What has happened and what has not happened due to the coronavirus disease pandemic: a systemic perspective on policy change

Christoph Knill and Yves Steinebach

Geschwister-Scholl Institute of Political Science, LMU Munich, Germany
Corresponding author: Christoph Knill, Geschwister-Scholl Institute of Political Science, LMU Munich, Germany.
Email: christoph.knill@gsi.uni-muenchen.de

We want to thank Aliaa Aly, Marie-Louise Boatey, Bastian Buitkamp, Lara Holzmer, Leo Kirsch, Jana Lohmer, Leon Maixner, Tim Möschl, Nicolas Pokorny, Daniel Rauscher, Alex Robinsin, Leon Schaller and Florian Weindel for their coding efforts and their thoughtful comments on how to improve our manuscript.

Abstract
The societal and policy transformations associated with the coronavirus disease pandemic are currently subject of intense academic debate. In this paper, we contribute to this debate by adopting a systemic perspective on policy change, shedding light on the hidden and indirect crisis effects. Based on a comprehensive analysis of policy agenda developments in Germany, we find that the pandemic led to profound shifts in political attention across policy areas. We demonstrate that these agenda gains and losses per policy area vary by the extent to which the respective areas can be presented as relevant in managing the coronavirus disease crisis and its repercussions. Moreover, relying on the analysis of past four economic crises, we also find that there is limited potential for catching up dynamics after the crisis is over. Policy areas that lost agenda share during crisis are unlikely to make up for these losses by strong attention gains once the crisis is over. Crises have hence substantial, long-term and so far, neglected effects on policymaking in modern democracies.

Keywords: COVID-19; coronavirus disease pandemic; crisis; policy change; agenda setting; punctuated equilibrium theory

Introduction
For scholars interested in the impact of crises on policy change, there could hardly be a more opportune object of study than the coronavirus disease pandemic. There is no doubt that in terms of its severity, proximity, novelty, as well as its endurance (Rochefort & Cobb, 1993), the pandemic can be considered as one of the most formative crisis events in recent history. Intuitively, we would expect major departures from the status quo as a consequence of this focusing event. In response to the pandemic, governments have developed bundles of new policy measures and reforms (Capano et al., 2020; Goyal & Howlett, 2021; Maor et al., 2020). Yet, what probably hardly anybody considers is the flipside of the coin, namely the extent to which the pandemic has actually prevented policy reforms that might have occurred otherwise. It is well conceivable that the pandemic’s attraction of political attention...
implies that political responses to other urging problems, such as climate change, global migration flows, or increasing social inequality, were put on hold. Yet, the role of crises as an impediment to change has hardly been on the analytical radar of scholars of public policy. The focus is typically on changes “caused” by crises rather than on those “inhibited” by crises. We argue that the reason for this blind spot lies in the dominant analytical lens that runs through the literature on public policy change.

Crisis are perceived as rare events with a high potential to trigger major policy change. If we look into the policy change literature, this seems to be a core belief that is reflected in all frameworks addressing policy change. And indeed, if we consider policy change exclusively from a policy subsystem lens, the link between crisis and far-reaching policy change is almost a truism. As soon as we abandon the subsystem lens in favor of a more systemic perspective, however, this belief is shattered: We quickly see that crises are actually not so rare as usually assumed. Looking beyond individual policy subsystems, it becomes clear that crises are a common feature of everyday politics in modern democracies. Over the last 20 years, governments have been confronted with a seemingly inexhaustible number of external shocks that challenged the effectiveness and legitimacy of existing policy regimes, including recurrent terrorist attacks, the global financial crisis, the crisis of the Eurozone, the refugee crisis, Brexit, the climate crisis, or now the coronavirus disease pandemic. Overall, crises are thus ordinary rather than exceptional phenomena in modern-day policymaking.

Moreover, also the statement that crises trigger major policy change needs to be qualified. By focusing only on those policy subsystems that are most directly affected by a crisis, we overlook that crises connect change dynamics across different policy areas. Given their cognitive and institutional limitations, governments cannot deal with all issues with the same intensity at every point in time (Workman et al., 2009). As a consequence, some policy areas receive more governmental attention at the expense of others. Such a shift of attention, in turn, implies that the effects of crises on policy change extend far beyond those policy subsystems that are (assumed to be) most strongly hit by the crisis. In consequence, crisis-induced policy changes in one subsystem have the potential to actually crowd out policy changes in other areas (Fernández-i-Marín et al., 2020).

If we adopt a systemic perspective on policy change, these considerations point to two sets of questions that are of both, academic and practical relevance. First, to what extent do crises lead to interdependencies in the patterns of policy change across different policy subsystems? And can we observe crowding-out effects with departures from the status quo in some areas coming at the expense of policy inertia in other ones? Are policy reforms systematically suppressed or neglected in policy areas that are not directly affected by a given crisis event? Or put simply: what change is “not” happening because of a crisis?

Second, to what extent can policy subsystems that suffer from such attention losses during crises recover once the crisis is over and, through that, compensate for previously omitted reforms by successive over-proportional attention gains? Is the policy inertia during crisis times simply offset by more dynamic changes in the postcrisis-period? Are policy reforms that did not happen during crisis times simply postponed or are they permanently abolished? Especially the latter scenario can have substantial implications for resolving policy problems in areas not directly affected by crises and, in consequence, for the long-term problem-solving capacities of modern governments.

We address these questions in this paper. In doing so, we focus on the effects of the coronavirus disease pandemic on policymaking across multiple policy subsystems. We expect the pandemic to cause a redistribution of policymakers’ attention. The case of the coronavirus disease crisis is particularly suitable to study the effects of attention shifts across different subsystems given its emergence as health crisis in the first place but strong repercussions on many more different aspects of life. Based on a long-term analysis of policy agenda developments in Germany, we analyze the extent to which the coronavirus disease pandemic has undermined policy changes in policy areas not directly affected by the crisis, while triggering major changes in crisis-proximate one.

We find that the pandemic has indeed caused pronounced shifts in the political attention share of different policy areas. The German government has made massive efforts to protect domestic commerce and the economy from the repercussion of the coronavirus disease pandemic. Issues such as immigration and the protection of climate and the environment, by contrast, dropped from the policy agenda. We can demonstrate that these gains and losses vary by the extent to which the respective areas can be presented as relevant in managing the coronavirus disease crisis and its repercussions.
Relying on the analysis of four past economic crises, we also find that there is limited potential for catching up dynamics after the crisis is over. Policy areas that lost attention during crisis are unlikely to make up for these losses through pronounced attention gains once the crisis is over. Crises have hence substantial and so far, neglected effects on policymaking in modern democracies: Changes in policy areas neglected during crisis times might not only be postponed, but also are rather likely to never happen at all. An exemption from this general rule are situations in which the advocates of policy reforms are able to link their policy areas to other (new) crisis events and, this way, (re)gain governmental attention.

The remainder of this paper is structured as follows: We begin by a short discussion of the state of the art, highlighting existing research gaps with regard to the assessment of interdependencies between policy changes across subsystems (section on ‘crises and policy change). In the section on the ‘Theoretical argument’, we present our novel theoretical argument on the systemic effects of crises and develop expectations on patterns of policy change in crisis-proximate and -remote subsystems in the context of the coronavirus disease pandemic. In ‘Materials and Methods’, we present our research design. In the section on ‘Coronavirus disease and policy changes across different subsystems’, we study how the coronavirus disease pandemic has redistributed patterns of policy change across policy subsystems. In the section on ‘Compensation effects in postcrisis periods’, we turn to the question of potential compensation effects in post-crisis periods and the last section concludes.

**Crises and policy change: some blind spots in the literature**

Research focusing on the impact of crises on policy change generally suffers from two problems which can be summarized as a “subsystem bias” and a “proximity bias.” Both aspects are closely related. While the subsystem bias implies that interdependencies between policy developments across different policy subsystems are largely neglected, it actually favors a quite narrow analytical perspective with regard to the study of crisis effects. The impacts of crises are typically only studied in those subsystems that are conceived as most directly affected and severely hit by the crisis.

Policy subsystems are defined by a substantive issue area (domain), a geographical scope, and a relatively stable set of actors that interact within well-defined institutional boundaries (Cairney & Weible, 2015). The policy subsystem is the central building block of all prominent theoretical frameworks dealing with the analysis of policy change. Regardless of whether policy change is analyzed on the basis of the Advocacy Coalition Framework (ACF) (Sabatier & Weible, 2007), the Multiple Streams Approach (MSA) (Kingdon, 2003), or the punctuated equilibrium theory (PET) (Baumgartner et al., 2009), the analytical lens is focused on the assessment of policy changes in distinct policy subsystems.

The rationale behind this strong subsystem focus is that the typical mode of policymaking is considered to be driven by dynamics that are “endogenous” to the subsystem under scrutiny. The policy agenda is usually controlled by stable networks of politicians, bureaucrats, and interest group representatives operating in a given domain. As a result, policies display high stability over time and undergo only incremental change. It is only rarely the case that this isolated everyday life of policy subsystems is distorted. Sometimes, external shocks, like crises, entail that subsystem issues reach system-level attention, implying that long periods of stability are interrupted by fundamental policy change (so-called policy punctuations) (Baumgartner & Jones, 1993).

Yet, regardless of the prevalence of stability or punctuations, the crucial point of reference in all policy studies is the subsystem level. Anything that happens in other subsystems is treated analytically irrelevant as long as there are no obvious spill-over effects from other policy subsystems that are functionally connected to the subsystem in question (Joehim & May, 2010). In other words, the working assumption in studies of policy change is that policy subsystems “live next to each other” and hardly meet and influence each other in practice. The possibility that policy developments across subsystems are interdependent has not been on the radar of public policy research.

This analytical blind spot also prevails when taking a more specific view on the relationship between crises and policy change. Crises are considered a central prerequisite for major departures from the status quo (Capano, 2009; Nohrstedt & Weible, 2010). While existing theoretical frameworks vary in the extent to which they emphasize the importance of political actors and political institutions for the dynamics of policy change, they all agree that the chances for far-reaching policy change strongly increase with external shocks (Baumgartner & Jones, 1993; Baumgartner et al., 2009; Kingdon, 2003; Sabatier & Weible, 2007). The expectation that crises provide strong momentum for radical policy
change is derived from their conception as “periods of disorder in the seemingly normal development of a system and the widespread questioning, discrediting of established policies, practices, and institutions” (Nohrstedt & Weible, 2010, p. 3). Crises emerge from external stimuli that involve surprise, threat to societal core values, uncertainty, and urgency (Boin et al., 2009).

Yet, the study of crisis effects suffers from a proximity bias, which is closely linked to the narrow analytical focus on policy subsystems. Existing studies focus on the effects of crises only in those subsystems that seem to be most affected by crisis events (e.g., Blyth, 2013; Lindvall, 2012; Nohrstedt, 2008; Winter, 2003). At first glance, this is an obvious research strategy. If there is a shooting rampage, the most obvious effects in policy change should be observed in gun control policies (Hurka, 2017), but certainly not in remote policy subsystems, such as telecommunications regulation, for instance. This is not to say that the literature ignores the fact that policy subsystems might be more or less remote from crises (Nohrstedt & Weible, 2010). So far, however, we know only very little about whether the expectation that crises matter more for proximate than remote policy subsystems is actually justified. It is unclear in which ways crises affect the probabilities of more policy stability or more fundamental changes across different—proximate and remote—subsystems. Perhaps, there exists a so far unobserved connection between change patterns in different subsystems, according to which radical changes in one subsystem absorb the potential for such punctuations in others. If we want to get a holistic and complete picture of the long-term effects of the coronavirus disease pandemic, we need to shed light on these blind spots.

**Theoretical argument: policy change across subsystems in crisis and noncrisis periods**

To address the abovementioned open questions in the literature, we need to relax the assumption of subsystem independence but assume certain interdependence, acknowledging that changes in policy subsystems occur not in complete isolation from one another but are often interconnected. This requires shifting the focus from the subsystem level to a more systemic perspective on policy change.

Such a theoretical perspective is offered by the PET. In essence, PET rests on the assumption that the attention space at the system level and the information processing capacities of human mankind, including that of policymakers, are generally limited (Jones & Baumgartner, 2012). To overcome this limitation, political institutions are typically organized in parallel processes that allow an organization (e.g., the government, a public agency, or a legislative committee system) to treat multiple different issues at the same time. From time to time, however, the entire organizations must take action—either because it gets formally necessary (e.g., the plenary must vote on its committees’ proposals) or because an issue becomes so salient and urgent that it involves “high politics”. In these times, different policy subsystems do compete for system-level attention that is necessary to push through major policy reforms.

If a policy subsystem is hit by a crisis, we should hence observe more fundamental policy changes (punctuations) in the respective subsystem. This expectation is fairly undisputed and has been confirmed by existing scholarship (see, for instance, De Francesco & Maggetti, 2018; Walgrave & Varone, 2008). Yet, given that the attention space at the system level is limited, trade-offs in system-level attention are an inevitable consequence (Jones & Baumgartner, 2012; May et al., 2009).

While some subsystems might gain attention space due to the occurrence of a crisis event, others will, by definition, loose system-level attention (Jennings et al., 2011, p. 1020). In short, crises create attention-losers and -winners across different subsystems. Competition for limited system-level agenda space hence implies that changes in one policy subsystems can indirectly also affect the patterns of policy change in other, at first sight unconnected subsystems.

Although we can generally expect crisis-induced interdependencies of policy changes, the strength of such effects might vary across policy subsystems. While some issues might be completely off the agenda, others may continue to receive considerable system-level attention. Theories of policy change are strikingly silent when it comes to the analysis of this phenomenon. The predominant subsystem bias often comes with a big change bias, i.e., a concentration on those subsystems in which major policy changes were observed (Moschella, 2011; Nohrstedt, 2008). Given the relevance of crises as major drivers of change, there is thus an implicit bias towards the study of policy changes in attention-winning
subsystems. Even more problematic in our context, however, is that the nexus between crisis and subsystem is often taken for granted or simply treated as obvious and self-evident. Yet, policy subsystems strongly differ in their disposition to either win or lose from the occurrence of a given crisis event.

But which factors affect the crisis-proximity of a subsystem? In addressing this question, we assume that in every subsystem there are actors that seek to challenge existing policy monopolies and advocate for radical policy change. These change agents compete with corresponding actors in other subsystems to gain system-level attention for “their” policy issues (Hogan & Feeney, 2012). According to Boin et al. (2009), political actors engage in so-called framing contests in response to shocks and crises (t’Hart & Tindall, 2009). Framing contests describe the efforts of political actors to “strategically frame occurred events in order to produce particular political and policy outcomes that coincide with their ambitions” (Pille & Prins, 2018, p. 470). In consequence, any policy issue might—at least theoretically—be perceived as relevant in a given crisis context if change agents manage to spin the issue in the right way.

From this perspective, the extent to which a policy area emerges as proximate or remote from a crisis seems to be highly contingent upon the role of change agents. These contingencies, however, are reduced by the fact that crises come with certain objective problem implications that structurally affect the starting positions of different agents when competing for system-level attention. In other words, change agents in some policy subsystems will find it generally easier to link policy issues to a given crisis than change agents in other subsystems. It is, for instance, rather straightforward to discuss social policy issues, such as unemployment or subsidies for certain industries in the context of coronavirus disease (Clark & Nickels, 2021), but far more difficult to demand more equal rights for same sex couples by linking this issue to the same context. The crisis-proximity of a subsystem is thus determined by the extent to which change agents can (or cannot) exploit changes in objective problem parameters to the advantage of changes in the policy areas they are advocating for.

These theoretical considerations should also be reflected in the policy change patterns observed in the context of the coronavirus disease crisis. More precisely, we can expect that the coronavirus disease pandemic triggered shifts in policymakers’ attention, benefiting those areas that are deemed relevant for managing the coronavirus disease crisis and its repercussions. These gains, however, are likely to occur to the disadvantage of those areas that prove more difficult to link to the coronavirus disease pandemic. The corresponding theoretical expectations can be summarized as follows:

Conjecture 1: The coronavirus disease pandemic has triggered attention shifts across different policy subsystems. Policy areas that are deemed relevant in the crisis context (crisis-proximate areas) display more policy changes compared to pre-crisis levels. Policy areas that are deemed overall less relevant in the crisis context (crisis-remote areas) display less policy changes compared to pre-crisis levels.

In line with PET, a central theoretical proposition of our paper is that attention gains and system-level involvement are a necessary thing for a subsystem to thrive. This does not imply, however, that attention is always and inevitably a good thing. It is, for instance, well conceivable that saliency might also lead to increased polarization which, in turn, results in marginal and insignificant policy changes. Likewise, the relative depoliticization in attention-losing subsystems can facilitate policy change if political actors start considering an issue less important for their strategy and thus are more willing to compromise. Overall, however, we expect that system-level attention—more often than not—is an important condition for major policy change.

It could of course be the case that such attention shifts and crowding-out effects are only short-term in nature, and thus are more or less irrelevant once we take on a more long-term perspective. As soon as the crisis is over, policy subsystems that faced losses in system-level attention could regain salience, implying that the crisis-induced stagnation and absence of policy change is quickly compensated through more fundamental changes in the period succeeding the crisis. Yet, such catching-up dynamics are rather unlikely. According to PET, the major, although not only reason for policy punctuations, are external shocks and crises. As long as subsystems that lost system-level attention during crisis periods are not confronted with (new) shock events themselves, fundamental changes compensating for prior inactivity can hardly be expected. This essentially implies that crises might have enduring reform-preventing effects in attention-losing subsystems that largely remain uncompensated later on. From this follows that the years 2020 and 2021 might be lost time...
for those policy areas that dropped off the governmental agenda during the coronavirus disease pandemic.

Conjecture 2: Policy areas that display less policy changes during a crisis do not show substantially more changes in the aftermath of the crisis.

In the following sections, we test our theoretical expectations with help of a long-term empirical analysis of policy developments in Germany. Before turning to the empirical analysis, however, we first introduce our case selection and database.

Materials and methods

We test our arguments by focusing on policy agenda dynamics in Germany. With regard to our theoretical considerations on attention shifts and crowding-out effects, Germany can be considered a least-likely case (Gerring & Cojocaru, 2016). Germany has both a strong bureaucracy (Kaufmann et al., 2011, 2013) and a well-developed committee system (Zubek, 2021). Both aspects increase the policymakers’ ability to handle multiple issues simultaneously so that, in consequence, crisis-induced attention shifts, and the crowding-out effects should be overall less pronounced than in political systems, in which these capacities are less developed (Workman et al., 2009). In other words, if we can detect attention shifts and crowding-out effects in the case of Germany, we should also find the very same pattern in other (advanced) democracies.

Our analysis rests on the assumption that policy subsystems do not develop in isolation from each other but are connected via the system level. In empirical terms, this analytical perspective is highly demanding as it requires knowledge about the “entirety” of policy developments in different areas. Fortunately for our research purposes, Breunig and Schnatterer (2020) provide a comprehensive dataset covering all policy activities in Germany between 1975 and 2013. The dataset covers all stages of the policy process, including public opinion, party manifestos, government declarations, parliamentary questions, policy proposals, and final legislation. In the context of our analysis, we focus on all policy proposals submitted to the German Parliament (“Deutscher Bundestag”).

The focus on policy proposals comes with two advantages. The first advantage is that policy proposals come relatively late in the policy process and thus are (close to) representing actual policy changes. The second advantage is that policy proposals are easier to attribute to a given crisis event as they occur without much time delay (as opposed to final legislation that might take years until it is finally adopted).

Given our interest in policy dynamics in the context of the coronavirus disease crisis, we had to complement the dataset provided by Breunig and Schnatterer (2020), compiling respective data for the years from 2014 to 2021. The latest date included is 28 February 2021. To extend the data set for our purposes, we relied on the coding scheme proposed by the Comparative Agenda Project (CAP). Here, we focused exclusively on the 20 major topic categories (for more information on the coding manual, see Bevan, 2019). We dropped the category Public Lands given that the overall small number of policy changes in this area lead to strong distortion in our analysis when comparing relatively short time frames (see below). In the respective time period, there were 1,626 policy proposals discussed in the German Parliament. This equals on average 222 submissions per year and corresponds quite well to the average 207 submissions per year (with a total of 7,675) for the 1975 to 2013 time period reported by Breunig and Schnatterer (2020).

Figure 1 shows a more nuanced picture of the number of policy proposals submitted over time. It reveals that the number of policy proposals constantly grew until the early 2000s and decreased again over the course of the following decades. In the context of this general trend, the number of policy proposals...
proposals did also not substantially rebound in response to, for instance, the 2008/2009 financial crisis. The figure suggests that there seem to be some upper limits to the amount of information that can be processed by the German Parliament. This can be interpreted as a first empirical indication that there might be some trade-off between the issues the policymakers are dealing with.

In a last step, we calculated the agenda share for each major topic per year. This is done by dividing the annual number of policy proposals on a given major topic by the total number of policies proposed in a given year.

**Coronavirus disease and policy changes across different subsystems**

Based on our theoretical considerations, we expect that the coronavirus disease crisis has triggered policy changes in some areas but that these increases come at the expense of changes in other policy areas. Moreover, we expect that the extent to which policy areas have either won or lost during the crisis years depend on the interlinkage between their issue substance and the crisis at hand, and hence their relevance for managing the pandemic and its repercussions.

Figure 2 shows the gains and losses in the agenda share during the coronavirus disease pandemic (2020 and 2021) relative to the pre-crisis level. To calculate the pre-crisis level, we take the average for the four pre-crisis years, namely from 2016 to 2019. The displayed values are “specific” to the respective policy area. In other words, a policy area that accounts for 3% before and 6% of the agenda during the crisis doubles its agenda share (100% gain). By contrast, a policy area that makes up 15% of the agenda before and 18% after the crisis only gains 20% over the respective time period. This reference to the “base level” is necessary as the analysis would otherwise strongly overemphasize changes in (generally) large policy areas.

A quick glance at Figure 2 reveals that the coronavirus disease pandemic has created more losers than winners. While eight policy areas have witnessed more policy changes (in terms of policy proposals) during than before the crisis, the remaining 12 areas have either stayed the same or even lost agenda share. The top five areas that gained in agenda share are Domestic Commerce (↑ 252%), Agriculture (↑ 41%), Education (↑ 38%), Government Operations (↑ 32%), and Social Welfare (↑ 24%). The five areas that lost most in agenda share, in turn, are Immigration (↓ 70%), International Affairs (↓ 29%), Civil Rights (↓ 27%), Technology (↓ 26%), and Environment (↓ 24%).
At first sight puzzling is the fact that amidst of a health crisis that has led to massive restrictions on individual freedoms, health policies have not gained in attention and Civil Liberties even lost in agenda share. This finding, however, can largely be explained by the division of competencies between the legislative and the executive branch as well as between the federal and state levels in Germany. First, after the German Parliament had declared health emergency to combat the pandemic, the majority of health policy measurements have been adopted in the form of executive orders (BGBl. I Nr 14 S. 587). In other words, the respective measures never had to go through the parliament. Second, law and order policy and enforcement in Germany is constitutionally vested solely with the states. In consequence, most of the restrictions of civil liberties were decided at the state level, resulting in very different guidelines and provisions across the 16 Länder (states).

But how about the other policy areas? Are the observed shifts really triggered by the coronavirus disease pandemic or are they just due to more or less random shifts in the policymakers’ attention? To test for this aspect, we went through all 375 policy proposals submitted to the German Parliament in the years 2020 and 2021 and coded whether they refer to the coronavirus disease pandemic or not. In 85 out of 375 cases the policy initiators justified the respective proposals with the occurrence of the coronavirus disease crisis. This is about a quarter (23%) of all policy proposals discussed in the years 2020 and 2021. These proposals suggest, amongst others, changes of the insolvency law to allow companies that have got into financial difficulties due to the coronavirus disease pandemic to continue their business (BGBl. I, Nr. 14, S. 569) as well as a reduction of the value added tax from 19 to 16% to stimulate economic growth (BGBl. I 2020, Nr. 24, S. 1385).

Figure 3 presents the relationship between gains and losses in the agenda share and the number of coronavirus disease-related policy proposals. It shows that there is a relatively strong and significant ($p < .05$) correlation between the gains and losses in agenda share and the number of policy proposals with explicit reference to the pandemic. More precisely, each policy proposal that can prove its relevance in the context of the coronavirus disease crisis increases on average the (gains in) agenda share by about seven percentage points. By and large, these findings provide strong support for our first conjecture.

---

Figure 2. Gains and losses in the agenda share during the coronavirus disease pandemic.
Note: Own coding based on (Breunig & Schnatterer, 2020).
Figure 3. Policy areas’ gains and losses in agenda share and crisis-proximity.
Note: Own coding based on (Breunig & Schnatterer, 2020).

A possible alternative explanation for observations made in Figure 3 could be that the observed losses in agenda share are not caused by the occurrence of the coronavirus disease pandemic but simply by the fact that major reforms were completed before the crisis. The loss in issue attention would then just be a consequence of the lack in problem pressure, which “coincides” with attention changes caused by coronavirus disease crisis. To check for this aspect, we identified those areas that received outstandingly high levels of agenda share prior to the crisis (2016–2019) compared to the mean of the investigation period (≥ 1.5 of the attention share they typically received) and excluded the respective policy subsystems from the analysis. This procedure slightly reduces the level of statistical significance ($p = .055$) while leaving the effect size unchanged.

A remaining question is, however, how substantial and durable the observed changes really are. In other words, did the coronavirus disease crisis completely reshuffle the policymakers’ agenda or can we witness only limited attention shifts between distinct policy areas? To answer this question, we calculated an expected value for each policy area, i.e., the average absolute deviation in agenda shares between two time frames for the entire observation period. Again, and in the line with the previous analysis, we took the rolling average agenda share of 4 years and compared this value to changes in the fifth year (1976–1979 compared to 1980, 1977–1980 compared to 1981, etc.). Although easier to calculate and intuitively more meaningful to interpret, simply calculating average year-to-year differences did not prove successful as the fluctuations between 2 years are naturally higher the shorter the antecedent reference period is.

Figure 4 presents the absolute deviations from this expectation (mean) value for the changes observed in the context of the coronavirus disease pandemic. Here, a value greater than zero indicates that the observed changes are stronger than we can normally expect; a value smaller than zero, in turn, indicates the exactly opposite. The most remarkable aspect of Figure 4 is that only five out of 20 policy areas deviate stronger in either attention gains or attention losses than we would anticipate considering the expectation value. The remaining areas actually remain well below their typical fluctuations.

The areas are Civil Rights, Culture, Energy, International Affair, and Technology.
in agenda share. This observation also holds when using the median instead of the mean value and when calculating separate expectation values for gains and losses. In essence, the analysis reveals that the coronavirus disease pandemic has not turned the policymakers’ agenda completely upside down. Rather, there have been some limited attention shifts between distinct policy areas—here, especially between Domestic Commerce and Immigration on the one hand and Culture on the other. There are thus only few policy areas with very pronounced losses or gains that go beyond their long-term average fluctuations in agenda share. In the remaining policy areas, the coronavirus disease pandemic has primarily impinged on the dynamics of policymaking by limiting the “scope” of possible policy changes. Overall, this suggests that the pandemic, while shifting political attention across policy areas, also altered the change dynamics across policy areas (for a comparable finding see Fernández-i-Marín et al., 2020).

Compensation effects in postcrisis periods

In the previous section we have shown that some policy areas lost in agenda share during the coronavirus disease pandemic. A central question is, however, whether these losses are only temporary or more permanent in nature. For instance, it is well possible that the losses during crisis years are simply offset and compensated by particularly high agenda shares in the years after the crisis. Unfortunately, at the point of writing, the pandemic is not yet over, which makes it impossible to study potential rebound effects in the context of coronavirus disease crisis.

For this purpose, we try to draw conclusions based on previous crisis events. Here, we focus on economic crises. The focus on economic crises can be justified for two reasons: First and foremost, the coronavirus disease crisis has not only been a global pandemic and public health crisis, it has also severely affected the global economy and financial markets. Second, economic crises occur rather frequently and are fairly comparable in nature. This allows us to study the same type of crisis across multiple cases. More precisely, we focus on the four major economic crisis that hit Germany during our investigation period. These are the so-called consolidation crises in 1982 and 1994, the end of the high-tech (“dot-com”) bubble in the early 2000s and the financial crises in 2008 and 2009. All these crises resulted in abrupt and severe deterioration of key macroeconomic indicators (Heilemann, 2019). A fifth potential economic crisis to consider is the second oil shock. In the case of Germany, however,
this shock was rather limited in both its time and intensity.\textsuperscript{3} The real gross domestic product (GDP), for instance, shrank only by 1\% in comparison with the previous years. Likewise, the unemployment quota increased only by about one percentage point.

As in the previous analysis, we calculate for each of these crisis events the gains and losses in the agenda share compared to the pre-crisis level. In a second step, we assess whether attention-losing policy areas had an extraordinary great agenda share in the postcrisis period. To do so, we calculate whether the agenda share of the 4 years following the crisis is above or below a policy area’s average agenda share.\textsuperscript{4} To calculate the average agenda share, we refer to mean value of our entire investigation period. A value greater than one indicates an agenda share that is greater than the typical agenda share. For a value smaller than one the exactly opposite is true. Figure 5 presents the relationship between gains/losses during crisis times and the postcrisis agenda share for 20 policy areas and four crisis periods ($N = 80$). In fact, we arrive at a perfectly straight regression line. In case of a rebound effect, the slope of the line would be negative and the line under consideration would be falling from the upper left to the lower right side of the figure. This implies that there is no straightforward relationship between gains/losses during crises and postcrisis agenda shares. In other words, we do not find much empirical support for the expectation that the crisis-induced stagnation and absence of policy change in some areas is easily and quickly compensated by more fundamental changes once the crisis is over. This finding corresponds to our second conjecture (Conjecture 2) that there is no general rebound effect in political attention.

For advocates of policy changes in areas that lost in agenda share during the coronavirus disease crisis, the presented empirics seem barely encouraging. It seems that reform momentums that got lost during crisis times can hardly be compensated by postcrisis dynamics. Yet, our findings also show that such rebound effects actually cannot be ruled out completely. This becomes apparent when taking a closer look at the three outliers in the upper left corner of Figure 5.

These outliers are Environment ($-99.97/2.16$) in the 1980s, Foreign Trade ($-67.08/2.19$) in the 1990s, and Energy ($-43.18/2.13$) in the early 2010s. So, what was so special and different about these policy areas in the aftermath of the crises that they managed to (re)gain massive agenda share?

In the case of Foreign Trade, the policy changes are essentially due to two different sources. Due to the collapse of the Soviet Union, Germany had to adopt several (new) agreements with post-Soviet states (Dt. Bundestag 537/95; 535/95). Moreover, the entering into force of the Single European Market at the beginning of 1993 required multiple adjustment at the national level (e.g., BGBl. I Nr 54 S. 2068). From this perspective, the observed patterns simply mark a range of international events that had an impact upon the policy agenda in Germany.

The scenario is different when looking at the two remaining outliers, i.e., the changes in the area of Energy Policy in the early 2010s and the area of Environmental Policy in the 1980s. In both cases, proponents of policy change have been able to “exploit” new crisis events to push for far-reaching policy reforms. In the first case, the Fukushima nuclear accident opened a window of opportunity for the antinuclear green movements in Germany to (successfully) demand for a low-carbon and nuclear-free energy transition (Rinscheid, 2015). The multiple policy proposals discussed in the early 2010s both initiated and then implemented the German “Energiewende” (e.g., Dt. Bundestag 340/11; 194/11). The same observation can be made about the area of Environmental Policy in the 1980s. Here, the widespread observation of forest dieback (“Waldsterben”)—that was mainly attributed to national and transnational sulfur dioxide emissions—quickly turned into a highly salient issue in Germany. Strong political mobilization from ecological movements and the Green Party as well as from Conservative Parties representing the interests of farmers who feared economic losses created a strong reform momentum. The German government adopted not only a range of national policies geared towards the reduction of industrial air pollutants (e.g., BGBl. I Nr 51 S. 195), but also successfully advocated for the adoption of

\textsuperscript{3} We also do not include the 1991 recession. In fact, the 1991 crisis can be seen a statistical “artifact” (Heilemann, 2019).

\textsuperscript{4} While East German economy collapsed in consequence of the German reunification, the West German economy grew by more than 5\%.

\textsuperscript{4} Four years is equivalent to the length of an ordinary parliamentary term. In the annex, we test if policy subsystems that lost agenda share during crisis times could recuperate some of it at/after the next federal elections. Here, we use the years 1987/1988 as reference for the 1982 crisis, the years 1998/1999 as reference for the 1994 crisis, the years 2005/2006 as reference for the 2003 crisis, and the years 2014/2015 as reference for the 2009 crisis. In essence, the findings draw as similar picture (see Appendix 2). If at all, it seems that issues that lost attention in crisis times continue to do so in the following elections.
corresponding measures at the EU level, which in turn had to be transposed into national legislation (Héritier et al., 1996).

Overall, the presented cases show that rebound effects are actually possible but only if the change agents in the respective policy areas can link them to or create their “own” crisis scenario. With this reasoning, we do not exclude the possibility that there might be other factors that affect the ability of a given policy sector to “come back” in the crisis’ aftermath. For instance, it is well possible that the three policy fields that emerge as outliers in the crises’ aftermath (Foreign Trade, Energy, and Environment) are simply particularly relevant in the German context. From this perspective, the sectors’ capacity to rebound could be due to the activities of change agents but also because the sectors are “objectively” considered important in the system. Yet, an argument that goes against this way of reasoning is that it was always “different” policy areas that rebounded in the aftermath of the 1980s, 1990s, and 2000s economic crises. This invalidates—at least to some extent—claims that it is only and exclusively the inherent features of policy sectors that make them loose (or win) in agenda share in the years following a crisis.

**Conclusion**

Despite the rather recent emergence of the coronavirus disease pandemic, there are already numerous scholarly contributions that capture the management and consequences of this crisis in different contexts and constellations (Capano et al., 2020; Goyal & Howlett, 2021). Most of these assessments start from the common-sense assumption that such a fundamental event comes with deep societal and policy transformations.
In this paper, we deliberately opted for a different research perspective. Rather than merely concentrating on these “positive” crisis implications, our central interest has been on the flip side of the coin. We tried to shed light on the “negative” and more indirect crisis effects, leading us to the question to what extent the pandemic has shifted political attention across policy areas, hence undermining policy dynamics in crisis-remote policy areas. Moreover, we tried to adopt a more long-term perspective, analyzing the extent to which such redistributions in political attention may unfold lasting effects on sectoral dynamics of policy change beyond the immediate crisis period.

Based on our long-term analysis of policy agenda dynamics in Germany we showed that the pandemic indeed led to profound shifts in political attention. While some policy areas strongly lost political attention, other areas have been characterized by strong attention gains. We showed that these patterns are strongly affected by the crisis proximity of different policy areas. The more the issue substance of a policy area is related to the crisis matter, the higher is the potential for crisis-induced attention gains, and vice versa. Based on the analysis of change dynamics during and after economic crises, we also found that the chances for attention rebound dynamics in postcrises periods are fairly limited. Policy areas that lost attention during crisis rarely compensate for these losses through increased attention in postcrisis periods. It is only in constellation in which these areas are directly hit by crises themselves that such rebound effects might occur.

Yet, it is important to emphasize that attention loss and lacking catching-up dynamics often go unnoticed by the public. As long as existing measures are not suffering from reductions in implementation capacities and the governmental budgets remain fairly stable, weakened dynamics of policy change are unlikely to result in pronounced political mobilization or voter dissatisfaction. In short, attention-losing policy areas often suffer “silently.” Yet, this erosion of change dynamics has still a considerable potential to undermine the long-term problem-solving capacity in the affected subsystems. This is particularly the case as some areas will find it generally more difficult than others to present themselves as crisis relevant. Our data indicates, for instance, that the areas of Housing and Education lost political attention throughout all the four economic crises under analysis (see Appendix 1).

Overall, our study indicates the need for more encompassing analyses of policy changes that go beyond a mere focus on individual policy subsystems. Instead, we need to systematically capture the interdependencies of policy change across subsystems, which emerge from limitations in governmental attention spaces. This approach allows us to account for both crises-induced “changes” in some policy areas as well as for the crises-induced “stagnation” in others.

**Supplementary material**

Supplementary material is available online at Policy and Society (http://mtp.oxfordjournals.org/).

**Funding**

This work was supported by the European Research Council (ACCUPOL Project, Grant. No. 788941).

**Conflict of interest**

None declared.

**References**

Baumgartner, F. R., Breunig, C., Green-Pedersen, C., Jones, B. D., Mortensen, P. B., Nuytemans, M., & Walgrave, S. (2009). Punctuated equilibrium in comparative perspective. *American Journal of Political Science*, 53(3), 603–620.

Baumgartner, F. R., & Jones, B. D. (1993). *Agendas and instability in American politics*. University of Chicago Press.

Bevan, S. (2019). Gone fishing: The creation of the comparative agendas project master codebook. In F. R. Baumgartner, C. Breunig & E. Grossman (Eds.), *Comparative policy agendas: Theory, tools, data* (pp. 17–34). Oxford University Press.

Blyth, M. (2013). *Austerity: The history of a dangerous idea*. Oxford University Press.

Boin, A., t’Hart, P., & McConnell, A. (2009). Crisis exploitation: Political and policy impacts of framing contests. *Journal of European Public Policy*, 16(1), 81–106.
Breunig, C., & Schnatterer, T. (2020). Die politische Agenda Deutschlands. Politische Vierteljahresschrift, 61(1), 131–149.

Cairney, P., & Weible, C. M. (2015). Comparing and contrasting Peter Hall’s paradigms and ideas with the advocacy coalition framework. In J. Hogan & M. Howlett (Eds.), Policy paradigms in theory and practice. Studies in the political economy of public policy (pp. 83–99). Palgrave Macmillan.

Capano, G. (2009). Understanding policy change as an epistemological and theoretical problem. Journal of Comparative Policy Analysis: Research and Practice, 11(1), 7–31.

Capano, G., Howlett, M., Jarvis, D. S. L., Ramesh, M., & Goyal, N. (2020). Mobilizing policy (in)capacity to fight COVID-19: Understanding variations in state responses. Policy and Society, 39(3), 285–308.

Clark, A. D., & Nickels, A. E. (2021). Doubling down on austerity: Framing and coronavirus response. Administrative Theory & Praxis, 43(2), 209–216.

De Francesco, F., & Maggetti, M. (2018). Assessing disproportionality: Indexes of policy responses to the 2007–2008 banking crisis. Policy Sciences, 51(1), 17–38.

Deutscher Bundestag. (2017). Statistik der Gesetzgebung – Ueberblick 18. Wahlperiode. Retrieved August 9, 2021 from https://www.bundestag.de/resource/blob/194870/cf6769441cb2c733ca5f3948644d25e9/gesetzgebung_wp18-data.pdf.

Fernández-i-Marín, X., Hurka, S., Knill, C., & Steinebach, Y. (2020). Systemic dynamics of policy change: Overcoming some blind spots of punctuated equilibrium theory. Policy Studies Journal, 1–27.

Gerring, J., & Cojocaru, L. (2016). Selecting cases for intensive analysis: A diversity of goals and methods. Sociological Methods & Research, 45(3), 392–423.

Goyal, N., & Howlett, M. (2021). Measuring the mix of policy responses to COVID-19: Comparative policy analysis using topic modelling. Journal of Comparative Policy Analysis: Research and Practice, 23(2), 250–261.

Heilemann, U. (2019). Rezessionen in der Bundesrepublik Deutschland von 1966 bis 2013. Wirtschaftsdienst – Zeitschrift für Wirtschaftspolitik, 8, 546–555.

Héritéir, A., Knill, C., & Mingers, S. (1996). Ringing the changes in Europe. Regulatory competition and transformation of the state. De Gruyter.

Hogan, J., & Feeney, S. (2012). Crisis and policy change: The role of the political entrepreneur. Risk, Hazards & Crisis in Public Policy, 38(2), 1–24.

Hurka, S. (2017). Rampage shootings and gun control: Politicization and policy change in Western Europe. Routledge.

Jennings, W., Bevan, S., Timmermans, A., Breeman, G., Brouard, S., Chauqés-Bonafont, L., Green-Pedersen, C., John, P., Mortensen, P. B., & Falau, A. M. (2011). Effects of the core functions of government on the diversity of executive agendas. Comparative Political Studies, 44(8), 1001–1030.

Jochim, A. E., & May, P. J. (2010). Beyond subsystems: Policy regimes and governance. Policy Studies Journal, 38(2), 303–327.

Jones, B. D., & Baumgartner, F. R. (2012). From there to here: Punctuated equilibrium to the general punctuation thesis to a theory of government information processing. Policy Studies Journal, 40(1), 1–20.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. Hague Journal on the Rule of Law, 3(2), 220–246.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2013). The worldwide governance indicators project: Answering the critics. Policy Research Working Papers, 1–31.

Kingdon, J. W. (2003). Agendas, alternatives, and public policies. Longman.

Lindvall, J. (2012). Politics and policies in two economic crises. In N. Bermeo & J. Pontusson (Eds.), Coping with crisis: Government reactions to the great recession (pp. 233–260). Russell Sage Foundation.

Maor, M., Sulitzeanu-Kenan, R., & Chinitz, D. (2020). When COVID-19, constitutional crisis, and political deadlock meet: The Israeli case from a disproportionate policy perspective. Policy and Society, 39(3), 442–457.

May, P. J., Sapotichne, J., & Workman, S. (2009). Widespread policy disruption: Terrorism, public risks, and homeland security. Policy Studies Journal, 37(2), 171–194.

Moschella, M. (2011). Lagged learning and the response to equilibrium shock: The global financial crisis and IMF surveillance. Journal of Public Policy, 31(2), 121–141.

Nohrstedt, D. (2008). The politics of crisis policymaking: Chernobyl and Swedish nuclear energy policy. Policy Studies Journal, 36(2), 257–278.

Nohrstedt, D., & Weible, C. M. (2010). The logic of policy change after crisis: Proximity and subsystem interaction. Risk, Hazards & Crisis in Public Policy, 1(2), 1–32.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2013). The worldwide governance indicators project: Answering the critics. Policy Research Working Papers, 1–31.

Jochim, A. E., & May, P. J. (2010). Beyond subsystems: Policy regimes and governance. Policy Studies Journal, 38(2), 303–327.
Pille, C., & Prins, R. (2018). The framing contest unravelled: Mayors, framing strategies and political outcomes in the wake of three riot-related crises in the Netherlands. *Journal of Contingencies and Crisis Management, 26*(4), 469–479.

Rinscheid, A. (2015). Crisis, policy discourse, and major policy change: Exploring the role of subsystem polarization in nuclear energy policymaking. *European Policy Analysis*, 1(2), 34–70.

Rochezfort, D. A., & Cobb, R. W. (1993). Problem definition, agenda access, and policy choice. *Policy Studies Journal, 21*(1), 56–71.

Sabatier, P. A., & Weible, C. M. (2007). The advocacy coalition framework: Innovations and clarifications. In P. A. Sabatier (Ed.), *Theories of the policy process* (pp. 189–222). Westview Press.

t’Hart, P., & Tindall, K. (2009). *Framing the global economic downturn: Crisis rhetoric and the politics of recessions*. ANU Press.

Walgrave, S., & Varone, F. (2008). Punctuated equilibrium and agenda-setting: Bringing parties back in: Policy change after the dutroux crisis in Belgium. *Governance, 21*(3), 365–395.

Winter, M. (2003). Responding to the crisis: The policy impact of the foot–and–mouth epidemic. *The Political Quarterly, 74*(1), 47–56.

Workman, S., Jones, B. D., & Jochim, A. E. (2009). Information processing and policy dynamics. *Policy Studies Journal, 37*(1), 75–92.

Zubek, R. (2021). Committee strength in parliamentary democracies: A new index. *European Journal of Political Research, 60*(4), 1018–1031.