



Literature Review, Conceptual Framework and Methodology

WP2: Legitimate Crisis Governance in MLG Systems



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Executive summary

Crises, such as natural disasters, terrorist events, economic breakdowns, or disease outbreaks, pose fundamental challenges to governments. An important question is how governments can respond to and deal with crises, not only in an effective way, but also in a legitimate way. The legitimacy of crisis governance has received significant attention in the wake of the COVID-19 pandemic, with government responses that impacted virtually all citizens worldwide and that sometimes led to protests and other challenges to the legitimacy of measures and the authorities passing them. At the same time, the pandemic demanded coordinated action from governments at all levels, requiring a legitimate crisis response sensitive to the needs of federalism, decentralization, supranational authorities and other multilevel governance (MLG) institutions and processes. Despite this increasing scholarly attention, the role that MLG has played in government responses to the pandemic remains uncertain as the literature remains fragmented. Additionally, there is a need for a conceptualization of legitimate crisis governance to better understand these responses and contribute to future effective crisis response. In this three-part deliverable, we first synthesize the literature on the effects of MLG on governments' policy responses to COVID-19 through a systematic literature review. The systematic literature review shows that while current scholarship reveals much about national, subnational and local responses, it remains limited by a narrow set of research methods, comparisons across cases that are solely of one or another MLG-type, and a lack of specificity regarding the government response studied. The second part of the deliverable develops a conceptual framework for analyzing and assessing the legitimacy of crisis governance and develops a set of expectations that can guide empirical research into the legitimacy of crisis governance. Taking these two perspectives as a starting point, the third part of the deliverable proposes a mixed methods research design for testing the framework to better understand the effects of multilevel governance systems on crisis governance responses and citizens' perceptions of their legitimacy.



I. Systematic literature review

1. Abstract

COVID-19 has captured the attention of scholars across a wide variety of disciplines. As the pandemic demanded coordinated action from governments at all levels, the role of federalism, decentralization, supranational authorities and other multilevel governance (MLG) institutions and processes has come under much scholarly scrutiny. Three years on, much of this literature remains fragmented and in need of synthesis. In this systematic literature review we summarize and draw conclusions from the literature on the effects of MLG on governments' policy responses to COVID-19. We identified relevant contributions through a Web of Science search of MLG and COVID-19 governance keywords from the start of the pandemic until October 2022 that yielded 103 empirical studies. For each, we coded aspects of the research design, geographical and temporal scope, MLG factors examined, and results observed. Through frequency distributions and summary statistics, the review describes the sum of this literature and notes its gaps and potential biases. In addition to these quantitative results, we highlight a number of overarching themes. While the literature reveals much about individual national, subnational and local responses, it remains limited by a narrow set of research methods, comparisons across cases that are solely of one or another MLG-type, and a lack of specificity regarding the government response studied. We conclude by proposing a research agenda to move forward the effects of MLG on governments' policy responses COVID-19 and similar crises.

2. Introduction

Soon after COVID-19 reached the scale of a global pandemic, researchers across diverse academic disciplines directed their efforts to understanding the nature of the virus, its causes, effects, and the individual and collective responses to its spread. In political science, public administration, and related disciplines, attention turned to investigating the characteristics and consequences of the crisis governance precipitated by the outbreak. Among the many possible explanatory factors explored across countries, regions and types of government response, scholars in these fields have theorized and empirically tested the effects of federalism, supranational authorities, and other institutions of multilevel governance on a variety of response-related outcomes. Many interesting contributions have emerged, but until now the sum of this work remains untallied, with some exceptions (Devine et al., 2021; T-A-X Liu et al., 2021; Mardiyanta and Wijaya, 2022; Scognamiglio et al., n.d.) This systematic literature review aims to take stock of the state of knowledge on the effects of MLG institutions on COVID-19 government responses in Western democracies and thereby contribute to the accumulation of knowledge on this topic. Besides orienting scholars to the research that has been produced and what remains unknown, the synthesis produced here will be of value to policy practitioners for identifying potential roadblocks and institutional innovations that may hinder or help efforts to govern effectively through crises that demand a multilevel response.

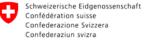


The objectives of the review consist of the following:

- Synthesize the results from past research to characterize and assess the nature of the effect of MLG institutions on the responses to COVID-19 by governments at all levels
- Identify gaps in the research in terms of
 - o the COVID-19 policy responses for which the effects of MLG institutions remain uncertain
 - the MLG institutions and processes that remain unexplored in the context of COVID-19 government responses
- Characterize the existing research and uncover potential biases in the research methods used, the cases and observations selected for analysis, and the disciplinary approaches undertaken
- Highlight salient themes that emerge from the study of the MLG-COVID-19 response literature
- Point the way towards a research agenda for better understanding the role of MLG institutions in crisis governance

Systematic literature reviews are valuable research outputs in their own right. By following transparent and replicable methods, they constitute original research of a kind. Although widely used in the health and biomedical sciences to accumulate evidence from clinical trials and other quantitative studies of the effects of interventions on health-related outcomes, social scientists have increasingly used these methods to synthesize conflicting and dispersed knowledge about social phenomena obtained through qualitative and quantitative research alike. Several have made important contributions, exploring topics such as public-private partnerships (Wang et al., 2018), the policy effects of decentralization (Kleider and Toubeau, 2022), the effects of mobility and other restrictions in educational settings during the pandemic (Ishihara et al., 2021) and COVID-19-related public sector co-creation (Scognamiglio et al., n.d.). Building on this emerging use of systematic literature reviews in public administration and related disciplines, we not only contribute to consolidating and pushing forward the literature on multilevel governance in crisis responses, but we also demonstrate the value of systematizing a literature review in a field that relies on diverse sources of evidence and methods of analysis. While meta-analysis can summarize and quantitatively analyze studies that rely on large-n statistical techniques, the synthesis of empirical evidence obtained through both statistical analysis and qualitative methods demands a different, but no less transparent and systematic approach. The systematic literature review here shows how such a methodologically diverse body of literature can be summarized.

Our results paint a picture of the literature on the role of MLG in COVID-19 government responses that is dominated by qualitative research methods, spread evenly across global regions and that covers a wide range of government response types. Specific countries that feature federal, regionalized, and other MLG arrangements, like the United States, Italy, Canada, and Spain, feature prominently, while more centralized countries represent a smaller share of the empirical evidence. The time period is limited almost exclusively to the first wave or first half year of the pandemic. While this set of studies taken as a whole problematizes local, subnational and (more rarely) supranational responses, explaining national responses is most common. In the majority of papers, the author(s) find MLG institutions or processes to



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be associated with differences across government responses or relevant for at least one response observed.

Moving from the quantitative results of the systematic review, we highlight three major themes from the literature. First, the collection of single and comparative case studies rarely include non-federal countries and as a result, the counterfactual to more 'typically' multilevel governance institutions remains unspecified and unexplored. Second, while some studies clearly conceptualize and document the multilevel governance dynamics that result in government responses, the scope of government response is often underspecified. Finally, relative inattention to government responses beyond the early stages of the pandemic is a significant gap, as later responses led to specific and different crisis management challenges and legitimacy concerns.

The next section presents the methods of our systematic literature review, including the search terms and a description of the study coding. The third section summarizes the results quantitatively according to the main study characteristics that we have coded and interprets the literature as a whole, noting gaps, potential biases, and limitations that emerge from this summary. A fourth discussion section delves more deeply into the major salient themes uncovered in the review. A final section concludes and presents an agenda for future research on the effects of multilevel governance institutions and processes on crisis policy response.

3. Methods

This systematic review follows the PRISMA 2020 statement for reporting systematic literature reviews (Page, McKenzie, et al., 2021; Page, Moher, et al., 2021). Developed to aid evidence-based policymaking in health sciences, scholars across a wide variety of disciplines, including political science and public administration, increasingly use its guidelines for planning and executing a systematic literature review (Harguindéguy et al., 2022; Kleider and Toubeau, 2022; Kuhlmann and van der Heijden, 2018; T-A-X Liu et al., 2021; van der Does and Jacquet, 2021). PRISMA includes a checklist of items for reporting the results of a systematic literature review (or meta-analysis) and a detailed elaboration (with examples) of how to construct each item in the review report abstract and text. The elaborated checklist ensures that each step of the literature review process is clear and transparent enough to ensure reproducibility, and that the literature review as a whole is comprehensive and comparable with other reviews that follow the same guidelines. In this section, we describe precisely the criteria for study inclusion in our review, the means through which we conducted the search, the coding we applied to each included study, and the main ways we summarize the results.



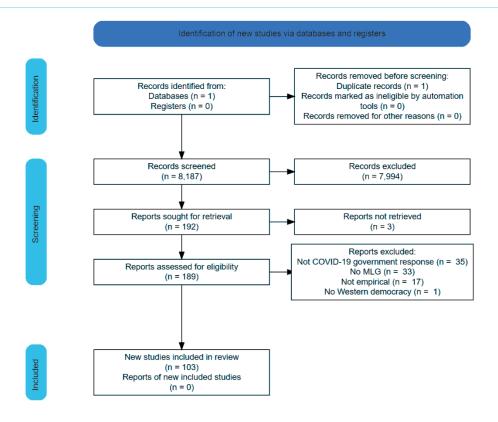


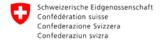
Figure 1 Flow diagram for study inclusion

Our synthesis of the extant research about the effects of MLG institutions on COVID-19 responses considers all empirical research published in peer-reviewed scholarly journals that examines the effects of multilevel governance institutions and processes on the responses of governments to COVID-19 in Western democracies. Figure 1 summarizes the search and selection process.¹. To ensure a multidisciplinary search of the largest number of records from a single database that allows the screening of peer-reviewed articles, we used the Web of Science (Gusenbauer and Haddaway, 2020). We conducted the search on 3 November 2022 and limited it to records with a publication date between 2020-01-01 (the start of the pandemic) and 2022-09-30 (the day prior to the project start date) and to publications written in English. The included research must focus on COVID-19 and include at least one term that refers to MLG (e.g., federalism, decentralization, multilevel, supranational, etc.) but government responses take a wide variety of forms that cannot be expressed comprehensively *a priori* with defined set of search terms. At the same time, we sought to include quantitative analyses that include a variable related to MLG factors (which may not be mentioned in the title, abstract or key words) by including all quantitative analyses of COVID-19 that refer to 'public' or words with the root govern*. Thus, our search string (applied to article title, abstract and key words) is as follows:

¹ We rely on the template from (Haddaway, Page, Pritchard, & McGuinness, 2022) for this flow diagram.

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(federal* OR regionali* OR confed* OR decentral* OR multilevel OR "multi-level" OR intergovernmental* OR subnational OR supranational OR ((multivariate OR "quantitative analy*" OR statistic*) AND (public OR govern*))) AND (COVID OR "COVID-19" OR coronavirus OR pandemic)

This resulted in 8,188 records² that we randomly divided among four researchers to screen for inclusion by reading the title and abstract. Screening allowed us to exclude purely theoretical contributions and empirical studies that obviously do not examine government responses as an outcome, multilevel governance institutions or processes as at least one explanatory variable or factor, or that do not include at least one Western democracy among the cases or observations included in the analysis. The screening process yielded 192 records that we randomly assigned to each researcher for retrieval (in three cases the full texts were not available) and coding. During the coding process, we excluded additional articles that did not meet the formal inclusion criteria, resulting in a total of 103 studies comprising the systematic review. Appendix A contains the complete citations for all reports reviewed.

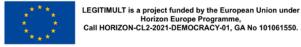
To summarize the empirical breadth and the results of this literature, we coded a number of attributes from each study. The complete codebook is in Appendix B; here we present the main coded attributes. First, we coded these characteristics of the research design and the geographical and temporal scope of the analysis:

- the research method(s): (single case or comparative case study, quantitative analysis and type of such analysis)
- the region(s) of the world from which cases or observations are selected: Europe, North America, Australia and New Zealand, or other (non-Western) democracy
- whether the study includes non-democracies among its cases or observations
- the individual countries from which cases are selected (for case study research)
- the academic field of the journal in which the report is published
- the start and end date of the empirical content analyzed (if reported) or a brief summary of its timespan
- whether the analysis included commonly used variables for multilevel governance or studying COVID-19 comparatively (Regional Authority Index, Local Authority Index, or the Oxford COVID-19 government response tracker)

Second, we coded characteristics of the government response outcome(s) studied in the research. As noted above, the wide scope of research on COVID-19 government outcomes precludes a simple a priori set of responses to code. We base our list of government response types on existing research and code each study for one or more of the following:

processes of multilevel governance (including the dynamics of government responses among different levels in producing any of the other response outcomes below)

² The full list of identified records is available from the authors by request. Project funded by



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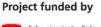


- testing, pandemic monitoring and other data collection efforts
- regulations on society to slow the pandemic's growth (mobility restrictions, mask mandates, mandatory school and business closures) and the removal of such regulations
- information campaigns and other communications with a policy (as opposed to purely political)
 function
- interventions to improve healthcare capacity (ICU procurement, training, healthcare spending, etc.)
- economic, social and other sectoral policies to mitigate the pandemic's economic effects

We coded which level(s) of government produced the response(s) analyzed (local/municipal, subnational, national, supranational or policies produced through joint decision-making among several levels). For the response outcome, we coded whether the study analyzed the timing, severity, scope or any qualitative differences across cases in the response(s).

Finally, we coded the nature of the effect of MLG institutions as uncovered in the analysis: whether the hypothesized or expected federalism, decentralization (including regional and local autonomy), supranational governance or other MLG factors influence or are relevant to the government response(s) analyzed.

In the next section, we summarize the literature by these main characteristics individually and in combination to reveal gaps and indicate the main sources of evidence and methods used so far to understand the effects of MLG institutions and processes on government COVID-19 responses. We also sketch the main results found for these effects.





4. Results

a. Methods

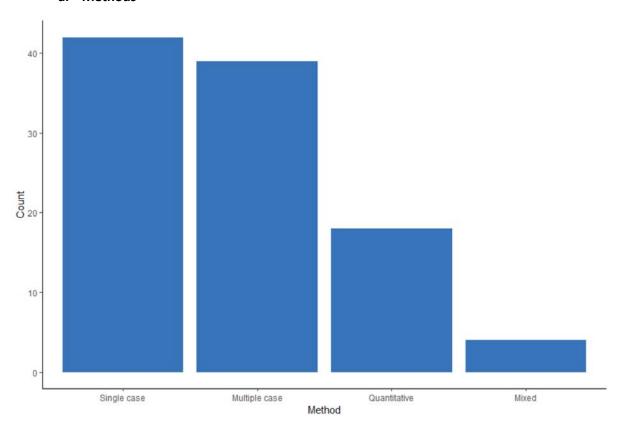


Figure 2: Methods used in the reviewed studies

Figure 2 shows the distribution of studies according to the methods employed. For 77% of the studies, the main methods are qualitative, split relatively evenly between single case studies and comparisons of multiple cases. The smaller number of quantitative and mixed (combined quantitative and qualitative) studies relied on cross-sectional (7), panel or time series cross-sectional (7), longitudinal or event history (5), or other quantitative methods (3). Given the dynamic nature of the pandemic and the evolution of policymaking in response, the predominance of data from multiple time periods among the quantitative analyses is unsurprising. Even cross-sectional analyses may reflect dynamics by, for example, comparing the timeliness of adopting stringent measures (Gasulla et al., 2022). They more typically take snapshots close to the time of the analysis, as in a comparison of whether (by the time of data collection), data reporting by subnational authorities meets WHO standards (Rocco et al., 2021). Thus, the studies encompass a variety of methods, though the presence of a large number of single case studies indicates that much of the evidence is explicitly without comparison.



b. Discipline

The distribution of included studies according to the journal's primary academic field is uneven (Figure 3). Studies appearing in journals from political science and public administration account for the majority (64%), with health studies and economics each comprising the next largest single disciplines. The other category includes multi- and transdisciplinary journals primarily at the intersection of health, technology and social science (Journal of Health Politics, Policy & Law, Health Policy and Technology, etc.) or that accept multiple disciplinary approaches to the study of a particular policy sector (Transport Policy and International Journal of Hospitality Management). Across the different fields, there are no significant differences in research methods. The predominance of public administration and political science journals follows from the intersection of multilevel governance and government policy responses in the scope of the review, but the limited number of studies from economics journals (which often publish scholarship concerning public choice) and multi- and transdisciplinary journals devoted to specific policy sectors may reflect the absence of multilevel governance concerns in explaining COVID-19 policy outcomes in these academic approaches. The small number of articles published in legal studies journals may underrepresent the extent of legal scholarship on the topic, some of which is published in political science and public administration journals.

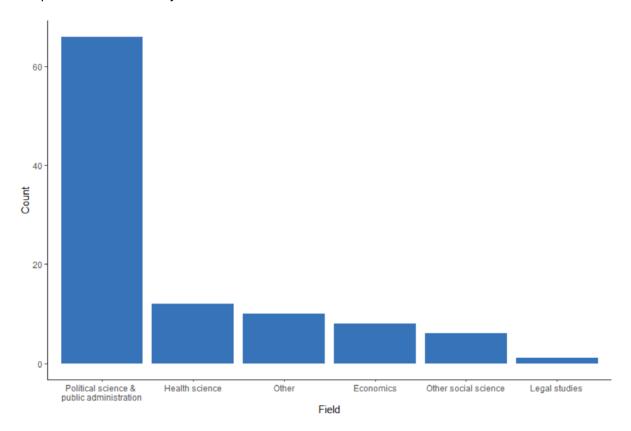


Figure 3: Disciplinary field of journal in which studies appear



c. Geographic and temporal scope

The geographic spread of the cases and observations across the included studies depends in part on the research methods. Depending on the level of analysis, large-n designs may include countries across the globe and as a result are more likely to have cases from multiple regions. Nevertheless, a majority of all included studies (79%) rely on cases from only one of Europe, North America, or Australia and New Zealand. Those that include cases from several regions are evenly split between multiple case study and quantitative or mixed methods research. Multiple case studies across regions tend to draw from at least one case in Europe or one case in North America combined with other Western democracies. Examples that depart from this selection strategy include a comparison of multilevel governance dynamics between New York state and China's Hubei Province (Z Liu et al., 2021), municipal responses in Los Angeles and Shanghai (Weng et al., 2020), and comparisons across supranational authorities like the EU and the Association of South East Asian Nations (ASEAN) (Kliem, 2021). Although we selected studies to include at least one Western democracy, few include comparisons with non-democracies and those that do involve either China (Z Liu et al., 2021; Weng et al., 2020) or regional authorities with non-democratic members (Baranes and Hazen, 2022; da Silva Nogueira de Melo and Papageorgiou, 2021; Kliem, 2021). Among the quantitative studies there are both globe-spanning analyses and studies limited to a single region or country. Quantitative analyses of global scope by nature include non-Western democracies and nondemocracies.

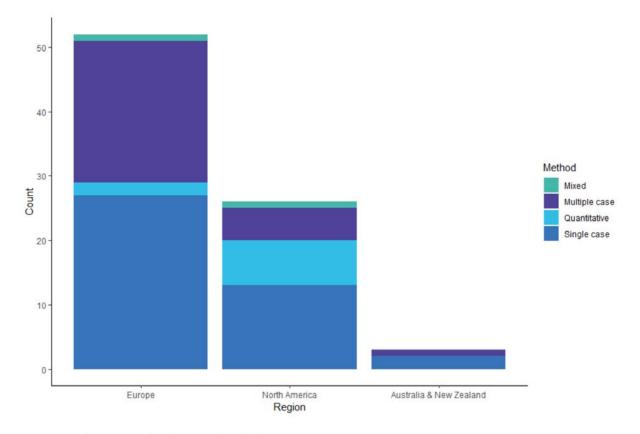


Figure 4: Single-region studies by research method



Figure 4 shows the regional and methodological distribution for the studies that all draw cases from a single region. Two quantitative studies compare governance response outcomes within and among European countries (McCann et al., 2022; Toshkov et al., 2021). Single country quantitative analyses compare across Canadian provinces and territories (1) or across the US states (6). Beyond the single country studies that by nature fall within a single region, many multiple case study comparisons take place in a single region (most often Europe, with 22). For containing a relatively small number of countries, North America supplies the cases in a large number of single case studies (13, against Europe's expectedly higher 28). Taken together, the quantitative studies and multiple case study designs, apart from the large n designs of global scope, seldom make comparisons across cases spanning multiple regions. Figure 5 shows that some countries (namely, the United States, Canada, Germany, Italy and Sweden) appear relatively frequently in case study designs.

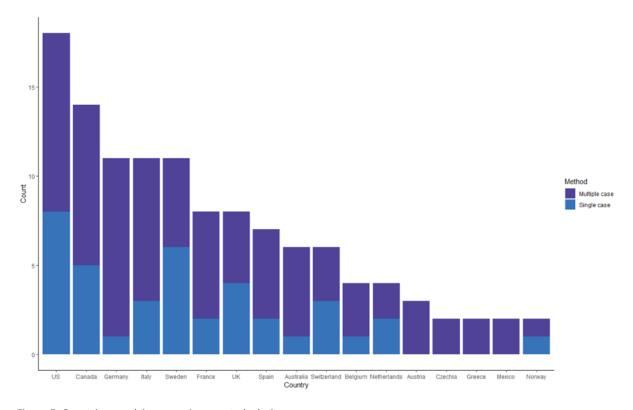


Figure 5: Countries supplying cases in case study designs

With respect to timing, of the 103 studies, 53 (about half) deal exclusively with the first wave of the pandemic. For four cases, the article does not specify the time period. Nearly all the remaining cases deal with the first wave in combination with later events. The two exceptions explore Norwegian vaccination efforts from December 2020 to early 2022 (Skjesol and Tritter, 2022) or explain differences across COVID-19 surveillance systems in subnational entities of federal countries in late 2021 (Rocco et al., 2021). Thus, the effects of MLG institutions and processes on the much longer post-first wave remains relatively understudied.

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d. Government levels

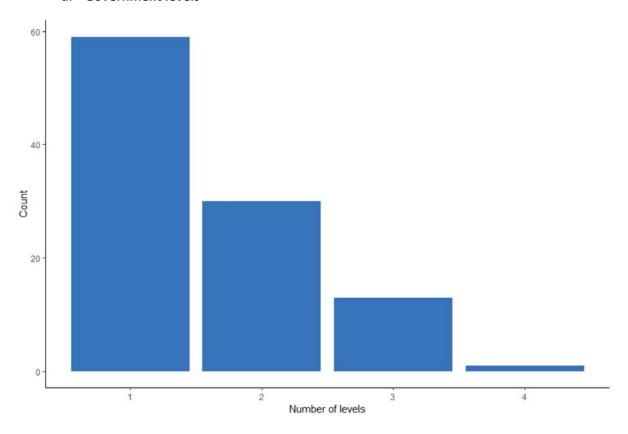


Figure 6: Number of studies by the number of government levels included

Across levels of government, most studies focus on a single level (Figure 6) and studies that include the national level are the norm (Table 1). Thus, scholars are mainly concerned with how MLG institutions and processes influence national responses to the pandemic. Given this concern, it is noteworthy that very few analyses make use of standardized indicators that measure differences in MLG-related phenomena, like the regional (6 studies) and local (2) authority indexes (Hooghe et al., 2016; Ladner et al., 2016). Subnational (between national and local or municipal) responses are also frequently the subject of research, and are the exclusive focus in 14 studies, while research that includes the role of supranational actors is relatively rare. Supranational authorities involving Western democracies are rare phenomena, so it is no surprise that all studies here include the EU as one case. Three studies compare the EU with similar sets of institutions (Baranes and Hazen, 2022; da Silva Nogueira de Melo and Papageorgiou, 2021; Kliem, 2021). The relative rarity of MLG research considering local or municipal responses is surprising, given the importance of this level both to the study of MLG and to their frontline role in COVID-19 responses.



Table 1: Presence of government levels in studies

	Count	Percent
National	80	78%
Subnational	53	51%
Local or municipal	21	20%
Supranational	8	8%

Response types and outcomes

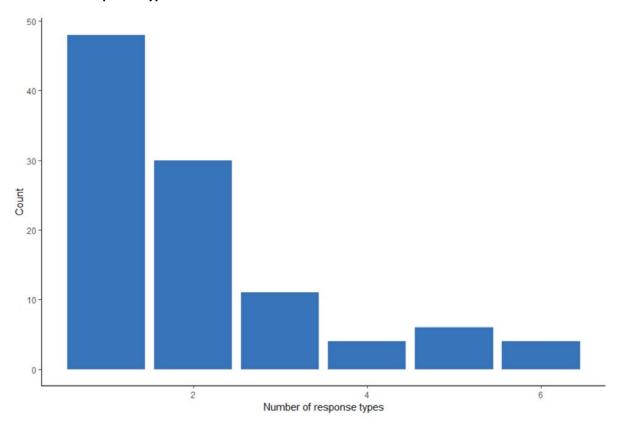


Figure 7: Number of studies by the number of government response types included

The studies reviewed here problematize a variety of government response types. Figure 7 shows that the analyzed government response often spans multiple types, with fewer than half focusing on one only. Table 2 indicates that societal regulations (mobility restrictions, school and business closures, mask mandates, etc.) and MLG processes are the most studied government response types. The former are those sets of regulations that are most familiar to citizens as they regulated their day-to-day activity on an unprecedented scale, particularly during the period of initial responses, so their attention in the literature is not surprising. The frequency of the latter reflects the main scholarly concerns present in a set of studies that focus on MLG institutions and processes. Articles use patterns in the timing and severity of government responses (including especially social regulations, but also others) across and within



different levels of government to characterize the overall MLG dynamics of a government response (as in Vampa, 2021). Sectoral policies (particularly related to economic and social measures taken to alleviate hardship brought upon by social regulation) and states of emergency are also relatively frequently studied. Vaccination efforts and health interventions, both key drivers of success in dealing with the crisis, are rarely studied.

Table 2:Presence of response types in studies

	Count	Percent
Societal regulations	62	60%
MLG processes	50	49%
Sectoral policies	30	29%
States of emergency	24	23%
Virus surveillance	18	17%
Information and communication	10	10%
Health policies	12	12%
Vaccination	5	5%

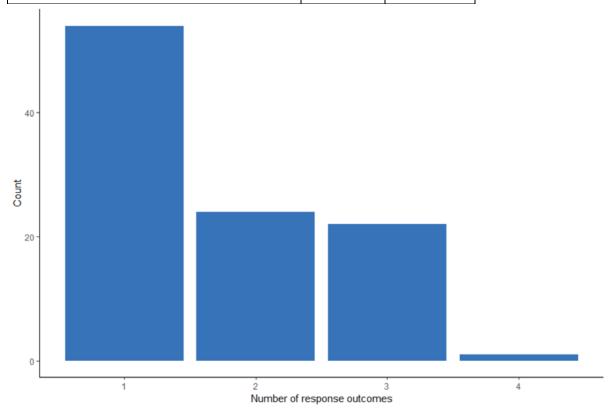
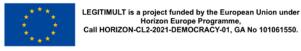
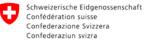


Figure 8:Number of studies by the number of response outcomes included

Similar to response types, the reviewed studies are divided roughly equally between those that consider a single outcome type and those that examine several. Two-thirds of the studies with quantitative designs







and half of those with qualitative designs use a single outcome type. Unlike response types, however, no outcome types are understudied: the timing, scope, and severity as well as qualitative differences in government responses are equally studied. The Oxford COVID-19 Government Response Tracker, a measure of the timing and severity of government responses globally and at multiple government levels appears in only 15 studies (Hale et al., 2021).

Table 3: Presence of outcome variables in studies

	Count	Percent
Timing	45	44%
Scope	43	42%
Severity	41	40%
Differences	45	44%

f. Results of analysis of MLG effects

The above summaries of the research methods, case selection means, government levels and government response and outcome types describe a highly diverse literature to this point on the effects of MLG institutions and processes on COVID-19 government responses. This diversity, especially with respect to the MLG factors and government responses, makes synthesizing results from across these studies into general insights difficult. Each study rests on a unique intersection of these design components. Nevertheless, we can make some general remarks based on a basic coding of each study's results and how they relate to some of the research design factors. We provide the full crosstabulations in Appendix C and summarize a selection of these here.

Overall, we find that MLG is relevant for the outcome in 87 (84%) of the studies reviewed here. Put differently, 16 studies explore in one way or another the role or relevance of MLG institutions or processes for responses to the pandemic but find them irrelevant. Remarkably, all 18 quantitative analyses find an MLG effect. Null findings are more common among multiple case studies relative to single cases and are more common among studies limited to North America in comparison to studies within Europe or across regions. Studies that include subnational government responses are less likely to find a null effect of MLG than studies that included national government responses (though there is overlap in these two sets). Null findings are absent in the five studies with vaccination-related government responses and are relatively rare in those with studies that include sectoral policies and (unsurprisingly) MLG processes among their responses. Finally, relative to other outcome types, null findings are rare when the severity outcome type is among the outcomes analyzed in the study.

The diversity of MLG explanatory factors and government response outcomes precludes us from summarizing the nature of these effects across all studies, as is done in meta-analysis. Even limiting ourselves to the quantitative analyses, which present estimates of effect sizes, would not allow for simple comparisons, as here too the factors and outcomes vary. Among these eighteen quantitative studies, four



converge on the role of regional autonomy, federalism and decentralization in the timing and stringency of government responses. Federalism or regional autonomy slowed the initial national responses and is associated with less stringency (Cheng et al., 2021; Nelson, 2021; Toshkov et al., 2021), though its presence or mechanisms to coordinate it led to a quicker relaxation of restrictions (Nelson, 2021; Yoon and Lofton, 2022). In imposing and removing lockdowns after the first wave, regional autonomy may have had the opposite effect (Jahn, 2022). The remaining quantitative studies explore different outcomes. Synthesizing insights across the many case study designs faces the same obstacles related to the comparability of outcomes and MLG explanatory factors, so we draw insights from these (together with the quantitative analysis) in the following discussion of three themes that emerged from reviewing the literature.

5. Discussion

a. Case selection

Case selection is an important aspect of the research design of comparative studies. It affects the validity and generalizability of individual articles. But it also constraints the lessons that the literature as a whole can deliver, in light of the typical case selection choices scholars in the field make.

Comparisons between a small number of cases is a popular mode of research in the literature on the connections between MLG and policy responses to the COVID-19 pandemic. The case selection strategies of most articles employing this mode of research, however, are not optimal for deriving valid and reliable inferences about the possible effects of MLG. The bulk of the studies (a) compare cases that do not vary significantly in the MLG arrangements, (b) do not specify whether their goals are theory-testing or theorygenerating, and (c) do not elaborate causal models that clarify the role of MLG as a direct cause or a moderating factor of other causes of the policy responses.

Most paired and small-N comparisons in this literature compare cases that have similar MLG arrangements, at least when we take general politico-administrative features of the states. Spain is frequently compared with Italy (Casula and Pazos-Vidal, 2021; Mattei and Del Pino, 2021; Parrado and Galli, 2021), even though both countries have similarly high levels of regionalization, which fall short of federalism. Sweden is frequently compared to its Nordic neighbors, which are all unitary states with significant levels of decentralization, in general and in the health-care sector in particular (Askim and Bergström, 2022) or with another unitary state – Greece (Petridou and Zahariadis, 2021). The same applies to a comparison between Czechia and Slovakia (Jüptner and Klimovský, 2022). Germany is often compared to other European federal states, such as Austria and Switzerland (Hegele and Schnabel, 2021; Schnabel and Hegele, 2021), or to the US (Rozell and Wilcox, 2020; Tonti, 2022) and Canada, which also have federal structures.

The lack of significant variation in MLG arrangements across the cases being compared makes it impossible to evaluate their causal impact on the nature of the policy responses to COVID-19. When the forms of MLG arrangements are broadly similar, it is very hard to test whether they make any difference for the outcomes of interest. If significant variation in outcomes is observed, it could be that MLG-related Project funded by

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factors do not matter, or it could be that they matter but their influence is contextual on other variables. The latter option is the interpretation often suggested by the articles. It is suggested that decentralization, regionalization and federal arrangements matter but their effects are contingent on processes such as 'proper' coordination. While such conditional effects are possible and even plausible, the case selection methods of the studies that propose them are not geared towards proper tests of such arguments.

More generally, most studies in the literature are not explicit about their research goals, and more specifically whether they are interested in theory-testing or theory-building. Many comparative articles take as a starting point variation in outcomes (COVID-19 policy responses) and proceed to select a set of broadly similar cases. Such a strategy is appropriate only for theory-building purposes (Toshkov, 2016). The inference about any factor - or combination of factors - that is found to account for the different outcomes can only be regarded as a hypothesis that needs further testing. For theory-testing, a different form of most similar systems design needs to be adopted, where the main explanatory factor of interest (e.g. MLG) varies, background variables are kept similar, and the researcher is agnostic about the case outcomes before the research is conducted. Such theory-testing comparative designs are rarely employed in the literature. Yet, the inferences from theory-building designs are often presented in stronger terms in terms of validity and generalizability than the research designs allow for.

Overall, very few of the articles present clear causal models of COVID-19 policy responses that include MLG as one factor among others. This is unfortunate, because the influence of MLG can only be ascertained if it is theorized in the broader set of determinants of (national) policy responses. MLG could have direct effects and indirect effects as well. It could moderate the effects of other factors, such as administrative capacities. And its effects could be moderated by variables such as coordination. But to have a chance to establish such effects, the theoretical assumptions of the causal models need to be spelled out, and the empirical case selection strategy needs to be attuned to the causal models. Currently, this is not the case in the small-N comparative literature on COVID-19 policies, and on crisis policy responses more generally.

To sum up, the lack of clearly specified research goals and causal models, coupled with case-selection strategies that are not appropriate for establishing causal effects severely limits the validity and generalizability of the conclusions of the existing literature about the MLG effects on Covid-19 governance. While virtually all comparative studies find some evidence for effects of one aspect of MLG or another, these inferences should be regarded as hypotheses at best, because they have not been tested with appropriate designs.

b. Governance outcome specification

The systematic literature review here focuses exclusively on studies that seek to understand how governments responded to the pandemic and to account for these responses and the differences observed over time, countries and government levels. Within this narrow focus, however, the review shows that studies vary considerably in the types and characteristics of government responses that they problematize. Not only do the outcomes differ, but in many instances there is no clear specification of

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what precisely constitutes the government response analyzed. The findings from such a broad range of phenomena are valuable, and taken together provide a detailed account of how countries responded in a variety of areas. This variety and the lack of precision regarding the content of a response, however, both stand in the way of accumulating insights into the effects of MLG institutions and processes on crisis governance.

In quantitative analyses, the researcher typically models a single outcome variable or a limited set of variables that measure the same outcome in different ways. This selection limits the range of empirical content contained in the analyzed outcome. This specificity of outcome is present in the quantitative analyses reviewed here: two-thirds are limited to a single response policy type (as compared to one-quarter of the qualitative analyses) and to a single outcome variable (as compared to half of the qualitative analyses). Several studies model the timing until particular types of response (Adolph et al., 2021; Jahn, 2022; Nelson, 2021; Toshkov et al., 2021; Yoon and Lofton, 2022). Spending in response to the pandemic is the subject of other quantitative analyses (Cho and Kurpierz, 2020; Rocco et al., 2020; Zhang et al., 2022). Each of these specify precisely the scope of pandemic response spending, though the categories of spending vary across the three. The precision in outcome variables among the quantitative research on COVID-19 government responses invites replication across different sets of observations, research designs and methods, and even similar outcomes in other crises. So far, such replication and knowledge accumulation remains limited as outcomes rarely overlap.

Many of the case study designs also specify precisely *a priori* the boundaries of the government response that will be explored. The specific policy area focus of Sanabria-Díaz et al. (2021) delimits the policy content of its government responses to national and EU measures to save the tourism and hospitality industries. Similarly, a case study of the decision-making process resulting in Dutch state-aid to the public transport sector examines a focused type of government response (Hirschhorn, 2021). For some single and multiple case study designs, the objective is not to explain differences in the timing or nature of measures taken but instead to characterize MLG processes that are a function of the dynamics of responses across and within levels of government (Askim and Bergström, 2022; Broadhurst et al., 2022; Navarro and Velasco, 2022; Vampa, 2021). In these cases, the content of the responses may be broad or narrow, but the theoretical context specifies in advance the nature of MLG dynamics that will be characterized and (sometimes) compared.

Other studies take a wholistic approach to understanding government response that combines multiple response types and outcome variables, without clearly specifying in advance the limits of 'response'. This lack of precision makes it difficult to accumulate knowledge across such case studies, as the limits and characteristics of government response studied change from one to another. Examples of studies with heterogeneous government response outcomes include a comparison of municipal responses in Los Angeles and Shanghai that covers information strategies, data surveillance, and lockdowns together (Weng et al., 2020), and other case study analyses that place lockdowns and other restrictions alongside economic measures (Rozell and Wilcox, 2020; Sottilotta, 2022). The heterogeneity or imprecision of government responses studied stands in the way of accumulating insights across cases. Within such cases,

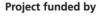


it is not clear whether the conclusions would hold if evidence from different aspects of the government response were to be considered.

c. MLG and Covid-19 governmental responses after the first wave

Within the analyzed literature, an important question reflects whether particular MLG elements have enabled national governments to better cope with the Covid-19 pandemic. In the relatively scarce body of quantitative research, there has however been a specific but limited focus on how differences in MLG are related to the timing of the *initial* responses of governments to the outbreak of Covid-19 pandemic in the spring of 2020. A reoccurring finding is that federal and decentralized states were often slower with their response at the beginning of the pandemic compared to countries with centralized and unitary systems. Based on an quantitative analysis of the initial Covid-19 responses for more than 150 countries, Nelson (2021) shows that unitary regimes tended to have stronger policy measures earlier in place than federalist states. Similarly, Cheng et al. (2021) find that it takes longer for more decentralized countries to implement any non-pharmaceutical interventions against COVID-19. Based on an analysis of the Covid-19 responses of 80 different countries during the first four months of 2020, they further show that more decentralized countries were more likely to adopt policies that are more targeted rather than general. For the case of 31 countries in Europe, Toshkov et al. (Toshkov et al., 2021) find that countries with higher scores of federalism and regionalism (RAI) were slower with the implementation of school closures and national lockdowns compared to non-federal and centralized states.

Within this stream of literature, it remains largely unknown whether and how aspects of MLG are associated with different Covid-19 policy trajectories after the first shocks of the pandemic were over. Based on the coronavirus regulations in 36 advanced democracies, Jahn (2022) suggests that countries with higher levels of regional autonomy (based on the RAI index) were often stricter with their lockdown measures and also slower with the removal of the measures. Interestingly, there is no clear evidence whether the slower responses of federal and decentralized states are also associated with higher excess death rates during the pandemic. Based on an analysis of the Covid-19 mortality rates in up to 113 countries, Lago-Peñas et al. (2022) find that federalism is associated with higher Covid-19 death rates. However, decentralization (as measured by RAI) had "a minor detrimental factor in addressing the Covid-19 emergency but only in the beginning of the pandemic" (Lago-Peñas et al., 2022: 28). In fact, a study of the excess death rates in more than 600 European regions during the first nine months of the pandemic suggests that higher local governance autonomy (LAI) was associated with lower excess death rates (McCann et al., 2022). However, virtually all quantitative and cross-country comparative studies focus on the relationships between MLG and Covid-19 responses in the first few months of the pandemic, while there is almost no large-N empirical evidence available for how MLG factors relate to country responses during the second and later wave(s) of the pandemic and/or during the vaccination phase. Thus, there is clear large-N evidence that unitary regimes responded faster to the initial outbreak of Covid-19 than federal and decentralized states, but we lack quantitative and comparative knowledge about the differences in policy trajectories in countries with different MLG traditions after the first wave.





From a crisis management perspective, it is however not only important how governmental authorities respond to a crisis when it occurs, but also to what extent they are able to deal with the consequences crises after the "hot phase" is over, in which governments are confronted with new and different policy challenges (Boin et al., 2008; 't Hart and Boin, 2001). The impact of MLG on governmental responses during latter phases of the Covid-19 pandemic might be very different compared to first-wave responses. Particularly during a transnational crisis, such as the Covid-19 pandemic, policy diffusion and learning is likely to occur and can affect how governments deal with emergency situations during latter phases of a crisis. This can moderate the effects of MLG on Covid-19 responses of governments.

Furthermore, the SLR shows that there is some qualitative evidence that multi-level governance dynamics can evolve and change over time during the Covid-19 pandemic. A qualitative study of six European democracies finds that both centralized and decentralized countries largely follow a similar pattern in the first few months of the pandemic, in which countries have temporarily reorganized their governance structure during the beginning of the pandemic and that, also in decentralized countries, "there was a provisional transfer of powers to the central level, in a tentative to reduce heterogeneity in measures and available resources throughout the territory" (Simões et al., 2021: 1884). A comparative case study of Covid-19 responses in Austria, Czechia, and France, suggests that heads of governments centralized policies during the first wave, in the spring of 2020, in order to gain credit for decisive action. In latter stages of the pandemic, national governments were however more inclined to decentralize responsibilities in order to allocate blame to the regional and/or local tiers of government (Greer et al., 2022). Also, for the case of Germany, Kuhlmann and Franzke (2022) show that intergovernmental dynamics shifted to a greater emphasis on vertical coordination between different levels of government when the first wave was at its peak in March/April 2020, but changed soon after the end of the first wave. In addition, a single case study of the French Covid-19 response illustrates how the initial response of the national government was very centralized, whereby local actions were strictly monitored and dictated by formal directives. In the light of growing criticism towards the national government, French local governments aimed to show their capacity to cope with the crisis and to develop modes of horizontal governance and horizontal cooperation after the first wave (du Boys et al., 2022). Building upon these insights, further research would benefit from a longitudinal perspective and can contribute to our understanding by focusing on how MLG has affected crisis decision-making during latter phases of the pandemic.

6. Conclusion

After it dawned on European governments sometime during late January and February 2020 that the virus would not stop at national borders, various institutions and processes at different levels of government came into action. As little was known about the infection rate of the virus and which measures could stop the spread of it, the early phase of the Covid-19 pandemic was characterized by a search for optimal governance responses. Transboundary crises require the attention of different governments at different levels of governance. The success or failure of governments' response to the pandemic is therefore largely a function of the cooperation between different levels of government and/or the level of government



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that responds to the crisis. Are responses at the subnational level more effective and legitimate than those that emanate from the national or supranational levels? Do responses where multiple levels and actors cooperated with one another be more effective than responses just a single actor and/or level? As pandemic hit all levels of governance, insights into MLG effects on government responses becomes all the more important for policymakers.

The purpose of this literature review has therefore been to collect and evaluate studies that focus on the effects of MLG institutions on governments' responses to the Covid-19 pandemic. From our review, it is difficult to draw definitive conclusions on what role MLG institutions and processes play in responding to the pandemic. One reason for this lack of insight can be ascribed to the lack of significant variation in MLG arrangements across the cases. Most comparisons are between similar type of MLG arrangements with fairly similar levels of federalism or regionalism. This precludes the isolation of MLG effects as would be the case in comparisons between centralized countries and federal or regionalized systems. The lack of variation masks the presence of possible effects of MLG institutions and processes. From studies that do quantitatively test the effect sizes of MLG factors, we cannot draw firm inferences as each employs different MLG factors and Covid-19 response outcomes. It is not clear which aspects of the policy responses are analyzed and there is not much use of standardized indicators that deems it impossible to compare the effects of estimated factors. Finally, it is difficult to draw definitive conclusions because it is difficult to evaluate and compare the results of quantitative and qualitative studies. Qualitative studies are often unclear about how the conclusion about the importance of a factor, including the MLG factors if they are present, is reached.

We see three lines of research that can move the study of MLG effects on government responses further. The first research line that should be explored is to set up genuinely comparative research designs. We found that the studies in our review were limited to comparative studies of federal and decentralized countries only. The studies rarely included comparisons across federal and non-federal countries. Under the current conditions it is very difficult to single out the effects of different MLG arrangements. The few quantitative large-n comparative studies converge on the finding that the more unitary and centralized states were quicker in responding to the pandemic than federal and decentralized countries. The causal mechanisms through which more federalized systems respond slower are by inference from the institutional designs, but more accurate process-related factors remain unknown. A second line of research that deserves the attention of future studies in this field should be to better specify the scope of the government responses. Except for the quantitative studies that need to delimit to specific government measures under study, qualitative studies were not precise as regards their scope. Different types of responses will be guided by different mechanisms. Different actors and different levels of governance will play a role with regard to economic and financial support than in the case of health measures. It is not clear from the studies reviewed which actors and levels have played which roles with regard to different types of responses. A better demarcation of the scope of government responses and a systematic modelling of MLG with regard to the various response types will improve our understanding of the roles different MLG institutions and intergovernmental processes play in the management of the pandemic. Finally, a gap that needs to be filled is the temporal dynamics of governments responses at later stages of



the pandemic. It is perhaps because of the timing of this review that the overwhelming majority of the studies that have been reviewed fall within the first wave of the pandemic. It is very likely the case that we will find different types of effects and mechanisms when the second and third waves are studied. How have different MLG institutions and intergovernmental process (re)acted after the first vaccination rounds were implemented? How did learning processes feed back into the response categories of MLG actors? Were significantly different levels and processes at play? These and other questions are in need for answer.



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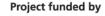
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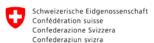
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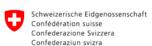
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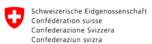
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9. Appendix B - Codebook

Coding the research design

Analyses

Through the following dummy variables, code the presence of analys(e)s based on the following methods

Quantitative cross-sectional (qtc)

Quantitative longitudinal (including event history analysis) (qtl)

Quantitative panel/cross-sectional time series (qtp)

Other quantitative (qto)

Single qualitative case study (qls)

Comparative qualitative case studies (qlc)

Other qualitative (qlo)

Geographical scope

Through the following dummy variables, code the presence of cases/observations from each of the following geographic areas:

North America (Democracy) (nad)

Europe (Democracy) (eud)

Australia or New Zealand (Democracy) (anz)

Other Democracy (od)

Non-Democracy (nd)

Case(s) (cases)

For qualitative case studies of individual countries, subnational or local/municipal governments, list the country or countries from which the researcher selects cases. For case studies of supranational organizations, list these.

For quantitative analyses, indicate the type and number of observations.



Academic field (field) Code the academic field of the journal: 1 = political science and public administration 2 = economics 3 = legal4 = other social science 5 = health science 6 = otherData Through the following dummy variables, code whether the analysis uses any of the following existing datasets: RAI (rai) LAI (lai) Federalism dummy (feddum) Oxford COVID-19 Government Response Tracker (oxgrt) Coding the government response Level of government response Through the following dummy variables, code the decision-making level(s) of government responsible for the outcome government response(s) the study analyses: Local/municipal (Ilm) Subnational (Isb) National (Ina) Supranational (Isp)

Joint decision-making (ljd)

Swiss Confederation



Timing of the response

Indicate the temporal scope of the analyzed response. Use start and end dates (rounded to the month if necessary) if available; if unavailable indicate with text the 'phase' of the pandemic analyzed. For dates, use YYYY-MM-DD format.

Start date (start)

End date (end)

Phase of response (phase)

Type of government response

Through the following dummy variables, code the type of government response (including "non-response", as in decisions not to impose restrictions).

Processes of multilevel governance (grmlgp)

Testing, monitoring of the pandemic and other related data collection efforts (grtest)

Regulations on society to slow the pandemic's growth³ (grreg)

Efforts to ensure vaccination (grvacc)

States of emergency, extraordinary legal measures and other departures from regular decision-making (grsoe)

Government communication, framing and politicization of the pandemic and responses (grcomm)

Economic, social and other sectoral policies to mitigate the pandemic's economic effects (grsect)

Health sector interventions (PPE purchasing, ICU capacity increases, etc.) (grhealth)

Characteristics of government response

Through the following dummy variables, code the characteristics of the government response

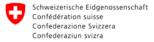
Timing (timing)

Severity (severity)

Scope (scope)

Mobility restrictions, mask mandates, mandatory school and business closures, reopening.
Project funded by







Qualitative differences (diffs)

Coding MLG as explanatory factor and its effect

MLG as a main effect in the analysis

Supranational governance (ivsupra):

- 0 = this feature is not an explanatory factor in the analys(e)s
- 1 = the presence/absence of this feature is an explanatory factor in the analys(e)s
- 2 = the qualitative 'type' of this feature is an explanatory factor in the analys(e)s
- 3 = the degree of this feature is an explanatory factor in the analys(e)s

Federalism (ivfed):

- 0 = this feature is not an explanatory factor in the analys(e)s
- 1 = the presence/absence of this feature is an explanatory factor in the analys(e)s
- 2 = the qualitative 'type' of this feature is an explanatory factor in the analys(e)s
- 3 = the degree of this feature is an explanatory factor in the analys(e)s

Decentralization (including regional and local autonomy) (ivdec):

- 0 = this feature is not an explanatory factor in the analys(e)s
- 1 = the presence/absence of this feature is an explanatory factor in the analys(e)s
- 2 = the qualitative 'type' of this feature is an explanatory factor in the analys(e)s
- 3 = the degree of this feature is an explanatory factor in the analys(e)s

Other MLG aspect (ivoth, ivothtext):

- 0 = this feature is not an explanatory factor in the analys(e)s
- 1 = the presence/absence of this feature is an explanatory factor in the analys(e)s
- 2 = the qualitative 'type' of this feature is an explanatory factor in the analys(e)s



3 = the degree of this feature is an explanatory factor in the analys(e)s

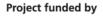
Indicate the MLG feature that appears as an explanatory factor in 'ivothtext')

Effect of MLG uncovered in the analysis

Main effect (maineffect)

0 = MLG has no effect on or is irrelevant to the outcome

1 = MLG has an effect on or is relevant to the outcome





10. Appendix C: Crosstabulations of main effect by coded variables

Table 4: Crosstabulation of presence of main effect by research design

	No	Yes
Mixed	2	2
Multiple case	10	29
Quantitative	0	18
Single case	4	38

Table 5: Crosstabulation of presence of main effect by academic field

	No	Yes
Economics	0	8
Health science	3	9
Legal studies	0	1
Other	0	10
Other social science	1	5
Political science & public	12	54
administration		

Table 6: Crosstabulation of presence of main effect by region

	No	Yes
Australia & New Zealand	0	3
Europe	10	42
Multiple regions	3	19
North America	3	23

Table 7: Crosstabulation of presence of main effect by pandemic phase

	No	Yes
After first wave only	0	2
First wave and beyond	6	42
First wave only	10	43

Table 8: Crosstabulation of presence of main effect by government level

	No	Yes
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No national level	4	19
National level	12	68
No subnational level	12	38
Subnational level	4	49
No local/municipal level	14	81
Local/municipal level	2	6
No supranational level	12	70
Supranational level	4	17

Table 9: Crosstabulation of presence of main effect by government response type

	No	Yes
No societal regulations	6	35
Societal regulations	10	52
No MLG processes	11	42
MLG processes	5	45
No sectoral policies	13	60
Sectoral policies	3	27
No states of emergency	10	69
States of emergency	6	18
No testing or surveillance	13	72
Testing or surveillance	3	15
No communication or	14	79
information		
Communication or information	2	8
No health policy interventions	13	78
Health policy interventions	3	9
No vaccination	16	82
Vaccination	0	5

Table 10: Crosstabulation of presence of main effect by response outcome variable

	No	Yes
No timing	9	49
Timing	7	38
No severity	14	48
Severity	2	39
No scope	11	47





Scope	5	38
Qualitative differences	5	53
No qualitative differences	11	34



Conceptual framework 11.

1. Abstract

This contribution develops a conceptual framework for analyzing and assessing the legitimacy of crisis governance. A main challenge for governmental authorities is to respond to crisis situations, not only in an effective way, but also in a legitimate way. Legitimacy is critical to governments as it provides the basis for the acceptance of their decisions. Nevertheless, crisis situations have their own dynamics that might affect how citizens perceive the legitimacy of governmental interventions. The connections between governance and legitimacy have been studied before, but relatively little attention has been paid to the links between legitimacy and crisis governance in particular. An important question reflects how citizens' beliefs and opinions about the legitimacy of crisis governance are shaped in practice. This conceptual framework combines insights from the crisis management literature and the literature on political and administrative legitimacy. Based on these literatures, this contribution develops a set of expectations that can guide empirical research into the legitimacy of crisis governance. We sketch out a research agenda for studying the legitimacy of crisis governance in multi-level governance settings.

Keywords: conceptualization, crisis management, governance, legitimacy, multi-level governance.

2. Introduction

Crises, such as natural disasters, terrorist events, economic breakdowns, or disease outbreaks, pose fundamental challenges to governments. Crises put the problem-solving capacity of governmental authorities to a critical test: when societies are confronted with major disruptive emergencies, the fate of public policies hangs in the balance (Farazmand, 2001; Lægreid & Rykkja, 2019; Lodge & Wegrich, 2012; Rosenthal, Charles, & 't Hart, 1989). Since the century's turn, some examples of major crises include 9/11 and related attacks, Hurricane Katrina (2005) and, most recently, the Covid-19 pandemic - events that have also shaped the field of crisis management research (Kuipers, van der Wilt, & Wolbers, 2022). Because of the threatening nature of a crisis, citizens demand authorities to implement adequate and effective measures and to do 'whatever it takes' to secure societal order and stability.

An important question is how governments can respond to and deal with crises, not only in an effective way, but also in a legitimate way. According to Christensen, Laegreid and Rykkja (2016), crisis management performance requires both governmental capacity and governmental legitimacy. Because capacity and legitimacy stand in a dynamic relationship with each other during a crisis, a lack of legitimacy can restrict the leeway of governments to deal effectively with a crisis (see also Hartley & Jarvis, 2020; Lund-Tønnesen & Christensen, 2022). If citizens perceive the crisis management of their governmental authorities as legitimate, they are more likely to accept and voluntarily comply with emergency rules and policies (Tyler, 1990, 2006), which contributes to the effectiveness of these measures. As Boin, 't Hart and McConnell (2021, p. 56) argue, "when collective behavior is the key to effective management of the crisis, legitimacy is probably the most important asset that governments can possess." Because crises tend to turn into political crises and can erode political trust (Dalton, 2017; Ellinas & Lamprianou, 2014; Project funded by



McConnell, 2020), citizens' perceptions of the legitimacy of a governance approach to crisis situations can be crucial for ensuring their support for the political and democratic system during and after a period of crisis.

However, how do citizens shape their beliefs about the legitimacy of crisis governance? The academic literature suggests that citizens' legitimacy beliefs (perceived legitimacy) are affected by a myriad of factors, including whether political authorities are responsive to citizens' needs and wishes and are open towards citizen participation, but also whether these authorities are able to deliver favorable outcomes and act in accordance with procedural values such as transparency and accountability (Arnesen, 2017; Levi, Sacks, & Tyler, 2009; Scharpf, 2009; Schmidt, 2013; Schmidt & Wood, 2019; Tyler, 2003, 2006).

Yet, crises have their own dynamics and can create several challenges to the legitimacy of governments, particularly when a crisis requires quick decision-making and "normal democratic principles and accountability relations are likely to be put on hold" (Goetz & Martinsen, 2021, p. 1009). When governments face a crisis with deep uncertainty about its causes and consequences, this creates problems for the governmental capacity to deliver policy outputs that are effective and that citizens consider as desirable (Christensen et al., 2016). In the case of conflicting views about the appropriateness of crisis interventions and responses, governmental authorities might face difficult decisional trade-offs (Rosenthal & Kouzmin, 1997). For transnational and transboundary crises, the quest for legitimacy is even more complicated because authorities have to deal with crises within complex multi-actor and multi-level governance systems that operate at a distance from citizens (Boin, Busuioc, & Groenleer, 2014; Lagadec, 2009; Olsson, 2015).

The threat and risks that are associated with crisis events can affect what citizens demand from their authorities and how they assess the legitimacy of governmental interventions. Risk perceptions are found to have a strong effect on the preferences and evaluations of citizens in different policy areas (Kasperson et al., 1988; see also Leiserowitz, 2006; Maestas, Chattopadhyay, Leland, & Piatak, 2020; Stoutenborough, Vedlitz, & Liu, 2015). Depending on the type of crisis, citizens might hold different expectations about what makes governmental conduct legitimate and assess the legitimacy of authorities, decisions and procedures according to different standards than under 'normal' times of governance.

This paper aims to improve our understanding of legitimate crisis governance by developing an integrative framework that can be useful for analyzing and assessing the legitimacy of crisis governance. Although the existing literature has discussed the importance of legitimate crisis governance as a factor that affects crisis management performance (Christensen et al., 2016), it has been less clear on how the legitimacy of governmental authorities, their decisions and responses, is shaped in times of crises. We proceed in the next section to summarize the contributions of the crisis management literature to the key concepts of crisis and crisis governance. The third section reviews several competing conceptualizations of legitimacy across several literatures. The fourth section synthesizes the preceding reviews to offer a workable definition of legitimate crisis governance. Using this definition, section five outlines the conditions under which citizens are likely to consider crisis governance legitimate, and the final section concludes with a





research agenda for applying this conceptual framework to advance the study of legitimate crisis governance.

3. Conceptualizing crises and crisis governance

a. Conceptualizing crises

First of all, what is exactly meant by a "crisis"? Although multiple definitions exist within the crisis management literature (McConnell, 2020; Roux-Dufort, 2007; Wolbers, Kuipers, & Boin, 2021), Rosenthal et al.'s (1989) crisis definition has become one of the most accepted and widely cited definitions. They refer to a crisis as "a serious threat to the basic structures or the fundamental values and norms of a social system, which — under time pressure and highly uncertain circumstances — necessitates making critical decisions" (Rosenthal et al., 1989, p. 10). Following this definition, crises consist of three main elements: threat, urgency, and uncertainty (see also Ansell & Boin, 2019; Boin, 't Hart, Stern, & Sundelius, 2005; Farazmand, 2001). Crises represent situations where the core values, life-sustaining systems or critical infrastructures of a community are *threatened*. Crises also include a sense of *urgency*: "the threat is here, it is real and must be dealt with now" (Boin et al., 2005, p. 6). The urgent threat that is posed by a crisis is further combined with deep *uncertainty* about its nature and potential impact.

Importantly, crises are not objective realities, but their elements are socially constructed. What is considered to be a crisis includes a subjective element (Christensen et al., 2016). As Rosenthal and Kouzmin (1997, p. 285) argue, "[c]rises are in the eyes of their beholders; if individuals (and the media) define a situation as a crisis, it is crisis in its consequences". Perceptions of a crisis can thus widely differ between and within communities. A situation can be a threat to someone, while others might disagree and perceive the same situation as an opportunity for necessary change (Alink, Boin, & T'Hart, 2001; Boin, 't Hart, & McConnell, 2009; Stark, 2010). The influx of refugees in Europe in 2015-2016 is an example of this. The increasing number of asylum-seekers at the borders of European states was framed as a 'migration crisis' in the public sphere, but such framing was also contested (Greussing & Boomgaarden, 2017).

Crises come in many guises and there are many different crisis taxonomies (see Table 1 for an overview). In the first place, scholars have often differentiated between crises based on their *causes*. Within the crisis literature, a common distinction has been made between natural ("acts of God") and man-made disasters (Rosenthal & Kouzmin, 1993; 1997), while Mitroff and Alpaslan (2003) further differentiate between crises that result from unintended and intended human behaviour. The analytical distinction between natural and man-made crises is often blurred in practice, as many crises can be a consequence of a combination of both natural events and (a lack of) human action (see also Lægreid & Rykkja, 2019). Another crisis classification has been made with regards to the origins of a threat, i.e. whether a crisis is caused by either an endogenous or an exogenous threat (Rosenthal & Kouzmin, 1997). Similarly, 't Hart and Tummers (2019, pp. 119–124) refer to situational crises, in which a crisis is caused by an external threat, as different from institutional crises, in which the cause of a crisis is located within the political realm and is inherently related to the functioning of political authorities. The cause of a crisis can also differ with regard to its



conflict potential. As Rosenthal and Kouzmin (1997) suggest, some crises might unite societies against a shared threat, while other crises lead to value conflicts and foster polarization (see also Quarantelli, 1988). Again, these distinctions are not watertight, because exogenous threats can turn into endogenous threats and situational crises can become institutional crises over time (Petridou, Zahariadis, & Ceccoli, 2020, p. 319). Also, when a crisis is perceived as a shared and common threat, it can still lead to some level of conflict in governmental decision-making (Rosenthal & Kouzmin, 1997, p. 286; see also 't Hart, 1993).



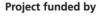
Table 1. An overview of crisis classifications.

Classification	Source	Crisis types				
Classification of crises by th	eir <i>causes</i>					
Type of cause	Rosenthal & Kouzmin (1993)	Natural	Man-made			
	Laegreid & Rykkja (2019)	Unintended	Intended			
	Mitroff & Alpaslan (2003)	Natural	Normal	Intentional (abn	ormal)	
Origins of cause	Rosenthal & Kouzmin (1997)	Exogenous	Endogenous			
	't Hart & Tummers (2019)	Situational	Institutional			
Conflict potential	Rosenthal & Kouzmin (1997)	Consensual	Conflict			
Classification of crises by th	eir spatial and temporal dimens	ions				
Place	Rosenthal & Kouzmin (1997)	International	National	Regional	Local	Organisationa
Duration	Farazmand (2001)	Sudden	Process-oriented			
	't Hart & Boin (2001)	Fast-burning	Cathartic	Long-shadow	dow Slow-burning (creeping)	reeping)
	McConnell (2020)	Sudden	Creeping	Long-shadow	Chronic	
Classification of crises by th	eir complexity					
Predictability/influence	Gundel (2005)	Conventional	Intractable	Unexpected	Fundamental	
Degree of uniqueness	Christensen et al. (2016)	Unique				
Degree of uncertainty	Christensen et al. (2016)	Uncertain				
Level of preparedness	McConnell (2020)	Predictable	Unforeseeable			
Transboundary aspects	Ansell et al. (2010)	Transboundary				
Scale of complexity	Helsloot et al. (2012)	Mega-				
	Topper & Lagadec (2013)	Fractal				



In a second approach, scholars have differentiated crises with regards to their spatial and temporal dimensions. Crises can range from an organizational or local scale to an international or global scale (Rosenthal & Kouzmin, 1993; 1997). The duration of a crisis has gained particular attention in the academic literature. Farazmand (2001, p. 3), for instance, refers to "sudden" and "process-oriented" crises, in which the former has a relatively short time span and the latter consists of a sequence of different but related events. 't Hart and Boin (2001) distinguish four ideal types of crises based on their development and termination. "Fast-burning" crises occur suddenly and have a sharp closure; examples include plane hijacks or hostage-takings. "Cathartic" crises suddenly reach a boiling point after a long and gradual onset. "Long-shadow" crises include incidents that occur suddenly but have a long-lasting impact on political communities afterwards. The "slow-burning crisis" or "creeping crisis" reflects a fourth type that has "a long incubation time and may keep simmering long after the "hot phase" is over" (Boin, Ekengren, & Rhinard, 2020, p. 120). As such, a creeping crisis can have a time span of years or even decades, with its long onset and its long-lasting impact (see also Wolbers et al., 2021), and might eventually turn into a chronic crisis "where a concentration of undesirable and threatening crisis conditions seems never ending" (McConnell, 2020, p. 8).

A third set of crisis taxonomies focuses on the *complexity* of a crisis. Rather than identifying a single cause of a crisis, these approaches acknowledge that the origins of a threat are not always concrete and tangible and consider a crisis as a result of multiple causes that interact over time (Kuipers et al., 2022, p. 6). These typologies take, for instance, the degree of uniqueness and the degree of uncertainty into account as important elements of a crisis (Christensen et al., 2016). Crises are more complex for governments when they are completely "unforeseeable", rather than to some extent predictable (McConnell, 2020). Gundel (2005) differentiates between crises with regards to their levels of predictability (high versus low) and the influence possibilities that governments have to sufficiently address the crisis (high versus low). As such, four types of crises can be distinguished: conventional crises (high predictability/high influence possibilities), unexpected crises (low predictability/high influence possibilities), intractable crises (high predictability/low influence possibilities), and fundamental crises (low predictability/low influence possibilities). As Gundel (2005) argues, conventional crises are considered to be the least dangerous ones that a community can face, while fundamental crises represent the most complex and dangerous type of crises. The complexity of a crisis is further affected by its transboundary dimensions (Ansell, Boin, & Keller, 2010; Blondin & Boin, 2020). Transboundary crises are highly complex because they represent a type of crisis that crosses several spatial, functional and/or temporal boundaries. This type of crisis is not restricted to a single geographical location (i.e., a "Ground Zero") and policy area or a particular time frame, but transboundary crises manifest themselves in multiple countries and multiple policy areas while they do not have clearly demarcated beginnings and ends. In addition, novel crisis concepts, such as "mega-crises" (Helsloot, Boin, Jacobs, & Comfort, 2012) or "fractal crises" (Topper & Lagadec, 2013), have entered the scene in the crisis management literature in the past decade, attempting to capture the increasing complexity of modern-day crisis events.





b. Conceptualizing crisis governance

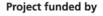
For each type of crisis, citizens look to their political authorities for managing and governing the crisis. Crisis governance, also referred to as crisis management, can be conceptualized as the operational and strategic processes whereby public authorities deal with a crisis before, during, and after it has occurred (Boin et al., 2005; Christensen et al., 2016; Drennan, McConnell, & Stark, 2014; Lægreid & Rykkja, 2019).

In crisis research, crisis governance is suggested to reflect both an operational dimension and a strategic (or political) dimension (Ansell & Boin, 2019; Boin et al., 2021; 't Hart & Sundelius, 2013). From an operational perspective, crisis governance is a professional craft that includes activities, such as scenario modelling, contingency planning and mobilizing response capacity. Often, this is the domain of control room operators and system experts (Baekkeskov, 2016; Rosenthal & 't Hart, 1991). However, crisis governance is not only a matter of managerial and technical aspects. As Boin and colleagues (2005, p. 9) suggest, crisis governance is "first and foremost (...) a deeply controversial and intensely political activity". Crisis governance is shaped within a specific political and institutional context that can influence crisis management performance (Christensen et al., 2016). From a strategic or political perspective, crises form a strategic window of opportunity for politicians and policy-makers. During crises, 'framing contests' take place in which both governments and their opponents use strategic language in order to attribute meaning to crisis-related events by formulating (alternative) problem definitions, assigning credit and blame and advocating preferred policy solutions (Alink et al., 2001; Boin et al., 2009; 't Hart & Sundelius, 2013). As 't Hart (1993, p. 41) argues, "the most important instrument of crisis management is language". Following this perspective, the role of political leaders and leadership is a crucial feature of crisis governance (Boin & 't Hart, 2003; Stern, 2013).

Crisis management scholars further contend that crisis governance is processual in nature and can be studied during four different phases: crisis prevention, crisis preparation, crisis response, and the aftermath of a crisis (Comfort, 1988; Comfort, Boin, & Demchak, 2010; Rosenthal & Kouzmin, 1993). These distinctions show that crisis governance involves not only how governments respond to crises when they occur, but also how a government tries to prevent and prepare for future crises and how governments ensure a return to normalcy after a crisis is over (Boin & 't Hart, 2003).

Before a crisis happens, crisis prevention and crisis preparation are the core tasks of governmental authorities. Crises can have a long incubation time (Boin et al., 2020; Turner, 1976) - in the pre-crisis phase, governments have to strive for a right balance between investing in prevention and building up resilience to effectively deal with crisis events ('t Hart & Sundelius, 2013). Predominantly, prevention has been considered to be the main focus of crisis governance (Rosenthal et al., 1989; Rosenthal & Kouzmin, 1993). Given the fact that not all crises can be prevented, crisis preparation has become an important but challenging task as it requires policy-makers to "prepare for the unknown" (Boin, Comfort, & Demchak, 2010, p. 4).

When a crisis occurs, governments are expected to respond by containing the crisis, minimizing the damage, and preventing the breakdown of critical systems. Typically, crisis responses require elements of





sense-making, decision-making and meaning-making by political and administrative elites (Boin et al., 2005; Stern, 2013). Confronted with a crisis, leaders need to "make sense" of a crisis by collecting information and developing an adequate interpretation of the ongoing situation, while they must make tough decisions about how to deal with scarce resources and how to weigh risks and opportunities. Leaders are further involved in meaning-making processes during the phase of crisis response, in which they have to give meaning to crisis events and present a compelling story of the crisis in such a way that their decisions will be understood and respected (see also Christensen & Lægreid, 2020b).

During the aftermath of a crisis, elements of recovery, accountability and learning are the core aspects of crisis management (Boin et al., 2005). Crisis termination is a relevant task in crisis leadership, because a return to normalcy will be inevitable for ensuring recovery and reconstruction within societies ('t Hart & Boin, 2001). After the crisis is over, questions of accountability take a prominent place on the political agenda (Bovens, 2007; Kuipers & 't Hart, 2014). In the post-crisis phase, learning is critical because crisis-induced learning is relevant for the improvement of the crisis responses of public authorities by formulating lessons for the prevention and preparation for future crises (Broekema, 2016; Deverell, 2009). Nevertheless, crisis-induced learning can be highly complex and challenging (Stern, 1997). In the post-crisis phase, crisis-related framing remains of high relevance, because it can shape post-crisis pathways that occur whereby the dominant frame out of these meaning-making processes will determine whether a crisis leads to learning and reform or results into ongoing blame games (Boin & 't Hart, 2022).

During these different phases, crisis governance is often not the responsibility of a single actor but involves multiple governmental actors and multiple levels of government. Crisis governance, therefore, requires crisis coordination (Comfort, 2007; Kuipers, Boin, Bossong, & Hegemann, 2015; Wimelius & Engberg, 2015; Wolbers, Boersma, & Groenewegen, 2018). This is most important for crises that are transboundary and transnational in nature and, as such, blur the organizational boundaries within governance structures and require more effort for authorities to make sense of the crisis and to coordinate across borders (Blondin & Boin, 2020). Crisis governance often means *multi-level governance*, in which governments at several territorial tiers—supranational, national, regional and local — are responsible for dealing with crises (cf. Hooghe & Marks, 2003). Summarizing above, crisis governance can be a challenging task that requires multiple crafts and activities and that occurs in multiple phases whereby multiple actors at different governmental levels can be involved.

4. Conceptualizing legitimacy

After conceptualizing crises and crisis management, we turn to the concept of legitimacy, which is elusive, contested and can have many different meanings (Beetham, 2013; Schoon, 2022; Thomas, 2014). The main distinction is the one between legitimacy as a normative concept and legitimacy as a descriptive concept. In disciplines such as political philosophy and law, legitimacy has been primarily understood as a normative concept and is associated with moral criteria, such as justice, legal standards, or other 'objective', externally given requirements (Buchanan, 2002; Coakley, 2011; Peter, 2017). The social sciences, including political science and public administration, typically adopt a descriptive or empirical approach to legitimacy. This understanding of legitimacy is also referred as "subjective" or "perceived"



legitimacy, as it captures how citizens or other actors (e.g. political elites) perceive and experience legitimacy in practice from their subjective points of view (Gilley, 2006; Jackson, 2018; Tyler, 2002, 2006).

As such, the descriptive approach to legitimacy stands in contrast to the normative approach. Instead of normative criteria, a descriptive understanding of legitimacy concerns the extent to which members of a political community share a belief that existing authorities and their actions are appropriate and morally justified. Normative and subjective notions of legitimacy are however linked, as subjective assessments of citizens about the legitimacy of their political authorities might overlap with normative evaluations of legitimacy that can be found in various philosophical traditions (Buchanan, 2002; Tyler & Jost, 2007). It is also possible that citizens consider an institution as legitimate even if it does not meet such normative standards of legitimacy- or vice versa (Hough, Jackson, Bradford, Myhill, & Quinton, 2010). In our framework, we consider legitimacy as a descriptive and subjective concept, because this is the kind of legitimacy that is likely to be most consequential for crisis governance. It is how actors perceive the legitimacy of government responses to crises situations that ultimately matters for whether they will comply with the government policies and support the government actions (Boin et al., 2021, 2005; Christensen et al., 2016).

Beliefs and other subjective assessments are the constitutive elements of many important conceptualizations and definitions of legitimacy in the descriptive approach (Dogan, 1992; Schaar, 1981).⁴ In Lipset's (1959, p. 77) widely used definition of legitimacy, the legitimacy of a political system refers to its capacity "to engender and maintain the belief that existing institutions are the most appropriate or proper ones for the society". Dahl (1956, p. 46) speaks of legitimacy as a "belief in the rightness of the decision or the process of decision making". According to Fraser (1974, p. 118), "a political system has high legitimacy when many system members think it behaves as it ought to behave; it has little legitimacy when the opposite situation obtains". More recently, Gilley (2006, p. 500) argues in a similar vein that a political institution is "more legitimate the more that it is treated by its citizens as rightfully holding and exercising political power". Furthermore, Tyler (2006, p. 375) defines legitimacy as a "psychological property of an authority, institution, or social arrangement that leads those connected to it to believe that it is appropriate, proper, and just."

The relational nature of beliefs and subjective assessments implies that there is an audience that confers legitimacy to an object. According to Schoon (2022, p. 479), legitimacy is a dyadic concept including an object, an audience and a relationship between the two. As above definitions illustrate, legitimacy can be about a range of different objects-i.e., who or what is perceived as legitimate. Whereas Fraser's (1974)

⁴ Within the descriptive approach to legitimacy, Max Weber ([1920] 1964) has made one of the most influential contributions to understanding and defining legitimacy. Weber (1964, p. 372) refers to legitimacy as "the basis of every system of authority, and correspondingly of every kind of willingness to obey, [...] a belief by virtue of which persons exercising authority are lent prestige." According to Weber, legitimacy corresponds with a belief in the authority's right to exercise power, and the legitimacy of political authorities is therefore based upon the legitimacy beliefs (or Legitimitätsglaube in German) that citizens hold about these authorities (see also Gilley, 2006; Tyler, 2006; Uphoff, 1989).



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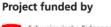


definition concerns the legitimacy of a whole political system, Dahl (1956) for example refers to decisions and decision-making processes and Tyler's (2006) definition includes authorities, institutions and social arrangements. Legitimacy is thus not only assigned to political regimes or authorities, but it can further be a quality of specific policies and decisions (see also De Fine Licht, Agerberg, & Esaiasson, 2022). Schmidt (2022, p. 981) differentiates between legitimacy "as citizen consent to a governing authority" and "as acceptance of such an authority's governing activities." And Gilley (2006, p. 501) argues, "[t]here are many objects of political legitimacy that have been studied: constitutions, politicians, judges, nations, laws, processes and much else." In Uphoff's (1989, p. 319) words, legitimacy can be accorded "to a regime, to a role, to an incumbent, to a policy, or simply to the outcome of a decision process". On the other side, there are also multiple audiences that can confer legitimacy to an object, ranging from an individual to a collection of individuals, such as the political community of a particular nation (Gilley, 2006; Thomas, 2014). These audiences will stand in a relationship with the object of legitimacy and hold a set of expectations about norms against which they assess the legitimacy of this object (Schoon, 2022).

From a descriptive approach, legitimacy reflects a concept that is difficult to measure directly and the operationalization of legitimacy has provided much controversy (Schoon, 2022; Thomas, 2014). In particular, legitimacy has been closely associated with trust, whereby explicit manifestations of trust and confidence indicate the presence of legitimacy. In survey research, trust in institutions is often used as an indicator for legitimacy (Gilley, 2006; Thomassen, Andeweg, & Van Ham, 2017; Tyler, 2011). According to Tyler (2006, 2011), trust is a central component of legitimacy (together with an willingness to obey): legitimacy includes an aspect of trust and confidence that authorities are honest and act in accordance with citizens' interests (see also Tyler & Jackson, 2014).

Such an approach to operationalizing legitimacy has also been debated. For example, Kaina (2008) argues that legitimacy and trust are distinct concepts, whereby the latter should not be considered a component of the former. Based on Easton's (1975) conceptualization of diffuse political support, Kaina suggests that legitimacy reflects someone's sense of whether an institution conforms to moral principles, whereas trust also includes an assessment of performance in accordance with moral norms. As Thomassen, Andeweg and Van Ham (2017, p. 513) summarizes, legitimacy "implies a normative judgment and is defined by the extent to which the authorities and the regime meet a person's norms and values", while trust "implies an instrumental judgment on the performance of the regime and the authorities (...)."

Nevertheless, a certain level of trust seems to be important for ensuring legitimacy. Empirically, trust is often highly correlated with other aspects of legitimacy, such as consent and willingness to obey (De Fine Licht et al., 2022; Hough et al., 2010; Johnson, Maguire, & Kuhns, 2014). As Tyler and Degoey (1996) show, trust in authorities shapes citizens' willingness to accept decisions of authorities and increases the sense of obligation to follow these decisions. Although legitimacy under ancient or feudal rule might have been based on tradition and devotion rather than on trust (see, most notably, Weber, 1978), it is difficult to consider legitimacy without trust in the context of contemporary societies. Even in modern-day totalitarian or despotic regimes, citizens' trust in authorities is found to be an important reason for why





people consider these authorities legitimate (Mazepus, 2017). According to Grimes (2006, 2008), trust can be considered an "expression" of perceived legitimacy.

In our framework, we consider legitimacy to be a multi-faceted concept. Operationally, trust is one aspect of legitimacy. Legitimacy, however, extends beyond trust and also incorporates other aspects of appropriateness, such as "acceptance, support, consent, and willingness to obey" (Schoon, 2022, p. 481). Not limited to explicit manifestations of trust and support, legitimacy can also include passive evaluations of authorities and decisions, whereby legitimacy reflects the absence of questioning the appropriateness of political institutions or the acceptability of decisions and measures. From this perspective, an institution, decision and/or action is considered legitimate when its appropriateness is "taken for granted" and its existence is not questioned, but audiences rather perceive it as necessary or inevitable (Suchman, 1995).

All these different interpretations of legitimacy have relevance for public governance. Normative interpretations suggest standards governance should aspire to, and descriptive interpretations uncover factors and processes that make governance acceptable to citizens. The connections between governance and legitimacy have been studied before, but relatively little attention has been paid to the links between legitimacy and *crisis* governance in particular.

5. Defining legitimate crisis governance

Our framework focuses specifically on the legitimacy of crisis governance. Given the above considerations, we propose the following definition of legitimate crisis governance: "the beliefs of citizens that the decisions, actions and interventions that are taken by a governmental authority or institutions and institutions before, during and after a period that is intersubjectively perceived as a crisis, are appropriate." Appropriateness includes aspects of trust, acceptance, support, consent, compliance and perceived obligations to obey (cf. Schoon, 2022, p. 481).

This definition follows existing definitions of legitimacy that use a descriptive approach and that operationalize the concept by focusing on subjective assessments of legitimacy. In line with existing definitions of legitimacy, our definition includes an aspect of beliefs, as it also has been presented in the classical works of Max Weber on legitimacy. In our definition of legitimate crisis governance, legitimacy is conceived as a quality of decisions, responses and interventions (in the span of a crisis) rather than of the political institutions and authorities that take them. In crisis governance, these decisions, responses and interventions are taken by political authorities and institutions with a formal mandate to do so through decision-making processes and procedures. There is empirical evidence that shows that the legitimacy of a decision is not only affected by the content or outcome of a decision, but is also strongly linked to the legitimacy of a decision-making authority and the legitimacy of a decision-making procedure (De Fine Licht et al., 2022; Esaiasson, Persson, Gilljam, & Lindholm, 2019). In addition, the established and existing legitimacy of political authorities has been considered an important 'reservoir of goodwill' in times of crises that can boost the legitimacy and acceptance of decisions that authorities implement during a crisis (Tyler, 2006, p. 381). As such, the nature of the actor – i.e., who is responsible for a decision, response



and/or intervention - can be of relevance for citizens' legitimacy beliefs. In our definition, we therefore emphasize that decisions, responses or interventions are taken by an actor – a governmental institution or authority.

Furthermore, our understanding of legitimate crisis governance relates to important insights from the crisis governance literature. In the first place, our definition acknowledges the processual nature of crisis management. In accordance with the literature, legitimate crisis governance reflects the sets of the decisions and actions that have been taken by political actors before, during and after a crisis (see e.g. Christensen et al., 2016). Second, our definition considers crises as socially constructed realities, instead of objective realities, by referring to the intersubjective element of crises, as it has been theorized in many crisis conceptualizations (Boin et al., 2005; Rosenthal & Kouzmin, 1997; Rosenthal et al., 1989).

As such, our definition has several advantages. First, our conceptualization of legitimate crisis governance is not only theoretically in line with major definitions and conceptualizations of subjective legitimacy, but also empirically applicable to various types of crises and to various phases of crisis governance. Second, the definition applies to the legitimacy beliefs of multiple audiences and can be used for comparing legitimacy beliefs across cases (such as different crises and different countries) and across audiences. Third, and finally, the definition can be used in combination with multiple approaches and strategies for measuring legitimacy beliefs, reflecting the various ways in which legitimacy has been operationalized in different streams of literature (Schoon, 2022).

6. Understanding legitimate crisis governance

Having defined legitimate crisis governance, when is crisis governance more likely to be considered legitimate? As various studies on political and administrative legitimacy have shown, citizens' legitimacy beliefs on governmental actions and decisions can be affected by a myriad of different sources, including but not restricted to the perceived effectiveness and the perceived procedural fairness of governmental actions and decisions, as well as political socialization and individual self-interest and outcome favorability (Arnesen, 2017; De Fine Licht, 2014; De Fine Licht et al., 2022; Esaiasson et al., 2019; Mazepus, 2017; Tyler & Trinkner, 2017; Werner & Marien, 2022). Meanwhile, the crisis management literature has discussed how different crisis elements and aspects of crisis governance can affect citizens' expectations and their perceptions of legitimacy (Boin et al., 2009; Christensen & Lægreid, 2020b; Christensen et al., 2016). Because crises have their own dynamics, the features of a crisis, as well as specific aspects of crisis management, are likely to cast a shadow on citizens' assessment of the legitimacy of governmental conduct in times of crises. Additionally, the political and administrative context, in which authorities take crisis measures, can be an important contextual factor for the legitimacy of crisis governance.

In this section, we combine the streams of literature on governmental legitimacy and crisis management and further use relevant insights from the broader governance literature to derive expectations for the conditions under which citizens perceive crisis governance as legitimate.



a. Effectiveness of crisis management

In the first place, the performance of governmental authorities is often considered to correspond with higher levels of legitimacy. As such, the effectiveness of crisis measures is likely to generate the belief among citizens that these measures are legitimate. The crisis management literature assumes a dynamic relationship between governance capacity and governance legitimacy, whereby a greater capacity to adequately respond to crisis events will result in more positive evaluations and assessments of the legitimacy of this approach (Christensen & Lægreid, 2020a; see e.g. Christensen et al., 2016). Safety and protection are among the central tasks of the state, and we would expect that perceived legitimacy decreases when governmental authorities are not capable of providing a basic level of security. Also, the broader literature on political-administrative legitimacy suggests a nexus between performance and legitimacy. Drawing on Scharpf's (1999) work on output-oriented legitimacy, the legitimacy of governmental authorities can be assessed against the extent to which they effectively promote the well-being of the people. As such, effectiveness and performance can be important sources for perceived legitimacy.

We would however assume that citizens do not only evaluate the legitimacy of crisis governance based on its outcomes and effectiveness. Next to output-oriented legitimacy, the input and throughput dimensions are suggested to be of further importance, meaning that the opportunities for democratic input in a political system, as well the quality of governing processes, can strengthen legitimacy (Scharpf, 2009; Schmidt, 2013). In line with the procedural fairness literature, one can expect that citizens also care about the procedures that result in these outcomes. According to this stream of literature, perceptions of the fairness of decision-making procedures are an important source for the legitimacy beliefs that citizens hold, as procedural fairness would increase trust, acceptance and compliance (Lind & Tyler, 1988; Tyler, 2002, 2006; Van den Bos, Wilke, & Lind, 1998). An important notion is that fair and appropriate procedures could enhance citizens' willingness to accept a decision, even if they disagree with the decision outcome (Tyler, 2006). As such, procedural fairness might compensate for negative performance or policy outcomes. Procedural fairness can be strengthened by elements of voice and participation, but accountability, transparency, unbiased and impartial decision-making and respect to others have also been considered to increase perceived procedural fairness. Procedural fairness can be considered particularly relevant for crisis governance, as Van den Bos (2001) finds that the importance of procedural fairness is higher for citizens when they are confronted with uncertainty, as is, for example, the case in crisis situations.

In the particular context of crisis governance, proportionality has further been considered a crucial aspect of legitimate crisis governance. When a crisis occurs, a critical question is often in which ways and to what extent governments are allowed to use their emergency or extraordinary powers. The relationship between the effectiveness of crisis measures and their perceived legitimacy may depend on whether citizens consider such measures to be proportionate or disproportionate. Even when governmental interventions are effective in addressing the threat imposed by a crisis, citizens might consider these interventions to be illegitimate when they perceive the cure to be worse than the threat, as for example,



when a crisis response restricts citizens' rights. When there is no legal or constitutional framework provided for particular types of crisis responses, this does not only hinder the legality of crisis measures, but might also affect the perceived legitimacy of these measures. Thus, the legitimacy of crisis responses will depend in part on whether the public perceive the measures to be appropriate, given the severity of the crisis. When citizens consider crisis measures to be effective, proportionate and procedurally fair, they are more likely to confer legitimacy to these measures.

b. Elements of threat, urgency, and uncertainty

However, we would expect that the different elements of a crisis (threat, urgency, and uncertainty) might interfere with how citizens subjectively evaluate the legitimacy of crisis governance. The urgency of a threat is often considered to constrain the legitimacy of crisis governance. Because governmental authorities only have a short amount of time to take important decisions for addressing and mitigating the consequences of a crisis, this can come at the cost of the democratic and participatory quality of decision-making processes during crises, potentially hindering the perceived procedural fairness of crisis governance (Goetz & Martinsen, 2021; Schmidt, 2022). Elements of threat and urgency can however also increase citizens' willingness to accept crisis measures. In the crisis management literature, citizens' perceptions of security risks in their own particular environment matter for governmental legitimacy (Christensen et al., 2016, p. 894) — when a crisis is perceived to be urgent, people may be more willing to accept governmental decisions and decision-making arrangements that they might not accept in a less pressing situation. In times of crises, scholars have often documented a rallying-around-the-flag effect, whereby support for incumbent leadership increases in the face of a large threat. As Davies and colleagues (2021, p. 3) suggest, "in periods of crisis people more readily accept various measures from political leaders, including stringent restrictions on their personal freedom".

Also, the literature on risk perceptions argues that people's perceptions of risks increase their personal need for security, and, thereby, their willingness to support policies targeted at risk reduction and mitigation (Kasperson et al., 1988; Slovic, 1987). Meanwhile, terror management theory suggests that citizens are more willing to support strong and decisive leaders when citizens perceive existential anxiety about security threats and believe that those leaders can help them to manage their deeply rooted fears (Greenberg, Pyszczynski, & Solomon, 1986; Pyszczynski, 2004; Solomon, Greenberg, & Pyszczynski, 2004). In the context of crisis governance, empirical research has found that citizens are more likely to develop technocratic attitudes and support transgressions of procedural fairness when they are faced with threatening crisis events — a pattern that has been found in the context of, amongst others, the 9/11 terrorist attacks and the Covid-19 pandemic (see e.g. Amat, Arenas, Falcó-Gimeno, & Muñoz, 2020; Davis & Silver, 2004; Hetherington & Suhay, 2011; Lavezzolo, Ramiro, & Fernández-Vázquez, 2022).

Meanwhile, the uncertainty of a crisis can feed into the legitimacy perceptions that citizens have about crisis governance. As social-psychological literature suggest, uncertainty creates confusion and anxiety. During crises, citizens look at their governmental authorities and expect them to reduce uncertainty. Yet, the uncertain nature of a crisis can further challenge the efficacy and consistency of crisis measures, because public authorities have to deal with limited information and knowledge about the nature of a **Project funded by**



crisis and continuously need to process newly available information (Boin & 't Hart, 2003; Moynihan, 2008). As such, uncertainty can have a negative impact on citizens' beliefs that authorities respond in an adequate way to crisis events and that their actions are consistent and can be trusted.

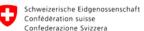
c. Different types of crises

After providing a generalized picture of how crisis characteristics may relate to citizens' legitimacy perceptions, we now consider the type of crisis as an important contextual factor for legitimate crisis governance. Particularly, the duration and the complexity of a crisis can provide additional challenges for legitimate crisis governance. The causes of a crisis can also be consequential for how citizens shape their legitimacy beliefs about governmental interventions.

First, the duration of a crisis provides specific challenges for the legitimacy of crisis governance. In the early stages of a crisis, the legitimacy of the political system and of authorities may experience a boost, and decisions and policies may be accepted as legitimate due to the urgency and uncertainty of the situation. During a creeping or long-lasting crisis, this 'reservoir of legitimacy' (cf. Tyler, 2006) may however be quickly depleted if the crisis progresses and governments are not able to successfully terminate the crisis situation. Even if the crisis management approach is to some extent effective in managing the crisis, this effectiveness might come at the price of restricting fundamental rights and liberties of people, which people might be willing to tolerate for a while, but not in the long term (Boin et al., 2020; Christensen et al., 2016). The longer a crisis lasts, the more likely it is that even authorities with a large reservoir of legitimacy will face challenges, and alternative narratives challenging the official interpretation of the crisis and its management will emerge (Boin & 't Hart, 2022). In this stage, parts of the population may lose beliefs in the legitimacy of the political authorities and the political system as a whole, which can lead to open defiance of government policies and violent protests.

As crises differ with regards to their complexity, the degree of crisis complexity (in terms of uncertainty, uniqueness and/or transboundary dimensions) might have implications for legitimate crisis governance as well. Complex crises are the most difficult crises for governments to prepare for and to deal with (Gundel, 2005). As Christensen et al. (2016, p. 890) suggest, "[t]he more transboundary, uncertain and unique a crisis is, the less effective crisis management performance will be." Subsequently, and given the dynamics between effective and legitimate crisis management (Lægreid & Rykkja, 2019), we might expect that governments face more challenges in securing citizens' legitimacy beliefs when a crisis is more complex.

In addition, crisis causes can have implications for the legitimacy of crisis governance. When crises have higher conflict potential, for instance, governments might be faced with the additional challenge that society is divided rather than united about the crisis response, and this might be reflected in the contested legitimacy of the crisis response (cf. Blondin & Boin, 2020). Crises that are considered endogenous (or institutional) instead of exogenous (or situational) might be more challenging for the legitimacy of crisis governance. Citizens might critically question the legitimacy of their governmental authorities to deal with





a crisis because they hold these authorities – at least partially – responsible for the crisis events to have occurred (Lee, 2022; 't Hart & Tummers, 2019).

d. Phase

Next to different types of crises, crises also have different phases that might come with different consequences for legitimate crisis governance. Next to the crisis response, the way in which governmental authorities prepare for and prevent crises, as well as how they deal with the aftermath of a crisis, are important aspects of crisis management. Crisis prevention and preparedness are vital aspects of crisis management, but, without an immediate threat, citizens might perceive preventive crisis measures often as unnecessary and overprotective rather than as legitimate (Boin & 't Hart, 2003, p. 546). Nevertheless, preparedness and prevention can be important for legitimacy in the long run. When governmental authorities are better prepared for a crisis, they might be more effective in addressing and mitigating a crisis when crisis events occur, and, as such, the perceived legitimacy of the crisis response might increase.

In the aftermath of a crisis, processes of inquiry and accountability can affect citizens' perceptions of the legitimacy of governmental conduct. Post-crisis accountability is important for truth-finding, justifying and excusing conduct and voicing victims' grievances (Bovens, 2007, p. 464). Yet, post-crisis phases often tend to be very political and adversarial in nature and can evoke strong debates about who should be held responsible and guilty for the collective harm of a crisis (Kuipers & 't Hart, 2014). In the aftermath of a crisis, governmental legitimacy can therefore become seriously challenged when questions of accountability and blame attribution take a prominent place in political debates (Bach & Wegrich, 2016; Brändström, 2015).

e. Multi-level governance and crisis coordination

Another factor that might be relevant for citizens' legitimacy beliefs is the level of crisis governance decision-making. We would expect that the structure of multi-level governance is a relevant factor for the perceived legitimacy of crisis governance. In general, Boin (2019, p. 97) suggests that it is important for legitimate crisis governance that decisions and interventions are made by an authority that citizens perceive to be best able to address the crisis.

Here, we argue that crises pose challenges to every political actor or institution, but this applies in particular to supranational authorities in the context of transnational and transboundary crisis management. As Boin, Groenleer, and Busuioc (2014, p. 421) suggest, "it becomes harder to generate legitimacy for a transboundary crisis response, given that decisions will be taken multiple levels away from the citizens experiencing the effects thereof on the ground" (see also Lagadec, 2009; Olsson, 2015). For example, the role of the European Union and its institutions (such as the European Central Bank) during crisis episodes has spurred political and public debates in various member states (Boin, 2019; Schimmelfennig, 2014; Schmidt, 2022). When citizens do not perceive the EU level as the appropriate level to act during a crisis, citizens might be less likely to consider a supranational crisis response as legitimate.



On the contrary, the legitimacy of a supranational crisis response might increase when audiences consider a supranational response as necessary for effective and successful crisis management. For example, the legitimacy of NATO was predicated on the widespread belief that Western European states could not stand alone against the Soviet threat during the Cold War (Boin, Ekengren, & Rhinard, 2013, p. 55). Also, the technocratic expertise of EU institutions is suggested to contribute to the EU's credible authority in crisis management operations (Busuioc & Rimkutė, 2020; Majone, 1994; Scharpf, 2009). In the context of the Covid-19 pandemic, Rimkutė and Mazepus (2023) provide experimental evidence that the European Medicine Agency (EMA) was perceived as a highly legitimate actor among Dutch local politicians, despite of a lack of formal control. Euroscepticism and trust in the European Union might however influence legitimacy perceptions of the EU's role as a crisis manager, as well as feelings of nationalism and regionalism.

Additionally, federalism might have implications for legitimate crisis governance. On the one hand, the crisis management literature suggests that decision-making authority must be centralized for the effectiveness of crisis governance (the centralization thesis, see 't Hart, Rosenthal, & Kouzmin, 1993). Following this perspective, federal states have more centers of democratic decision-making which requires more coordination costs than unitary countries, suggesting that federalism is more problematic for effective and legitimate crisis governance. During the initial phase of the Covid-19 pandemic in 2020, federal states were found to be slower with the implementation of crisis interventions than unitary states (Jahn, 2022; Nelson, 2021; Toshkov, Carroll, & Yesilkagit, 2022), whereas timing was crucial for both the effectiveness and the legitimacy of crisis measures.

On the other hand, a higher degree of regional and local autonomy allows for more local improvisation and flexibility during the handling of a crisis. When responsibilities in crisis management are shared among multiple layers of government, local and regional governments can contribute to the quality of a crisis response by providing bottom-up local solutions (Christensen et al., 2016; Kuipers et al., 2015). Another advantage of a decentralized crisis approach is that decision-making takes place at a governmental level closer to the citizen. When citizens perceive that a crisis response is more tailored to regional and/or local circumstances, this might contribute to the perceived legitimacy of a response.

Crisis coordination has an important role in shaping the legitimacy of crisis governance, particularly in the context of federal and decentralized systems. As Hegele and Schnabel (2021) suggest, federations can respond differently to crisis situations, whereby a coordinated crisis response would still allow for medium local variation in crisis measures, but reduces the chances of duplication, contradictions and/or frictions. Crisis coordination is an essential function of effective crisis management, whereas a "lack of coordination processes and structures can substantially damage the success of crisis response operations" (Kapucu & Hu, 2022, p. 776). Crisis coordination can also contribute to the perceived procedural fairness of crisis governance, because coordination signals that multiple political actors are able to provide input to the decision-making process, thereby strengthening procedural legitimacy. As such, we expect that the degree of coordination in a multi-level crisis response can further be consequential for the legitimacy of crisis governance.





f. Crisis exploitation and communication

Legitimate crisis governance concerns not only the locus of decision-making authority, but also how these decisions are communicated. We expect that processes of crisis exploitation can have an important impact on citizens' legitimacy beliefs. Citizens' legitimacy beliefs do not necessarily have to align with the actual quality of decision-making processes and outcomes. Instead, citizens' legitimacy beliefs are largely shaped from informational cues about decisions and processes, for instance obtained via media coverage and/or governmental communication (De Fine Licht, 2014). The literature on political and administrative legitimacy has widely documented how political actors in various settings use blame avoidance and/or legitimation strategies in order to strengthen their legitimacy in the public's eye (see e.g. Braun & Busuioc, 2020; Mazepus, Veenendaal, McCarthy-Jones, & Trak Vásquez, 2016; von Haldenwang, 2017).

Crises easily lend themselves to exploitation by political actors. Because crisis governance often takes place in a context of mediatization and politicization, the way in which political authorities defend and explain their decisions, responses and interventions, but also how these are framed by their oppositional forces within political and media debates, can impact how citizens evaluate the legitimacy of crisis governance (Alink et al., 2001; Boin et al., 2009; Schmidt, 2022). When a crisis occurs, governments and their opponents will try to frame the crisis in a way that benefits their interests. Governments may exploit the crisis to consolidate power, while oppositional politicians and other critics may use the crisis to challenge the legitimacy of the government. Both government and opposition are expected to defend the crisis measures that they stand for with use of strategic language.

If governmental authorities are successful in framing the crisis so as to position themselves as the only entity capable of effectively addressing the crisis, citizens may perceive these authorities and their actions and decisions as legitimate. Public leadership can provide justification for crisis decisions. Through meaning-making activities, the role of public leaders during a crisis is to convince citizens about the urgent importance of particular actions. When done successfully, crisis leadership can play an important role in shaping citizens' legitimacy beliefs. However, if the opposition or critical press is, for example, able to frame the crisis as a failure of the government's policies or suggests that the crisis management approach is insufficient and/or undesirable, this may erode the legitimacy of crisis governance.

7. Conclusion and discussion

In the past two decades policymakers have faced multiple profound crises. While the turn of the new century started with the terrorist attacks of 9/11 and the same decade brought the financial crisis, the past two years have witnessed a global pandemic and a devastating war in Ukraine. Such circumstances require not only helmsmanship to steer the state through highly disruptive events, but also, at least in democratic regimes, interventions that can boast the support of the majority. As we explained above, crisis governance requires not only timely and effective interventions that can restore the situation, but also support from the population that is affected. This paper has therefore explored the conditions under which crisis governance can be expected to be legitimate in the eyes of citizens.

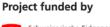
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Our assessment of the literatures on crisis management and legitimacy has brought together two diverse fields that were hitherto unexplored in a systematic way. The two fields are both rich with different perspectives and concepts yet diverge in their degree of coherence. Whereas students of crisis management have built a relatively coherent field of study with concepts and mechanisms that are broadly shared and supported, the legitimacy literature, by contrast, consists of contributions from different schools and disciplines with different focus areas and vocabularies. Reviewing the legitimacy literature revealed that there is no single intersubjectively agreed on definition of legitimacy and that the nature of the relationship of legitimacy to adjacent concepts, most notably trust, is contested. Despite of these conceptual challenges that obstruct a ready-made definition of legitimate crisis governance, the importance of citizens' perceptions of legitimacy for effective crisis governance led us to a definition that combines a descriptive and relational conceptualization of legitimacy with a definition of crisis governance that emerges from the crisis management literature.

Legitimate crisis governance is a general concept and is applicable to many different situations and many different political and governmental contexts. It remains an open question, for now, how the legitimacy of crisis governance is shaped in the context of multi-level governance. One research question to be explored, for example, is to what extent do different levels of governance cope differently with varying levels of threat or urgency? Of course, the question to this answer depends largely on the type of crisis, such as whether it is a 'cathartic' or a 'creeping' crisis, and at what stage the crisis is (e.g., is it the hot phase?). Next to temporal conditions, the spatial elements are important too. Given the transboundary nature of many crises, crises will often imply the coordination of different authorities at different levels. When a crisis has a local or regional scope, citizens might consider it to be more legitimate that local and regional authorities are more strongly involved in the crisis response. For transnational and global crises, citizens will be more likely to lent authority to supranational institutions, such as the European Union. Whether the legitimacy of crisis governance increases with a better fit between the proportions of a crisis and relevant level is an empirical question that needs to be answered.

Crises are highly dynamic, whether they are fast-burning or the creeping types. The public and policy-makers' perceptions of a crisis changes as a crisis evolves along different phases. For multi-level governance systems, this raises the questions as to whether and to what extent the temporal dynamics of crises affects the locus of governance. Does centralization in the initial reaction to a sudden crisis give way to decentralization as the crisis unfolds? At the regional or local levels of governance, crises can be handled by authorities that are closer to citizens and hence develop interventions that may be perceived more legitimate. Or do citizens more often than not prefer crises to be handled at the national or federal level of governance? Another empirical question that requires an answer is whether and to what extent different types of crises encourage multiple levels of governance to cooperate and to devise intergovernmental coordination mechanisms and processes. As is the case with other open-ended questions the answer to this one also depends on crisis attributes. We may expect that long-shadow and transboundary crises may more likely invoke enduring intergovernmental processes than local and short-lived crises.





So, the attribute of a crisis may influence the probability of a specific governance response. The question that now still remains is how citizens will evaluate the outcome of the crisis type-governance response interaction. Is it more likely that functional crisis type-governance responses, i.e., where the level or mode of governance response 'fits' crisis type, are considered more legitimate than crises where there is no such a fit? In other words, is there some sort of aesthetics that deems specific crisis type-governance responses pairs more likely, rational or just such that they are perceived more likely as legitimate in the eyes of citizens? At the same time, we must not forget that crisis governance is a highly political and politicized endeavor. Given the type of crisis, politicians will consider whether it is politically favorable to be seen at the leading end of crisis management machinery. In other words, blame games may be a better predictor of the governance level at which a crisis is governed. Crises may lead to a 'battle of the levels'. Given the political nature of crisis governance, it may be therefore the case that political leadership, i.e., the successful bid for crisis management by an authority, may trump the aesthetics aspect of the functional logic at hand, as citizens will find a firm political demand for governing a crisis more legitimate than a proper fit between crisis type and governance response. These political elements of a crisis governance may be well more exacerbated in dual than in cooperative multi-level states.

These concluding thoughts try to bring together a rich and fuzzy set of concepts and ideas. The definition of legitimate crisis governance was a first step towards understanding the legitimacy of policymakers' interventions under conditions of crisis. It needs to be fleshed out for understanding the legitimacy of crisis governance in the context of multi-level governance.

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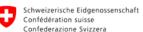
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III. Methodology

To address the gaps identified in the systematic literature review and test the above conceptual framework on legitimate crisis governance in multilevel governance systems, we propose a mixed methods approach that combines process tracing with the quantitative analysis of protests in a set of parallel (quantitative and qualitative) case studies. The process tracing case studies will allow us to test explicitly the causal mechanisms implied by our theoretical framework and the quantitative analysis of protests allows us to fill an important gap in the study of MLG and the legitimacy of crisis response. We outline the two approaches in these final two sections.

1. Process tracing to unravel the causal mechanisms that link MLG and Covid-19 decision-making

Covid-19 hit states with different types of governance regimes simultaneously. The pandemic hence offers a quasi-experimental setting that makes it possible to study the effects of different governance settings on governmental decision-making concerning measures to mitigate the pandemic. Our systematic literature review however reveals that the studies on the MLG effects on the pandemic thus far do not allow for making conclusive inferences about the effects of MLG arrangements and the causal mechanisms through which they operate on pandemic decision-making. Although the majority of the studies that we reviewed claim that MLG arrangements were relevant for the outcomes they study, we conclude on the basis of their design choices, most notably with regard to case selection and outcome specification, that these studies do not allow for making conclusive inferences concerning the MLG effect.

Among other things, we found that most studies employed paired small-N comparisons of countries with similar MLG arrangements. This makes it hard to attribute the observed variation in government responses across the countries being compared to differences in these countries' governance arrangements. As for the outcomes, whereas in many small-N studies the outcomes under study were unclear, large-N studies were limited to a single type of government response. Another problem was that most studies were unclear about their research goals, i.e., theory-building or theory-testing. Finally, most studies focused on the first wave of the pandemic. The role of MLG-arrangements in the further course of the pandemic remains undertheorized and unexplored empirically. Temporal effects, such as the impact of policy diffusion, changing perspectives on the pandemic and learning, are not taken into account.

In sum, the reviewed literature offers little systematic insights about the effects of MLG on government responses and hence the course of the pandemic. The studies are set up in such ways that it is not clear whether MLG has had a direct or intervening effect on the government responses and in which of the phases of the pandemic MLG arrangements mattered. We therefore will execute a study that focuses on how governments responded to the pandemic across time. The main question we ask is to what extent do there exist regular patterns of government responses across systems of governance with varying degrees of regionalism and federalism? Can we discern crisis governance patterns across different



countries that are specifically related to different MLG modes? The research goal of our study is hence to build a theory of MLG-effects on crisis governance.

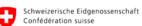
Our outcome variable is the variation in governance modes through which governments responded to the pandemic. By 'governance modes' we mean the governance levels that were involved in decisions regarding the government response, the number of (horizontal and vertical) governance levels involved in the response decision-making, and the horizontal and vertical shifts between governance levels at certain points in time. While theory-building is our primary goal, we will include as hypotheses MLGrelated correlations that are found in some of the (large-N) studies, i.e., that higher levels of MLG have a negative effect on some of the aspects of crisis governance, such as speed and coordination costs.

We apply a process tracing design that involves detailing the sequences of events and other observable implications of causal mechanisms implied by our theoretical framework (Bennett & Checkel, 2014). We will use evidence from policy documents, media and expert interviews to trace these processes. The cases in these studies are the moments when governments decide to invest pandemic control decision-making powers at a specific level of governance. In the Netherlands, for example, parliament issued at the time of the second wave the Temporary emergency law that relocated Covid-19 decision-making from the Safety Regions to the central level. In pair-wise comparisons of countries with different MLG arrangements, we will identify the moments where authority-assignment took place and historically trace the debates and decision-making processes that led to these decisions. In order to isolate the MLG-effect, we will compare Belgium-The Netherlands and Germany-France as cases of smaller and larger pairs of federal-unitary countries.

The time period under consideration runs from the start of the pandemic to its end, i.e., December 2019 - December 2022. During this period, all countries under study are experiencing the same pressures, such as the subsequent waves of Covid-19 and the more elusive process of issue expansion (when the pandemic expands from a health care problem to social, economic and political problems). An important difference between the countries is most notably their health care systems and capacities. We will carefully take these and other within-case aspects into account.

2. Quantitative analysis of protests at the regional level

When citizens contest the legitimacy of crisis governance, their response may range from passive condemnation to signaling their discontent in the polling booth to organized expressions of disapproval as protests, riots, and other anti-government or anti-policy demonstrations. Beginning even in the earliest months of the COVID-19 pandemic, despite movement restrictions, intensifying as restrictions eased following the first wave, and continuing in the years that followed, citizens took to the streets everywhere from China to South Africa to demonstrate against government measures. As the most visible expressions of citizens' disapproval (Keman, 2014), protests against COVID-19 measures have been the subject of scholarship seeking to understand why people participate and why protests emerge in certain times and places. We extend this literature with explicit attention to the perceived legitimacy of multilevel crisis governance by testing hypotheses about protest mobilization derived from our conceptual framework on





legitimate crisis governance and the prior study of both COVID-19 protests and protest at the local level. This broadens the application of our conceptual framework by complementing the experimental vignette study of individual legitimacy attitudes and process tracing of multilevel governance responses with the analysis of observational data on protest activity at the subnational level.

Existing literature has applied insights from the broader study of protest mobilization to the uneven rise and changing patterns of COVID-19 demonstrations. While some scholars have relied on original survey data collected over several waves to understand the role that individual-level factors like political distrust and far right ideology have on individuals' willingness to participate in protest events (e.g., Hunger, Hutter, & Kanol, 2023), most studies examine the effects of national and time sensitive contexts, linked to incentives for mobilization, on the frequency and intensity of protests. Several studies support the idea that more stringent policies, when coupled with declining pandemic intensity, increases the number of protests in countries globally (van der Zwet, Barros, van Engers, & Sloot, 2022; Wood, Reinhardt, RezaeeDaryakenari, & Windsor, 2022), within Europe (Kriesi & Oana, 2022; Neumayer, Pfaff, & Plümper, 2021) and across U.S. states (Pfaff et al., forthcoming) and German Länder (Plümper, Neumayer, & Pfaff, 2021). National and regional aggregates of individual-level attributes like trust in government and support for mainstream policies also correlate with the incidence of protest (Neumayer et al., 2021; Plümper et al., 2021), as do geographical characteristics like urbanization and peripherality. Although some of these studies delve within countries to explain subnational variation, none up to now distinguish the targets of protest activity by level of government or examine the opportunities for mobilization against COVID-19 measures provided by different multilevel governance institutions and processes.

Beside the more immediate scholarly attention to COVID-19 protests exists a more enduring literature on subnational protest mobilization. The bureaucratic capacity and state authority of subnational governments (Sullivan, 2019, 2021), the rise and fall in incentives for participating in politics through elections (Arce & Mangonnet, 2013) and the presence of incubators of ideological and counter-conformist thinking in the form of universities (Dahlum & Wig, 2021) have all been linked to the frequency of protest across regions within countries in Africa and Latin America. With respect to multilevel governance institutions in particular, a debate rages over whether decentralization increases protest activity or the existence of decentralization owes something significant to protest success. Among proponents of the first, some argue that decentralization provides citizens more access points and increasing their perception that protests will be successful (Quaranta, 2013) while others argue that regional autonomy is linked with vertical accountability and support for populist ideologies that express themselves in protest, as more autonomy provides encourages and institutionalizes region-specific demands that may reject national-level policymaking (Stoyan & Niedzwiecki, 2018; Van Hauwaert, Schimpf, & Dandoy, 2019). Against this view, and using an instrumental variable design explicitly aimed at disentangling possible endogeneity, Fatke argues that it is protest activity that more directly shapes the extent of self-rule rather than the reverse (2016). Together, these two literatures suggest that spatiotemporal patterns in protest activity may result from contextual factors that operate at different levels (individual, local, national and time-specific), and that our understanding of the role of multilevel governance institutions and processes remains limited.



We aim to address the above-mentioned gaps by testing a set of explanations derived from these literatures for the outbreak of in-person protest activities across regions and over time in our selected countries (The Netherlands, Belgium, Germany, France, Slovenia and Croatia). We selected these countries to approximate a Most Similar Systems Design that keeps a variety of cross-national contextual factors constant while varying multilevel governance institutions. This allows us to examine the effect MLG institutions on protest activity and the interaction of these with regional-level factors through the statistical analysis of regional-level protests over time. To measure protest activity, we use the weekly count of riot and protest events per region⁵ identified in the Armed Conflict Location and Event Data's (ACLED) COVID-19 Disorder Tracker (CDT). For policy stringency, we rely on the Oxford COVID-19 Government Response Tracker (OxCGRT) and original data on regional policy responses collected as part of the LEGITIMULT project. We include regional aggregates of individual-level attitudes and behavior obtained from the most recent election results and relevant Eurobarometer surveys. We use global databases on pandemic intensity (case numbers and infection rates) and finally control geographical characteristics like the degree of urbanization and distance from the national capital and other potential confounders.

Although it will be impossible to consistently distinguish protests aimed at explicitly or primarily regional-level government responses from those targeting the overall government response, we will complement our quantitative analysis with qualitative evidence about the targets of protest activity available in the CDT data and uncovered in the process tracing component of our case studies. With the quantitative analysis we will test hypotheses derived from the literature, while this additional qualitative evidence will provide plausibility probes for the mechanisms these hypotheses implicate.

We collect data at the level of Dutch and Belgian provinces, German states, French regions, Slovene statistical regions and Croatian counties.
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