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The Politics of Covid-19 Containment Policies in Europe

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ABSTRACT

Do partisan preferences, the electoral system, checks on government, political fragmentation, civil liberties and trust contribute to explaining the stringency of containment policies in European countries? Empirical studies suggest that political science theories have helped very little in understanding European democracies’ political response to the pandemic’s first wave. We argue in this article that the negligible effect of politics, broadly defined, is confined to the first wave and that during subsequent waves over the autumn 2020 to spring 2021 season some of the above political factors contribute to our understanding of variation in countries’ response. Employing a sample of 26 European democracies analyzing daily data on the stringency of adopted containment policies we provide evidence that politics does not matter during the first wave but is substantively important during later waves.

“There will be no way to understand the different responses to COVID-19 and their effects without understanding policy and politics.”

Greer et al. ([55]: 1413)

1. Introduction

Politics systematically influences public policies. According to traditional political science theories, European countries should choose Covid-19 containment policies which are correlated with partisan preferences, electoral systems, checks on government, the degree of government and opposition fractionalization, and political culture. However, empirical research analyzing the political response to Covid-19 during the first wave of the pandemic found little support for predictions derived from these theories. European governments did not act identically and their containment policies, the speed of their introduction and their overall stringency varied to some extent – but this variation was not systematically related to political factors [1–3,66].

We demonstrate that the low explanatory power of conventional theories of political decision-making remains confined to the first wave of the pandemic. During later waves, these theories at least partly regained their explanatory power. We suggest that during the first wave of the pandemic political factors exerted close to no influence on containment policies for two main reasons: Firstly, containment policies had to be chosen and implemented under great uncertainty [4,5] – an issue that returned later in 2020 when...
governments had to order vaccines [6]. Little was known about the properties and the spread of the virus and thus governments did not know, at least not sufficiently well, how the virus could be contained and how a meltdown of the health system as happened in Northern Italy could be prevented by means other than relatively stringent lockdown policies. The pandemic presented policy-makers with such ‘extreme governance challenges’ [7]: 1131) that the ‘existing playbook on how to manage pandemics was soon found wanting’ (ibid: 1132). As BÉcker et al. [8] suggest, prior experience shapes disaster preparedness (see also [9]). If this holds, then the absence of prior experience leads to policy responses and crisis management that are not systematically driven by political factors. Instead, in the Covid-19 pandemic governments turned to experts who were themselves however unable to ‘offer effective pre-
scriptions for situations in which many people had contracted the virus and stayed asymptomatic’ [7]: 1138). Secondly, despite the coronavirus pandemic revealing a shocking lack of disaster preparedness by practically all European governments, the first wave of the pandemic triggered a ‘rally around the flag’ effect in which incumbents gained in popularity regardless of the specific containment policies they had chosen and largely independent of the stringency of these policies [10,11]. If maximizing political support was their aim, incumbent parties could not do much wrong during the first wave of the pandemic. In response to governmental management of a ‘mega crisis’ [12]: 189), the normal instinct of critics to blame the government for its handling of a crisis [13] became temporarily suspended together with normal modes of policy-making. Thorough contested by some (e.g. Ref. [14], many regard Covid-19 as a natural disaster [15–17]. We agree with Wolbers et al. (2021: 384) that Covid-19 is best conceptualized as a transboundary disaster and crisis that transcends natural or man-made boundaries, disperses across all geographical jurisdictions and all economic sectors and thus challenges governments with the formidable task of ‘transboundary crisis management’. Like all disasters of this scale and transboundary nature, the Covid-19 pandemic has distorted standard crisis management procedures at all societal levels and required an immediate political response under huge uncertainty.

These two factors prevented the containment policy response of governments from being systematically shaped by politics. However, both factors weakened as the pandemic evolved and further waves, i.e., periods of high incidence rates, occurred. Accordingly, two ‘logics’ explain the growing influence of political factors on the stringency of containment policies over time: Over the summer and autumn of 2020 governments and opposition parties had learned that there is no obvious single best policy response to Covid-19 [18]; Janssen and van der Voort [57] and that the pandemic is manageable with different containment strategies. Sweden maintained its principled approach of adopting relatively lax containment policies whilst the governments of other countries like Germany, the Netherlands and the UK became more pragmatic in their policy approach [7]. As the pandemic evolved, information on the effectiveness of specific policies in the policy repertoire slowly increased and policy-makers understood that a more nuanced set of policies can yield similar epidemiological outcomes as more stringent across-the-board policy responses. Even if much uncertainty about the efficacy of policies remains, it becomes possible to politically contest specific containment measures without being seen as utterly irresponsible. The larger the menu of contestable policy choice, the larger is also the influence of politics on policies.

The second logic results from the changing attitude of voters to containment policies. The ‘rally around the flag’ effect was short-lived and ran out of steam [19] once the first wave of the pandemic ended. Stringent containment policies became increasingly unpopular amongst the electorate. Parliaments regained influence on political decision-making, opposition parties increasingly pointed to the detrimental side effects of containment policies and begun to cast doubt on their effectiveness [20]. European countries went from a situation in which containment policies adopted by their crisis-managing governments tended to be widely supported across the political spectrum toward a ‘politicization of containment policies’ over the summer and autumn of 2020. As the economic and social side-effects of containment policies became clearer and entered more strongly into public focus so did politics regain influence over these policies. In addition to policy learning with respect to which containment policies were effective, for which there were strong incentives given the high issue salience of the pandemic (Trein and Vagionaki 2022), the politicization of containment policies generated strong incentives for learning by governments with regards to which containment policies were politically acceptable or even political support maximizing, a phenomenon sometimes called political learning (Zito and Schout 2009) or power-oriented learning (Trein and Vagionaki 2022).

We put our prediction that political factors based on traditional political science theories became important for the stringency of containment policies in subsequent waves of the pandemic whereas they were largely irrelevant during its first wave to an empirical test in a sample of 26 European democracies. We find that in line with the majority of previous empirical studies, differences in the stringency of containment policies in the pandemic’s first wave are largely unsystematic and political factors do not contribute to explaining variation in containment policies. By contrast, during subsequent waves of infection containment policies were more stringent in substantively important ways in countries in which the party of the prime minister was located more toward the right of the left-right political spectrum, where civil liberties are higher and political oppositions were more fractionalized in national par-
laments. Containment policies were substantively less stringent where governments are more fractionalized and in countries with a higher degree of personal trust.

This article thus reinstates the explanatory relevance of political science theories for explaining the political response to the pandemic. The a-political policy response to the first wave of the pandemic was an exception to the established pattern that politics influences policy choices – an important exception, but an exception nevertheless.

2. The politics of containment policies and its irrelevance in the first wave of the pandemic

In this section, we set out how politics can in principle be expected to shape containment policies according to traditional political science theories and review existing empirical evidence suggesting that by and large these expectations failed to pan out during the first wave of the pandemic. In order to understand how political factors may shape containment policies, we start by considering how these policies affect voters. The pandemic and containment policies enacted to combat the spread of the virus had a major impact on
the lives of pretty much every citizen. However, the consequences of the pandemic and of the policies imposed for its containment were not felt evenly. The virus is most threatening for the old and the clinically vulnerable, but not very dangerous for the young and healthy. In contrast, the adverse social and economic effects of containment policies are felt most by those working in economic sectors and firms with direct customer contact. Covid-19 is primarily a health threat for the old and clinically vulnerable whereas the costs of containment policies are being felt to some extent by all but primarily by the young and healthy, by families with children and by those generating income from non-essential service industries with unavoidable customer contact. To compensate for the distributional consequences of the containment policies, most governments have introduced income support and compensation schemes that propel money towards affected sectors, firms and individuals. These schemes add a third layer of distributional effects to Covid-19 and containment policies, redistributing resources within public budgets but also massively increasing public debts, thereby also redistributing income from future generations to the current generation and possibly making debtors better off and creditors worse off through rising inflation. Policies with strong redistributive effects tend to be politicized and stand at the core of ideological cleavages. The redistributive effects of Covid-19 containment make it highly unlikely that political factors do not influence the adoption of containment policies – and yet, this appears to be what happened during the first wave of the pandemic. We address how the political system, partisan politics and electoral systems as well as aspects of a country’s political culture such as the protection of civil liberties and personal trust can be expected to shape the political response to the pandemic and review existing empirical evidence on the irrelevance of these factors to the political response during the first wave of the pandemic.

2.1. Political systems

Political scientists often categorize political systems into ‘families of nations’ (Obinger and Wagschal 2001), ‘varieties of capitalism’ (Hall and Soskice 2001) or welfare regimes (van Kernbergen and Manow 2009). These typologies tend to be multidimensional and combine political institutions, socio-economic variables and public policies. A typical distinction groups countries into liberal market economies, Scandinavian welfare states and continental European welfare states, which can be further distinguished between corporatist and non-corporatist countries.

Before the pandemic begun, many political scientists would probably have expected that the political response to Covid-19 would be correlated with these long-established patterns with liberal market economies shying away from stringent containment policies due to their detrimental impact on private business and welfare states adopting very stringent containment policies due their ability and willingness to mitigate the economic damage imposed by containment policies with generous transfer payments. However, the evidence for a systematic response along established political system differences is weak. Kuhlmann et al. (2021: 15), for example, conclude based on a qualitative study that “cultural and institutional contexts do not sufficiently explain the responses to the pandemic, as revealed by the conspicuously divergent containment policies pursued in Sweden and its neighbouring countries (Denmark, Finland and Norway), which also belong to the Nordic administrative culture but preferred distinctly different approaches.”

Other factors of the political system of countries which usually exert a strong influence on public policies such as the level of democracy, the populist nature of its government or the extent to which policy-making is devolved to lower-level political units have not had a systematic influence on Covid-19 containment policies either. Admittedly, even theoretically, the impact of political regime type on crisis management in a disaster is ambiguous. As Stasavage (2020) points out based on historical evidence, autocracies and democracies both can be expected to have specific strengths and weaknesses when it comes to fighting emergency threats. Autocracies can act more quickly and more drastically than democracies but typically lack the feedback loops and accountability of democracies that can prevent them from persistently adopting the wrong course of action. Consistent with this theoretical ambiguity, Greer et al. (2021: 14) suggest that while some authoritarian governments performed well, “overall we saw no evidence that authoritarian regimes as a group were more effective at making and implementing policy than democratic regimes.” Among democracies, majoritarian electoral systems seem to have had more erratic containment policies – especially when political leaders had an affinity to populism (2021: 18). However, while some populist leaders like former US President Donald Trump or Mexico’s President Andrés Manuel López Obrador preferred relatively lax containment policies, the populist governments in Poland and Hungary have been no less consistent in their containment policies than other European democracies and tended to employ more stringent policies than the governments in Denmark or Sweden.

Federalist countries as well as countries that are not formally federalist but devolve much of public health policy-making down to lower-level political units can be expected to adopt less stringent containment policies or to adopt stringent containment policies more slowly than countries in which policy-making is centralized. However (2021), also find little evidence for a federalism effect, not least because during the first wave “almost every federation saw substantial centralization” (p. 23). Usually, federal countries implemented emergency legislation and maintained centralized decision-making on Covid-19 emergency legislation well through the first wave (2021).

2.2. Partisan politics

 Parties tend to systematically disagree on public policies because their platforms tend to align with strong ideological differences on the role of the state in a market economy and the degree to which governmental intervention ought to be restricted by individual liberties [22,50,54]. The pandemic and the containment policies had strong distributional effects and thus could have become a new area for strong disagreement between party families. In European democracies politics is shaped by competition among parties with differing partisan preferences. Traditionally, political scientists have located party competition on a single political dimension with parties on the left favoring more redistribution, higher taxes and trade unions and parties on the right favoring less redistribution, lower taxes and employers [23,24]. Left-leaning parties also tend to be more committed to universal healthcare. As a consequence, political scientists expected that conservative parties adopt less stringent containment measures because of “the impact of such
measures on economic activity and the difficulties they create for businesses and employers in particular” [25]: 9). However, as pointed out by the same authors, right-wing parties also often have an ideological interest in “expanding and centralizing the power of the state” [25]. Moreover, voters of conservative parties tend to be older than their counterparts on the left. To appeal to their voters, conservative parties have a greater incentive to implement stringent containment policies. Thus, theories of partisanship remain inconclusive and do not allow one to derive an unequivocal prediction on how the left-right divide influence the stringency of Covid-19 containment policies. Based on bivariate estimations with only population size as control variable [25], find a correlation between the policy holding the prime-ministerial position tending more toward the alternative-libertarian than the authoritarian-nationalist dimension and earlier school closures and lockdowns. The same holds for more left-leaning parties and earlier school closures. Besides this tentative evidence of this study, we know of no other evidence demonstrating clear partisan effects on containment policies.

2.3. Political institutions

Party competition and partisan preferences are mediated by political institutions. One of these mediating influences comes from the electoral system. In plurality and majoritarian voting systems, voters in swing districts exert a larger influence on incumbents’ policy choices than in proportional voting systems where the influence of voters is more evenly distributed. Plurality and majoritarian voting systems thus favor project policies described as pork barrel politics [26] while in proportional systems governments tend to focus more on redistribution between societal groups. Majoritarian electoral systems are also often associated with strong political leadership, often unified in the hand of a president. Since policy choices depend less on bargaining processes and more on powerful political leaders, majoritarian systems can respond more quickly, but they also have an inherent tendency that policy choices become idiosyncratic and erratic [21]: 19). The predictive power of majoritarian electoral systems is still weak but containment policies may vary more over time in majoritarian systems. More importantly, as containment policies become politicized, leaders in majoritarian systems will adopt less stringent containment policies.

At the same time, however, proportional electoral systems tend to bring more parties into parliament and are often governed by a coalition of parties creating a larger number of potential veto players while plurality electoral voting systems often but not always lead to single-party governments. Political scientists have occasionally shown that coalition governments are likely to respond more slowly than single party governments, partly because junior partners act like veto-players in coalition governments [27–30] but that over multiple legislative periods policies tend to be more stable [51]. At the same time, governments find it easier to implement stringent containment policies if the opposition parties are fractionalized in parliament as these parties will find it more difficult to organize and mount a successful opposition. It is therefore important to distinguish between the fractionalization of governments and the fractionalization of the opposition: a higher degree of fractionalization of governments should result in less stringent containment policies, while a higher degree of fractionalization of the opposition should result in more stringent containment policies.

However, as already noted in the Introduction, the first wave of the pandemic triggered a strong ‘rally around the flag’ effect increasing popular support of the incumbent parties [31]. In the vast majority of countries, little if any parliamentary debate on containment policies took place [20]. Articulation of discontent with containment policies was accordingly relatively rare and was usually readily dismissed. Political leaders who raised doubts about the effectiveness and the legitimacy of containment policies were usually outside the political mainstream. From today’s perspective what seems to be most puzzling about the first few weeks of containment policies is just how popular these policies and the governments that implemented them have been in Europe. The popularity of containment policies and the absence of protest against them by citizens moderated existing cleavages between mainstream parties and prompted opposition parties to support their governments’ actions. For example, the Green Party in Germany supported the containment policies of the CDU-SPD governing coalition, which helped to keep political controversies in parliament at bay, and the liberal FDP while occasionally voicing opposition was at pains to avoid making the same arguments as the far-right AfD. In Belgium, the minority government reached a deal with opposition parties on containment policies and in the Netherlands a politician of an opposition party temporarily became health minister after his predecessor resigned for health reasons [20]. Accordingly, any potential decision-making ‘weakness’ of coalition governments during the pandemic’s first wave was thus, at least partly, compensated for not only by a fractionalized opposition but also by a strong ‘rally around the flag’ effect and coalition governments were no less able to agree and implement stringent policies than governments led by a single party.

2.4. Political culture: civil liberties and personal trust

Containment policies represent a major curtailment of civil liberties. However, the role of civil liberties on the stringency of containment policies is everything but straightforward. Civil liberties influence policies in various ways: as constitutional rights, they constrain policy-making. Nelson ([60]: 6) makes the case that countries with high protection of civil liberties are less likely to see more stringent containment policies: “In societies that have been traditionally afforded a great deal of individual freedom policy makers may face additional hurdles when it comes to imposing ‘emergency’ restrictions designed to combat the pandemic.” In this view, civil liberties constrain the political response to the pandemic. However, civil liberties also provide for free and open communication about policy choices and may thus facilitate popular support for unpopular policies. Given these policies are, at least in Western democracies, meant to restrict civil liberties only temporarily for the duration of the pandemic and for the protection of human health and life, two fundamental human rights, high levels of civil liberties may thus enable governments to adopt more stringent containment policies because citizens trust that these curtailments of civil liberties will be temporary and for the duration of the crisis only. Nelson (2022: 10) finds that countries in which “political rights and civil liberties are given less priority” responded more aggressively during the first few months after the pandemic hit their country. However, he also finds that other countries “generally caught up in terms of their policy response during the later months” (ibid.). At least during the first wave, a strong commitment to civil liberties did not for long prevent governments from implementing stringent measures that would cut deep into these civil liberties.
Importantly, the degree to which governments see the need to temporarily curb civil liberties by stringent containment policies is also influenced by the level of personal trust in a society. Social capital in general fosters resilience and may amplify the rally around the flag effect. Likewise, political trust influences the degree to which the population complies with measures, which in turn reduces incidence rates and, ultimately, makes less stringent containment policies possible. The relation between trust and compliance has been established at the microlevel, but they generalize well to the macrolevel. A high level of personal trust has been found to reduce non-compliance with containment measures also in comparative cross-country perspective. Therefore, governments in countries with higher levels of trust can be expected to implement less stringent containment policies because higher compliance with less stringent measures generate the same effect on the spread of infections as more stringent measures would where compliance is lower. As Pierre argues with respect to Sweden’s heavy reliance on voluntary behavioral changes rather than stringent intrusive containment policies: “The degree to which institutions can shape social behavior depends to a large extent on the level of institutional trust in society. In political cultures where trust is low, institutions often have to resort to govern society by coercive measures, whereas if the trust is high institutions can rely on more subtle instruments such as advice or recommendation or even nudges to bring about the desired social behavior.”

3. The return of politics during later waves of the pandemic

Two principal factors brought politics back into the picture when the first wave was broken and incidence rates fell quickly in the summer of 2020. One is that the large uncertainty about which containment policies are necessary to keep the pandemic in check slowly but surely decreased and willing governments could engage in policy learning. The other factor is that in countries that relied on stringent containment policies, support for these policies began to slowly dwindle and the ‘rally around the flag’ effect increasingly gave way to a politicization of containment policies which prompted governments to engage in political or power-oriented learning about what measures were reasonably acceptable or even popular amongst the electorate. Let us address both factors in turn.

During the first wave, the majority of governments seem to have operated under the principle of ‘much helps much’ – with occasional tendencies to “policy overreaction” despite evidence showing that an early reaction was more important than a stringent reaction. Amongst European democracies, Sweden has been a notable exception, demonstrating that alternatives to the mainstream of Covid-19 containment policies were possible. The Swedish government understood the pandemic as a lasting challenge and did not believe that a democratic government can repeatedly implement stringent containment policies over an extended period of time. Other countries that had eschewed very stringent policies such as Denmark and Norway did not, unlike Sweden, become explicit role-models for more liberal containment policies, even though they were much more successful in combining relatively liberal containment policies with significantly lower Covid-19 mortality rate than Sweden. Nevertheless, the experience of different countries with different combinations and timings of measures allowed governments willing to update their priors via policy learning both from others and from their own experience.

At the same time, advances in scientific research on the effectiveness of containment measures began to stimulate public debates that were largely absent in the first wave of the pandemic. We do not wish to overstate the importance of policy learning, however. As Hale et al. point out, despite scientific advances and reductions in uncertainty about what works in terms of containment policies “identifying causal effects of government policies is not straightforward due to many confounding factors and potential sources of endogeneity.”

Instead, we wish to stress that the passing of time and the successful fight against the first wave of the pandemic in all but a few countries opened up the possibility to politically contest the very same containment policies that were widely popular during the first wave of the pandemic. Critics of relatively stringent containment policies increasingly pointed to the experience of countries that pursued a more liberal containment policy when incidence and mortality rates of these liberal frontrunners were low. In contrast, proponents of stringent containment policies would stress that liberal policies caused excessively high mortality rates when incidence and mortality rates in countries with relatively liberal policies seemed to spiral out of control. These public discourses often did not use comprehensive scientific evidence to develop an optimal policy response but rather drew on selective pieces of evidence to support predefined ideological positions.

In countries that relied on stringent containment policies, support for these policies began to slowly dwindle when the first wave was broken and incidence rates fell dramatically. Containment policies became increasingly politicized as their massive redistributive consequences became ever more apparent. Many governments all across Europe were slow to lift restrictions when the virus, often to the surprise of virologists who did not expect a strong seasonal effect, quickly retreated in late spring and early summer 2020. The resulting combination of containment policies that remained relatively stringent together with low incidence rates quickly politicized containment policies. Public protest in European countries against containment policies was most likely to emerge when incidence rates were low and containment policies remained relatively stringent. In early summer of 2020 protest groups became active and, in some countries, started to organize themselves in national organizations.

This politicization of containment policies after the first wave thus often started outside parliaments, but eventually revived parliamentary opposition parties that increasingly criticized some measures for their lack of effectiveness and side-effects, and others for their limited legitimacy. They triggered a return of proper parliamentary debates on containment policies – a democratic feature often absent during the first wave. Increasingly, protest parties tried to piggyback protests but as containment policies became more politically contested, the controversy over the limits of containment, the legitimacy of measures,
and the side-effects of stringent policies also reached the political mainstream. In most countries, containment policies became a classic example of ‘valence issues’ [43] which exist when political actors agree on goals but disagree on the policies necessary and conducive to reach these goals [44].

When the virus returned to most European countries in late summer and early autumn of 2020, partly with returning holiday-makers [67] and partly because the declining temperatures made a transmission of the virus again more likely [45], containment policies were no longer popular and they became heavily politically contested. While opposition against containment policies during the first wave would have cost political support, moderate opposition against containment policies during the second wave could actually strengthen the political support of opposition parties. When policies become contested and politicized, they inevitably become an instrument of party competition. Parties can win and lose political support, votes, and elections over the containment policy decisions they make. After the first wave, incumbents could only gain support if they managed to keep the pandemic under control without resorting to excessively intrusive containment policies. Lockdowns potentially became politically as costly as they always have been economically. Governments needed to embrace political learning or power-oriented learning in order to maintain their political support.

Naturally, we do not argue that political factors influence containment policies to an extent that renders the epidemiological situation irrelevant. Far from it: the pandemic is first and foremost a health crisis that makes it impossible for incumbents in democracies to do nothing. The influence of political factors on containment policies therefore has to be evaluated against the backdrop of the epidemiological situation. When incidence and mortality rates are rising rapidly, governments see little alternative to ratcheting up the stringency of their containment policies, albeit to differing degrees of course. By contrast, governments start lifting measures when incidence and mortality rates go down, albeit again to differing degrees.

4. Research design and data

Theories of how political factors impact policies are best tested in a sample consisting of comparatively well-functioning democracies rather than nascent democracies or semi-democratic regimes like some of the countries on the Balkan, Moldova or Ukraine. By definition, they cannot be tested in autocratic countries like Belarus or Russia. In order to test our prediction that political factors did not impact upon the stringency of containment policies in European countries during the first wave of the pandemic but did do so in later waves, we therefore include all established European democracies, except that we exclude countries with a population size below one million as well as Switzerland for which we have no data on one of the political variables. See appendix 1 for a list of the 26 countries in the sample, which with the exception of excluding small countries also has the advantage of being identical to the sample contained in Ref. [25]. As this is the most prominent and most highly cited existing study into the impact of political factors onto containment policies at the start of the pandemic, this property ensures that any new insights will not be simply down to using a different sample.

For our analyses, the definition of a wave is crucial. Since ‘waves’ are notoriously hard to define, we use two alternative definitions: In the first operationalization, we assume that waves are simultaneous events and they take place in all countries during the same defined time periods, namely the first wave between days 85 (March 25, 2020) and 130 (May 9, 2020) and the second and subsequent waves between days 301 (October 27, 2020) and 505 (May 19, 2021). The count number of days always refers to the number of days passed since January 1, 2020. This design has the advantage that all countries are in the sample in both the first and in subsequent waves.

It has the disadvantage however that some countries hardly experience identifiable waves of mortality and, if they do experience them, they do so not necessarily during the same narrow time period. In our alternative operationalization, we therefore assume that a first wave of mortality occurs at any time before day 200 and subsequent waves of mortality occur at any time on or after day 201 but they only count and countries therefore only enter the first or subsequent wave samples if and as long as the 7-day smoothed daily mortality rate from Covid-19 is above 1 per million inhabitants. In a non-reported robustness test, we applied a higher mortality rate threshold of 2 per million inhabitants with very similar findings.

Our dependent variable is the stringency index from the Oxford University’s Covid-19 government response tracker which is the most widely used internationally comparable comprehensive measure of the stringency of containment policies. This index is based on an ordinal coding of the extent to which policies and regulations issued by governments result in school closing, workplace closing, the cancellation of public events, restrictions on gathering size, the closing of public transport, stay at home requirements, restrictions on internal movement, restrictions on international travel, and public information campaigns. It is normalized to range between 0, indicating the absence of any Covid-19 containment policies, and 100, indicating the most stringent policies possible. Policies, however, do not reach either extreme.

As shown in Fig. 1, containment policies were relatively stringent between day 80 and day 150 during the first wave and between day 280 and day 500 during subsequent waves, where days are counted since January 1, 2020. Mortality rates were highest between day 80 and day 150 during the first wave and between day 300 and day 520 during subsequent waves.

As one would expect, containment policies tend to be more stringent when mortality rates are high. Still, when mortality rates approached zero in between the two waves during the summer and early autumn of 2020, the stringency of containment policies did

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3 We know of only one alternative, namely a measure based on a compilation of country response measures to Covid-19 provided by the European Centre for Disease Prevention and Control (ECDC). Whilst they find lower correlations for the coding of some individual measures [46], find very high correlations with the Oxford University measure in the range of 80–90% for the level and monthly changes in the aggregate measure they built on ECDC.
not also approach zero. Governments kept some safeguard policies in place and occasionally even introduced additional ones despite very low incidence and mortality rates. During the second and subsequent waves, on average governments implemented slightly less stringent policies than they had implemented during the first wave.

To test the impact of political factors reviewed in section 2 above, we select those for which there is sufficient variation among the countries in our sample. Specifically, to measure partisanship, we employ the position on the general left-right scale of the party holding the prime-ministerial position, taken from Ref. [25]. The original data refer to 2019 but there were only five national elections during our sample period and they did not result in a change to the party holding the prime-ministerial position or, as in Lithuania, in the main party endorsing an independent prime minister. For political institutions, we employ the most recent, namely 2020, data from the Database of Political Institutions (DPI) [53] which provides measures of government fractionalization and opposition fractionalization, namely the probability that two deputies picked at random from among the government and opposition parties, respectively, will be of different parties. Also from the DPI comes a variable called ‘checks’, which is a complex measure of the number of effective veto players in a country’s political system, as well as plurality, which is a dummy variable set to one if legislators are elected using a ‘first past the post’ rule. Data on civil liberties are taken from Freedom House’s Freedom in the World 2020 publication (freedomhouse.org). It quantifies the extent to which the civil liberties of citizens are protected in a country, based on assessments by a team of 125 analysts and 40 advisers from the academic, think tank, and human rights communities. Civil liberties refer to freedom of expression and belief, associational and organizational rights, rule of law and personal autonomy and individual rights. They are measured on a scale from 0 to 60. The data refer to 2020 and one may be concerned that the measure of civil liberties is endogenous to containment measures adopted by countries. However, only four countries in our sample saw marginal one-point changes in this variable between 2019 and 2020. Not surprisingly, then, it makes no substantive difference to our analysis whether we measure civil liberties in 2019 or 2020. Finally, we use the interpersonal trust variable from Ref. [25]; which measures the percentage of the population who state that they have personal trust in others and is based on the latest available data from the World Values Survey, all of which stem from before the pandemic started.

As control variables, we employ the reported 7-day smoothed daily Covid-19 mortality rate from Our World in Data. We prefer mortality rates to incidence rates (confirmed positively tested cases) since the mortality rate is much less prone to measurement error in the first wave of the pandemic when limited testing capacity meant that a large number of infections, indeed the majority of infections, remained unconfirmed by Polymerase Chain Reaction (PCR) tests. However, the empirical results on political factors reported in the next section are hardly affected if we employ incidence rates instead of mortality rates or replace the official Covid-19 mortality rates with excess mortality estimates, which shield against governments employing restrictive definitions of Covid-19 fatality to make their containment performance appear more successful than it is.

From the same Our World in Data source comes a country’s median population age since governments in countries with older populations will be under greater pressure to enact stricter containment policies given the steep gradient of age and mortality from Covid-19 [25]. We argue that specific capacity in the health sector reduces the necessity to implement stringent social distancing policies. We use one of their variables capturing the pre-pandemic availability of intensive care unit beds per capita. Since many governments have justified stringent containment policies by the need to prevent a collapse of the health system, countries with a better equipped health system can afford to respond later and less stringently to rising infection rates. Rather than trying to measure a country’s capacity to enact and enforce containment policies with various highly correlated measures of government effectiveness and government capacity, we simply capture this aspect with a country’s gross domestic product (GDP) per capita, since these will correlate highly with

\[^{4}\text{All variables taken from Ref. [25] are scaled (standardized) by these authors to have a mean of }0\text{ and a standard deviation of }1.\]

\[^{5}\text{The exception is Bulgaria where a non-partisan government became appointed on 12 May 2021, which is however right at the end of our sample period.}\]
a country’s level of economic development [47], suggest that government capacity affects the degree to which governments impose restrictions on businesses because “powerful economic actors were able to resist pressures to shut down in the face of the pandemic.” Maybe so but we think this is more a function of how rich a country is rather than its government capacity since richer countries can also afford better economically expensive containment policies and compensate businesses to overcome their resistance. GDP per capita data are taken from Ref. [25]; refer to 2018 and are thus not affected by the severe economic downturn caused by the pandemic. Finally, we include a variable measuring a country’s pre-pandemic direct revenue from international tourism as a percentage of GDP, typically in 2019 or the most recent year available, as recorded in the balance of payments accounts, since, all other things equal, tourism-dependent countries have an incentive to keep containment policies relatively low in order not to deter tourists. 

Our unit of analysis is the country day. Such high frequency data typically generate strongly serially correlated residuals and we estimate our models with ordinary least squares (OLS) and a lagged dependent variable included after which the residuals do not exhibit any clear structure. Standard errors are clustered on countries. Our results are substantively identical and highly robust if we further take out the average trend in the stringency of containment policies in our samples with day fixed effects. The same holds if we include the squared residuals in the estimation model to account for time-dependent error variance (results not shown but included in replication files).

5. Results

Table 1 presents our estimation results for the first and subsequent waves and for both ways of defining these waves. Results from Table 1 corroborate our prediction that political factors fail to explain any variation in containment policies during the first wave. Only checks on government and fractionalization of the opposition were correlated with the stringency of containment policies but, counterintuitively, positively and negatively so, respectively. These two unexpected findings may well be down to pure chance since hardly any of the explanatory variables explain variation in the stringency of containment policies in the first wave. These unexpected results and non-findings suggest to us that the response to the first wave was predominantly unsystematic and depended more on idiosyncrasies, such as the advice of the dominant public health experts in a country or personal preferences of the relevant political leaders [7, 12, 48], than on structural factors.

Results from Table 1 also corroborate our second prediction that political factors become substantive predictors of containment policies during subsequent waves. As explain in section 2, theory is inconclusive whether left- or right-leaning parties pursue more stringent policies. Empirically, at least for the countries included in our sample, we find that conservative governmental parties holding the prime ministerial position have on average responded with more stringent policies in later waves, whereas we found no such statistically significant association in the first wave. The association with checks on government is statistically insignificant, albeit now with the expected negative coefficient. Yet, higher government fractionalization, a variable also related to the veto-player theory, is associated with less stringent policies whereas the opposite holds for higher fractionalization of the opposition – but again only in later waves not in the first wave. A more unified government and a less unified opposition both make political decision-making easier for the government and this leads to the implementation of more stringent containment policies. This interpretation appears plausible but institutional theories leave unanswered why governments tend to favor more stringent and the opposition less stringent policies – which more unified governments or governments faced with less unified opposition can then more easily pursue. We suspect that, on average and all other things equal, governments are forced to play the more responsible part in preventing first and foremost a collapse of the health system whilst it appears to have become the job of the opposition, again on average and all other things equal, to draw attention to the negative side-effects of containment policies and/or to question their necessity.

We find no evidence that a plurality voting system, beyond its impact via the other aspects of political institutions, matters directly for containment policies. By contrast, we find, again for subsequent waves only, that higher civil liberties are associated with more stringent containment policies. As we have noted in section 2, it only seems counterintuitive that countries with higher civil liberties actually implement more stringent containment policies. Instead, illiberal policies invoked for the prevention of an imminent health crisis are easier to implement in such countries because voters are more likely to believe that these measures are strictly temporary only.

Lastly, we find that higher levels of interpersonal trust are associated with less stringent policies. As expected, where trust is higher, this allows governments to rely more on compliance with measures and on personal responsibility than where trust is lower. Note that the two opposite findings for civil liberties and interpersonal trust obtain despite the two variables being relatively highly correlated with each other at r = 0.68. Importantly, the two opposite findings are not an artifact of both of these highly correlated variables simultaneously being included in the estimations. Dropping either one of the variables leaves the result of the other variable intact both with respect to their statistical significance and their substantive importance, on which more below (results not reported).

Besides political factors, other structural determinants also become predictors of the variation in countries’ responses during the pandemic’s waves subsequent to the first one. Most importantly, mortality rates are positively associated with the stringency of containment policies. Of course, any interpretation needs to take the obvious reverse causality into account but when the pandemic is rampant, as signalled by high mortality rates, democratic governments have little choice than to adopt relatively stringent containment policies. Per capita income and the median age of the population both have the expected positive association and greater per capita

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6 https://ec.europa.eu/eurostat/web/tourism.

7 In a non-reported robustness test, we checked that this finding is not simply an artifact of the specific variable taken from Ref. [25]. Coding our own variable capturing all governmental parties on a spectrum from left, centre-left, centre, centre-right to right single party or coalition governments we similarly find a positive and statistically significant association for subsequent waves suggesting that governments located further to the right adopted more stringent containment policies.
The availability of intensive care beds has the expected negative association with the stringency of containment policies. Countries that are more dependent on direct revenue from tourism appear to adopt less stringent policies in model 4.

As a next step, we analyze the substantive long-term effects of the explanatory variables during the first and subsequent waves. We compute the asymptotic predicted effects of each variable for a counterfactual one standard deviation increase in the variable. In other words, we counterfactually assume that the value of each independent variable changes by one standard deviation. Fig. 2 visualizes the probability density around the point estimate based on simulated data derived from the standard deviation of the point estimate. We base these estimates on models 1 and 2, i.e., where we define the waves with respect to fixed time periods only without additionally taking into account mortality rates.

Fig. 2 displays the predicted asymptotic counterfactual effects of the political variables. Given that the observed stringency score in subsequent waves of the pandemic varies between 31.5 and 88.9 with a mean of 67.0 and a standard deviation of 11.9, political factors have an important substantive impact on the stringency of containment policies. Considering that, on average, the countries in our sample implemented more stringent containment policies in the first wave, the influence of political factors on containment policies was low or non-existent in wave 1 and smaller than during subsequent waves. Thus, the political response to high incidence rates in subsequent waves not only became less stringent than it had been during the first wave, but also more systematically influenced by political factors such as partisan preferences of the ruling coalition and the strengths of civil liberties. The growing influence of the fragmentation of the parliament indirectly indicates that Covid-19 containment policies have become more politicized as the pandemic evolved.

6. Conclusion

Several studies have shown that political factors were at best weakly and often not at all correlated with containment policies during the first wave in European countries. We seconded these studies but have also argued that the stringency of containment policies was more aligned with politics from autumn 2020 onwards.

We have explained the return of politics by the availability of information on the effectiveness of political measures that aim at

| Table 1 |
|---|
| Estimation results. |
| Wave 1 | Subsequent Waves | Wave 1 | Subsequent Waves |
| Day 85–130 | Day 301–505 | Before day 200 & daily mortality rate>1 per million | Day 200 onwards & daily mortality rate>1 per million |
| model 1 | model 2 | model 3 | model 4 |
| Stringency of policies (t-1) | $0.931^{***}$ | $0.964^{***}$ | $0.984^{***}$ | $0.966^{***}$ |
| Smoothed C-19 mortality rate | $0.0206$ | $0.0346^{***}$ | $0.0390^{***}$ | $0.0402^{***}$ |
| GDP per capita | $7.90e-06$ | $2.63e-05^{***}$ | $-1.49e-05$ | $2.99e-05^{***}$ |
| Tourism revenue per capita | $0.0312$ | $-0.0429$ | $-0.0176$ | $-0.0526^{***}$ |
| Median population age | $-0.130^*$ | $0.163^{***}$ | $-0.0241$ | $0.146^{***}$ |
| ICU beds capacity per capita | $0.0435$ | $-0.109^{**}$ | $0.0728$ | $-0.119^{***}$ |
| Left-right | $0.135$ | $0.105^{**}$ | $0.162$ | $0.069^*$ |
| Checks | $0.146^*$ | $-0.0349$ | $0.114$ | $-0.0358^*$ |
| Government fractionalization | $-0.409$ | $-0.707^{***}$ | $-1.030$ | $-0.640^{***}$ |
| Opposition fractionalization | $-1.432^{**}$ | $0.511^{***}$ | $-0.926$ | $0.320^*$ |
| Plurality voting system | $0.123$ | $-0.0387$ | $-0.0462$ | $-0.0445$ |
| Civil liberties | $-0.0261$ | $0.0411^{***}$ | $0.0243$ | $0.0399^{***}$ |
| Interpersonal trust | $-0.141$ | $-0.156^{**}$ | $0.262$ | $-0.177^{***}$ |
| Observations | $1196$ | $5330$ | $1015$ | $5531$ |
| Number of countries | $26$ | $26$ | $18$ | $26$ |

Note: Standard errors clustered on countries in parentheses. Constant included but not shown. ***, **, * statistically significant at 0.01, 0.05, and 0.1 level, respectively.

Similar values obtain in our alternative definition of a second wave.

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containing the virus and preventing a meltdown of the health system and by the end of the ‘rally around the flag’ effect of the first wave. Political conflict about containment policies started over the summer of 2020 and resulted in a politicization of these policies when European countries faced new waves of infection from autumn 2020 onwards. These developments brought political factors related to partisan preferences, political decision-making institutions and political culture back as important influences on containment policies – a development that we have described in our statistical analyses.

While it is well understood that regression analyses of observational data may suffer from model misspecification [49] and therefore should be interpreted with caution, we see little reason to doubt the claim that the contestability and politicization of containment policies allowed political factors to reassert their impact on containment policies and thereby also led to increased variation in containment policies adopted across countries. During the first wave, European governments have, with the notable exception of Sweden, implemented very similar policies with the standard deviation of the stringency index in our sample lowest (sd = 7.22) on day 92, April 1st. During subsequent waves, the standard deviation of stringency policies never fell below 9.\(^9\)

Can our findings be generalized to other unexpected exogenous shocks? Are insights from Covid-19 research in general and from the political response to the pandemic in particular informative for other unexpected slow-moving disasters, as [16] suggests? There are good reasons to believe that the coronavirus pandemic is not the only case that has triggered a policy response that fails to systematically align with established political cleavages, political institutions and political culture that regularly shape policy decisions. Huge uncertainty and ‘rallying around the flag’ effects are not restricted to Covid-19. We have even more reasons to believe that in all cases in which rather unsystematic policy responses occur immediately after a drastic exogeneous shock political factors will eventually re-assert their importance. This is so because all policies have distributional consequences and there is always an alternative policy response that reconfigures relative winners and losers. It may take time, but eventually political actors learn that alternatives exist. Sweden and later the UK have at different point in time chosen a more liberal response to the pandemic, accepting a temporarily higher mortality rate. We doubt, however, that the Swedish model was a necessary condition for rising discontent with more interventionistic containment policies. Alternatives to stringent containment policies have always been available and thus we have reason to believe that the politicization of containment policies was inevitable.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

\(^9\) Dropping Sweden from the sample during the first wave reduces the standard deviation in the stringency score further in wave 1 but not in wave 2.
Data availability

Data will be made available on request.

Appendix 1. Countries in the sample

Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

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