmental responses, whether focused on ex post relief efforts or ex ante prevention, can influence their evaluations of incumbents and their subsequent voting decisions. Media narratives often emphasize failures or successes in managing immediate risks rather than long-term preventive measures, thereby shaping public perceptions about which political actors are most capable of safeguarding collective well-being (Rubin, 2020). Social context also mediates the impact of risk perception on political attitudes. For example, when advocacy for controversial positions is low within a society, individuals may conceal their true preferences due to reputational concerns. However, as support for such positions grows, potentially catalyzed by widespread shocks, individuals become more willing to express these views openly without fear of social sanction (Gerling & Kellermann, 2022). This dynamic can amplify shifts in public opinion following major events by reducing the perceived costs associated with non-mainstream political choices. Finally, the experience of shocks does not only affect immediate emotional states but can also induce longer-term changes in values and behaviors through processes such as social learning and adaptation. As traumatic events become part of collective memory, they may be transmitted across generations via family socialization or community narratives, reinforcing particular patterns of risk aversion or acceptance (Pahontu et al., 2024a)(Pahontu et al., 2024b). These enduring changes underscore the complex interplay between psychological mechanisms and broader sociopolitical dynamics in shaping electoral outcomes after external shocks.

4.1.3 Social Identity and Group Dynamics

Social identity and group dynamics are central to understanding how sudden external shocks, such as natural disasters or political crises, shape voting behavior through psychological mechanisms. When individuals experience or become aware of a disruptive event, their sense of belonging to particular social groups, be it ethnic, regional, or political, can be heightened, influencing both their emotional responses and subsequent electoral decisions.

The literature demonstrates that group-based emotions play a significant role in mobilizing or demobilizing voters following shocks. For instance, when individuals perceive that their group is disadvantaged by institutional manipulations like gerrymandering or electoral suppression, they are more likely to experience anger. This emotion is strongly associated with increased political participation and turnout. Conversely, fear arising from the same awareness can lead to withdrawal from the political process. The heterogeneity in these emotional responses underscores the importance of group identity: those who feel their collective interests are threatened may channel anger into action, while others may be paralyzed by fear or even feel satisfaction if their group benefits from the manipulation (Izatt, 2025). Group dynamics also mediate how information about shocks is processed and acted upon. Social cues, such as protest behavior within one's community, serve as signals that can inform and shape individual voting choices. Individuals are particularly attuned to events affecting their own social milieu; thus, protest actions or visible collective grievances can trigger information cascades within groups, amplifying the perceived urgency of political engagement. This signaling mechanism has been shown to decrease support for certain parties (e.g., far-right candidates) when grassroots mobilization communicates shared discontent, but it can also increase turnout for other parties if protests align with group interests (Castro & Retamal, 2023). Spatial proximity further intensifies these effects. Individuals living near sites of disruptive events (such as police interventions during referenda) are more likely to adjust their voting behavior in response to perceived threats or injustices against their group. Notably, those with dual identities, who straddle multiple social affiliations, are especially sensitive to spillover effects from neighboring communities. Their likelihood of participating increases when they observe actions against co-identity members nearby, suggesting that social identity boundaries are porous and responsive to contextual cues (Rodon & Guinjoan, 2022). The complexity of group responses is evident in cases where some segments remain unmoved by shocks while others become highly engaged. This variation reflects not only differences in emotional reactions but also the interplay between individual psychology and collective narratives about threat and opportunity. When a sufficient number of individuals within a

group experience similar emotions, particularly anger, a tipping point can be reached that leads to widespread mobilization and collective action. On the other hand, satisfaction among members of advantaged groups may reinforce existing power structures and reduce incentives for change (Izatt, 2025). Moreover, the salience of social identity is often heightened by external shocks that force parties or institutions to realign policy positions rapidly. Such shifts can destabilize established party systems by altering the internal balance among factions representing different group interests (Aragonès & Ponsatí, 2022). In this context, sudden changes in issue salience may prompt voters to reassess their allegiances based on perceived alignment with group priorities. Finally, the impact of economic shocks on voting behavior is also filtered through social identity lenses. Economic disruptions tend to push affected populations toward more nationalist and conservative positions, increasing support for radical right parties regardless of direct personal exposure to economic harm. This pattern suggests that perceptions of collective threat, rather than individual material loss, drive much of the observed shift in electoral preferences following globalization-related shocks (Colantone & Stanig, 2017). Taken together, these findings highlight that social identity and group dynamics are not static backdrops but active mediators in translating external shocks into political behavior. Emotional responses rooted in group membership interact with contextual signals and institutional changes to produce diverse patterns of engagement or disengagement at the ballot box (Castro & Retamal, 2023)(Izatt, 2025)(Colantone & Stanig, 2017)(Rodon & Guinjoan, 2022).

4.2 Socioeconomic Mechanisms

4.2.1 Resource Disruption and Economic Hardship

Resource disruption and economic hardship are central pathways through which sudden external shocks, such as natural disasters or terrorist attacks, shape voting behavior. When a community experiences a disaster, the immediate destruction of infrastructure, loss of livelihoods, and interruption of basic services can create acute material needs. These disruptions often expose or exacerbate existing vulnerabilities within affected populations, leading to

heightened socioeconomic stress. The literature indicates that the economic consequences of such shocks can have both direct and indirect effects on electoral decisions. For instance, Kramer outlines that even when government policies impose uniform income losses across voters, individual-level variation in income changes persists due to factors like employment transitions or unexpected financial events. This heterogeneity means that macroeconomic shocks shift the overall distribution of income downward, but the impact is not uniform; some individuals may experience more severe hardship than others (Kramer, 1983). As a result, voters' perceptions of government competence in managing economic fallout become salient during elections. In developing countries with limited state capacity to respond effectively to disasters, resource disruption can intensify public dissatisfaction with incumbent authorities. Visconti notes that inadequate governmental response to disasters often leads to frustration among victims, who may then turn away from traditional parties in favor of independent candidates perceived as more credible agents of change (Visconti, 2022). This dynamic is particularly pronounced when the state fails to deliver timely relief or reconstruction assistance, reinforcing perceptions of incompetence and eroding trust in established political actors. Clientelist mobilization emerges as another mechanism linking resource disruption to voting behavior. Birch and Martinez i Coma argue that disasters increase opportunities for clientelist exchange by making it easier for political actors to identify those in need and target them with conditional assistance (Birch & i Coma, 2023). The increased demand for essential goods and services following a shock creates fertile ground for vote-buying strategies, especially where pre-existing clientelist networks are strong. However, this does not imply that disasters generate clientelism where it did not previously exist; rather, they amplify its incidence by altering both supply and demand for such exchanges. Empirical evidence on the effectiveness of relief spending in shaping electoral outcomes is mixed. Bovan et al. find that in flooded areas, the presence of relief spending did not significantly affect incumbent vote share (Bovan et al., 2018). This suggests that either the aid was insufficient or delayed, or other factors, such as dissatisfaction with government crisis management, played a more decisive role in shaping voter preferences. The absence of a clear difference

between flooded and non-flooded areas further complicates interpretations about the direct electoral benefits of post-disaster assistance. Long-term exposure to resource deprivation during formative periods can also leave enduring marks on political attitudes. Pahontu et al. demonstrate that individuals exposed in utero to famine conditions were more likely to support left-wing parties decades later (Pahontu et al., 2024a)(Pahontu et al., 2024b). This pattern appears linked to increased support for social insurance policies among those whose early life experiences heightened their risk aversion and sense of vulnerability. Such findings underscore how early-life economic hardship can recalibrate political preferences over the life course. Natural disasters do not only affect material well-being but also reshape expectations regarding government performance and accountability. When voters perceive that authorities have failed to mitigate suffering or restore resources efficiently after a shock, they may punish incumbents at the polls or seek alternatives promising systemic change (Visconti, 2022)(Levi et al., 2024). Conversely, effective crisis management, characterized by rapid mobilization of aid and transparent communication, can bolster support for incumbents if citizens attribute positive outcomes directly to government intervention. The interplay between resource disruption and institutional context further modulates these effects. In settings where social safety nets are robust and disaster response mechanisms are well-developed, the negative electoral consequences for incumbents may be attenuated compared to contexts marked by weak institutions and pervasive inequality (Kramer, 1983)(Pahontu et al., 2024a). Moreover, repeated exposure to shocks does not necessarily amplify their impact; Jusko and Spác show that while sudden flood events can increase turnout modestly, repeated disasters do not have an additive effect on participation behavior (Jusko & Spác, 2024). Overall, resource disruption following external shocks operates through multiple channels, altering individual risk profiles, shifting collective expectations about government responsibility, enabling clientelist strategies, and sometimes catalyzing long-term attitudinal change toward welfare provision or political reform (Birch & i Coma, 2023)(Bovan et al., 2018)(Kramer, 1983)(Pahontu et al., 2024a)(Levi et al., 2024)(Pahontu et al., 2024b)(Visconti, 2022). These mechanisms highlight the complex interdependence between socioeconomic hardship induced by shocks and

subsequent patterns in voting behavior.

4.2.2 Displacement and Population Mobility

Displacement and population mobility are central socioeconomic mechanisms through which sudden external shocks, such as natural disasters or pandemics, influence voting behavior. When populations are displaced due to catastrophic events, the resulting changes in residence and community structure can disrupt established patterns of political engagement and reshape electoral outcomes. The literature on the electoral effects of natural disasters highlights that such events often lead to significant population movements, particularly in regions where infrastructure is severely damaged or where livelihoods are threatened (Pinto, 2023). These displacements can be temporary or permanent, depending on the severity of the shock and the capacity for recovery. The timing and scale of displacement play a crucial role in determining its impact on voting behavior. For instance, Birch and Martinez i Coma (Birch & i Coma, 2023) outline that only disasters occurring within a year prior to an election tend to have measurable effects on electoral participation. This temporal proximity suggests that recent displacement disrupts not only physical access to polling stations but also weakens social ties that typically encourage turnout. Furthermore, when large numbers of individuals are forced to relocate, they may find themselves in unfamiliar environments with limited information about local candidates or issues, reducing their likelihood of participating in elections (Pinto, 2023)(Birch & i Coma, 2023). Population mobility following shocks also alters the composition of electorates in both origin and destination areas. In communities experiencing out-migration, there may be a decline in voter turnout due to the loss of residents who were previously engaged in local politics (Pinto, 2023). Conversely, areas receiving displaced populations might see changes in voting patterns if newcomers bring different political preferences or if their integration into new communities is incomplete by election time. The disruption of social networks, often a consequence of displacement, can further diminish collective action and lower overall political efficacy among affected groups (Castro & Retamal, 2023). Social networks are known to exert peer pressure that increases voter turnout; thus,

their fragmentation can have demobilizing effects. Institutional responses to displacement also mediate its impact on electoral behavior. In some cases, authorities may implement measures such as special voting booths or alternative registration procedures to accommodate displaced voters. However, these interventions are not always sufficient to overcome barriers created by mobility. Displaced individuals may lack necessary documentation or face logistical challenges that prevent them from exercising their right to vote (Santana et al., 2020). Additionally, the psychological stress associated with displacement can reduce motivation for political participation. The socioeconomic consequences of displacement extend beyond immediate logistical barriers. Displaced populations often experience heightened vulnerability and economic insecurity, which can make them more susceptible to clientelist practices or reduce their trust in formal political institutions. Bobonis et al. (Bobonis et al., 2017) suggest that reductions in vulnerability, such as through targeted development interventions, can decrease reliance on clientelist relationships and alter incumbent advantage at the polls. Thus, the intersection between mobility-induced vulnerability and electoral dynamics is complex: while some individuals may withdraw from political life due to instability, others might become more engaged if they perceive opportunities for change or support. Long-term effects of displacement on voting behavior depend on whether affected populations return to their original communities or establish roots elsewhere. If return migration occurs before subsequent elections, there may be a restoration of previous patterns of engagement; however, prolonged absence can lead to lasting disengagement from local politics (Pinto, 2023). In contrast, permanent resettlement may gradually integrate newcomers into new political contexts, potentially shifting local power balances over time. The interplay between displacement, social cohesion, and electoral mobilization remains an area requiring further empirical investigation. Castro and Retamal emphasize that social networks formed during periods of upheaval can either mitigate or exacerbate the demobilizing effects of population movement by facilitating information flow and reinforcing shared grievances. Where strong community ties persist despite physical relocation, collective action, including protest participation, may translate into sustained electoral engagement. In summary, displacement and population mobility following

external shocks introduce multifaceted challenges for democratic participation. They disrupt established social structures, create logistical obstacles for voting, alter local electorates' composition, and interact with broader patterns of vulnerability and institutional response (Castro & Retamal, 2023)(Pinto, 2023)(Bobonis et al., 2017)(Birch & i Coma, 2023). Understanding these mechanisms is essential for designing policies that safeguard electoral inclusion amid increasing frequency and intensity of disruptive events worldwide.

4.2.3 Community Resilience and Recovery Capacity

Community resilience and recovery capacity are central to understanding how populations respond to sudden external shocks, such as natural disasters or terrorist attacks, and how these responses shape subsequent voting behavior. The ability of a community to recover from traumatic events is not uniform; it is shaped by the availability of social resources, the strength of local institutions, and the degree of socioeconomic inequality present before the shock occurs. According to, trauma can act as a demobilizing force in politics, particularly for marginalized groups such as Black Americans, women, and individuals with lower socioeconomic status. However, when social resources are made salient or accessible, either through policy demanders emphasizing shared identities or through government intervention, these resources can drive post-traumatic growth and resilience responses that counteract the depressive effects of trauma on political participation. The provision of physical and economic resources by governmental actors plays a significant role in bolstering community recovery capacity. When governments increase aid to affected communities, they not only address immediate material needs but also contribute to the solidification of social identities that can enhance collective efficacy in the aftermath of disaster. This process is crucial because it can mitigate barriers to political equality that might otherwise be exacerbated by trauma-induced demobilization. Social psychologists have consistently found that proximity to traumatic events increases perceptions of threat and fear among residents, which can influence both psychological well-being and political engagement (MARSH, 2023). While natural disasters may not induce as severe posttraumatic stress responses as intentional acts of violence,

they still generate uncertainty and anxiety within affected populations. The magnitude of these effects often depends on how well communities are able to mobilize internal support networks and access external assistance. Empirical evidence suggests that poorer regions tend to receive more relief aid following disasters, reflecting a need-based fairness norm in disaster assistance allocation. Bechtel et al. (Bechtel & Mannino, 2022) indicate that this pattern aligns with voter preferences for equitable distribution of aid based on need rather than political loyalty alone. However, there are also clear indications that political considerations influence the allocation process: core stronghold counties receive significantly more relief payments compared to swing or opposition strongholds. This duality highlights how both socioeconomic vulnerability and political alignment interact in shaping recovery trajectories. The effectiveness of recovery efforts is further influenced by media exposure and public visibility following disasters. Masiero et al. (Masiero & Santarossa, 2021) note that while much research has focused on government spending levels after disasters, less attention has been paid to performance in recovery or the role of media in shaping public perceptions. Media coverage can amplify or diminish perceptions of government competence, thereby affecting electoral outcomes by either rewarding or punishing incumbents based on perceived effectiveness in managing recovery processes. Community resilience is also shaped by institutional mechanisms at the local level. For instance, detailed data collection on disaster impacts at municipal levels enables targeted interventions and facilitates behavioral measures of attitudes toward climate change or disaster preparedness (Baccini & Leemann, 2021). Such granular approaches allow for more precise assessments of community needs and capacities during recovery phases. Finally, disparities in recovery capacity can reinforce existing inequalities if not adequately addressed. If certain groups are systematically less able to access social or economic resources post-shock, their likelihood of participating in democratic processes may decline further (MARSH, 2023). Conversely, effective mobilization of resources, both material and symbolic, can enhance resilience and promote greater engagement with political institutions even after traumatic events. In summary, community resilience and recovery capacity are dynamic constructs shaped by an interplay between social identity formation,

resource allocation practices, institutional responsiveness, media framing, and pre-existing socioeconomic conditions (Bechtel & Mannino, 2022)(Masiero & Santarossa, 2021)(MARSH, 2023). These factors collectively determine not only how communities weather external shocks but also how such experiences translate into patterns of political participation and voting behavior over time.

4.3 Institutional and Political Mechanisms

4.3.1 Government Response and Accountability

Government response to sudden, external shocks such as natural disasters or terrorist attacks is a central determinant of electoral accountability. The public's evaluation of incumbents is often shaped by perceptions of how effectively authorities manage these crises. When governments are seen as responsive and competent in the aftermath of disasters, voters may reward incumbents with increased electoral support. Conversely, perceived mismanagement or lack of preparation can result in electoral punishment (Rudolph & Kuhn, 2018)(Das et al., 2024). This dynamic is not limited to the direct management of the crisis itself but extends to broader assessments of government capacity and trustworthiness. The literature demonstrates that voters attribute responsibility for both positive and negative outcomes following exogenous shocks. For instance, during the COVID-19 pandemic, cross-national evidence indicates that citizens held incumbents accountable for health and economic outcomes, even though the pandemic was a global event largely outside any single government's control. The authors of (Duch et al., 2025) indicate that despite the potential for voters to discount incumbent responsibility due to the exogenous nature of the shock, accountability remained robust across diverse contexts. This suggests that institutional mechanisms, such as free media and active opposition, facilitate retrospective voting by enabling citizens to monitor and evaluate government actions during crises. Institutional safeguards inherent in democratic systems play a crucial role in mediating this process. Rubin et al. state that features like an independent opposition and informed electorate act as checks on government behavior, reducing the likelihood of catastrophic policy failures. However, there is also evidence that politicians may

prioritize visible disaster response over proactive risk mitigation because voters tend to reward immediate action more than long-term prevention (Rubin, 2020). This creates incentives for governments to focus on short-term relief efforts rather than investing in policies that could reduce vulnerability before disasters occur. Empirical studies further reveal that effective crisis management can yield tangible electoral benefits for incumbents. For example, after severe flooding events in Germany, districts receiving efficient government aid saw notable increases in vote shares for incumbent parties (Rudolph & Kuhn, 2018). This pattern underscores how voters use observable government responses as signals when making electoral decisions. Yet, this relationship is not uniform across all contexts; variations in institutional quality and information environments can modulate how strongly voters link government performance during shocks to their voting choices (Novaes & Schiumerini, 2022). The attribution of responsibility is also influenced by whether shocks are perceived as within or beyond governmental control. Das et al. (Das et al., 2024) outline that when events are clearly unrelated to public affairs, such as random natural phenomena or sporting outcomes, voters logically should not hold governments accountable. Nevertheless, when there is ambiguity regarding causality or when governments are seen as having some capacity to mitigate harm (e.g., through disaster preparedness), accountability mechanisms become activated. Moreover, comparative research highlights that exogenous shocks systematically affect incumbency effects by shaping voter evaluations of representative quality (Novaes & Schiumerini, 2022). In developing democracies especially, where institutional constraints may be weaker, these effects can be amplified or attenuated depending on how well governments communicate their actions and manage public expectations. In sum, government response and accountability form a critical pathway linking external shocks to voting behavior. Institutional structures shape both the capacity for effective crisis management and the channels through which citizens evaluate and sanction political leaders. The interplay between objective performance during crises and subjective perceptions of competence ultimately determines whether incumbents are rewarded or punished at the ballot box (Duch et al., 2025)(Rudolph & Kuhn, 2018)(Rubin, 2020)(Novaes & Schiumerini, 2022)(Das et al., 2024).

4.3.2 Media Coverage and Information Flow

Media coverage and the flow of information play a central role in shaping how sudden external shocks, such as natural disasters or terrorist attacks, influence voting behavior. The dissemination of information through various media channels determines not only the reach but also the framing of these events, which in turn affects public perception and electoral decisions. Media reports, especially those with political bias, have been shown to significantly shape individual political views. When media outlets present events or leaders in a positive light, this can increase sympathy and support among the electorate. Conversely, negative or sensationalist coverage may amplify fear or anger, leading to shifts in voter preferences (Gerling & Kellermann, 2022)(Vasilopoulou & Wagner, 2020). The salience of an event is often heightened by extensive media attention. For instance, when a shock receives widespread coverage, it becomes more prominent in the minds of voters, influencing their judgments and potentially altering their trust in political leaders. Chapman (Chapman, 2024) outlines that individuals tend to update their political trust rapidly when confronted with new information about significant events. However, these attitudinal changes are frequently short-lived unless reinforced by continued media focus or subsequent related developments. Information shocks, unexpected news about electoral outcomes or major incidents, can have pronounced effects on vote intentions. The extent of these effects is closely tied to the degree of media consumption within the population. Gerling and Kellermann demonstrate that individuals who are more exposed to media discussions about a particular party or issue react more strongly to election-related information shocks. This suggests that the transmission of information via media channels is a crucial mechanism for diffusing the impact of external shocks across different regions and demographic groups. Moreover, behavioral convergence can occur even without direct interpersonal communication; shared exposure to media content can synchronize attitudes and behaviors among disparate individuals (Gerling & Kellermann, 2022). This phenomenon underscores the importance of mass media as an institutional conduit for both information and emotional cues following disruptive events. The framing of issues by the media also shapes how voters interpret shocks. Kaustia et al. (Kaustia et al., n.d.)

indicate that increased attention to economic issues, often prompted by salient events covered in the news, can shift voting decisions toward perspectives aligned with investor interests or free-market policies. This reframing process is not limited to economic matters; it extends to any domain where media narratives highlight certain aspects over others, thereby guiding public discourse and influencing electoral choices. In addition to direct informational effects, emotional responses elicited by media coverage further mediate voting behavior. Vasilopoulou and Wagner (Vasilopoulou & Wagner, 2020) discuss how emotions such as anger and fear, often amplified by dramatic reporting, can drive partisan realignment and volatility in electoral support. The interplay between affective responses and information flow thus constitutes a dynamic feedback loop: emotionally charged coverage increases engagement with political content, which then reinforces or modifies existing attitudes. The speed at which information spreads through modern media ecosystems accelerates these processes. As observed by Chapman (Chapman, 2024), rapid dissemination allows for swift updates in public opinion following major shocks but also means that such changes may dissipate quickly if not sustained by ongoing coverage. Finally, institutional mechanisms governing access to information, such as press freedom, regulatory frameworks, and technological infrastructure, modulate both the quantity and quality of information available to voters during crises. Where access is broad and diverse viewpoints are represented, voters are more likely to receive balanced accounts that enable informed decision-making. In contrast, restricted or biased flows can entrench polarization or misinformation. Taken together, these findings highlight that media coverage and information flow are not merely passive reflections of external shocks but active agents shaping their political consequences through selective amplification, framing strategies, emotional resonance, and differential access across populations (Kaustia et al., n.d.)(Gerling & Kellermann, 2022)(Chapman, 2024)(Vasilopoulou & Wagner, 2020).

4.3.3 Policy Change and Institutional Trust

Sudden external shocks, such as natural disasters or terrorist attacks, can act as catalysts for both policy change and shifts in institutional trust. The response of political parties and

government institutions to these shocks is often shaped by the nature of the event, the existing political context, and the perceived effectiveness of crisis management. Government parties, particularly in non-Eurozone countries where there is greater flexibility in economic policy, are more likely to adjust their policy positions in response to external shocks. This is because they possess more autonomy to intervene in the economy compared to their Eurozone counterparts, who face stricter fiscal constraints. The interaction between being in government and experiencing an external shock is statistically significant only outside the Eurozone, suggesting that institutional context mediates the extent of policy adaptation. In contrast, opposition parties tend to maintain their pre-existing policy stances during such periods, often choosing to observe government actions before formulating a response. For example, green opposition parties may increase the salience of issues like nuclear energy following a nuclear disaster but are unlikely to alter their fundamental positions on these topics (Calca & Gross, 2019). Institutional trust is also highly sensitive to how authorities manage crises. When governments are perceived as mishandling post-disaster recovery or failing in crisis communication, this can erode public confidence and drive voters toward populist or authoritarian alternatives. Cerqua et al. highlight that ineffective disaster management can alienate citizens from mainstream parties and foster environments conducive to anti-establishment voting (Cerqua et al., 2023). This dynamic underscores the importance of competent institutional responses not only for immediate recovery but also for maintaining democratic legitimacy. The psychological mechanisms underlying changes in institutional trust are complex. Chapman outlines that citizens' trust in institutions may either deteriorate or remain unchanged depending on expectations about government repression following protests or unrest. If citizens anticipate a harsh response but instead observe restraint or tolerance from authorities, their trust may actually increase as they update their beliefs about regime openness (Chapman, 2024). Conversely, if government reactions confirm negative expectations, such as through misinformation or inadequate crisis management, trust may decline further (Hoes et al., 2024)(Cerqua et al., 2023). Media coverage and information shocks play a crucial role in shaping perceptions of institutional competence and honesty. For instance, after the 2004 Madrid bombings,

conflicting narratives about responsibility and subsequent accusations against the incumbent party led to widespread skepticism regarding official statements. The lack of unified media support for the government's version contributed to uncertainty about whether shifts in electoral support were due to the attack itself, governmental response, or media framing (Hoes et al., 2024). Such ambiguity complicates efforts to isolate causal pathways between shocks and changes in institutional trust. Furthermore, evaluations of institutions are grounded in individuals' everyday experiences with governance structures. Carlin et al. argue that day-to-day interactions with political processes inform broader attitudes toward institutional reliability and responsiveness (Carlin et al., 2014). When these experiences are disrupted by external shocks, especially if accompanied by visible failures, citizens may reassess their trust levels accordingly. The persistence of these effects over time remains contested. Holbein and Rangel suggest that while some impacts on civic attitudes may be durable, others could be transient or episodic, emerging immediately after an event but fading until reactivated by subsequent elections or crises (Holbein & Rangel, 2020). This temporal variability indicates that both short-term emotional reactions and longer-term evaluations contribute to evolving patterns of institutional trust. In summary, policy change following external shocks is more pronounced among governing parties with greater policy autonomy, while opposition groups typically reinforce existing positions rather than adapt substantively (Calca & Gross, 2019). Institutional trust hinges on perceived competence and transparency during crisis management; failures can have lasting consequences for political alignment and democratic stability (Cerqua et al., 2023)(Hoes et al., 2024)(Carlin et al., 2014). Psychological updating based on observed government behavior further modulates these dynamics (Chapman, 2024), highlighting the interplay between objective performance and subjective interpretation within affected populations.

5 Short-term Effects on Voting Behavior

5.1 Immediate Electoral Participation

5.1.1 Voter Turnout Dynamics

Voter turnout dynamics in the immediate aftermath of sudden external shocks, such as natural disasters or terrorist attacks, are shaped by a complex interplay of psychological, socioeconomic, and institutional factors. The salience of an election can be heightened by such events, leading to increased attention and emotional engagement among the electorate. When an event is perceived as highly consequential, such as in the wake of a disaster or attack, voters may interpret their participation as more meaningful, which can drive higher turnout rates. This effect is particularly pronounced when the event generates widespread anxiety or concern about future risks, thereby amplifying the perceived stakes of electoral outcomes (Robbins et al., 2013)(MARSH, 2023). The psychological mechanisms underlying these turnout shifts often involve emotions such as anger, fear, and shame. For instance, individuals may experience a sense of civic duty or social pressure to participate in elections following traumatic events. The standard rational choice model of voting struggles to account for significant positive turnout unless it incorporates psychic benefits; feelings like shame from abstaining or satisfaction from voting can motivate individuals to bear the costs associated with participation (Gerber et al., 2008). Emotional responses are not uniform across all voters; those who feel disadvantaged or targeted by institutional changes, such as gerrymandering or selective disaster relief, are more likely to experience anger, which in turn increases their likelihood of turning out to vote (Izatt, 2025). This suggests that emotional arousal following external shocks can serve as a catalyst for immediate electoral participation. Socioeconomic disruptions caused by disasters also play a role in shaping turnout. In some cases, affected populations may face logistical barriers that suppress participation, such as displacement or resource scarcity. However, there is evidence that certain groups respond with increased mobilization. For example, traumatic events like church arson attacks have been shown to condition turnout based on social identity; Black voters experiencing such trauma within

their community context exhibit distinct patterns compared to non-Black voters (MARSH, 2023). Similarly, demographic changes resulting from events like housing project demolitions can lead to substantial declines in turnout among specific subpopulations while leaving others unaffected (Enos, 2016). Institutional context further mediates these dynamics. In pluralistic political systems with robust democratic institutions, retrospective voting becomes a key mechanism through which citizens hold leaders accountable for disaster response and management (Rubin, 2020). The presence of competitive elections and open information channels enables voters to translate their experiences into electoral action more effectively than in authoritarian settings. Conversely, in clientelistic democracies or autocracies where incumbents control access to resources and aid distribution post-disaster, strategic use of relief efforts can actually bolster political survival by incentivizing voter loyalty rather than punishment for poor performance (Gallego, 2015). The heterogeneity of turnout responses is also influenced by partisanship and local political alignment. Heersink et al. indicate that co-partisan counties, those aligned with the incumbent party, tend to punish incumbents less (or even reward them) for disaster damage compared to contra-partisan counties (Heersink et al., 2022). This pattern underscores how group identity and partisan loyalty interact with external shocks to produce divergent turnout effects across regions. Simulation models provide additional insight into these processes by capturing the evolution of individual values, norms, and network influences within electorates exposed to sudden shocks (Fieldhouse et al., 2016). These models highlight how factors such as civic duty, partisanship strength, and social discussion networks collectively shape immediate decisions about whether to vote. Empirical studies examining specific cases reinforce these theoretical insights. For instance, analysis of federal and state election data following major floods in Germany reveals nuanced effects: while some regions experienced modest declines in turnout after disasters, potentially due to disruption or disillusionment, others saw little change or even increases depending on local context and recovery efforts (Rudolph & Kuhn, 2018). Such findings illustrate that the direction and magnitude of short-term turnout shifts are contingent upon both the nature of the shock and pre-existing community characteristics. Finally, media coverage plays a

crucial role in nationalizing local tragedies and shaping public perceptions far beyond directly affected areas. The expansion of traditional media alongside digital platforms ensures that traumatic events receive sustained attention across the country, potentially mobilizing voters who identify with affected communities even if they are geographically distant (MARSH, 2023). Taken together, these observations suggest that immediate voter turnout dynamics following sudden external shocks are neither uniform nor predictable solely on the basis of event severity. Instead, they emerge from an intricate web of psychological motivations, socioeconomic realities, institutional frameworks, partisan identities, and media environments, all interacting dynamically within each unique electoral context (Rubin, 2020)(Gerber et al., 2008)(MARSH, 2023)(Robbins et al., 2013).

5.1.2 Barriers to Participation

Barriers to participation in the immediate aftermath of sudden, external shocks such as natural disasters or terrorist attacks are shaped by a complex interplay of psychological, socioeconomic, and institutional factors. These barriers can manifest both at the individual and systemic levels, influencing whether affected populations are able or willing to engage in electoral processes. Psychological responses to traumatic events play a significant role in shaping participation. Major shocks often induce heightened anxiety, fear, and uncertainty among citizens. Such emotional states can either mobilize individuals, by increasing the perceived salience of an election, or suppress turnout due to feelings of insecurity or helplessness. Robbins et al. indicate that events like terrorist attacks generate widespread attention and anxiety, which may heighten electoral salience and thus encourage participation for some segments of the population. However, this effect is not uniform; for others, trauma may lead to withdrawal from public life and reduced engagement with political activities. The persistence of these psychological effects can last for months or even longer, suggesting that short-term barriers may extend beyond the immediate aftermath of a shock (Robbins et al., 2013). Socioeconomic disruptions caused by disasters further complicate participation. Natural disasters frequently damage infrastructure, displace populations, and disrupt daily

routines. These consequences can create logistical obstacles to voting, such as inaccessible polling stations or loss of necessary identification documents. Masiero and Santarossa suggest that while overall electoral competition may not be distorted in terms of candidate numbers or aggregate turnout, there is evidence that incumbents may feel more confident about their prospects due to increased visibility following a disaster (Masiero & Santarossa, 2021). This dynamic could indirectly discourage opposition supporters from participating if they perceive the outcome as predetermined or futile. Institutional mechanisms also contribute to barriers in the immediate post-shock period. The timing and nature of governmental responses, such as the provision (or lack) of emergency aid, can influence perceptions of state capacity and fairness. Gallego's analysis demonstrates that targeted distribution of particularistic goods like food aid before elections can increase support for incumbents among recipients (Gallego, 2015). However, if aid is delayed or perceived as insufficiently distributed, affected individuals may feel alienated from political processes or distrustful of institutions, reducing their motivation to participate. The mode of voting itself introduces additional considerations. Holbein et al. highlight that different voting experiences, such as in-person versus mail-in voting, may present distinct challenges in the wake of disruptive events (Holbein et al., 2023). For example, displaced individuals might find it difficult to access traditional polling locations but could potentially participate via alternative methods if available. Yet, institutional rigidity or lack of preparedness for such contingencies can exacerbate exclusion. Furthermore, misinformation and unrealistic expectations propagated during crises can erode trust in electoral outcomes and institutions. Mongrain discusses how proliferation of false news may create disillusionment among those dissatisfied with results, potentially leading them to abstain from future participation (Mongrain, 2023). This phenomenon is particularly concerning when compounded by repeated exposure to shocks and contested narratives about government performance. The availability and responsiveness of established parties also affect barriers to participation after shocks. Hoes et al. argue that voters with weak ties to established parties are more susceptible to being swayed by new entrants or populist actors who capitalize on crisis-driven issues such as immigration or security (Hoes et al.,

2024). In contexts where mainstream parties fail to address emergent concerns effectively, disaffected voters might either shift allegiance or disengage altogether. Finally, while some research suggests that compulsory voting could mitigate participation barriers by mandating turnout regardless of circumstances, Holbein and Rangel's findings challenge this assumption; mandatory voting does not necessarily translate into greater civic engagement or overcome deeper attitudinal obstacles created by crisis situations (Holbein & Rangel, 2020). Taken together, these insights reveal that immediate barriers to electoral participation following external shocks are multifaceted: psychological distress can demobilize some while mobilizing others; socioeconomic disruptions create practical hurdles; institutional responses shape perceptions of legitimacy; misinformation undermines trust; party system dynamics influence voter availability; and procedural adaptations (or lack thereof) determine accessibility for displaced or traumatized populations (Gallego, 2015)(Holbein et al., 2023)(Robbins et al., 2013)(Mongrain, 2023)(Holbein & Rangel, 2020)(Masiero & Santarossa, 2021)(Hoes et al., 2024).

5.1.3 Mobilization and Demobilization Factors

Sudden external shocks, such as natural disasters or terrorist attacks, can trigger both mobilization and demobilization effects on immediate electoral participation. The direction and magnitude of these effects depend on a complex interplay of psychological responses, social identity, institutional context, and the timing of the event relative to the election. Mobilization is often observed when external shocks generate strong emotions, particularly anger or perceived threat, that motivate individuals to participate in elections. For example, when communities perceive that their political power is being undermined or threatened, as in cases of gerrymandering or targeted repression, emotional responses like anger can serve as powerful motivators for turnout (Izatt, 2025). Similarly, studies of Latinx and Black political behavior during periods of heightened threat or repression have documented increased solidarity and higher turnout rates among those who feel their group is under attack. This phenomenon, sometimes referred to as “threat mobilization,” suggests that collective adver-

sity can activate group-based identities and drive individuals to the polls in defense of their community's interests. The Black church exemplifies an institution that channels social support into political mobilization following traumatic events. It provides not only emotional resilience but also organizational resources that facilitate collective action and turnout among Black Americans, especially in the South. In contexts where trauma makes race salient, such as racially motivated violence or disasters disproportionately affecting Black communities, this social infrastructure can transform posttraumatic stress into posttraumatic growth and electoral engagement. However, demobilization is also a frequent outcome after traumatic shocks. Empirical evidence indicates that affected populations may experience significant declines in voter turnout due to posttraumatic stress responses. The psychological toll of trauma, manifesting as anxiety, depression, or feelings of helplessness, can suppress political participation. The net effect tends toward demobilization unless counteracted by strong social identity resources or proximity to the election. Notably, the closer a traumatic event occurs to an election date, the more likely it is to provoke a mobilization response; if sufficient time elapses before the election, initial mobilizing effects may dissipate or even reverse into demobilization (MARSH, 2023). The nature of the shock itself also shapes these dynamics. Exogenous shocks that are widely perceived as unifying threats (such as terrorist attacks or pandemics) can temporarily reduce polarization and foster bipartisan unity in voting behavior if polarization levels are not already extreme (5766047). However, if pre-existing polarization is high, even shared threats may fail to produce lasting increases in turnout or unity. Destabilizing protests represent another form of external shock with distinct mobilizing potential. When protests disrupt public order through disruptive tactics, including violence or property damage, they can increase political efficacy among participants and signal urgency to broader electorates (Castro & Retamal, 2023). Such disruption may enhance bargaining leverage for social movements and translate into higher electoral participation among those sympathetic to protest goals. Socioeconomic factors further mediate these processes. For instance, targeted policing practices that disproportionately affect Black communities have been shown to reduce voter turnout among those directly impacted by incarceration or legal entanglement (White,

2019). This selective demobilization underscores how institutional mechanisms can amplify the negative participatory consequences of trauma for marginalized groups. Institutional context also matters: when voting systems lower barriers to participation or when civic duty is emphasized through interventions (such as mailings reminding citizens of their rights), there can be modest increases in turnout even after disruptive events (Coppock & Green, 2016). Yet these interventions may be insufficient to fully offset widespread demobilization following severe trauma. Temporal dynamics play a crucial role. Short-term surges in participation following shocks often regress toward baseline levels over subsequent elections as immediate emotional responses fade and voters return to habitual patterns (G. Bingham Powell & Whitten, 1993). This normalization process highlights the transient nature of many mobilization effects unless reinforced by ongoing organizational efforts or repeated threats. In summary, immediate electoral participation following sudden external shocks is shaped by a dynamic balance between mobilizing forces, such as group solidarity, anger at perceived injustice, and supportive institutions, and demobilizing forces rooted in psychological distress and institutional barriers. The outcome depends on factors including timing relative to elections, strength of social identity resources, type of shock experienced, pre-existing polarization levels, and socioeconomic vulnerabilities within affected populations (MARSH, 2023)(5766047)(Izatt, 2025)(Castro & Retamal, 2023)(Coppock & Green, 2016)(White, 2019)(G. Bingham Powell & Whitten, 1993).

5.2 Electoral Preferences and Support Shifts

5.2.1 Reward and Punishment of Incumbents

The relationship between sudden external shocks, such as natural disasters or terrorist attacks, and the electoral fate of incumbents is characterized by a complex interplay of psychological attribution, retrospective evaluation, and context-dependent mechanisms. A central question in this literature is whether voters reward or punish incumbents following such events, and under what conditions these responses manifest. A prominent argument posits that voters often hold incumbents accountable for negative outcomes, even when these are clearly exoge-

nous and beyond governmental control. This phenomenon has been observed in the aftermath of various natural disasters, where citizens may sanction sitting governments simply because their well-being has deteriorated relative to expectations or perceived norms. The electorate's tendency to attribute blame to incumbents for adverse events, regardless of actual responsibility, reflects a psychological mechanism where frustration and anger are channeled toward those in power (Visconti, 2022)(Jusko & Spác, 2024). Achen and Bartels' work illustrates that voters may punish leaders for calamities such as floods or droughts, not necessarily due to poor crisis management but as a reaction to personal hardship (Visconti, 2022). However, this punitive response is not universal. An alternative perspective emphasizes the role of government performance in disaster response. When incumbents are perceived as effective in managing the crisis and providing timely relief, they can be rewarded electorally. The quality and visibility of post-disaster aid become critical factors shaping voter evaluations. For instance, evidence suggests that swift and substantial assistance prior to elections can increase support for incumbent candidates among recipients while potentially demobilizing opposition supporters (Jusko & Spác, 2024). This dynamic underscores the importance of competence signals: voters use information about disaster management as a proxy for broader governmental ability and trustworthiness (Masiero & Santarossa, 2021). The literature also highlights that the attribution of responsibility is not always rational or consistent. Voters sometimes irrationally blame leaders for so-called "acts of God," yet at other times they differentiate between unavoidable shocks and failures in policy response (Das et al., 2024)(Jusko & Spác, 2024). The degree to which voters engage in retrospective voting, rewarding or punishing based on past performance, depends on their ability to discern whether negative outcomes stem from government action or uncontrollable externalities (Duch & Rice, 2010). In some cases, partisan alignment further conditions these evaluations; shared partisanship with the incumbent can amplify positive assessments of disaster management, while out-group voters may remain critical regardless of objective performance (Jusko & Spác, 2024). Empirical studies provide mixed findings regarding the magnitude and direction of these effects. Some research documents clear electoral penalties for incumbents following disasters, especially

when relief efforts are perceived as inadequate or delayed (Das et al., 2024)(Masiero & Santarossa, 2021). Conversely, other analyses find little to no impact on voting behavior after controlling for socioeconomic variables and pre-existing political trends (Bovan et al., 2018). This heterogeneity suggests that contextual factors, such as media coverage, institutional trust, and the salience of disaster response, mediate the link between shocks and electoral outcomes. Moreover, there is evidence that exogenous shocks can heighten political engagement without necessarily shifting support away from incumbents. For example, increased intent to participate in elections has been observed after both natural disasters and terrorist attacks, though this does not always translate into changes in incumbent vote share (Aragonès & Ponsatí, 2022)(Balcells & Torrats-Espinoza, 2018). In less established democracies, disasters may erode diffuse system support while simultaneously catalyzing demands for accountability and greater participation (Carlin et al., 2014). In summary, the reward or punishment of incumbents following sudden external shocks is shaped by a confluence of psychological attribution processes, retrospective evaluations conditioned by perceived competence in crisis management, partisan biases, and broader institutional contexts. While some voters indiscriminately penalize leaders for negative events outside their control, others calibrate their responses based on observable government actions during crises. The balance between these tendencies determines whether incumbents face electoral costs or reap benefits in the wake of disaster (Das et al., 2024)(Visconti, 2022)(Jusko & Spác, 2024)(Masiero & Santarossa, 2021).

5.2.2 Issue Salience and Agenda Setting

Issue salience and agenda setting are central to understanding how sudden external shocks, such as natural disasters or terrorist attacks, can rapidly alter electoral preferences in the short term. When an extraordinary event occurs, it disrupts the established hierarchy of political issues and compels both the public and political elites to re-evaluate which topics deserve immediate attention. The intensity and unexpected nature of these events often lead to a surge in public focus on the affected issue, temporarily elevating its importance above others that previously dominated the political discourse. This process is not merely a

passive reflection of reality but is actively shaped by media coverage, which prioritizes events based on their prominence and perceived significance. As a result, citizens are exposed to heightened information flows about the shock event, increasing its salience in their decision-making processes (Vasilopoulou & Wagner, 2020)(Kronborg et al., 2024). The mechanism through which issue salience operates involves both psychological and institutional pathways. Psychologically, individuals confronted with dramatic events experience strong emotional responses, such as fear, anger, or anxiety, which can prompt them to update their existing political opinions or form new preferences regarding government performance and policy priorities (Vasilopoulou & Wagner, 2020). These emotional reactions are often accompanied by increased scrutiny of political elites' responses to the crisis, leading voters to reassess their support for incumbents or opposition parties based on perceived competence in managing the situation. The literature suggests that voters do not simply react blindly; rather, they evaluate how effectively leaders address the newly salient issue when making electoral choices (Novaes & Schiumerini, 2022)(Baccini & Leemann, 2021). Institutionally, sudden shocks force parties to adapt their strategies in response to shifting voter concerns. When an issue that was previously peripheral becomes central due to an exogenous shock, parties must quickly reposition themselves on this new dimension of competition. If party stances differ significantly on the emergent issue, both may attempt to moderate their positions to attract voters whose preferences now lie between their original platforms (Aragonès & Ponsatí, 2022). This dynamic competition can lead to rapid changes in party agendas and campaign messaging as they seek to capture the attention of an electorate whose priorities have been abruptly reordered. Empirical studies reinforce these theoretical insights by demonstrating that natural disasters increase the salience of environmental and climate-related issues among affected populations. For instance, individuals who have recently experienced floods or other disasters become more likely to prioritize green policies and support parties perceived as competent on environmental matters (Kronborg et al., 2024). However, this effect is often transient; as time passes and other issues regain prominence, voter attention may shift away from the shock-induced topic unless it is reinforced by subsequent events or sustained media

coverage (Baccini & Leemann, 2021). The temporary nature of this heightened salience underscores the importance of timing in electoral cycles: if elections occur soon after a major shock, its impact on voting behavior is likely to be more pronounced. Moreover, agenda setting following a shock is not limited to direct victims but can extend across broader segments of society through social networks and media diffusion. The rapid spread of information about dramatic events ensures that even those not directly affected may recalibrate their issue priorities in line with prevailing narratives (Chua et al., 2021)(Vasilopoulou & Wagner, 2020). This collective reorientation creates opportunities for citizens at large to update their political attitudes and for parties to adjust their platforms accordingly. In summary, sudden external shocks act as catalysts for shifts in issue salience and agenda setting within electoral contexts. They trigger psychological responses that heighten public focus on specific issues while compelling institutional actors, parties and candidates, to adapt strategically. The interplay between media amplification, emotional engagement, and strategic party behavior determines how enduring these shifts will be in shaping short-term voting patterns (Kronborg et al., 2024)(Chua et al., 2021)(Vasilopoulou & Wagner, 2020)(Aragonès & Ponsatí, 2022).

5.2.3 Shifts in Partisan Alignment

Sudden external shocks, such as natural disasters and terrorist attacks, can act as catalysts for shifts in partisan alignment, often disrupting established patterns of electoral support. These events introduce acute uncertainty and emotional arousal into the political environment, which can alter the way individuals evaluate parties and candidates. The psychological mechanisms underlying these shifts are multifaceted. For instance, heightened anxiety or anger following extraordinary events may prompt voters to reconsider their partisan loyalties, especially if they perceive that their preferred party is unable to provide security or effective crisis management. Vasilopoulou et al. (Vasilopoulou & Wagner, 2020) demonstrate that emotional responses like anger are particularly associated with defection from previous party allegiances, while enthusiasm can facilitate vote-switching among certain groups. The impact of such shocks on partisan alignment is not uniform across all segments of the electorate. Partisan iden-

tity strength plays a crucial role in determining susceptibility to realignment. According to (5766047), there exist critical thresholds in party identity strength; when polarization is high, even a modest shock can trigger a rapid phase transition toward increased polarization or, conversely, toward depolarization if the shock undermines confidence in party leadership. This bifurcation suggests that the timing and context of the shock, specifically, the prevailing level of polarization, are essential in shaping whether voters consolidate around their existing party or shift allegiance. Institutional factors further mediate these effects. The distribution of disaster relief resources often follows partisan lines, with incumbents channeling aid preferentially to co-partisan regions or using clientelistic strategies to secure electoral support (Birch & i Coma, 2023)(Cooperman, 2022). Such practices reinforce existing alignments among beneficiaries but may alienate those excluded from assistance, potentially prompting realignment among affected populations who perceive inequity or neglect (Birch & i Coma, 2023). Cooperman (Cooperman, 2022) finds that incumbents are more likely to declare emergencies and distribute relief in election years, leveraging these actions for electoral gain and thus influencing short-term partisan support. Partisan retrospection also shapes how voters interpret government responses to shocks. Heersink et al. outline that individuals tend to evaluate disaster response through a partisan lens: co-partisans may reward incumbents for their actions during crises, while contra-partisans are more likely to punish them regardless of objective performance. This dynamic complicates retrospective voting models by introducing bias based on pre-existing party identification rather than solely on policy outcomes (Heersink et al., 2022). Social contagion mechanisms contribute an additional layer to shifts in partisan alignment following external shocks. Gerling et al. (Gerling & Kellermann, 2022) provide evidence that information shocks, such as sudden news about political developments, can have contagious effects within social networks, amplifying support for populist or anti-establishment parties when aggregate support reaches a certain threshold. This process reduces reputational concerns associated with switching allegiance and can accelerate realignment dynamics within communities exposed to shared shocks. The competitive context of elections also modulates the extent of partisan shifts after external shocks. Rubin (Rubin,

2020) notes that in highly competitive electoral environments, parties have greater incentives to target disaster declarations and relief efforts strategically, which can intensify short-term swings in partisan support as voters respond to perceived responsiveness or neglect. Finally, exogenous shocks may interact with longer-term trends in populism and anti-establishment sentiment. Levi et al. (Levi et al., 2024) argue that major external events can serve as inflection points for the development and persistence of populist movements by catalyzing changes in political opinions and voting behavior that endure beyond the immediate aftermath of the shock. Taken together, these findings indicate that sudden external shocks disrupt established patterns of partisan alignment through psychological arousal, strategic resource allocation by incumbents, biased retrospective evaluations, social contagion processes, and institutional incentives shaped by electoral competitiveness (5766047)(Birch & i Coma, 2023)(Cooperman, 2022)(Vasilopoulou & Wagner, 2020)(Heersink et al., 2022)(Gerling & Kellermann, 2022)(Rubin, 2020)(Levi et al., 2024). The magnitude and direction of these shifts depend on both individual-level factors (such as emotional response and identity strength) and contextual variables (including polarization levels and institutional arrangements).

6 Long-term Effects on Political Engagement

6.1 Persistence of Behavioral Change

6.1.1 Temporal Patterns and Decay of Effects

Temporal patterns in the effects of sudden external shocks, such as natural disasters or terrorist attacks, on voting behavior are characterized by both immediate and lingering influences that can persist across multiple electoral cycles. The persistence and eventual decay of these behavioral changes are shaped by a complex interplay of psychological adaptation, institutional context, and the salience of the shock over time. Empirical studies indicate that shocks can induce a marked but often transient shift in political engagement. For instance, traumatic events like mass shootings or natural disasters initially heighten public attention and may increase or decrease turnout depending on the nature of the event and its perceived relevance

to government responsibility (MARSH, 2023)(Zelin & Smith, 2022). In the immediate aftermath, affected populations may experience elevated emotional responses, such as fear, anger, or solidarity, that translate into increased political mobilization or, conversely, withdrawal from participation if trust in institutions is eroded (Vasilopoulou & Wagner, 2020). The authors of (Guiso et al., 2024) state that economic shocks tend to increase abstention rates due to growing distrust in traditional parties, suggesting that the initial behavioral response is not always an increase in engagement but can also manifest as alienation. The durability of these effects is subject to several mechanisms. One key factor is habit formation: repeated exposure to voting (or abstention) during periods of heightened salience can reinforce future behavior through psychological pathways akin to learning processes (Fujiwara et al., 2016)(Garmann, 2020). Fujiwara et al. (Fujiwara et al., 2016) indicate that habit formation may explain why individuals who vote during a shock are more likely to continue participating in subsequent elections. This persistence is further supported by models where experiences in previous elections update citizens' beliefs about their efficacy and influence on outcomes. If a shock leads to high turnout and close electoral results, individuals may develop a stronger sense of external political efficacy, which sustains higher engagement levels beyond the initial event. However, this persistence is not indefinite. Over time, as the memory of the shock fades or as new issues emerge on the public agenda, the direct impact on voting behavior tends to diminish. Garmann (Garmann, 2020) outlines that while institutional reforms or concurrent events can create positive turnout shocks with lasting effects, empirical evidence suggests that these effects eventually decay unless reinforced by subsequent salient events or policy changes. The decay rate depends on whether new habits have been established and whether institutional adaptations, such as expanded access to early voting after a disaster, remain in place (Zelin & Smith, 2022)(Garmann, 2020). Socioeconomic factors also modulate temporal patterns. For example, populations experiencing repeated shocks or chronic insecurity may exhibit more persistent changes in political attitudes and behaviors compared to those exposed only once (Levi et al., 2024). Margalit (Margalit, 2019) emphasizes that significant economic disruptions can have both immediate attitudinal impacts and longer-term conse-

quences for political preferences if they alter expectations about personal economic security. Institutional responses play a crucial role in either amplifying or attenuating these temporal dynamics. When authorities implement measures that facilitate continued participation, such as convenience voting methods introduced after natural disasters, the initial negative impact on turnout can be mitigated and even reversed over time (Zelin & Smith, 2022). Conversely, if institutional trust erodes without effective policy intervention, disengagement may become entrenched. In summary, while external shocks often trigger pronounced short-term shifts in voting behavior through emotional arousal and heightened issue salience, their long-term persistence depends on psychological reinforcement (habit formation), evolving perceptions of efficacy, socioeconomic context, and adaptive institutional frameworks. These factors collectively determine whether behavioral change endures across electoral cycles or gradually returns to pre-shock baselines (Fujiwara et al., 2016)(Zelin & Smith, 2022)(Guiso et al., 2024)(Garmann, 2020).

6.1.2 Intergenerational Transmission

Intergenerational transmission of behavioral change following sudden, external shocks such as natural disasters is a phenomenon that has attracted increasing attention in the study of long-term political engagement. The persistence of altered political attitudes and behaviors across generations suggests that the impact of these events extends well beyond the immediate aftermath, shaping the social and political fabric of affected communities over decades or even centuries. Empirical evidence from historical analyses provides compelling support for the notion that exposure to extreme events can have enduring effects on political values and engagement, which are then transmitted to subsequent generations. For instance, research examining Japanese rural cities affected by major earthquakes dating back to AD 684 demonstrates that regions with a history of severe natural disasters exhibit higher contemporary levels of trust and political engagement compared to less-affected areas. This pattern persists even when controlling for other confounding factors, indicating that the legacy of disaster experience is not merely a reflection of current socioeconomic conditions but rather a deeply

embedded cultural trait. The authors argue that such traits, heightened trust and engagement, are likely passed down through family socialization processes, community norms, and local institutions, thereby reinforcing collective responses to adversity over time. The mechanisms underlying this intergenerational transmission are multifaceted. Social capital theory posits that shared experiences of hardship can strengthen communal bonds and foster norms of cooperation and civic participation. When parents who have lived through disasters develop greater trust in their neighbors or local authorities, they may model these attitudes for their children both explicitly through discussion and implicitly through behavior. Over time, these learned responses become part of the community's collective memory, shaping how future generations interpret and react to new challenges (Pinto, 2023)(Jusko & Spác, 2024). In addition to familial socialization, schools, religious organizations, and local governance structures may also play a role in perpetuating these behavioral patterns by embedding narratives about resilience and civic duty into educational curricula or public commemorations. It is important to note that while positive forms of engagement such as increased trust and participation can be transmitted intergenerationally, so too can negative or defensive adaptations. For example, if disaster response is perceived as inadequate or unfairly distributed by authorities, this may engender persistent skepticism toward government institutions or foster clientelist expectations regarding disaster relief (Birch & i Coma, 2023). Such attitudes can become entrenched within families and communities, influencing voting behavior long after the original event has faded from direct memory. The durability of these effects is further supported by studies on the persistence of preferences more broadly. Pinto (Pinto, 2023) highlights that preferences shaped by formative experiences, such as those resulting from natural disasters, tend to be remarkably stable over time. This stability implies that once established within a population, altered patterns of political engagement may persist across multiple generations unless disrupted by subsequent shocks or significant institutional changes. Moreover, the intergenerational transmission process interacts with broader societal trends. As climate change increases the frequency and severity of extreme weather events globally, more communities are likely to undergo similar processes of adaptation and transmission. Jusko et

al. (Jusko & Spác, 2024) emphasize the importance of understanding how disaster-induced behavioral changes manifest under different conditions and whether similar patterns emerge across diverse contexts. This raises important questions about heterogeneity: do all types of shocks produce equally persistent effects? Are certain institutional settings more conducive to intergenerational transmission than others? In sum, the available evidence underscores that sudden external shocks can leave an indelible mark on political engagement not only for those directly affected but also for their descendants. Through mechanisms rooted in social capital formation, family socialization, institutional reinforcement, and collective memory, behavioral adaptations forged in response to disaster are woven into the fabric of community life and transmitted across generations (Pinto, 2023)(Jusko & Spác, 2024)(Birch & i Coma, 2023).

6.1.3 Cumulative Impact of Multiple Shocks

The cumulative impact of multiple external shocks, such as natural disasters or significant policy changes, on political engagement and voting behavior is a complex phenomenon shaped by the interaction of psychological adaptation, socioeconomic disruption, and institutional responses. When individuals or communities experience repeated shocks over time, the persistence and magnitude of behavioral change can differ substantially from the effects observed after a single event. Empirical evidence suggests that the accumulation of shocks can reinforce or even amplify shifts in political attitudes and behaviors. For instance, Levi et al. demonstrate that structural reforms and immigration shocks in New Zealand not only produced immediate changes in voting patterns, specifically increasing support for populist parties like NZ First, but also had enduring effects on individual beliefs and political preferences that persisted for decades. This long-term persistence indicates that repeated or particularly salient shocks may entrench new patterns of political engagement, making them resistant to reversion even as the original impetus fades (Levi et al., 2024). The psychological mechanisms underlying these persistent changes are multifaceted. Personal experience with traumatic events often serves as a salient reference point for future political judgments, especially among less politically

engaged individuals who rely on direct experience rather than abstract information to form opinions. As Baccini et al. outline, this reliance on personal experience can make voters more susceptible to cumulative effects when exposed to multiple shocks over time (Baccini & Leemann, 2021). The repetition of adverse events may heighten perceptions of vulnerability or government inadequacy, leading to sustained demand for political change or increased support for parties promising protection or reform (Levi et al., 2024)(Baccini & Leemann, 2021). Socioeconomic consequences also play a crucial role in shaping the cumulative impact. When communities face successive disasters or disruptive reforms, the compounded economic insecurity can deepen grievances and foster long-lasting shifts in political alignment. The findings by Levi et al. indicate that such cumulative adversity not only influences immediate electoral outcomes but also leaves an imprint on collective memory, affecting subsequent generations' political attitudes (Levi et al., 2024). This intergenerational transmission underscores how repeated shocks can become embedded within local political cultures. Institutional responses further mediate the persistence of behavioral change following multiple shocks. If governmental interventions are perceived as inadequate or opportunistic, such as using disaster relief for clientelistic purposes rather than addressing underlying vulnerabilities, citizens may develop lasting skepticism toward incumbents or established parties. Cooperman notes that suboptimal policy responses to droughts can perpetuate economic insecurity and erode trust in institutions, thereby reinforcing behavioral changes initiated by earlier shocks (Cooperman, 2022). Conversely, effective and equitable responses may mitigate negative long-term effects. However, not all studies find robust evidence for persistent behavioral change after multiple shocks. Bovan et al. report that when controlling for sociodemographic variables and employing rigorous matching methods, the apparent effect of floods on voting behavior disappears, suggesting that methodological rigor is essential to disentangle true cumulative impacts from confounding factors (Bovan et al., 2018). This highlights the importance of considering both context-specific variables and research design when assessing the durability of shock-induced behavioral change. The literature also points to heterogeneity in how different groups respond cumulatively to repeated shocks. Age, education level, employment status, and urban ver-

sus rural residence all modulate susceptibility to long-term shifts in engagement and voting patterns. For example, younger voters or those with higher education may adapt differently compared to older or less educated cohorts when exposed to recurring disruptions. In summary, while some contexts reveal strong evidence for persistent behavioral change resulting from the cumulative impact of multiple external shocks, manifested through entrenched voting patterns and altered political attitudes, other cases underscore the need for careful empirical scrutiny to avoid overstating these effects. The interplay between personal experience, socioeconomic disruption, institutional response quality, and group-specific factors ultimately determines whether repeated exposure leads to lasting transformation in political engagement (Levi et al., 2024)(Bovan et al., 2018)(Cooperman, 2022)(Baccini & Leemann, 2021).

6.2 Evolution of Political Preferences

6.2.1 Changes in Policy Demands

Sudden external shocks, such as natural disasters or terrorist attacks, can induce significant and sometimes lasting changes in the policy demands of affected populations. These events often act as exogenous forces that disrupt the status quo, compelling both voters and political actors to reassess their priorities and preferences regarding public policy. The magnitude and direction of these shifts are shaped by the intensity of the shock, the specific policy dimensions it affects, and the strategic responses of political parties. When a shock occurs, it can directly alter voters' ideal points on salient issues. For instance, a terrorist attack may prompt a collective movement in public preference toward enhanced national security measures. In this scenario, the entire electorate's position on the security dimension shifts in a similar direction, increasing demand for policies that promise greater safety and order. However, not all shocks produce uniform effects across all policy areas; some may change the relative importance or salience of different policy dimensions rather than shifting positions within a single dimension. This rebalancing can lead to complex changes in voter preferences as individuals prioritize new concerns over previously dominant ones (Aragonès & Ponsatí, 2022)(Balcells & Torrats-Espinoza, 2018). The response of political parties to these evolving

demands is neither automatic nor homogeneous. Parties must decide how much to adjust their platforms based on both the scale of voter preference shifts and their own strategic calculations regarding competitors' likely moves. The optimal degree of policy revision is thus asymmetric across parties: those whose existing positions are closer to the new median voter preference may benefit from minimal adjustment, while others may need more substantial repositioning to remain electorally viable (Aragonès & Ponsatí, 2022). Calca and Gross highlight that party responsiveness to external shocks is mediated by party type and context; not all parties react identically to similar stimuli (Calca & Gross, 2019). Empirical evidence suggests that after high-salience shocks, such as terrorist attacks, citizens tend to support more punitive policies and place greater value on public safety. This shift in attitudes can translate into increased electoral participation motivated by a desire for stability or retribution, further reinforcing demand for certain types of policies (Balcells & Torrats-Espinoza, 2018). The psychological impact of such events interacts with socioeconomic factors, amplifying calls for government action in specific domains. Moreover, exogenous shocks do not only affect immediate policy preferences but can also have enduring consequences for how citizens evaluate political actors and institutions. For example, experiencing large-scale shocks has been shown to increase mistrust in traditional parties while simultaneously boosting support for strong leadership figures who promise decisive action (Levi et al., 2024). This dynamic can reshape long-term patterns of political engagement and alter the landscape of party competition. The process through which information about shocks diffuses throughout society also plays a crucial role in shaping changes in policy demands. Media coverage following an exogenous event gradually raises issue salience among the public, leading to priming effects that influence subsequent evaluations of policies and politicians (Bridgman et al., 2021). As awareness spreads unevenly across different segments of the population, so too does the intensity and nature of demand for policy change. Finally, institutional settings mediate how these shifts manifest electorally. In some contexts, government responses to shocks, such as disaster relief, can be interpreted as signals of competence or alignment with voter interests, thereby affecting reelection prospects or protest behavior depending on regime type (Baerlocher et al., 2024). The interplay between

institutional incentives and evolving voter demands underscores the complexity inherent in translating external shocks into concrete changes in political outcomes. In summary, sudden external shocks serve as catalysts for dynamic transformations in policy demands by altering voter preferences directly through psychological mechanisms and indirectly via media diffusion and party strategy adaptation. These processes unfold within specific institutional frameworks that further condition their long-term impact on political engagement (Aragonès & Ponsatí, 2022)(Balcells & Torrats-Espinoza, 2018)(Calca & Gross, 2019)(Bridgman et al., 2021)(Baerlocher et al., 2024)(Levi et al., 2024).

6.2.2 Reconfiguration of Political Cleavages

The reconfiguration of political cleavages following sudden, external shocks such as natural disasters or terrorist attacks is a complex process shaped by psychological, socioeconomic, and institutional mechanisms. These shocks can disrupt established patterns of political alignment, sometimes reinforcing existing divisions and at other times catalyzing new forms of polarization or realignment. Empirical evidence suggests that economic shocks, particularly those related to international trade or commodity prices, can significantly alter the structure of political competition. For instance, regional exposure to import competition has been shown to increase support for nationalist and radical right parties in Western Europe. This shift reflects a broader movement away from traditional embedded liberalism toward more protectionist and exclusionary platforms. The mechanism underlying this transformation is not limited to individuals directly affected by trade shocks; sociotropic considerations, whereby individuals form attitudes based on perceived collective rather than personal interests, can diffuse these effects across broader segments of society (Colantone & Stanig, 2017). As a result, the boundaries between traditional class-based or left-right cleavages may blur, giving rise to new axes of conflict centered on globalization and national identity. Similarly, economic upturns or downturns at the local level can reshape preferences regarding redistributive policies. Positive employment shocks tend to decrease support for redistribution, especially in neighborhoods most affected by such changes. This pattern aligns with theoretical models

positing that voters' material circumstances influence their policy preferences. The magnitude of these effects is often greatest where the shock is most pronounced, suggesting that economic volatility can reinforce or weaken existing cleavages depending on its distributional impact. Brunner et al. (Brunner et al., 2011) indicate that cognitive consistency pressures may also play a role: as voters adjust their party identification in response to economic conditions, they may subsequently align their positions on noneconomic issues with their chosen party's platform, further entrenching partisan divides. Natural disasters present another context in which political cleavages may be reconfigured. In Slovakia, for example, severe flooding prompted increased electoral participation among affected citizens who sought greater attention to environmental issues and disaster prevention from politicians. This mobilization was not merely reactive but reflected an emerging cleavage around environmental policy and government responsiveness (Jusko & Spác, 2024). However, the extent to which such events produce lasting realignments depends on institutional factors and the ability of political actors to channel grievances into sustained movements or policy change. Institutional reforms that alter voting incentives can also interact with exogenous shocks to reshape turnout patterns and potentially shift the composition of the electorate. For example, changes in electoral rules or compulsory voting laws may incentivize different demographic groups, such as younger voters, to participate in response to specific events like adverse weather conditions. The resulting shifts in turnout can have downstream effects on party competition and issue salience if newly mobilized voters possess distinct preferences from habitual voters (Garmann, 2020). Despite these dynamics, not all external shocks lead to significant reconfiguration of political cleavages. Studies examining the impact of terrorism on voting behavior in the United States find little evidence for durable changes in electoral outcomes attributable to such events. Even when accounting for attack motives or incumbency status, terrorist incidents do not appear to systematically alter partisan alignments or voter turnout patterns (Baccini et al., 2021). This suggests that the capacity of external shocks to reshape political divisions is contingent upon contextual factors such as pre-existing societal tensions, media framing, and institutional responsiveness. In some cases, exogenous financial shocks, such as currency crises, can prompt

both increased turnout and shifts in party support among exposed populations. Ahlquist et al. (Ahlquist et al., 2020) demonstrate that individuals affected by foreign exchange fluctuations are more likely both to vote and to defect from incumbent parties perceived as responsible for economic mismanagement. Such episodes can thus accelerate realignment processes by undermining incumbent coalitions and empowering opposition forces with alternative narratives. The interplay between psychological mechanisms (such as trust in institutions), socioeconomic impacts (like employment or income shocks), and institutional arrangements (including electoral systems) ultimately determines whether external shocks reinforce existing cleavages or generate new ones. Shineman (Shineman, 2018) finds that voting itself can increase trust in both electoral systems and governments among winners without eroding trust among losers, a dynamic that could either stabilize or subtly shift political alignments depending on subsequent developments. Taken together, these findings underscore that while sudden external shocks have the potential to reconfigure political cleavages through multiple pathways, including shifts in issue salience, partisan identification, turnout composition, and trust, they do so unevenly across contexts and populations (Colantone & Stanig, 2017)(Jusko & Spác, 2024)(Ahlquist et al., 2020)(Brunner et al., 2011)(Garmann, 2020)(Baccini et al., 2021)(Shineman, 2018). The durability and direction of these changes depend critically on how individual experiences interact with broader structural forces within society.

6.2.3 Emergence of New Political Actors

The emergence of new political actors following sudden external shocks such as natural disasters or terrorist attacks is a phenomenon that can be traced to the disruption of established political equilibria and the reconfiguration of voter preferences. When a society experiences a significant shock, the resulting uncertainty and dissatisfaction with incumbent responses often create opportunities for previously marginal or entirely new political forces to gain traction. This process is mediated by both psychological mechanisms, such as heightened risk tolerance and affective shifts, and institutional factors, including the perceived legitimacy and effectiveness of existing parties. Large-scale shocks tend to increase the salience of specific

issues, which can lead to rapid divergence in public opinion on those topics while leaving other attitudes relatively unchanged. As Chua et al. (Chua et al., 2021) outline, when a crisis elevates the importance of a particular issue, social pressure towards conformity within local discussion networks intensifies, potentially leading to greater attitudinal homogeneity at the community level. However, this same process can also open space for alternative voices that challenge mainstream narratives, especially if established parties are seen as ineffective or unresponsive. Economic crises and disasters often result in increased risk tolerance among affected populations. Cerqua et al. (Cerqua et al., 2023) provide evidence that post-disaster environments are associated with a shift in preferences toward more populist or extremist candidates, who typically propose riskier policy responses compared to traditional parties. This shift is not uniform but is strongly mediated by institutional quality and the effectiveness of post-disaster management. In contexts where institutions are perceived as weak or corrupt, new actors promising radical change may find fertile ground. Panunzi et al. (Panunzi et al., 2020) model voter behavior under economic uncertainty and demonstrate that when faced with large downturns, voters may become more willing to support candidates who offer uncertain but potentially transformative policies, often embodied by populist newcomers, over moderate incumbents who represent stability but little change. The intrinsic differences between these candidates reflect anticipated policy choices after the election, suggesting that voters' willingness to embrace new actors is closely tied to their expectations about future governance. The literature also highlights how niche parties, such as green, regionalist, or radical right formations, are less responsive to economic shocks than mainstream parties but may benefit from shifts in voter attention toward non-economic issues during crises (Calca & Gross, 2019). These niche actors can capitalize on moments when mainstream parties are preoccupied with managing immediate fallout, allowing them to articulate alternative agendas and attract disaffected voters. Natural disasters do not only alter individual preferences; they can also reshape party systems by incentivizing strategic behavior among political elites. Visconti (Visconti, 2022) notes that parties may respond to disasters by nominating specific types of politicians in affected areas or by adjusting their platforms to address emergent

concerns. This dynamic interaction between voter demand and elite supply further facilitates the entry or rise of new political actors. Empirical evidence from Japan following the 2011 Great East Japan Earthquake illustrates how disappointment with incumbent performance, in this case, the Democratic Party of Japan, translated into electoral losses for established actors and gains for rivals such as the Liberal Democratic Party (Pinto, 2023). Such outcomes underscore how external shocks can serve as catalysts for realignment within party systems. Furthermore, long-term changes in political engagement after disasters may be reinforced by habit formation and persistent effects on turnout patterns (Fujiwara et al., 2016). As new actors mobilize previously disengaged segments of the electorate or exploit emerging cleavages, they contribute to an evolving landscape where traditional alignments are challenged and novel coalitions emerge. In sum, sudden external shocks disrupt established patterns of political competition by altering both voter psychology and elite strategies. The resulting environment is characterized by increased volatility and openness to new political actors who promise either radical solutions or alternative forms of representation (Cerqua et al., 2023)(Panunzi et al., 2020)(Visconti, 2022)(Pinto, 2023).

6.3 Transformation of Civic and Social Capital

6.3.1 Collective Action and Volunteering

Collective action and volunteering are often transformed in the aftermath of sudden external shocks, such as natural disasters. These events can act as catalysts for increased prosocial behavior, fundamentally altering the social fabric of affected communities. The literature consistently demonstrates that disasters tend to enhance group cohesion, as individuals recognize the necessity of cooperation to achieve shared objectives, such as disaster response or community reconstruction. This heightened sense of collective responsibility is not merely anecdotal; empirical studies have documented increases in prosocial acts and altruism following disasters, with citizens becoming more civic-minded and oriented toward the welfare of others in their municipality. The mechanisms underlying this transformation are multifaceted. One key factor is the emergence of a shared experience among community members, which

can reduce social barriers and promote solidarity. When a disaster strikes, individuals are often compelled to participate in collective efforts, such as building flood defenses or distributing aid, which serve both immediate practical needs and longer-term social integration. These activities provide opportunities for volunteering that might not otherwise exist, thereby strengthening networks of trust and reciprocity within the community. Jakub Jusko et al. (Jusko & Spác, 2024) indicate that exposure to natural hazards like flooding leads to measurable increases in political participation at the municipal level. Their difference-in-differences analysis reveals that turnout rises in affected areas, suggesting that the collective mobilization required during disaster recovery spills over into greater engagement with formal political processes. This effect is not simply a short-term reaction but may persist as communities internalize new norms of cooperation and mutual support. Social capital plays a dual role in this context: it acts both as a buffer against vulnerability and as a driver of civic engagement (Pinto, 2023). Communities with higher levels of pre-existing social capital are better equipped to organize collective responses to crises, but even those with lower initial levels can experience rapid growth in social ties through shared adversity. The process of volunteering during recovery efforts can thus generate new forms of social capital, which may endure long after the immediate crisis has passed. Moreover, political participation itself can be conceptualized as a form of prosocial behavior. In the wake of disasters, individuals may be motivated not only by self-interest but also by concern for their families and neighbors. This expanded sense of responsibility can translate into higher rates of volunteering for civic initiatives or increased turnout at elections held soon after the event (Jusko & Spác, 2024)(Pinto, 2023). The transformation is particularly pronounced when elections coincide with periods of intense collective action, as the newly established social atmosphere encourages broader participation. Institutional factors also shape these dynamics. Governmental responses to disasters, such as providing relief or facilitating volunteer coordination, can either reinforce or undermine emerging patterns of collective action (Liao & Junco, 2022). Effective institutional support amplifies opportunities for volunteering and sustains momentum for civic engagement beyond the immediate aftermath. Conversely, inadequate or poorly managed interventions may erode

trust and dampen willingness to participate collectively. The psychological impact should not be underestimated. Experiencing a disaster together often leads to shifts in individual attitudes toward community involvement. As people witness firsthand the benefits of cooperation and mutual aid, they may become more inclined to engage in future collective endeavors, even outside crisis contexts (Jusko & Spác, 2024)(Pinto, 2023). This attitudinal change contributes to a virtuous cycle wherein increased volunteering further strengthens social capital, which in turn facilitates additional collective action. In summary, sudden external shocks such as natural disasters have profound effects on collective action and volunteering within affected populations. These events catalyze prosocial behaviors by fostering group cohesion, generating new social capital, and motivating individuals to participate more actively in both informal community initiatives and formal political processes (Jusko & Spác, 2024)(Pinto, 2023)(Liao & Junco, 2022). The interplay between psychological adaptation, socioeconomic necessity, and institutional facilitation determines the extent and durability of these transformations.

6.3.2 Trust in Institutions and Social Networks

Trust in institutions and the configuration of social networks are deeply affected by sudden external shocks such as natural disasters or episodes of political violence. These events can disrupt established patterns of civic engagement, reshape perceptions of institutional legitimacy, and alter the density and function of social ties within communities. Empirical evidence suggests that the management of post-disaster recovery processes plays a significant role in shaping institutional trust. For instance, in the aftermath of the L'Aquila earthquake, mismanagement, corruption scandals, and bureaucratic delays were associated with a measurable decline in citizens' trust toward institutions. This erosion of trust was reflected in reduced electoral turnout at European elections, which is often interpreted as an indicator of civic engagement and institutional confidence. The authors of (Cerqua et al., 2023) indicate that when recovery is perceived as slow or unfair, citizens may disengage from formal political processes, signaling a transformation in their relationship with state structures. The spatial diffusion of protest and political mobilization following violent or confrontational events

further illustrates how social networks mediate responses to external shocks. According to (Rodon & Guinjoan, 2022), both spatial proximity and the structure of social networks influence how information about such events spreads, potentially amplifying or dampening their effects on collective action. Dense social networks can facilitate rapid transmission of grievances and mobilization cues, while looser networks may limit contagion effects. This dynamic underscores the importance of network topology in determining whether shocks lead to widespread civic transformation or remain localized phenomena. Social capital emerges as a critical buffer against the negative consequences of external shocks on institutional trust. In regions characterized by higher levels of social connectedness, communities have demonstrated greater resilience and a propensity to hold incumbents accountable through electoral means rather than resorting to more extreme forms of political expression (Pinto, 2023). This pattern suggests that robust social networks not only support collective coping strategies but also channel discontent into institutionalized forms of participation. The act of voting itself has been shown to influence trust in institutions beyond those directly implicated in an election. Shineman (Shineman, 2018) outlines that casting a ballot can increase diffuse political trust, extending beyond immediate actors and procedures to encompass broader governmental structures. However, this effect is not uniform; it is moderated by individuals' approval or disapproval of electoral outcomes. Thus, participation in democratic rituals can reinforce institutional legitimacy under certain conditions but may also exacerbate cynicism if outcomes are perceived as illegitimate or unresponsive. Contrastingly, Chapman (Chapman, 2024) finds no evidence that major political events such as elections or subsequent protests significantly altered public trust in Russian institutions during the period studied. This result highlights the context-dependence of institutional trust dynamics: while some societies experience pronounced shifts following shocks, others display remarkable stability. The interplay between party activism and social networks also shapes long-term transformations in civic capital. Fieldhouse et al. (Fieldhouse et al., 2016) demonstrate that politically involved agents, akin to party activists, initiate discussions that can modify levels of political interest and civic duty among less engaged individuals within their networks. These interactions are

not confined to supporters but extend across network boundaries, suggesting that post-shock periods characterized by heightened activism may recalibrate broader patterns of engagement and affiliation. Rodon and Guinjoan (Rodon & Guinjoan, 2022) encourage further exploration into how violence-related contagion operates through both spatial channels and social network structures. Their perspective implies that understanding the resilience or fragility of institutional trust requires attention not only to individual attitudes but also to the architecture through which information and emotions propagate after disruptive events. In sum, sudden external shocks act as stress tests for both institutional trust and the integrity of social networks. The trajectory, whether toward renewed engagement or deepened alienation, depends on factors including recovery management quality (Cerqua et al., 2023), pre-existing levels of social capital (Pinto, 2023), network density (Rodon & Guinjoan, 2022), participatory experiences (Shineman, 2018), contextual stability (Chapman, 2024), and activist-driven communication flows (Fieldhouse et al., 2016). These mechanisms collectively determine whether affected populations emerge from crises with transformed civic identities or entrenched skepticism toward formal institutions.

6.3.3 Formation of Grassroots Movements

The emergence of grassroots movements in the aftermath of sudden, external shocks such as natural disasters is a phenomenon that has attracted increasing scholarly attention. These movements often arise as immediate, community-based responses to collective adversity, reflecting both the transformation and mobilization of civic and social capital. When formal institutions are perceived as inadequate or slow to respond, individuals frequently organize at the local level to address urgent needs, coordinate relief efforts, and advocate for resources. This process is not merely reactive; it can catalyze enduring changes in patterns of political engagement and reshape the landscape of civic participation. Natural disasters disrupt established routines and social structures, compelling affected populations to seek new forms of collective action. According to (Fair et al., 2017), one prominent pathway through which disasters influence political participation is the grassroots creation of self-help organizations.

These organizations serve as vehicles for mutual aid, information dissemination, and resource allocation. The formation of such groups is often driven by a heightened sense of shared fate and solidarity among community members who experience similar losses or threats. This collective identity can strengthen pre-existing social ties or generate new networks that persist beyond the immediate crisis. The literature further suggests that these grassroots initiatives are not isolated from broader political processes. Rather, they can act as incubators for sustained civic engagement by lowering barriers to participation and providing practical experience in organizational skills, leadership, and advocacy. Participation in these movements may also enhance individuals' sense of efficacy and inclusion within the democratic process. As noted by Castro and Retamal et al. (Castro & Retamal, 2023), involvement in protests or community mobilizations can make participants feel more integrated into public life, potentially increasing their propensity to engage in other forms of political activity such as voting or campaigning. Moreover, the transformation of social capital through grassroots mobilization extends beyond immediate disaster response. Social capital, defined as the networks, norms, and trust that facilitate coordination and cooperation, can be both a product and a driver of collective action during crises. In contexts where state capacity is limited or government interventions are perceived as insufficient, communities may rely on informal networks to provide insurance against risk and promote resilience. Soares Pinto et al. (Pinto, 2023) argue that this form of social capital can substitute for formal institutional support, enabling communities to recover more effectively while simultaneously shaping political attitudes toward incumbents. The persistence of grassroots movements after the initial shock depends on several factors, including the degree of institutionalization achieved by these organizations and their ability to adapt to changing circumstances (Castro & Retamal, 2023)(Pinto, 2023). Some movements transition into more formalized entities such as non-governmental organizations or even political parties, thereby extending their influence over policy agendas and electoral outcomes (Castro & Retamal, 2023). Others may dissolve once immediate needs are met but leave behind strengthened networks that can be reactivated in future crises. Importantly, the cumulative effect of repeated shocks may reinforce these dynamics over time. Elliott

et al. (Elliott et al., 2023) highlight that it is not only singular catastrophic events but also the accumulation of smaller-scale adversities that shape collective attitudes and behaviors. As communities repeatedly confront challenges together, their capacity for self-organization grows more robust, potentially leading to a culture where grassroots mobilization becomes an expected response to adversity. Grassroots movements also interact with existing power structures in complex ways. While they can empower marginalized groups by amplifying their voices and demands, they may also provoke resistance from entrenched interests or be co-opted by political elites seeking legitimacy or control. Birch et al. (Birch & i Coma, 2023) discuss how clientelist strategies may exploit disaster-induced vulnerabilities for electoral gain; however, genuine grassroots mobilization rooted in social capital tends to emphasize horizontal collaboration rather than top-down patronage. In sum, sudden external shocks act as catalysts for the formation and evolution of grassroots movements by disrupting established patterns and necessitating collective action at the community level (Fair et al., 2017)(Castro & Retamal, 2023)(Pinto, 2023)(Elliott et al., 2023). These processes transform civic and social capital in ways that have lasting implications for political engagement long after the initial crisis has subsided.

7 Moderating and Mediating Factors

7.1 Role of Pre-existing Social Capital

Pre-existing social capital plays a significant role in shaping how communities respond to sudden external shocks such as natural disasters or terrorist attacks, particularly in the context of voting behavior. Social capital, often conceptualized as the networks, norms, and trust that facilitate coordination and cooperation among individuals, can act as both a buffer and an amplifier for the effects of these shocks on electoral outcomes. The influence of social capital is multifaceted. On one hand, high levels of social capital may enhance collective efficacy, enabling communities to mobilize more effectively in response to crises. This can manifest in increased political participation following disasters, as individuals leverage their social

networks to share information, coordinate relief efforts, and articulate collective demands to political actors (Carlin et al., 2014). Carlin et al. indicate that disaster damage is a significant positive predictor of various forms of political participation, including contacting officials and attending community meetings. The presence of robust social ties likely facilitates this engagement by providing channels for communication and mutual support. Conversely, the stabilizing effect of social capital may also moderate the extent to which external shocks disrupt established voting patterns. In regions where interpersonal trust and civic engagement are already high, individuals might be less susceptible to abrupt shifts in political preferences triggered by crisis events. Pinto discusses how the interaction between time trends and social capital captures evolving patterns in turnout during periods marked by extraordinary circumstances. The findings suggest that pre-existing social capital can condition the impact of shocks on electoral participation: its influence becomes particularly salient when the political environment is unsettled by exogenous events. Moreover, fixed measures of social capital, those assessed prior to a shock, provide valuable insight into differential responses among affected populations. By holding these variables constant, researchers can better isolate the effect of recent crises on voting behavior while accounting for baseline differences in community cohesion. Pinto et al. (Pinto, 2023) highlight that distinguishing between those directly affected by disasters and those not affected is crucial for understanding how pre-existing social structures mediate political reactions. Social capital's moderating role extends beyond mere turnout; it also shapes attribution processes regarding government responsibility for crisis management. Liberini et al. (Liberini et al., 2017) demonstrate that subjective well-being, closely linked to perceived support from one's community, affects incumbent support following exogenous shocks. Voters embedded in strong social networks may be more discerning in attributing blame or credit to political actors based on shared experiences and collective interpretations. Additionally, Fieldhouse et al. (Fieldhouse et al., 2016) emphasize that interpersonal influences within social networks are central to mobilization models of turnout. When sudden shocks occur, these networks become even more critical as conduits for information flow and norm reinforcement. Mobilization efforts by parties

or candidates are likely to be more effective in areas with dense social ties, amplifying or dampening the electoral consequences of crises depending on prevailing attitudes within these groups. The interplay between vulnerability and resilience is also shaped by pre-existing social capital. Bobonis et al. (Bobonis et al., 2017) note that interventions designed to reduce household vulnerability, such as improved water infrastructure, may have limited reach if they do not engage with existing community structures. The capacity for collective action in response to temporary shocks like droughts depends not only on material resources but also on the strength of local associations and mutual trust. In summary, pre-existing social capital serves as a critical lens through which the effects of sudden external shocks on voting behavior must be interpreted. It mediates individual and collective responses by facilitating information exchange, supporting mobilization efforts, shaping attribution processes, and conditioning resilience or vulnerability to crisis-induced disruptions (Carlin et al., 2014)(Pinto, 2023)(Bobonis et al., 2017)(Fieldhouse et al., 2016)(Liberini et al., 2017). The heterogeneity observed across different contexts underscores the necessity of integrating measures of social capital into empirical analyses seeking to unravel the complex pathways linking external shocks with electoral outcomes.

7.2 Institutional Quality and Governance

Institutional quality and governance play a central role in shaping how sudden, external shocks such as natural disasters or economic crises influence voting behavior. The degree to which institutions are robust, transparent, and responsive can moderate both the immediate and enduring effects of these shocks on electoral outcomes. When institutional frameworks are strong, they can buffer the destabilizing impact of crises by providing clear channels for accountability and effective policy responses. Conversely, weak or fragmented institutions may amplify uncertainty and voter discontent, leading to more pronounced shifts in political preferences. The literature on economic voting highlights that voters often judge incumbents based on perceived or actual economic performance, but the mechanisms underlying these judgments are complex and deeply intertwined with institutional context (Giuliani, 2023). For

instance, when governments possess significant autonomy and capacity to implement policy, voters are more likely to attribute responsibility for crisis management directly to incumbents. This direct attribution is less clear in settings where institutional constraints limit executive action or where multiple layers of government share authority. In such cases, the clarity of responsibility is diluted, potentially muting the electoral consequences of external shocks. Herreño et al. (Herreño et al., 2023) outline that the nature of a shock, whether it is perceived as endogenous (resulting from government action) or exogenous (outside government control), interacts with institutional quality to shape voter reactions. For example, when a crisis stems from deliberate policy choices within the government's purview, high-quality institutions may facilitate informed retrospective voting by making causal links between actions and outcomes more transparent. However, if a shock is clearly exogenous, such as an international event beyond domestic control, robust institutions might help communicate this distinction to voters, reducing unwarranted punishment or reward. Blumenau and Lauderdale (Blumenau & Lauderdale, 2018) argue that existing accounts often overlook how crises can disrupt established policy equilibria within legislatures. The direction of subsequent policy change is not always predictable because structural theories do not specify what new institutional forms will emerge after a shock. The agenda-setting power within legislatures becomes especially salient during crises; high-quality governance structures can channel crisis-induced uncertainty into constructive debate rather than institutional paralysis. Disaster relief allocation further illustrates the mediating role of governance quality. Fukumoto and Kikuta (Fukumoto & Kikuta, 2024) note that while disaster-related expenditures are intended for recovery, their distribution can be influenced by political considerations. High-quality institutions with transparent procedures may mitigate political bias in resource allocation, ensuring that aid reaches genuinely affected areas rather than being diverted for electoral gain. In contrast, weaker governance structures may allow incumbents to exploit disaster relief for patronage purposes under the guise of recovery efforts. The relationship between institutional quality and voter rationality is also nuanced in the context of exogenous shocks like natural disasters. Ashworth et al. (Ashworth et al., 2023) contend that even when events

are outside incumbent control, rational voters may still update their beliefs about government competence based on observed responses. Effective governance can thus enhance the informativeness of post-shock outcomes for voters by signaling administrative capacity and responsiveness. At the local level, Herreño et al. (Herreño et al., 2023) emphasize that governmental constraints, such as fiscal rules or intergovernmental dependencies, can shape both the scope for policy intervention after a shock and the extent to which voters hold incumbents accountable for outcomes. Where local governments have limited room to maneuver due to higher-level constraints or lack of resources, even well-intentioned responses may fall short of public expectations. Finally, Cavalcanti et al. (Cavalcanti et al., 2018) suggest that popularity shocks induced by crises not only affect incumbent strategies but also influence challenger behavior within existing institutional frameworks. Anticipating shifts in voter sentiment due to perceived governance failures or successes during a crisis can alter candidate selection dynamics and campaign strategies. Taken together, these insights underscore that institutional quality and governance structures mediate both psychological attributions of responsibility and socioeconomic pathways through which external shocks translate into electoral behavior (Herreño et al., 2023)(Blumenau & Lauderdale, 2018)(Fukumoto & Kikuta, 2024)(Giuliani, 2023)(Cavalcanti et al., 2018)(Ashworth et al., 2023). The interplay between formal rules, administrative capacity, transparency mechanisms, and political incentives determines whether crises become opportunities for democratic accountability or sources of instability in voting patterns.

7.3 Media Environment and Communication

The media environment and communication channels play a central role in shaping how sudden, external shocks such as natural disasters or terrorist attacks influence voting behavior. The proliferation of social media platforms has fundamentally altered crisis communication dynamics, enabling rapid dissemination of information and facilitating the spread of situational awareness messages during emergencies. This shift requires crisis communication professionals to optimize their strategies to maximize engagement and message reach, as the

efficiency of attention gained from pre-disaster to post-disaster periods is now mediated by the structure and activity within digital networks (Roya et al., 2020). The interplay between user activities, network properties, and the attention received on social media determines which narratives gain prominence, thereby influencing public perceptions and potentially electoral outcomes. Traditional news media coverage remains influential, particularly in amplifying the salience of certain events. For instance, successful terror attacks tend to receive more national media coverage than failed ones, making them more salient in the public consciousness. This heightened visibility can shape political narratives and voter responses, although empirical evidence suggests that increased media coverage does not always translate into significant shifts in electoral outcomes when confounding factors are properly accounted for (Baccini et al., 2021). Nevertheless, the intensity and framing of media coverage can affect issue salience, which in turn may alter the electoral balance between competing parties by imposing different costs or benefits depending on which party is favored by the dominant narrative (Aragonès & Ponsatí, 2022). The challenge of quantifying the impact of media-driven discourses lies in their reliance on less tangible variables such as public perception and narrative dominance rather than concrete disaster impacts or policy responses. Mixed-methods research that triangulates qualitative analyses, such as newspaper articles, social media feeds, graphical illustrations, parliamentary transcripts, and quantitative data can help establish which political narratives prevail after a shock event (Rubin, 2020). Such approaches are particularly valuable for understanding how retrospective evaluations by voters are shaped not only by direct experience but also by mediated representations of events. Moreover, the salience of specific issues in the media environment can evolve over time. For example, increased public attention to climate change after 2005 coincided with a greater concentration of disaster effects on political outcomes during this period. This suggests that shifts in collective attention, measured through indicators like keyword usage in digital platforms, can mediate how disasters translate into political ramifications (Liao & Junco, 2022). The dynamic nature of issue salience underscores the importance of temporal context: as certain topics become more prominent in public discourse due to sustained media focus, their capacity to influence voting behavior

is amplified. Institutional mechanisms also interact with the media environment. Governments' ability to collect and disseminate economic or disaster-related information through official channels or news outlets affects both voter exposure to relevant data and their capacity for informed retrospection. In modern economies with robust information infrastructures, voters are more likely to be exposed to comprehensive coverage of shocks and government responses. However, this exposure does not guarantee rational attribution; voters may still reward or punish incumbents for events outside governmental control if these events are highly salient in the media (Herreño et al., 2023). Finally, it is important to recognize that not all findings from marketing research on social media engagement are directly transferable to disaster contexts. During crises, a diverse array of actors, including agencies, individuals, and influencers, participate in information dissemination within compressed timeframes dictated by disaster intensity and spread. The heterogeneity of communicators complicates efforts to manage narratives but also increases opportunities for alternative perspectives to gain traction. In sum, the structure and dynamics of both traditional and social media environments mediate how external shocks are perceived by affected populations. These perceptions feed into psychological processes such as fear or sympathy and institutional mechanisms like policy shifts or agenda-setting. By shaping which issues become salient and how they are framed for mass audiences, communication channels serve as critical moderators in translating sudden shocks into electoral consequences (Roya et al., 2020)(Rubin, 2020)(Baccini et al., 2021)(Liao & Junco, 2022).

7.4 Demographic and Cultural Variables

Demographic and cultural variables play a substantial role in shaping how populations respond to sudden external shocks, such as natural disasters or terrorist attacks, with respect to their voting behavior. The heterogeneity of these responses is often rooted in the interplay between local socioeconomic structures, cultural identities, and demographic compositions. One important dimension is the urban-rural divide. Liao and Ruiz Junco highlight that the fraction of the population living in non-metro counties, characterized by open countryside,

rural towns, and small urban areas, can influence both political attitudes and the perception of external shocks. Rural communities may experience and interpret weather-related events differently than urban populations, which can translate into distinct patterns of political engagement and support for particular parties or policies. This differentiation is not only due to exposure but also to varying economic dependencies, such as higher employment shares in agriculture or mining sectors in rural districts, which can mediate the impact of shocks on electoral preferences (Liao & Junco, 2022). Cultural context further moderates these effects. Colantone and Stanig demonstrate that regions experiencing stronger import shocks, a form of economic external shock, tend to exhibit increased support for nationalist and radical right parties. This shift is not merely an economic reaction but is deeply intertwined with sociotropic perceptions: voters assess their community's well-being rather than just personal circumstances. Such collective evaluations are often filtered through prevailing cultural narratives about national identity, globalization, and perceived threats to traditional values (Colantone & Stanig, 2017). The authors' findings suggest that cultural anxieties can amplify the electoral consequences of economic disruptions. The interaction between demographic characteristics and institutional responses also shapes post-shock voting behavior. Cerqua et al. provide evidence from two seismic events with similar physical magnitudes but different socioeconomic contexts and institutional management strategies. In territories where post-disaster recovery was inadequate, often those with pre-existing economic vulnerabilities, the sense of abandonment fostered a turn toward authoritarian right-wing parties. Conversely, areas with more effective institutional responses did not experience such a pronounced political shift. This indicates that demographic factors like local economic structure interact with cultural perceptions of government competence to mediate electoral outcomes after shocks (Cerqua et al., 2023). Age composition, education levels, and occupational structures are additional demographic variables influencing susceptibility to shock-induced changes in voting behavior. For instance, younger or more educated populations may be more resilient to narrative shifts following extraordinary events due to greater access to diverse information sources or higher baseline trust in institutions (Das et al., 2024). Conversely, older or less-educated

groups might be more prone to emotional or identity-based voting shifts when confronted with uncertainty or fear triggered by external shocks. Cultural polarization within a society can further condition how shocks are processed electorally. Mongrain (Mongrain, 2023) notes that in highly polarized environments dominated by two major parties, citizens' expectations about electoral integrity and satisfaction with democracy are shaped by their affective attachments and ideological divides. When an external shock occurs, these pre-existing cleavages can intensify reactions, leading some groups to question institutional legitimacy while others double down on partisan loyalty. Moreover, extraordinary events like Brexit have shown that emotional reactions tied to group identities can drive volatility and party system change beyond traditional party lines. Vasilopoulou and Wagner (Vasilopoulou & Wagner, 2020) argue that such events create new axes of political alignment based on emergent identities (e.g., pro-versus anti-Brexit), which cross-cut established demographic categories but are nonetheless influenced by underlying cultural variables such as regionalism or historical attitudes toward integration. Finally, the effectiveness of prevention policies or crisis management is often filtered through demographic lenses. Morvan and Paty find that even when prevention plans mitigate long-term fiscal impacts of disasters at the municipal level, citizens do not necessarily reward incumbents for these efforts at the ballot box. This myopic response may be particularly pronounced among certain demographic groups who prioritize immediate investment spending over long-term preparedness, a tendency possibly linked to socioeconomic status or prevailing local norms regarding risk and responsibility (Morvan & Paty, 2023). In sum, demographic composition, including rurality, age structure, education levels, and cultural context, such as polarization, collective identity narratives, and historical experiences, act as crucial moderators in determining how external shocks translate into electoral behavior shifts. These variables shape both the direct psychological impact of extraordinary events on individuals and the broader community-level pathways through which these impacts manifest politically (Colantone & Stanig, 2017)(Liao & Junco, 2022)(Mongrain, 2023)(Cerqua et al., 2023).

8 Broader Implications for Democratic Systems

8.1 Resilience and Adaptability of Political Institutions

Political institutions are frequently tested by sudden, external shocks such as natural disasters or terrorist attacks, which can expose both their vulnerabilities and their capacity for adaptation. The resilience of these institutions is not only a function of their formal structures but also of the ways in which they respond to crises and maintain legitimacy among affected populations. In less established democracies, natural disasters have the potential to undermine public confidence in political systems, sometimes leading to decreased legitimacy and increased participatory fervor. This dynamic can result in a more active yet discontented citizenry, placing additional stress on democratic quality and stability (Carlin et al., 2014). The ability of institutions to channel this heightened participation constructively is therefore essential for sustaining democratic processes. Institutional adaptability is often reflected in the mechanisms through which resources and benefits are distributed following a shock. Programmatic distribution, where criteria are formalized, transparent, and consistently applied, can enhance perceptions of fairness and institutional reliability. In contrast, non-programmatic distribution, influenced by partisan or political considerations, may erode trust if citizens perceive that aid allocation is arbitrary or politically motivated. The co-existence of both programmatic and non-programmatic approaches within the same policy framework suggests that institutional responses are shaped by both technical guidelines and political dynamics. For example, technical criteria for disaster relief may be highly specific, yet local bureaucratic capacity and political discretion can influence actual implementation. The interaction between institutional design and electoral incentives further shapes resilience. Elected officials in competitive democracies must balance immediate crisis response with long-term accountability to voters. The presence of regular, free elections imposes constraints on opportunistic behavior but also incentivizes responsiveness to constituents' needs during emergencies. However, the process of declaring emergencies itself is not always exogenous; political factors can influence whether and when such declarations occur (Coop-

erman, 2022). This introduces an additional layer of complexity in assessing institutional resilience. Empirical evidence indicates that the existence of preemptive policies, such as municipal prevention plans, can increase the likelihood that incumbents will seek re-election after experiencing a disaster event. This effect is particularly pronounced when these plans are implemented prior to the shock, suggesting that proactive institutional measures contribute to both perceived competence and political survival. At the same time, fiscal health plays a significant role: municipalities with stronger budget positions are more likely to see incumbents running again, while high debt discourages candidacy (Morvan & Paty, 2023). These findings highlight how financial flexibility underpins institutional adaptability. The salience of environmental issues has grown over recent decades, yet translating this into effective policy remains challenging due to technical complexity and difficulties in mobilizing sustained voter support. Political progress on climate-related issues often depends on electoral backing for both policies and politicians willing to enact them. Retrospective voting theory posits that personal experience with extreme events influences support for climate protection measures (Baccini & Leemann, 2021). Thus, institutions must not only respond effectively but also communicate their actions transparently to maintain or rebuild public trust. Natural disasters can also alter patterns of political engagement beyond voting behavior. In some cases, citizens who previously had limited involvement in civic affairs become more active following a crisis (Carlin et al., 2014). This surge in participation can reshape civil society but may also challenge existing institutional arrangements if it is accompanied by widespread dissatisfaction with government performance. The extent to which institutions can absorb this energy constructively depends on their openness to participatory channels and their ability to demonstrate responsiveness. Finally, the relationship between incumbents' policy stances, such as environmental positions, and post-disaster electoral dynamics underscores the importance of issue alignment between representatives and constituents. After a disaster, incumbents with anti-environmental stances tend to face increased fundraising activity from challengers and a higher probability of facing competition in subsequent elections. This dynamic slightly reduces their chances of re-election, indicating that institutional adaptability involves not just

procedural reforms but also substantive alignment with evolving public preferences (Liao & Junco, 2022). Taken together, these insights illustrate that resilient political institutions are characterized by transparency in resource allocation, proactive policy planning, fiscal flexibility, responsiveness to citizen engagement, and alignment with shifting societal values. Their adaptability is continually tested by external shocks; those that succeed do so by integrating technical expertise with democratic accountability mechanisms (Cooperman, 2022)(Liao & Junco, 2022)(Morvan & Paty, 2023)(Baccini & Leemann, 2021)(Carlin et al., 2014).

8.2 Impacts on Political Representation

Sudden external shocks, such as natural disasters and terrorist attacks, can significantly reshape political representation by altering both voter behavior and the strategic responses of political actors. The immediate aftermath of such events often brings about a shift in issue salience, with new concerns rising to the forefront of public consciousness. This reordering of priorities can advantage certain parties or candidates whose platforms are perceived as more closely aligned with the emergent issues, while disadvantaging others whose positions are less congruent with the new median voter preferences. For instance, when a shock introduces a salient issue on which the two main parties hold similar stances, it creates an opening for new entrants to challenge the status quo, potentially destabilizing established party systems and leading to greater fragmentation in representation (Aragonès & Ponsatí, 2022)(Panunzi et al., 2020). Empirical evidence from Japan demonstrates that natural disasters can have pronounced effects on both voter turnout and party performance. In districts where the incumbent belonged to the Democratic Party of Japan (DPJ), turnout was notably lower following the Fukushima disaster, whereas districts represented by the Liberal Democratic Party (LDP) saw higher participation rates. This divergence suggests that voters' retrospective evaluations of incumbents' crisis management play a crucial role in shaping electoral outcomes and thus influence which parties are represented in legislative bodies (Pinto, 2023). The impact is not limited to turnout; party results themselves are directly affected, with incumbents facing either sanction or reward depending on their perceived effectiveness in responding to crises

(Masiero & Santarossa, 2021)(Gallego, 2015). The psychological mechanisms underlying these shifts are multifaceted. Cognitive dissonance may lead citizens to adjust their attitudes about voting itself to align with their actual participation decisions after a shock (Fujiwara et al., 2016). Additionally, sociotropic considerations, whereby voters assess government performance based on community well-being rather than personal circumstances, can drive collective accountability for local economic or social disruptions caused by external shocks (Meyerrose & Watson, 2024). These dynamics incentivize politicians to adapt their policy positions or campaign strategies in response to changing voter expectations, further influencing patterns of representation. Terrorist attacks introduce another layer of complexity. Such events can simultaneously trigger a rally-around-the-flag effect, bolstering support for incumbents as symbols of stability, while also increasing support for Populist Radical Right Parties (PRRPs) among segments of the electorate who develop heightened negative attitudes toward out-groups or immigration. The coexistence of these mechanisms means that representation may shift toward either established authorities or insurgent challengers depending on how different groups within the population process and react to the shock (Hoes et al., 2024)(Panunzi et al., 2020). Institutional factors also mediate these effects. The rarity and severity of an event determine its salience and thus its capacity to influence both voter attention and elite behavior. When damages surpass a certain threshold, such as a 10-year return level for natural disasters, they become matters of public concern that demand political response. Elected officials may alter their legislative behavior or resource allocation strategies in anticipation of electoral repercussions, thereby affecting not only who is elected but also how those representatives govern once in office (Elliott et al., 2023)(Masiero & Santarossa, 2021). Furthermore, shifts in political representation following external shocks are not uniform across all contexts. Localized trade shocks or economic downturns have been shown to increase polarization and support for populist parties, particularly in regions experiencing acute employment losses or economic insecurity (Panunzi et al., 2020)(Meyerrose & Watson, 2024). This pattern is consistent with historical evidence linking large-scale recessions or crises to increased volatility in party systems and greater receptivity to radical alternatives.

The interplay between voter psychology, socioeconomic context, institutional design, and elite adaptation underscores the complex pathways through which sudden shocks reshape political representation. As Williams et al. indicate, foreign policy crises or costly disputes can disrupt traditional issue hierarchies and alter vote shares across parties, further complicating predictions about which actors will ultimately benefit from such disruptions (Williams & Brule, 2013). These findings collectively highlight that external shocks do not merely affect short-term electoral outcomes but can have enduring consequences for the composition and stability of representative institutions.

8.3 Challenges for Policy Design and Crisis Management

Sudden external shocks such as natural disasters present significant challenges for policy design and crisis management within democratic systems. The unpredictability and intensity of these events require rapid, adaptive responses from local governments, often under conditions of uncertainty and heightened public scrutiny. Municipalities are tasked with not only immediate crisis response, ensuring safety, organizing protection, and providing support to affected populations, but also with managing the administrative aftermath, which includes securing official disaster status to unlock compensation mechanisms for citizens. This designation process is critical; failure to obtain it may be perceived as a shortcoming of local leadership, potentially eroding public trust and influencing subsequent electoral outcomes. The complexity of policy design in this context is compounded by the need to balance short-term emergency measures with long-term recovery strategies. Local political actors must navigate institutional constraints, fiscal limitations, and competing demands from various stakeholders. The management of additional costs generated by disaster response falls on municipal budgets, which can strain resources and necessitate difficult trade-offs between immediate relief efforts and ongoing public services (Morvan & Paty, 2023). Furthermore, the effectiveness of crisis management is often evaluated by citizens in real time, with the performance of incumbents during such shocks becoming a salient criterion in electoral decision-making (Masiero & Santarossa, 2021)(Jusko & Spác, 2024). This dynamic places pressure on pol-

icymakers to demonstrate competence and transparency under challenging circumstances. From an institutional perspective, the interaction between signaling and election motivations becomes particularly pronounced during crises. Candidates may adjust their policy platforms in response to information revealed through both the shock itself and subsequent electoral results. The iterative nature of elections means that initial crisis responses can shape future policy choices as candidates seek to align their platforms with evolving voter preferences informed by recent experiences (Razin, 2003). This feedback loop complicates the normative implications of crisis management: while responsiveness is desirable, there is a risk that policy decisions become overly reactive or politicized in the wake of high-profile shocks. Socioeconomic heterogeneity further complicates effective policy design. The impact of disasters, and thus the appropriate policy response, varies across communities depending on factors such as economic vulnerability, population density, and pre-existing social structures (Baerlocher et al., 2024). For example, rural or less internationally connected areas may exhibit heightened susceptibility to populist appeals following external shocks, necessitating tailored interventions that address specific local needs rather than one-size-fits-all solutions (Levi et al., 2024). Policymakers must therefore integrate granular data on community characteristics into their crisis management frameworks to ensure equitable and effective outcomes. The psychological dimension also plays a role in shaping both citizen expectations and official responses. Disasters can disrupt habitual behaviors and prompt reassessment of government performance, sometimes leading to persistent changes in political engagement or trust even after the immediate crisis has subsided (Jusko & Spác, 2024). This persistence underscores the importance of transparent communication strategies and sustained support measures that extend beyond the acute phase of disaster response. Finally, empirical evidence suggests that while some models predict no systematic effect of disasters on incumbent fortunes due to assumptions like additive separability in governance outcomes, real-world complexities, such as non-linear interactions between disaster intensity and government performance, challenge these theoretical simplifications (Ashworth et al., 2023). Policymakers must therefore remain attentive to both model-based insights and empirical realities when designing interventions.

In sum, sudden external shocks expose underlying vulnerabilities in democratic governance structures by testing the capacity for rapid adaptation, equitable resource allocation, and responsive leadership. Effective policy design requires integrating institutional flexibility with robust mechanisms for accountability and community engagement across diverse socioeconomic contexts (Masiero & Santarossa, 2021)(Morvan & Paty, 2023)(Baerlocher et al., 2024)(Levi et al., 2024).

9 Conclusion

Sudden external shocks such as natural disasters, terrorist attacks, pandemics, and economic crises exert profound and multifaceted influences on political behavior and democratic processes. These events disrupt established political equilibria by introducing exogenous variation that compels rapid reassessment of voter priorities, party strategies, and institutional responses. The complexity of their impact arises from the interplay of psychological, socioeconomic, institutional, and communicative mechanisms that operate across temporal and spatial dimensions.

Psychologically, shocks trigger a spectrum of emotional responses, including fear, anger, anxiety, and solidarity, that mediate political engagement and electoral choices. These affective states can mobilize participation by heightening issue salience and perceived stakes, yet they may also induce withdrawal or apathy depending on individual and group-level factors such as social identity, trauma resilience, and perceived legitimacy of political institutions. Socioeconomic disruptions caused by resource loss, displacement, and economic hardship further shape voting behavior by altering material conditions and expectations of government performance. The presence of clientelist networks and the quality of disaster relief allocation influence whether incumbents are rewarded or punished, while repeated or cumulative shocks can entrench new political attitudes and preferences that persist across generations.

Institutional quality and governance capacity critically moderate these dynamics. Robust, transparent, and responsive institutions enhance accountability mechanisms, enabling voters to differentiate between uncontrollable external events and government competence in crisis

management. Conversely, weak or politicized institutions may exacerbate voter disillusionment, facilitate patronage, and undermine democratic legitimacy. Electoral systems, media environments, and communication channels also play pivotal roles by shaping information flow, framing narratives, and influencing the diffusion of political attitudes. Media coverage amplifies issue salience and emotional resonance, while social networks and interpersonal mobilization determine the reach and intensity of political responses.

The temporal dimension reveals that behavioral changes following shocks often exhibit initial volatility with potential for both short-term mobilization and longer-term decay or persistence. Habit formation, intergenerational transmission, and institutional adaptations contribute to the durability of these effects, though their magnitude varies by context and population characteristics. Spatially, the geographic scope of shocks determines exposure and heterogeneity in political outcomes, with spillover effects influencing neighboring regions through migration and shared media narratives.

At the collective level, external shocks can catalyze the emergence of new political actors, reconfigure party competition, and reshape political cleavages by elevating previously peripheral issues or intensifying existing divisions. Grassroots movements and increased volunteering often arise as communities organize to address immediate needs and advocate for change, transforming civic and social capital in ways that influence long-term political engagement. Pre-existing social capital serves as both a buffer and amplifier, conditioning community resilience and the capacity for collective action.

These phenomena present significant challenges and opportunities for democratic systems. Political institutions are tested in their ability to adapt, maintain legitimacy, and balance short-term crisis management with long-term policy planning. Effective governance requires transparent resource allocation, proactive prevention strategies, and responsiveness to evolving voter demands. The interplay between psychological reactions, socioeconomic realities, institutional frameworks, and communication environments underscores the necessity of integrated approaches to understanding and managing the political consequences of sudden external shocks.

Ultimately, the study of these events illuminates the intricate pathways through which crises influence electoral behavior, political representation, and democratic stability. Recognizing the heterogeneity of responses across different regimes, regions, and populations is essential for designing policies that enhance resilience, promote accountability, and sustain democratic engagement in the face of increasing global uncertainties.

10 Declarations

Competing Interests: The author has no competing interests to declare that are relevant to the content of this article.

Funding: The author did not receive support from any organization for the submitted work.

Generative AI and AI-Assisted Technologies: During the preparation of this work, the author used AI-assisted technologies to enhance readability and language. The author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

References

- Ahlquist, J., Copelovitch, M., & Walter, S. (2020). The political consequences of external economic shocks: Evidence from poland. *American Journal of Political Science*, 64(4), 904–920. <https://doi.org/10.1111/ajps.12503>
- Aragonès, E., & Ponsatí, C. (2022). Shocks to issue salience and electoral competition. *Economics of Governance*, 23(1), 33–63. <https://doi.org/10.1007/s10101-022-00267-0>
- Ashworth, S., de Mesquita, E. B., & Friedenber, A. (2023). Learning about voter rationality. *Journal Name*, 1(1). <https://doi.org/10.0000/xxxxx>
- Baccini, L., Brodeur, A., Nossek, S., & Shor, E. (2021). Terrorism and voting behavior: Evidence from the united states. *Research and Politics*, 1–7. <https://doi.org/10.1177/2053168020987333>
- Baccini, L., & Leemann, L. (2021). Do natural disasters help the environment? how voters respond and what that means. *Political Science Research and Methods*, 9(3), 468–484. <https://doi.org/10.1017/psrm.2020.25>
- Baerlocher, D., Caldas, R., Cavalcanti, F., & Schneider, R. (2024). Natural disasters and voting behavior under authoritarian regimes: Evidence from the brazilian shrimp vote. <https://ssrn.com/abstract=4249006>
- Balcells, L., & Torrats-Espinoza, G. (2018). *Proceedings of the National Academy of Sciences*, 115(42), 10624–10629. <https://doi.org/10.1073/pnas.1800302115>
- Bechtel, M. M., & Mannino, M. (2022). Retrospection, fairness, and economic shocks: How do voters judge policy responses to natural disasters?
- Birch, S., & i Coma, F. M. (2023). Natural disasters and the limits of electoral clientelism: Evidence from honduras. *ELECTORAL STUDIES*, 85, 102651. <https://doi.org/10.1016/j.electstud.2023.102651>
- Blumenau, J., & Lauderdale, B. E. (2018). *The Journal of Politics*, 80(2). <https://doi.org/10.1086/694543>

- Bobonis, G. J., Gertler, P., Gonzalez-Navarro, M., & Nichter, S. (2017, July). Vulnerability and clientelism. <http://www.nber.org/papers/w23589>
- Bovan, K., Banai, B., & Banai, I. P. (2018). Do natural disasters affect voting behavior? evidence from croatian floods. <https://doi.org/10.1371/currents.dis.cbf57c8ac3b239ba51ccc801d3362c07>
- Bridgman, A., Ciobanu, C., Erlich, A., Bohonos, D., & Ross, C. (2021). Unveiling: An unexpected mid-campaign court ruling's consequences and the limits of following the leader. *The Journal of Politics*, 83(3). <https://doi.org/10.1086/711177>
- Brunner, E., Ross, S. L., & Washington, E. (2011). Economics and policy preferences: Causal evidence of the impact of economic conditions on support for redistribution and other ballot proposals. http://direct.mit.edu/rest/article-pdf/93/3/888/1918938/rest%5C_a%5C_00088.pdf
- Calca, P., & Gross, M. (2019). To adapt or to disregard? parties' reactions to external shocks. *West European Politics*, 42(3), 545–572. <https://doi.org/10.1080/01402382.2018.1549851>
- Carlin, R. E., Love, G. J., & Zechmeister, E. J. (2014). Natural disaster and democratic legitimacy: The public opinion consequences of chile's 2010 earthquake and tsunami. *Political Research Quarterly*, 67(1), 3–15. <https://doi.org/10.1177/1065912913495592>
- Castro, F., & Retamal, R. (2023). Does electoral behavior change after a protest cycle? evidence from chile and bolivia.
- Cavalcanti, F., Daniele, G., & Galletta, S. (2018). Popularity shocks and political selection. *Journal of Public Economics*, 165. <https://doi.org/10.1016/j.jpubeco.2018.07.011>
- Cerqua, A., Ferrante, C., & Letta, M. (2023). Electoral earthquake: Local shocks and authoritarian voting. *European Economic Review*, 156, 104464. <https://doi.org/10.1016/j.eurocorev.2023.104464>
- Chapman, H. S. (2024). Shocks to the system: Electoral manipulation, protests and the evolution of political trust in russia. *Government and Opposition*, 496–516. <https://doi.org/10.1017/gov.2024.18>

- Chua, O. J., Donges, J. F., Robertson, G. B., & Pop-Eleche, G. (2021). The microdynamics of spatial polarization: A model and an application to survey data from Ukraine. *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.2104194118>
- Colantone, I., & Stanig, P. (2017, August). The trade origins of economic nationalism: Import competition and voting behavior in western Europe. <https://ssrn.com/abstract=2904105>
- Cooperman, A. (2022). (un)natural disasters: Electoral cycles in disaster relief. *Comparative Political Studies*, 55(7), 1158–1197. <https://doi.org/10.1177/00104140211047410>
- Coppock, A., & Green, D. P. (2016). Is voting habit forming? New evidence from experiments and regression discontinuities. *American Journal of Political Science*, 60(4). <https://doi.org/10.1111/ajps.12210>
- Das, K., Ghosh, A., & Maitra, P. (2024). Exogenous shocks and 2013 electoral outcomes. *Public Choice*, 201, 145–179. <https://doi.org/10.1007/s11127-024-01162-4>
- Duch, R. M., Loewen, P., Robinson, T. S., & Zakharov, A. (2025). Governing in the face of a global crisis: When do voters punish and reward incumbent governments? *Proceedings of the National Academy of Sciences*, 122(4). <https://doi.org/10.1073/pnas.2405021122>
- Duch, R. M., & Rice, R. S. (2010). The global economy, competency, and the economic vote. *The Journal of Politics*, 72(1), 105–123. <https://doi.org/10.1017/S0022381609990508>
- Elliott, R. J. R., Nguyen-Tien, V., Strobl, E. A., & Tveit, T. (2023). Climate-related natural disasters and voting behavior: Evidence from environmental legislation in the US Senate. *Journal of the Association of Environmental and Resource Economists*, 10(3), 753. <https://doi.org/10.1086/722540>
- Enos, R. D. (2016). What the demolition of public housing teaches us about the impact of racial threat on political behavior. *American Journal of Political Science*. <https://doi.org/10.1111/ajps.12156>
- Fair, C. C., Kuhn, P. M., Malhotra, N., & Shapiro, J. N. (2017). Natural disasters and political engagement: Evidence from the 2010-11 Pakistani floods.

- Fieldhouse, E., Lessard-Phillips, L., & Edmonds, B. (2016). Cascade or echo chamber? a complex agent-based simulation of voter turnout. *Party Politics*, 22(2), 241–256. <https://doi.org/10.1177/1354068815605671>
- Fujiwara, T., Meng, K., & Vogl, T. (2016). Habit formation in voting: Evidence from rainy elections. *American Economic Journal: Applied Economics*, 8(4), 160–188. <https://doi.org/10.1257/app.20140533>
- Fukumoto, K., & Kikuta, K. (2024). After a storm come votes: Identifying the effects of disaster relief on electoral outcomes. *Political Behavior*, 46, 2357–2377. <https://doi.org/10.1007/s11109-024-09921-1>
- G. Bingham Powell, J., & Whitten, G. D. (1993). A cross-national analysis of economic voting: Taking account of the political context. *American Journal of Political Science*, 37(2), 391–414. <https://www.jstor.org/stable/2111378>
- Gallego, J. (2015, February). Natural disasters and clientelism: The case of floods and landslides in colombia.
- Garmann, S. (2020). *Economics & Politics*, 32, 411–429. <https://doi.org/10.1111/ecpo.12153>
- Gerber, A. S., GREEN, D. P., & LARIMER, C. W. (2008). Social pressure and voter turnout: Evidence from a large-scale field experiment. *American Political Science Review*, 102(1). <https://doi.org/10.1017/S000305540808009X>
- Gerling, L., & Kellermann, K. L. (2022). Contagious populists: The impact of election information shocks on populist party preferences in germany. *European Journal of Political Economy*, 72, 102098. <https://doi.org/10.1016/j.ejpoleco.2021.102098>
- Giuliani, M. (2023). Voting between two global crises. a nuts3-level analysis of retrospective voting in four south-european countries. *Italian Political Science Review / Rivista Italiana di Scienza Politica*. <https://doi.org/10.1017/ipo.2022.9>
- Guiso, L., Herrera, H., Morelli, M., & Sonno, T. (2024). Economic insecurity and the demand for populism in europe. *Economica*. <https://doi.org/10.1111/ecca.12513>

- Heersink, B., Jenkins, J. A., Olson, M. P., & Peterson, B. D. (2022). Natural disasters, 'partisan retrospection,' and u.s. presidential elections. *Political Behavior*, 44, 1225–1246. <https://doi.org/10.1007/s11109-020-09653-y>
- Herreño, J., Morales, M., & Pedemonte, M. O. (2023, March). The effect of local economic shocks on local and national elections. <https://doi.org/10.26509/frbc-wp-202308>
- Hoes, E., Kamphorst, J., & Krouwel, A. (2024). Prominence over proximity? terror attacks 'impact on party preferences. *European Political Science Review*, 112–130. <https://doi.org/10.1017/S175577392300019X>
- Holbein, J. B., & Rangel, M. A. (2020). Does voting have upstream and downstream consequences? regression discontinuity tests of the transformative voting hypothesis. *The Journal of Politics*, 82(4). <https://doi.org/10.1086/707859>
- Holbein, J. B., Rangel, M. A., Moore, R., & Croft, M. (2023). Is voting transformative? expanding and meta-analyzing the evidence. *Political Behavior*, 1015–1044. <https://doi.org/10.1007/s11109-021-09746-2>
- Izatt, H. J. (2025). Seeing red: How gerrymandering emotionally mobilizes turnout. *Political Psychology*, 00, 1–23. <https://doi.org/10.1111/pops.70013>
- Jusko, J., & Spác, P. (2024). Motivated to vote? the effect of flooding on political participation. <https://doi.org/10.1111/disa.12606>
- Kaustia, M., Knüpfer, S., & Torstila, S. (n.d.). Stock ownership and political behavior: Evidence from demutualization. <http://ssrn.com/abstract=2209645>
- Kramer, G. H. (1983, December). The ecological fallacy revisited: Aggregate- versus individual-level findings on economics and elections.
- Kronborg, A., Hedegaard, F., Klindt, I., & Vandeweerd, C. (2024). Do green parties in government benefit from natural catastrophes? how wildfires are linked to voting. *Electoral Studies*, 88, 102749. <https://doi.org/10.1016/j.electstud.2024.102749>
- Levi, E., Sin, I., & Stillman, S. (2024). The lasting impact of external shocks on political opinions and populist voting. *Economic Inquiry*. <https://doi.org/10.1111/ecin.13184>

- Liao, Y., & Junco, P. R. (2022). Extreme weather and the politics of climate change: A study of campaign finance and elections. *Journal of Environmental Economics and Management*, 111, 102550. <https://doi.org/10.1016/j.jeem.2021.102550>
- Liberini, F., Redoano, M., & Proto, E. (2017). Happy voters. *Journal of Public Economics*, 146, 41–57. <http://wrap.warwick.ac.uk/84425>
- Margalit, Y. (2019). Political responses to economic shocks. *Annual Review of Political Science*, 22, 277–295. <https://doi.org/10.1146/annurev-polisci-050517-110713>
- MARSH, W. Z. C. (2023). *American Political Science Review*, 117(3), 1036–1052. <https://doi.org/10.1017/S0003055422001010>
- Masiero, G., & Santarossa, M. (2021). Natural disasters and electoral outcomes. *European Journal of Political Economy*, 67, 101983. <https://doi.org/10.1016/j.ejpoleco.2020.101983>
- Meyerrose, A. M., & Watson, S. (2024). The effects of import shocks, electoral institutions, and radical party competition on legislator ideology: Evidence from france. *British Journal of Political Science*, 547–572. <https://doi.org/10.1017/S0007123423000662>
- Mongrain, P. (2023). Suspicious minds: Unexpected election outcomes, perceived electoral integrity and satisfaction with democracy in american presidential elections. *Political Research Quarterly*, 76(4), 1589–1603. <https://doi.org/10.1177/10659129231166679>
- Montjoy, R. S., & Chervenak, E. E. (2020). Postdisaster politics: new lessons from new orleans. *Urban Affairs Review*, 56(3), 703–725. <https://doi.org/10.1177/1078087418798496>
- Morvan, C., & Paty, S. (2023, July). Natural disasters and voter gratitude: What is the role of prevention policies? <https://hal.science/hal-04160167v1>
- Novaes, L. M., & Schiumerini, L. (2022). *British Journal of Political Science*, 1689–1708. <https://doi.org/10.1017/S0007123421000478>
- Pahontu, R. L., Hooijer, G., & Rueda, D. (2024a). Insuring against hunger? the long-term political consequences of exposure to the dutch famine. *Journal of Historical Political Economy*, 4(1), 33–58. <https://doi.org/10.1561/115.00000067>

- Pahontu, R. L., Hooijer, G., & Rueda, D. (2024b). Insuring against hunger? the long-term political consequences of exposure to the dutch famine. *Journal of Historical Political Economy*, 4(1), 33–58. <https://doi.org/10.1561/115.00000067>
- Panunzi, F., Pavoni, N., & Tabellini, G. (2020, August). Economic shocks and populism: The political implications of reference-dependent preferences. <http://www.igier.unibocconi.it>
- Pinto, G. R. S. (2023, February). Essays on the impact of extreme events on culture: The case of japan.
- Razin, R. (2003). Signaling and election motivations in a voting model with common values and responsive candidates. *Econometrica*, 71(4), 1083–1119.
- Robbins, J., Hunter, L., & Murray, G. R. (2013). Voters versus terrorists: Analyzing the effect of terrorist events on voter turnout. *Journal of Peace Research*, 50(4), 495–508. <https://doi.org/10.1177/0022343313479814>
- Rodon, T., & Guinjoan, M. (2022). Beaten ballots: Political participation dynamics amidst police interventions. *Political Science Research and Methods*, 153–170. <https://doi.org/10.1017/psrm.2020.48>
- Roya, K. C., Hasan, S., Sadri, A. M., & Cebrian, M. (2020). Understanding the efficiency of social media based crisis communication during hurricane sandy. *International Journal of Information Management*. <https://doi.org/10.1016/j.ijinfomgt.2019.102060>
- Rubin, O. (2020). The political dynamics of voter retrospection and disaster responses. *Disasters*, 44(2), 239–261. <https://doi.org/10.1111/disa.12376>
- Rudolph, L., & Kuhn, P. M. (2018). Natural disasters and political participation: Evidence from the 2002 and 2013 floods in germany.
- Santana, A., Rama, J., & Bértoa, F. C. (2020). The coronavirus pandemic and voter turnout: Addressing the impact of covid-19 on electoral participation.
- Shineman, V. (2018). Evidence that casting a ballot increases political trust: Isolating the downstream effects of voting by generating exogenous shocks in turnout. <https://ssrn.com/abstract=3272681>

- Vasilopoulou, S., & Wagner, M. (2020). Emotions and domestic vote choice. *Journal of Elections, Public Opinion and Parties*. <https://doi.org/10.1080/17457289.2020.1857388>
- Visconti, G. (2022). After the flood: Disasters, ideological voting and electoral choices in Chile. *Political Behavior*, 44(3), 1985–2004. <https://doi.org/10.1007/s11109-022-09814-1>
- White, A. (2019). Misdemeanor disenfranchisement? the demobilizing effects of brief jail spells on potential voters. *American Political Science Review*, 113(2), 311–324. <https://doi.org/10.1017/S000305541800093X>
- Williams, L. K., & Brule, D. J. (2013). Predictably unpredictable: The effects of conflict involvement on the error variance of vote models. *B.J.Pol.S.*, 44, 287–299. <https://doi.org/10.1017/S000712341200083X>
- Zelin, W. A., & Smith, D. A. (2022). Weather to vote: How natural disasters shape turnout decisions. *Political Research Quarterly*, 76(2), 553–564. <https://doi.org/10.1177/10659129221093386>

Sudden external shocks such as natural disasters, terrorist attacks, pandemics, and economic crises profoundly disrupt political equilibria and influence voting behavior through complex psychological, socioeconomic, and institutional mechanisms. These events introduce exogenous variation that reshapes issue salience, voter emotions, and party competition, often triggering immediate shifts in electoral participation and preferences. Psychological responses, including trauma, risk perception, and social identity dynamics, interact with socioeconomic factors like resource disruption, displacement, and community resilience to mediate political engagement. Institutional quality, government accountability, media coverage, and communication environments further condition how shocks translate into electoral outcomes, affecting incumbent support, partisan alignment, and the emergence of new political actors. Temporal and spatial dimensions influence the persistence and diffusion of behavioral changes, with evidence of intergenerational transmission and cumulative effects from repeated shocks. The interplay of pre-existing social capital, demographic variables, and governance structures shapes heterogeneous responses across regions and regimes. These insights highlight the challenges and opportunities for democratic institutions to adapt and maintain legitimacy amid crises, emphasizing the importance of transparent policy design, effective crisis management, and inclusive political representation in sustaining resilient democratic systems.