Path Dependence in Crisis: Historical Political Norms and Government Responses to COVID-19

Philipp Trein
josefphilipp.trein@unil.ch
University of Lausanne

July 24, 2025

Abstract

How do historical political norms shape contemporary crisis governance in democracies? This article investigates the enduring influence of past regime types and civil society strength on the stringency and effectiveness of COVID-19 containment policies. Drawing on research of historical political analysis, I argue that norms formed under authoritarian regimes and in robust civil societies produce heuristic shortcuts for policymakers and citizens in times of uncertainty. Using Bayesian multilevel modeling and panel data from 31 countries over three years, the study shows that a legacy of authoritarian rule is associated with more stringent public health measures and lower excess mortality, while strong historical civil societies correlate with laxer policies and higher mortality. These findings suggest that normative legacies—not just contemporary regime characteristics—play a critical role in shaping policy outputs and outcomes. The analysis contributes to debates on crisis response, democratic resilience, and the long-term political consequences of past governance.

Keywords: Policy Feedback, State Capacity, Political Legacies, Compliance Behavior, Crisis Politics

1 Introduction

Democratic governance faces a paradox in times of crisis. On the one hand, decision-makers must impose far-reaching restrictions on civil liberties to protect the population from threats such as a virus. On the other hand, such crisis policies often concentrate power in the executive branch and reduce parliamentary oversight. During the COVID-19 pandemic, governments in many countries enacted policies that curtailed individual freedoms to safeguard public health and save lives—shelter-in-place orders being a notable example. Although most countries confronted a similar threat, there were substantial differences in the timing and stringency of these policies (Hale, Angrist, Goldszmidt, Kira, Petherick, Phillips, Webster, Cameron-Blake, Hallas, Majumdar et al. 2021).

Existing research suggests that democratic governments were slower to implement restrictive lockdown measures compared to authoritarian regimes (Sebhatu, Wennberg, Arora-Jonsson & Lindberg 2020, Cheibub, Hong & Przeworski 2020, Engler, Brunner, Loviat, Abou-Chadi, Leemann, Glaser & Kübler 2021). At the same time, a separate body of literature has shown that swift and stringent responses to the pandemic increased support for governments and democracy more broadly (Blais, Bol, Giani & Loewen 2020, De Vries, Bakker, Hobolt & Arceneaux 2020, Bol, Giani, Blais & Loewen 2021). Conversely, other studies have argued that lockdown measures may enhance public support for autocratic governance styles and pose risks to democratic institutions (Schwartz 2012, Amat, Arenas, Falcó-Gimeno & Muñoz 2020, Cepaluni, Dorsch & Branyiczki 2020, Flinders 2020). Regarding the relationship between crisis outcomes and regime type, findings are mixed. Some research indicates that while democracies experienced higher infection rates, their death rates were lower (Karabulut, Zimmermann, Bilgin & Doker 2021). Other studies suggest that democracies initially suffered higher mortality rates (Cepaluni, Dorsch & Branyiczki 2022).

An essential aspect of crisis policymaking is the need for decision-makers to respond promptly to urgent policy issues. In this context, the rapidity required to make policy decisions often leads to the use of norm-heuristics by decision-makers, that is, cognitive shortcuts that facilitate processing vast amounts of information quickly to make informed decisions under uncertainty (Boin, Stern, Sundelius et al. 2016, 32)(Trein & Vagionaki 2022). Research has shown that trust in government is a crucial norm-heuristic that explains why citizens adhere to government policies (Nielsen & Lindvall 2021, Toshkov, Carroll & Yesilkagit 2022). However, our understanding of the political

norm-heuristics that decision-makers employ in response to crises remains limited. For instance, little is known about how governments assess the potential effectiveness and political acceptability of restrictive policies, such as public health regulations implemented to combat the COVID-19 pandemic.

In this article, I examine how historically embedded norms regarding state coercion and civil society relate to the stringency of anti-crisis policies and mortality during the COVID-19 pandemic. This inquiry is motivated by recent research connecting these two dimensions (Acemoglu & Robinson 2023). I argue that prior episodes of authoritarian rule and the presence of a strong civil society contributed to the formation of norms concerning the legitimacy of restrictive public health measures. In other words, historical periods characterized by coercive state authority and inclusive societal structures have shaped the normative heuristics that both policymakers and citizens employ during crises. These collective norms emerged alongside the development of modern state institutions and policy capacities, particularly in the late nineteenth and early twentieth centuries (Ansell & Lindvall 2020). During this era, the evolution of public administration and social policy institutionalized expectations regarding the permissible extent of state intervention in individual liberties. In times of uncertainty, these norms produce interpretive feedback through mechanisms of learning and socialization, thereby influencing contemporary policy responses (Pierson 1993, Mettler & SoRelle 2018, Béland, Campbell & Weaver 2022, Jacobs, Mettler & Zhu 2022).

To empirically evaluate this argument, I employ Bayesian multilevel regression models (McElreath 2018), drawing on publicly available datasets concerning the COVID-19 pandemic, government-imposed restrictions, and the historical development of democracy and civil society worldwide (Coppedge 2021, Mathieu, Ritchie, Rodés-Guirao, Appel, Giattino, Hasell, Macdonald, Dattani, Beltekian, Ortiz-Ospina & Roser 2023). The analysis, based on an effective sample of 31 predominantly democratic countries, reveals that a historically strong civil society is associated with a lower probability of implementing stringent COVID-19 measures. Conversely, a legacy of authoritarian governance increases the likelihood of adopting more stringent policy responses. Moreover, the results tentatively suggest that countries with a strong historical civil society experienced higher mortality during the pandemic, whereas those with an authoritarian past reported lower excess death rates. These findings contribute to the literature on pandemic responses by highlighting that historical, rather than contemporary, levels of democracy (Sebhatu et al. 2020, Cheibub, Hong &

Przeworski 2020, Engler et al. 2021) shape the stringency of crisis policies. Regarding the consequences of the crisis, the results imply a paradox: an authoritarian legacy may enable democracies to respond more flexibly by deploying coercive measures when necessary.

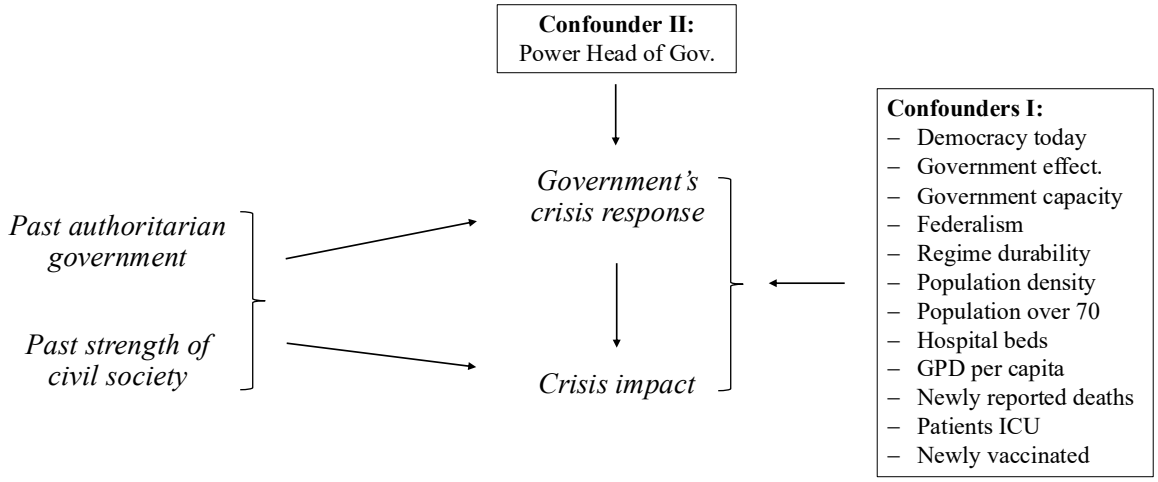
More broadly, this article advances our understanding of the role that historical norms play in shaping contemporary political phenomena (Acharya, Blackwell & Sen 2016, Acharya, Blackwell & Sen 2018, Nunn & Wantchekon 2011, Talhelm & English 2020, Homola, Pereira & Tavits 2020, Pepinsky, Goodman & Ziller 2023) by analyzing their influence on crisis governance. Specifically, I show that past regime types—rather than particular public policies—produce interpretive feedback effects that inform present-day policymaking (Pierson 1993). This analysis builds on the premise that both despotic and inclusive features of state formation (Acemoglu & Robinson 2023) are essential to understanding the historical norms that guide decisions on anti-crisis measures and societal behavior in times of emergency. The findings offer broader insights into how historical trajectories shape contemporary public policy and contribute to debates on effective governmental responses to future pandemics and other crises, including environmental disasters.

2 Theoretical Priors

The analysis presented in this paper is guided by a theoretical model grounded in insights from the literatures on comparative politics and comparative public policy. The central argument is that an important yet under-explored explanation for cross-national variation in responses to the COVID-19 crisis lies in the feedback effects of historically embedded norms concerning state coercion and civil society's capacity to resist such measures. Accordingly, this paper focuses on how historical norms regarding the role of the state have shaped contemporary anti-crisis policies.

Figure 1 summarizes the theoretical framework, which centers primarily on two explanatory pathways. First, I examine the direct effect of historically rooted norms—namely, legacies of coercive state authority (i.e., a history of authoritarian government) and traditions of societal resistance to state intervention (i.e., a historically robust civil society)—on the stringency of anti-crisis policies. Second, I investigate how these historical norms shape both the outcomes of crises and the effects of the implemented anti-crisis policies. In addition to these core components, Figure 1 also depicts a set of confounding variables that are accounted for in the empirical analysis. While relevant to the

Figure 1: *Theoretical model*



study, these factors do not constitute the main theoretical focus of the paper.

2.1 Historic norms influence present anti-crisis policies...

Historical cases illustrate that public health responses to pandemics have often involved coercive policing. For instance, during the 1884 cholera epidemic in the Italian city of Naples, public health authorities imposed repressive measures on the local population. "The city sent teams of people who would now be termed health care workers and disinfection squads, but they conducted themselves almost like an army in enemy territory. Making a great show of force, they arrived at tenements with weapons drawn, sometimes at night, and ordered distraught tenants to surrender critically ill relatives to undergo isolation and treatment at a distant hospital that was rumoured to be a death house" (Snowden 2019, 251)(Snowden 2002). Another example is the "Spanish Flu" of 1918—1920, during which governments across the globe imposed lockdown measures that curtailed individuals' economic and civic liberties (Barry 2005). Although the COVID-19 pandemic affected countries to varying degrees, it posed a broadly similar policy challenge across national contexts. Nevertheless, researchers have shown that governmental responses differed significantly, particularly with respect to the extent to which lockdown measures restricted individual liberties (Spadaro 2020, Hale et al. 2021).

To develop hypotheses that can explain these differences between countries, I draw on multiple strands of literature. First, proponents of historical institutionalism have emphasized, in general

terms, that historical policy decisions shape current reform options and structure political conflict through feedback effects for the beneficiaries of those policies (Pierson 2000, Thelen 2014). These feedback effects can take the form of either material or interpretive returns, such as support from the public or political elites (Béland & Schlager 2019, Jacobs, Mettler & Zhu 2022). Interpretive feedback effects refer to the signals that citizens—and elites—receive from existing policies about their role in the polity and the appropriate modes of participation (Béland, Campbell & Weaver 2022, 14, 17). Contemporary decision-makers and the general public internalize such norms through processes of socialization and learning. As a result, historical norms inform present-day actors about the perceived appropriateness of specific policies (March & Olsen 1983), including governmental measures taken in response to crises.

Second, research on the historical transposition of norms further reinforces this point. Numerous studies across economics and political science suggest that social norms persist over time, understood as beliefs and values transmitted across generations. A prominent example is the relationship between the legacy of slavery and political attitudes in the southern United States, where scholars have shown that the historical presence of enslaved populations in a county correlates negatively with support for racial equality (Acharya, Blackwell & Sen 2016, Acharya, Blackwell & Sen 2018). Other research has demonstrated that the transatlantic slave trade is associated with persistent levels of mistrust (Nunn & Wantchekon 2011), and that historical rice farming practices are linked to the present-day strength of social norms (Talhelm & English 2020). In addition, scholars have debated whether proximity to Nazi concentration camps during the Third Reich predicts contemporary levels of xenophobia (Homola, Pereira & Tavits 2020, Pepinsky, Goodman & Ziller 2023).

Drawing on the aforementioned research, I argue that a legacy of authoritarian government can generate social norms that render restrictive lockdown measures more acceptable to decision-makers during the COVID-19 pandemic. The literature on the intergenerational transmission of norms supports the plausibility of this mechanism. Economic scholarship has noted that "when individuals invest in learning and internalizing that society's cultural norms and values, they exert significant externalities on other members of society. In very many cases, these will be positive externalities, as individuals adopt norms of cooperation, tolerance, fairness, honesty, and so on." Individuals who acquire such norms do so with the expectation that the future benefits of adopting them will outweigh the costs of learning (Dessi 2008, 534—35). Consequently, a historical period of authoritarian rule

may have normalized coercive or despotic forms of state intervention—particularly in situations characterized by uncertainty, such as the COVID-19 crisis. Through interactions with parents, other family members, and peers, individuals become socialized into these norms and come to understand their social value (Cornejo, Rocha, Castro, Varela, Manzi, González, Jiménez-Moya, Carvacho, Álvarez, Valdenegro et al. 2021). Once collective historical experience legitimizes restrictive state action, contemporary decision-makers are more likely to perceive such public health measures as both appropriate and legitimate tools for managing complex crises.

Nevertheless, the literature suggests that norms related not only to coercive state authority but also to the strength of civil society are critical for the analysis in this paper. Acemoglu and Robinson argue that both state capacity and societal capacity are essential to understanding the emergence of despotic, failed, or inclusive states (Acemoglu & Robinson 2023, 408—409). Importantly, the authors emphasize that, in addition to the state's ability to exert control over society, elites may accumulate the resources necessary to resist state intervention. This insight implies that, beyond legacies of coercive state authority, it is also necessary to account for the historical capacity of elites to resist intrusive government action. While Acemoglu and Robinson refer to such capacity as "resilience," in the context of this paper, resilience is interpreted as resistance to COVID-19 containment measures.

Consequently, the inverse of the argument concerning coercive state authority applies as well: where norms of societal resistance are historically entrenched, decision-makers are less likely to rely on coercive lockdown measures that limit individual liberties. In these contexts, coercive interventions by the state are less likely to have undergone historical normalization in the sense that they are no longer seen as appropriate or legitimate policy heuristics during crises.

In summary, this theoretical framework implies that decision-makers are more likely to adopt stringent lockdown policies during the COVID-19 pandemic if they operate in a context shaped by a legacy of authoritarian rule, where coercive state intervention is perceived as appropriate (Hypothesis 1). Conversely, the same actors are more likely to favor less restrictive anti-crisis measures if they govern in settings characterized by enduring norms of societal resistance (Hypothesis 2).

2.2 ... and policy outcomes

Interpretive feedback effects related to coercive state authority and societal capacity for resistance may also influence crisis outcomes, as they shape public compliance with anti-crisis policies. Previous

research has examined the role of social norms in vaccine uptake (Abdallah & Lee 2021, Bicchieri, Fatas, Aldama, Casas, Deshpande, Lauro, Parilli, Spohn, Pereira & Wen 2021), social distancing (Martínez, Parilli, Scartascini & Simpser 2021), and anti-crisis policies more broadly (Cabrera-Álvarez, Hornsey & Lobera 2022, Kittel, Kalleitner & Schiestl 2021). This scholarship typically conceptualizes social norms as individual beliefs shaped by the behavior of proximate others. For instance, in the context of the COVID-19 crisis, research has shown that social norms enhance preventive behaviors such as mask-wearing and maintaining physical distance (Kittel, Kalleitner & Schiestl 2021). Scholars have thereby focused on how the behavior and opinions of close social contacts influence individual decision-making (Cabrera-Álvarez, Hornsey & Lobera 2022, Kittel, Kalleitner & Schiestl 2021).

Building on this literature, I extend the argument to consider how norms affect the outcomes of anti-crisis policies. I focus on macro-level norms and posit that collective historical experiences foster shared understandings regarding the legitimacy of restrictive policies. These norms may, in turn, influence policy effectiveness, as individuals act in accordance with them when deciding whether to comply with or resist government measures. For example, strong norms legitimizing coercive state authority—such as those rooted in a history of authoritarian rule—may enhance compliance with stringent policies, thereby mitigating the severity of the crisis. Conversely, interpretive feedback effects that emphasize the inappropriateness of coercive state interventions or valorize resistance to them are likely to reduce compliance with lockdowns and other freedom-restricting measures.

Applied to the COVID-19 pandemic, this logic suggests that countries with a history of authoritarian governance are likely to exhibit lower excess mortality, as historically rooted norms promote acceptance of and compliance with government directives and official information. In contrast, in societies with historically strong civil societies, restrictive COVID-19 measures may be perceived as excessive or illegitimate government overreach (Maor 2021, 187)(Howlett & Kemmerling 2017). Accordingly, compliance with containment policies—including mask mandates and social distancing recommendations—is likely to be lower. As a result, the impact of the crisis may be more severe due to widespread non-compliance in contexts where restrictive measures are perceived as less appropriate.

From this theoretical perspective, two additional hypotheses can be formulated. First, historical norms of coercive state authority—reflected in a legacy of authoritarian governance—are expected

to reduce excess mortality from COVID-19 (Hypothesis 3). Second, historical norms of societal resistance—manifested in a tradition of strong civil society—are expected to increase excess mortality from COVID-19.

2.3 Confounders

The theoretical mechanisms discussed above are not the only factors influencing the stringency of anti-crisis policies and the impact of these measures. Additional factors may confound the proposed explanation and contribute to the cross-national differences addressed in this article. Previous scholarship has explored how various factors shape the adoption of lockdowns and school closures during the COVID-19 crisis. For example, Toshkov et al. highlight that regionalism, the salience of individual freedom, societal trust, health expenditures, GDP per capita, government effectiveness, and other factors affect the timing of these policies (Toshkov, Carroll & Yesilkagit 2022). Other research by Engler et al. demonstrates that higher levels of democracy may lead governments to exercise greater caution when adopting stringent anti-crisis measures (Engler et al. 2021). Furthermore, scholarship on public health regimes has examined the relationship between institutional arrangements and COVID-19 outcomes, underscoring the challenges liberal democracies face in curbing the spread of the virus (Wise, Katznelson, Shachar & Campbell 2024).

Political science research has also investigated the impact of institutional configurations on mortality during the pandemic. Notably, Freiburghaus et al. find that consensus democracies—as defined by (Lijphart 2012)—tended to experience fewer deaths from COVID-19 compared to more majoritarian systems. According to the authors, "the high quality of decisions and policy coherence manifest themselves even during a crisis" in consensus democracies, in contrast to majoritarian ones (Freiburghaus, Vatter & Stadelmann-Steffen 2023, 1122).

Figure 1 presents these potential confounders and their possible effects on both the stringency of anti-crisis measures and the severity of crisis outcomes. Building on this literature, I incorporate the following variables into the analysis: the level of democracy at the onset of the crisis, government effectiveness, state capacity, federalism, regime durability, population density, the proportion of the population over age 70, the availability of hospital beds, and GDP per capita. These variables are measured at the country level. In addition, I account for newly reported COVID-19 deaths and the number of patients in intensive care units (ICUs), which serve as indicators of the pressure on

governments to act. The number of newly vaccinated individuals is also included, given its likely influence on both policy responses and outcomes. All of these factors plausibly affect both the stringency of lockdown measures and the broader impact of the crisis. I further control for the power of the head of government, although this variable is more likely to influence the degree of policy stringency than the crisis outcome itself.

The model presented in Figure 1 does not theorize the influence of confounders on the main explanatory variables—historical levels of authoritarianism and civil society. This is intentional, as the confounders capture political, economic, and social conditions immediately preceding the crisis, as well as pressures experienced by governments during the crisis period.

3 Research Design and Data

To operationalize the theoretical framework discussed above, I conduct two empirical analyses. First, I examine the relationship between the historical presence of authoritarian government and a strong civil society, on the one hand, and national responses to the COVID-19 pandemic (2020–2022), on the other. To capture governmental responses to the pandemic, I focus on the *stringency of non-pharmaceutical anti-crisis policies*, as measured by the COVID-19 Government Response Tracker. This dataset enables cross-national and temporal comparisons of government measures to contain the pandemic (Hale et al. 2021). It constitutes a valuable resource for public policy analysis, as it tracks daily changes in policies across countries throughout the pandemic period. Second, I investigate the relationship between historical indicators and crisis outcomes, specifically focusing on *excess mortality* during the COVID-19 pandemic.

Table 1 presents descriptive statistics for the variables based on the effective sample underlying the analysis in Figure 2. The effective sample includes 19,505 observations across 31 countries. While the full dataset comprises 179 countries, data limitations reduce the number of countries retained for final analysis to 31.[1] A detailed table describing all variables across the entire country population is available in the supplementary materials.

The stringency index used to measure COVID-19 restrictions includes the following non-pharmaceutical

[1]The countries included are: Sweden, Switzerland, South Africa, Japan, USA, Portugal, Bolivia, Argentina, South Korea, Canada, Australia, Chile, France, Germany, Ireland, Italy, Latvia, Netherlands, Spain, UK, Algeria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Luxembourg, Malta, and Romania.

interventions: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, public transport closures, stay-at-home requirements, public information campaigns, internal movement restrictions, and international travel controls. These measures are coded on a daily basis across the three-year observation period. Importantly, the index varies within each country over time.

Given the global coverage of the dataset, data quality presents a potential concern. To validate the accuracy of the COVID-19 Government Response Tracker (Hale et al. 2021), I compare it with national replication efforts. In Switzerland, the Swiss Economic Institute (KOF) re-created both national and subnational indices using the original codebook (Pleninger, Streicher & Sturm 2022). The correlation between the KOF index and the Oxford dataset is high (0.93), suggesting that the latter is a valid measure of policy stringency.[2]

To measure *norms of coercive state authority*, I rely on the inverse of the liberal democracy index from the *Varieties of Democracy* dataset (Coppedge 2021).[3] The measure of historical norms regarding *societal resistance to state intervention* is based on the core civil society index from the same dataset.[4]

Specifically, I construct two distinct sets of measures for each of the two historical norms central to this study. The first set captures long-term historical averages of authoritarian government and civil society strength from 1849 to 1939—a period commonly associated with the emergence of modern public services (Ansell & Lindvall 2020). The starting point in 1849 reflects the democratization of many countries after 1848. These averages are designed to reflect enduring norms related to state coercion and societal resistance. The second set of variables focuses on a narrower historical window—1918 to 1920—corresponding to the global influenza pandemic commonly referred to as the *Spanish Flu*.[5] The variables measuring norms of state authority and societal resistance are highly (negatively) correlated (Figure 3, Supplementary Materials), and thus are not included simultaneously in the same models. I also tested for an interaction effect of both measures, but it did not yield any informative outcome.

[2]The correlation for the period from January 1, 2020 to December 31, 2022 is 0.93. Using an earlier version of the Oxford dataset (January 1 to May 31, 2020), the correlation increases to 0.99.

[3]The variable name is $v2x_libdem$, which is inverted to capture the absence of democracy as an indicator of authoritarian governance.

[4]The variable name is $v2xcs_ccsi$.

[5]Descriptive statistics for these variables can be found in Table 1 of the Supplementary Materials.

The variables used to operationalize historical norms regarding the perceived legitimacy of state coercion and societal resistance are constructed from annual data and vary only at the country level. Their main strength lies in capturing structural conditions that likely influenced the formation of such norms. A key limitation, however, is that these indicators do not directly measure individual-level attitudes or beliefs.

Table 1: Summary statistics, effective sample, Figure 2

	Observations	Mean	Std_Dev	Min	Max
Stringency index	19505	38.63	21.48	5.56	87.96
Authoritarian past (1849-1939)	19505	-0.59	0.58	-1.57	0.42
Democracy before COVID-19	19505	0.60	0.30	-0.53	0.88
Historic strength of civil society (1849-1939)	19505	0.51	0.49	-0.58	1.14
Strength of civil society before COVID-19	19505	0.36	0.23	-0.78	0.52
Quality of government	19505	0.58	0.33	-0.31	1.00
State capacity	19505	0.26	0.54	-1.11	1.15
Federalism	19505	0.40	0.38	-0.64	0.71
Regime durability	19505	0.33	0.43	-0.49	1.30
Power head of government	19505	0.29	0.47	-0.44	0.60
Population density	19505	-0.04	0.15	-0.14	0.69
Pop. older than 70	19505	0.69	0.39	-0.27	1.51
Hospital beds	19505	0.40	0.59	-0.36	2.26
GDP per capita	19505	0.48	0.41	-0.30	1.88
Newly reported deaths (t-14 days)	19505	0.12	0.35	-0.12	5.04
Patients in ICU (t-14 days)	19505	0.01	0.52	-0.38	3.18
Time since January 01, 2020	19505	0.29	0.31	-0.58	0.65

Table 1 also describes the control variables used to operationalize alternative explanations. The operationalization of government effectiveness uses the measure for Quality of Government taken in the *Varieties of Democracy* data set (Coppedge 2021).[6] The index measures the, "quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies" (Coppedge 2022, 352). In addition, the analysis uses control variables at the country level and at the level of days. At the country level, the analysis controls for federalism, GDP per capita, regime stability, population density, and government efficiency. At the level of days, the analysis controls for hospital beds, time that passed since the onset of the pandemic, newly

[6]The name of the variable in the dataset is *e_wbgi_gee*.

reported deaths, and the number of patients in ICU. The time variable models the time dimension of the crisis, whereas newly reported deaths and ICU patients aim at capturing the crisis pressure policymakers are facing. The measure for newly reported deaths is valid indicator for the problem governments face, but less for the "real" impact of the crisis due to challenges in measurement and coding. Therefore, I use excess mortality, which examines the difference of deaths with the previous year and is considered a much for valid indicator to understand the crisis' impact for the analysis of the link between historic norms and crisis impact (Msemburi, Karlinsky, Knutson, Aleshin-Guendel, Chatterji & Wakefield 2023). The descriptive statistics of regarding the analysis of policy outcomes (excess mortality) are presented in the section where I conduct this empirical analysis.

The variables measuring the level of liberal democracy and strength of civil society, government efficiency, federalism, GDP per capita, regime stability, and relative power of the head of government (HoG) at the country level are taken from the *Varieties of Democracy* data set (Coppedge 2021). The data for state capacity comes from the data set by Hansen and Sigman (Hanson & Sigman 2021). These variables are measured at the country level and I extrapolate them over the period of the pandemic in all of the countries included in the analysis. I use the values for these variables from the year 2019 or before, if no later data is available, as I want to understand the impact of pre-pandemic situation on the policy responses against COVID-19. This practice reduces the risk of reverse causality being a problem in the analysis.

Further control variables are the following: population density, share of the population aged 70 or older, hospital beds, fully vaccinated individuals, time (days) that passed since the onset of the pandemic as well as different alternative measures for the pandemic situation (newly dead, number of patients in ICUs (Intensive Care Units) as well as excess mortality) are taken from the data base by Mathieu et al. (Mathieu et al. 2023), which comes already in a pre-formatted version where the data is available at the level of days nested in countries.[7] To measure the crisis outcome concerning the COVID-19 crisis, I use excess mortality as this measure helps dealing with some of the problems related to measuring mortality from COVID-19 (Beaney, Clarke, Jain, Golestaneh, Lyons, Salman & Majeed 2020). Observations for excess mortality are not taken on a daily basis but reported every week or month, depending on the country. I take the measure for the cumulative percentage of excess mortality since this indicates the overall impact of the crisis (cf. Table 2).

[7]The codebook for this dataset is available here.

To analyze the data, I use a Bayesian multilevel model to explore the impact of various predictors on policy stringency indices, formulated as:

$$\mathrm{Y}_i = \beta_0 + \sum_{k=1}^{K} \beta_k X_{ik} + u_{\mathrm{country}_i} + u_{\mathrm{country}_i} \times \mathrm{time}_i + \epsilon_i \tag{1}$$

In this model, α is the intercept, β_k are the coefficients for a set of predictors X_k, which entail a measure for the norms as well as the control variables (Table 1). The model includes random intercepts u_{country} and $u_{\mathrm{country}} \times \mathrm{time}_i$ to account for country-level variation and a random slope for time within countries; ϵ denotes the error term. Priors for the intercept and slopes are specified as Student's t-distributions with 3 degrees of freedom, mean 0, and scale 10. This choice allows for heavy tails to accommodate outliers (Lemoine 2019). Estimation leverages the `brms` package (Bürkner 2021).

I opt for a linear model with a log link function regarding the analysis of stringency because the distribution of effective sample is skewed to the left (cf. Figure 2, Supplementary materials). The index measures stringency on a scale from 0-100. To model the time structure in the data, I use a count variable that measures the days that passed since the beginning of 2020.

This research design does not allow to estimate causal effects for the impact of an authoritarian past as well as the historic strength of civil society on anti-crisis measures and excess mortality by comparing a treatment and control group. Therefore, I am trying to mitigate concerns regarding a causal interpretation of regression coefficients in other ways. Reverse causality is not a problem in the variables at the country level because the measurements are based on pre-pandemic values. Regarding the variables that vary on a daily basis (Newly reported deaths, patients in ICU, new vaccinated, the date, and stringency in the models estimating crisis outcomes), I use a moving average with a delay of 14 days to mitigate the problem of reverse causality. To address the problem of omitted variables, I include a large number of plausible controls into the analysis (cf. Theory section and Table 1). Finally, I estimate time dependency within each country through a random slope, which should take into account that time dynamics of the pandemic differ between countries.

4 Historical norms and stringency of COVID-19 policies

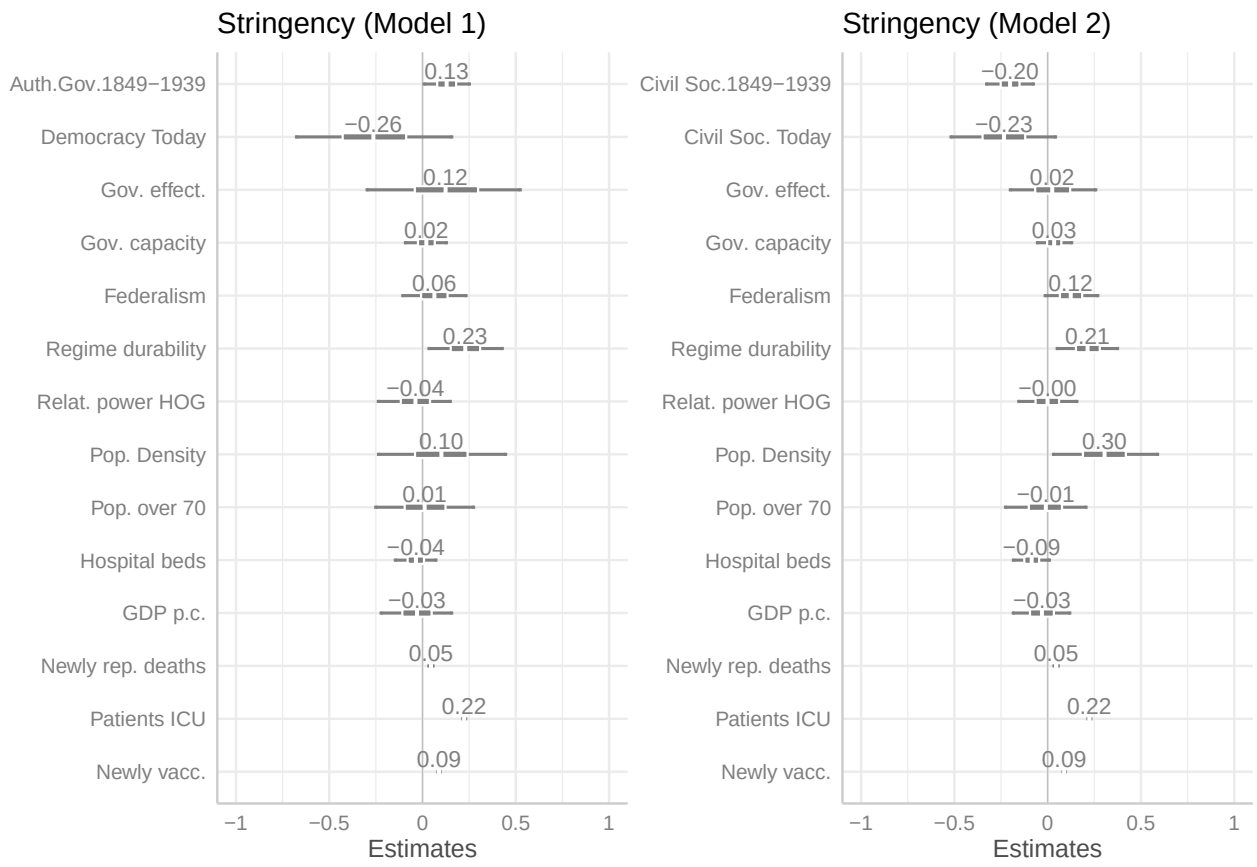
Figure 2 presents the results of the main models from the Bayesian multilevel analysis. In addition to the variables shown in the graph, the models also include a variable for the time trend, which is not shown in the Figure but the coefficient is presented in the table with the regression results that is included in the supplementary materials (Table 1, Supplementary materials). Figure 2 shows 50% and 89% credibility intervals around the median of the posterior distribution, which follows the literature on Bayesian modeling (McElreath 2018, Makowski, Ben-Shachar & Lüdecke 2019)). I estimate two different models, one including the variable on authoritarian past (Model 1, Figure 2), and another one that models the past strength of the civil society (Model 2, Figure 2), because the two measures are highly correlated (cf. Figure 2, in the Supplementary materials).[8]

Substantively, the findings show that an authoritarian government in the past increases the likelihood of more stringent anti-crisis policies. On the contrary, a strong civil society in the past decreases the probability for strict anti-crisis policies. Regarding the control variables at the country level, the findings suggest that a longer regime durability makes stricter anti-crisis policies more likely. Interestingly, other variables at the country level do not seem to have a robust impact on stringency, including the variables measuring today's level of democracy and today's level of civil society. Concerning the variables at the level of days during the three years of the pandemic, the findings suggest that higher number of reported deaths, more patients in ICUs, and a higher number of newly vaccinated individuals increase the likelihood of stricter anti-crisis policies (remember these indicators are lagged by 14 days).

To interpret the size of the coefficients, we need to transform the logarithmic values of the coefficients. The positive value for a history of authoritarian government has a value of 0.13, which implies that a one unit increase of the value for authoritarian past result in an approximately 13.9 percent increase of the lockdown stringency. When taking the mean value of lockdown stringency, 38.63, an one point increase in authoritarian past results in an average lockdown stringency of 43.65. On the contrary, the -0.2 value for a history of civil society implies that a one point increase in the historical strength of civil society results in an average lockdown of 30.09.

[8]The supplementary materials at the end of the paper show the fit plots for the different models. All the models converge well. Tables with the coefficients from the models, number of observations, and values for the credibility intervals are located in the supplementary materials.

Figure 2: *Past authoritarian government and past civil society's link to stringency of lockdown measures*



Notes: The model also includes a control variable for the time passed since January 2020. This variable has by far the largest coefficient and is excluded from the presentation for these reasons (cf. supplementary materials for details). Figure 2 shows 50% and 89% credibility intervals and the posterior median (McElreath 2018, Makowski, Ben-Shachar & Lüdecke 2019)). The models include 31 countries. The lower part of the graph shows only the coefficient for the interaction and the two constituting terms. A table with the complete models including all variables can be found in Table 1 in the supplementary materials.

Overall, these findings provide support for the argument that historical norms concerning coercive state authority and societal resistance give rise to enduring interpretive feedback effects, which in turn influence contemporary policy decisions during times of crisis. This evidence aligns with the expectations outlined in Hypotheses 1 and 2. Hypothesis 1 posits that historical norms of coercive state authority increase the likelihood of stringent anti-crisis policies. Using the historical level of authoritarian government as an indicator of such norms, the empirical results lend support to this claim. When confronted with the uncertainty of a mega-crisis such as the COVID-19 pandemic, decision-makers appear more inclined to adopt strict lockdown measures in contexts with a legacy

of authoritarian rule. In such settings, past governance structures seem to have shaped norms that function as cognitive shortcuts (heuristics) in contemporary decision-making.

Following a similar logic, Hypothesis 2 proposes that historical norms of societal resistance reduce the likelihood of stringent anti-crisis policies. The results support this expectation as well: decision-makers embedded in contexts with strong traditions of civil society appear to have internalized norms of resistance and draw on these heuristics to justify the adoption of less restrictive measures.

The findings in Figure 2 show differences in the statistical robustness between the findings. Notably, the result for the coefficients for historic strength of civil society are clearly have the outer (89%) credibility intervals clearly above the zero line while they are just on the zero line regarding the information for the historic level of authoritarian government. Nevertheless, and more importantly, the values showing the historic strength of civil society and authoritarian government are more robust compared to today's levels of democracy. This finding is a strong indicator of support for our argument.

The results from the analysis discussed above are robust to a range of specification tests. First, I re-estimate the models using the levels of authoritarian government and civil society strength during the years 1918—1920, when a highly lethal influenza pandemic prompted governments to implement restrictive measures. Rather than relying on average levels of authoritarianism and civil society capacity over a longer historical period (1849—1939), this alternative specification focuses on these indicators during the time of a prior global health crisis. As shown in Figure 7 in the supplementary materials, the findings remain relatively stable. However, the effect of the variable capturing authoritarianism becomes statistically less robust. This result suggests that longer historical periods may be necessary to adequately capture the feedback effects of historically embedded norms related to authoritarian government and civil society.

I also estimate the models and include as an additional control two variables regarding information on the strength of parties in government (Toshkov, Carroll & Yesilkagit 2022). Notably, the variables measure the strengths of centre- and right parties in government (left parties are the baseline category). The results are robust to this test. Substantively, the party variables indicate no noteworthy effect (Figure 9, Supplementary materials). The data I use covers only the years 2020 and 2021 (Armingeon, Engler, Leemann & Weisstanner 2023). Finally, I conduct another robustness test that uses flat (uninformed) instead of weakly informative priors. The findings are also robust

to this test (Figure 11, Supplementary materials).

5 Historical norms and excess mortality during the COVID-19 crisis

I now turn to the results of the analysis linking interpretive feedback effects related to historic norms on the result of the crisis and the outcomes of anti-crises policies, by examining the link between the history of authoritarian government and civil society's strength and excess mortality during the COVID-19 crisis. Table 2 shows the effective sample for the variables included in this analysis. In addition to the variables described in Table 1, I add the values for excess mortality and newly vaccinated individuals per one million inhabitants. Both variables are taken from the same dataset as the one used for the first analysis (Mathieu et al. 2023). There are less observations available than for the first analysis, because excess mortality is measured on a less frequent basis.

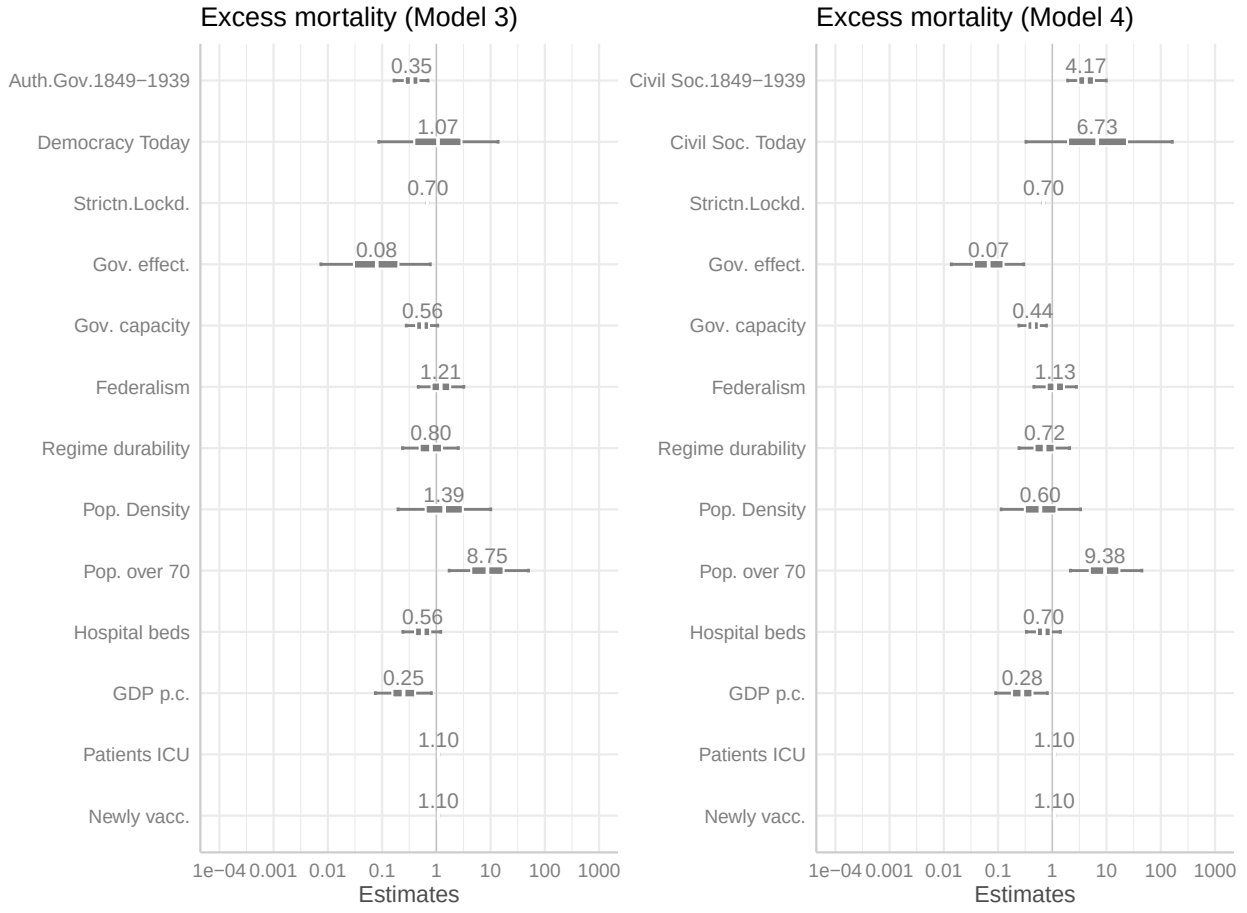
Table 2: Summary statistics, effective sample, Figure 3

	Observations	Mean	Std_Dev	Min	Max
Excess mortality	2493	1.73	1.64	-0.31	10.20
Authoritarian past	2493	-0.66	0.57	-1.57	0.42
Democracy before COVID-19	2493	0.67	0.19	-0.21	0.88
Historic strength of civil society (1849-1939)	2493	0.57	0.46	-0.58	1.14
Strength of civil society before COVID-19	2493	0.40	0.09	0.01	0.52
Lockdown (t-14 days)	2493	-0.09	0.43	-0.75	0.89
Quality of government	2493	0.65	0.26	-0.31	1.00
State capacity	2493	0.28	0.54	-1.11	1.15
Federalism	2493	0.42	0.34	-0.13	0.71
Regime durability	2493	0.38	0.41	-0.49	1.30
Power of head of government	2493	0.33	0.44	-0.44	0.60
Population density	2493	-0.03	0.15	-0.14	0.69
Population older than 70	2493	0.73	0.33	-0.27	1.51
Hospital beds	2493	0.38	0.53	-0.36	2.26
GDP per capita	2493	0.53	0.39	-0.30	1.88
Patients in ICU (t-14 days)	2493	0.02	0.51	-0.38	3.16
Fully vaccinated individuals (t-14 days)	2493	0.14	0.50	-0.35	2.27
Time since January 01, 2020	2493	0.30	0.31	-0.58	0.65

For this analysis, I estimate a model that assumes a skew normal distribution of dependent variable (cf. Figure 8, Supplementary materials) and applies a logarithmic transformation to the

linear predictor modeling the mean of the distribution. Figure 3 presents these results. The models are multilevel models according to the way they are presented in the methods section, in which I estimate the probability for the level of excess mortality within countries over time, including a number of predictor variables.[9] The scale of the graphs in Figure 3 show the exponentiated coefficients representing the multiplicative effect on the expected value of the response variable on the original scale for a one-unit increase in the predictor variable, holding other variables constant.

Figure 3: *Historic norms and excess mortality*



Notes: The model also includes a control variable for the time passed since January 2020. This variable has by far the largest coefficient and is excluded from the presentation for these reasons (cf. supplementary materials for details). Figure 5 shows 50% and 89% credibility intervals (McElreath 2018, Makowski, Ben-Shachar & Lüdecke 2019)). The models include 30 countries. All the coefficients and statistics of the model can be found in the supplementary materials.

Substantively, the findings show that in contexts with a historically strong civil society, the level

[9]The supplementary materials at the end of the paper show the fit plots for the different models. All the models converge well.

of excess mortality was higher compared to countries where this was not the case. Furthermore, the results indicate also that in nations that were under authoritarian rule during the period of modern state formation, the level of excess mortality was lower during the COVID-19 pandemic. The effect size is stronger concerning the historical role of civil society. Furthermore, the findings indicate a slightly negative effect of lockdown strictness on excess mortality as well as a clearly negative effect of government effectiveness on the degree to which the pandemic came along with higher mortality rates. A higher rate of a population over 70 years of age strongly increases excess mortality, whereas in more wealthy countries it is less elevated.

The findings provide support for the theoretical arguments formulated by Hypotheses 3 and 4. Hypothesis 3 argued that historical norms of coercive state authority, that is a high level of past authoritarian government, leads to lower levels of excess mortality, because strict lockdowns are considered more appropriate. Hypothesis 4 postulated the opposite, notably that historical norms of societal resistance are likely to increase excess mortality, because norms are considered less appropriate. More generally, the results underline the important role of interpretive feedback effects in the transmission of norms regarding government and state authority for the results of public policies in times of crisis.

The results are robust to a number of confounders. The control variables are amongst others today's level of democracy and power of civil society, the strictness of the lockdown, government capacity, regime durability, hospital beds richness of the country, patients in ICU as well as newly vaccinated individuals. By taking into consideration all of these factors, historical norms based on a history of an authoritarian past as well as a strong civil society seem to be linked to levels of mortality during the COVID-19 crisis. The history rather than the present of democracy and authoritarianism seem to not only influence the decision of governments regarding lockdowns, they also might be directly associated with the results of the crisis.

6 Conclusion

This article has examined how historically embedded norms shape the stringency of anti-crisis policies and their outcomes. The empirical analysis demonstrates that a legacy of non-democratic governance—reflecting strong norms of coercive state authority—is associated with the adoption

of more restrictive COVID-19 policies. Conversely, a historical record of strong civil society—indicating entrenched norms of societal resistance—is linked to the implementation of less stringent non-pharmaceutical interventions. These findings remain robust when controlling for current levels of democracy and civil society. Moreover, norms of societal resistance are associated with higher excess mortality, while norms of coercive authority may help reduce the human costs of crisis.

This study contributes to the literature on the enduring political consequences of historical norms (Nunn & Wantchekon 2011, Acharya, Blackwell & Sen 2016, Talhelm & English 2020), with a particular focus on public policy outputs and outcomes. I interpret these findings as evidence that the design of anti-crisis policies (Fernández-i Marín, Knill & Steinebach 2021) can be traced back to historically grounded beliefs about the legitimacy of coercive state power. These beliefs are transmitted over time through interpretive feedback effects (Mettler & SoRelle 2018, Béland, Campbell & Weaver 2022). By showing how such norms influence both policy choices and their effectiveness, the study contributes to political science and public policy scholarship by extending the reach of historical institutionalism into the domain of crisis governance.

Beyond its empirical contribution, the article sheds light on the political dynamics of the prevention paradox. Public health research defines this paradox as a situation in which preventive measures generate substantial collective benefits but yield limited observable advantages for individuals, who may not perceive the threat they are being protected against (Rose 1981, 50). This challenge was evident during the COVID-19 crisis, as democratic governments struggled to justify restrictive policies in the absence of visible immediate danger. My findings suggest that countries with an authoritarian past are more likely to adopt stringent policies, which may ultimately lead to fewer deaths. In contrast, democratic histories foster norms that limit the political acceptability of such interventions, potentially resulting in greater crisis impacts.

These findings highlight a paradox for democracies during high-stakes crises. On the one hand, democratic polities may benefit from authoritarian legacies that have institutionalized norms legitimizing temporary coercive measures. On the other hand, governments in liberal democracies must balance swift and effective crisis response with the imperative to maintain democratic legitimacy and to account for societal resistance to state authority. The risk is that liberal democracy becomes conflated with institutional weakness and an inability to protect citizens under conditions of acute uncertainty (Ansell 2019).

At the same time, public health emergencies may present authoritarian regimes with opportunities to demonstrate technocratic competence and effective governance. In contrast, democracies are required to navigate the twin demands of responsiveness and legitimacy. In doing so, they confront a normative and practical dilemma: how to preserve democratic values while implementing policies that may temporarily restrict individual freedoms.

This research opens several avenues for future inquiry. First, while the analysis centers on a mega-crisis context (Boin, McConnell & t'Hart 2021), in which decision-makers operate under extreme uncertainty and time pressure, future studies should examine whether similar historical norms influence governmental responses to other types of crises—such as climate shocks. Climate change presents a particularly salient case of the prevention paradox, especially in advanced democracies where political support for precautionary measures tends to be reactive and short-lived.

Second, the findings call for further investigation into the causal mechanisms underlying interpretive feedback effects. Specifically, future research should explore how historical norms regarding the legitimacy of state coercion are transmitted over time and embedded in political decision-making. Survey-based studies and fine-grained qualitative or mixed-methods approaches could offer deeper insight into how such norms are internalized by political elites and the broader public. Advancing this line of inquiry would enhance our understanding of how historical legacies continue to shape the possibilities and limits of contemporary governance.

Data availability statement

There is data associated with this manuscript. The data is available upon request from the author. Once the paper is close to final acceptance, the data will be published on a suitable server.

Use of Large Language Models

The author used Chat GPT (Model 4o) to correct grammar and spelling mistakes in the text.

References

Abdallah, Devon A & Christine M Lee. 2021. "Social norms and vaccine uptake: College students' COVID vaccination intentions, attitudes, and estimated peer norms and comparisons with influenza vaccine." *Vaccine* 39(15):2060–2067.

Acemoglu, Daron & James A Robinson. 2023. "Weak, Despotic, or Inclusive? How State Type Emerges from State versus Civil Society Competition." *American Political Science Review* 117(2):407–420.

Acharya, Avidit, Matthew Blackwell & Maya Sen. 2016. "The Political Legacy of American Slavery." *The Journal of Politics* 78(3):621–641.

Acharya, Avidit, Matthew Blackwell & Maya Sen. 2018. *Deep Roots: How Slavery Still Shapes Southern Politics*. Vol. 6 Princeton: Princeton University Press.

Amat, Francesc, Andreu Arenas, Albert Falcó-Gimeno & Jordi Muñoz. 2020. "Pandemics Meet Democracy. Experimental Evidence from the COVID-19 Crisis in Spain.".

Ansell, Ben W & Johannes Lindvall. 2020. *Inward Conquest: The Political Origins of Modern Public Services*. Cambridge: Cambridge University Press.

Ansell, Christopher K. 2019. *The Protective State*. Cambridge: Cambridge University Press.

Armingeon, Klaus, Sarah Engler, Lucas Leemann & David Weisstanner. 2023. *Comparative Political Data Set 1960-2021*. Zurich/Lueneburg/Lucerne: University of Zurich, Leuphana University Lueneburg, and University of Lucerne.

Barry, John M. 2005. *The Great Influenza: The Epic Story of the Deadliest Plague in History*. New York: Penguin.

Beaney, Thomas, Jonathan M Clarke, Vageesh Jain, Amelia Kataria Golestaneh, Gemma Lyons, David Salman & Azeem Majeed. 2020. "Excess mortality: the gold standard in measuring the impact of COVID-19 worldwide?" *Journal of the Royal Society of Medicine* 113(9):329–334.

Béland, Daniel, Andrea Louise Campbell & R Kent Weaver. 2022. *Policy feedback: How policies shape politics*. Cambridge: Cambridge University Press.

Béland, Daniel & Edella Schlager. 2019. "Varieties of policy feedback research: Looking backward, moving forward." *Policy Studies Journal* 47(2):184–205.

Bicchieri, Cristina, Enrique Fatas, Abraham Aldama, Andrés Casas, Ishwari Deshpande, Mariagiulia Lauro, Cristina Parilli, Max Spohn, Paula Pereira & Ruiling Wen. 2021. "In science we (should) trust: Expectations and compliance across nine countries during the COVID-19 pandemic." *PloS one* 16(6):e0252892.

Blais, André, Damien Bol, Marco Giani & Peter J. Loewen. 2020. "The Effect of COVID-19 Lockdowns on Political Support: Some Good News for Democracy?" *European Journal of Political Research* .

Boin, Arjen, Allan McConnell & Paul t'Hart. 2021. *Governing the pandemic: The politics of navigating a mega-crisis*. London: Palgrave Macmillan.

Boin, Arjen, Eric Stern, Bengt Sundelius et al. 2016. *The politics of crisis management: Public leadership under pressure*. Cambridge: Cambridge University Press.

Bol, Damien, Marco Giani, André Blais & Peter John Loewen. 2021. "The effect of COVID-19 lockdowns on political support: Some good news for democracy?" *European Journal of Political Research* 60(2):497–505.

Bürkner, Paul-Christian. 2021. "Bayesian Item Response Modeling in R with brms and Stan." *Journal of Statistical Software* 100(5):1–54.

Cabrera-Álvarez, Pablo, Matthew J Hornsey & Josep Lobera. 2022. "Determinants of self-reported adherence to COVID-19 regulations in Spain: social norms, trust and risk perception." *Health Promotion International* 37(6):daac138.

Cepaluni, Gabriel, Michael Dorsch & Réka Branyiczki. 2020. "Political Regimes and Deaths in the Early Stages of the COVID-19 Pandemic." *Available at SSRN 3586767* .

Cepaluni, Gabriel, Michael T Dorsch & Réka Branyiczki. 2022. "Political regimes and deaths in the early stages of the COVID-19 pandemic." *Journal of public finance and public choice* 37(1):27–53.

Cheibub, JA, JYJ Hong & A Przeworski. 2020. Rights and deaths: Government reactions to the pandemic. SSRN. Technical report SSRN.

Coppedge, Michael et al. 2021. "V-Dem dataset v11. 1." *University of Gothenburg; V-Dem Institute* .

Coppedge, Michael et al. 2022. "'V-Dem Codebook v12' Varieties of Democracy (V-Dem) Project." *University of Gothenburg; V-Dem Institute* .

Cornejo, Marcela, Carolina Rocha, Diego Castro, Micaela Varela, Jorge Manzi, Roberto González, Gloria Jiménez-Moya, Héctor Carvacho, Belén Álvarez, Daniel Valdenegro et al. 2021. "The intergenerational transmission of participation in collective action: The role of conversation and political practices in the family." *British Journal of Social Psychology* 60(1):29–49.

De Vries, Catherine E, Bert N Bakker, Sara Hobolt & Kevin Arceneaux. 2020. "Crisis Signaling: How Italy's Coronavirus Lockdown Affected Incumbent Support in Other European Countries." *Available at SSRN 3606149* .

Dessi, Roberta. 2008. "Collective memory, cultural transmission, and investments." *American Economic Review* 98(1):534–560.

Engler, Sarah, Palmo Brunner, Romane Loviat, Tarik Abou-Chadi, Lucas Leemann, Andreas Glaser & Daniel Kübler. 2021. "Democracy in times of the pandemic: explaining the variation of COVID-19 policies across European democracies." *West European Politics* 44(5-6):1077–1102.

Fernández-i Marín, Xavier, Christoph Knill & Yves Steinebach. 2021. "Studying policy design quality in comparative perspective." *American Political Science Review* 115(3):931–947.

Flinders, Matthew. 2020. "Democracy and the Politics of Coronavirus: Trust, Blame and Understanding." *Parliamentary Affairs* .

Freiburghaus, Rahel, Adrian Vatter & Isabelle Stadelmann-Steffen. 2023. "Kinder, gentler–and crisis-proof? Consensus democracy, inclusive institutions and COVID-19 pandemic performance." *West European Politics* 46(6):1106–1132.

Hale, Thomas, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, Emily Cameron-Blake, Laura Hallas, Saptarshi Majumdar et al. 2021. "A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)." *Nature Human Behaviour* 5(4):529–538.

Hanson, Jonathan K & Rachel Sigman. 2021. "Leviathan's latent dimensions: Measuring state capacity for comparative political research." *The Journal of Politics* 83(4):1495–1510.

Homola, Jonathan, Miguel M Pereira & Margit Tavits. 2020. "Legacies of the Third Reich: Concentration camps and out-group intolerance." *American Political Science Review* 114(2):573–590.

Howlett, Michael & Achim Kemmerling. 2017. "Calibrating climate change policies: The causes and consequences of sustained under-reaction." *Journal of Environmental Policy & Planning* 19(6):625–637.

Jacobs, Lawrence R, Suzanne Mettler & Ling Zhu. 2022. "The pathways of policy feedback: How health reform influences political efficacy and participation." *Policy Studies Journal* 50(3):483–506.

Karabulut, Gokhan, Klaus F Zimmermann, Mehmet Huseyin Bilgin & Asli Cansin Doker. 2021. "Democracy and COVID-19 outcomes." *Economics letters* 203:109840.

Kittel, Bernhard, Fabian Kalleitner & David W Schiestl. 2021. "Peers for the fearless: Social norms facilitate preventive behaviour when individuals perceive low COVID-19 health risks." *Plos one* 16(12):e0260171.

Lemoine, Nathan P. 2019. "Moving beyond noninformative priors: why and how to choose weakly informative priors in Bayesian analyses." *Oikos* 128(7):912–928.

Lijphart, Arend. 2012. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, London: Yale University Press.

Makowski, Dominique, Mattan S Ben-Shachar & Daniel Lüdecke. 2019. "bayestestR: Describing effects and their uncertainty, existence and significance within the Bayesian framework." *Journal of Open Source Software* 4(40):1541.

Maor, Moshe. 2021. "Deliberate disproportionate policy response: Towards a conceptual turn." *Journal of Public Policy* 41(1):185–208.

March, James G & Johan P Olsen. 1983. "The New Institutionalism: Organizational Factors in Political Life." *American Political Science Review* 78(3):734–749.

Martínez, Déborah, Cristina Parilli, Carlos Scartascini & Alberto Simpser. 2021. "Let's (not) get together! The role of social norms on social distancing during COVID-19." *PloS one* 16(3):e0247454.

Mathieu, Edouard, Hannah Ritchie, Lucas Rodés-Guirao, Cameron Appel, Charlie Giattino, Joe Hasell, Bobbie Macdonald, Saloni Dattani, Diana Beltekian, Esteban Ortiz-Ospina & Max Roser. 2023. "Coronavirus Pandemic (COVID-19)." *Our World in Data* . https://ourworldindata.org/coronavirus.

McElreath, Richard. 2018. *Statistical rethinking: A Bayesian course with examples in R and Stan*. Chapman and Hall/CRC.

Mettler, Suzanne & Mallory SoRelle. 2018. Policy feedback theory. In *Theories of the policy process*. Routledge pp. 103–134.

Msemburi, William, Ariel Karlinsky, Victoria Knutson, Serge Aleshin-Guendel, Somnath Chatterji & Jon Wakefield. 2023. "The WHO estimates of excess mortality associated with the COVID-19 pandemic." *Nature* 613(7942):130–137.

Nielsen, Julie Hassing & Johannes Lindvall. 2021. "Trust in government in Sweden and Denmark during the COVID-19 epidemic." *West European Politics* 44(5-6):1180–1204.

Nunn, Nathan & Leonard Wantchekon. 2011. "The slave trade and the origins of mistrust in Africa." *American Economic Review* 101(7):3221–3252.

Pepinsky, Thomas B, Sara Wallace Goodman & Conrad Ziller. 2023. "Modeling Spatial Heterogeneity and Historical Persistence: Nazi Concentration Camps and Contemporary Intolerance." *American Political Science Review* pp. 1–10.

Pierson, Paul. 1993. "When effect becomes cause: Policy feedback and political change." *World politics* 45(4):595–628.

Pierson, Paul. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." *American Political Science Review* 94(2):251–267.

Pleninger, Regina, Sina Streicher & Jan-Egbert Sturm. 2022. "Do COVID-19 containment measures work? Evidence from Switzerland." *Swiss Journal of Economics and Statistics* 158(1):5.

Rose, Geoffrey. 1981. "Strategy of prevention: lessons from cardiovascular disease." *British Medical Journal (Clinical research ed.)* 282(6279):1847–1851.

Schwartz, Jonathan. 2012. "Compensating for the 'Authoritarian Advantage' in Crisis Response: A Comparative Case Study of SARS Pandemic Responses in China and Taiwan." *Journal of Chinese Political Science* 17(3):313–331.

Sebhatu, Abiel, Karl Wennberg, Stefan Arora-Jonsson & Staffan I Lindberg. 2020. "Explaining the homogeneous diffusion of COVID-19 nonpharmaceutical interventions across heterogeneous countries." *Proceedings of the National Academy of Sciences* 117(35):21201–21208.

Snowden, Frank M. 2002. *Naples in the Time of Cholera, 1884-1911.* Cambridge: Cambridge University Press.

Snowden, Frank M. 2019. *Epidemics and Society: From the Black Death to the Present.* New Haven: Yale University Press.

Spadaro, Alessandra. 2020. "COVID-19: Testing the Limits of Human Rights." *European Journal of Risk Regulation* pp. 1–9.

Talhelm, Thomas & Alexander S English. 2020. "Historically rice-farming societies have tighter social norms in China and worldwide." *Proceedings of the National Academy of Sciences* 117(33):19816–19824.

Thelen, Kathleen Ann. 2014. *Varieties of Liberalization and the New Politics of Social Solidarity.* Cambridge: Cambridge University Press.

Toshkov, Dimiter, Brendan Carroll & Kutsal Yesilkagit. 2022. "Government capacity, societal trust or party preferences: what accounts for the variety of national policy responses to the COVID-19 pandemic in Europe?" *Journal of European Public Policy* 29(7):1009–1028.

Trein, Philipp & Thenia Vagionaki. 2022. "Learning heuristics, issue salience and polarization in the policy process." *West European Politics* 45(4):906–929.

Wise, Tess, Gali Katznelson, Carmel Shachar & Andrea Louise Campbell. 2024. COVID-19 and National Public Health Regimes: Whither the Post-Washington Consensus in Public Health? In *COVID-19 and the Law Disruption, Impact and Legacy*, ed. Glenn Cohen, Abbe R. Gluck, Katherine I. Kraschel & Carmel Shachar. Cambridge University Press pp. 335–353.