Is there a first mover advantage in lobbying? A comparative analysis of how the timing of mobilization affects the influence of interest organizations in 10 polities

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Abstract

The first mover advantage is a critical factor for the productivity of firms that enter new markets. Surprisingly, however, the importance of timing is rarely explored in studies of interest organizations and their influence on new policy agendas. In this article, we therefore develop a theory of first mover advantages in lobbying. We argue that especially more resourceful and more highly affected organizations should be able to benefit from early mobilization. Using granular survey data on the timing of mobilization of interest organizations on Covid-19 related policies in 10 European democracies, we test this novel theory. Our results show that timing is an important predictor of lobbying influence, but that organizations that are hardly affected by a new policy cannot benefit from early mover advantages in the same way as affected organizations. Moreover, we give evidence for differences in first mover advantages depending on organizational staff resources.

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Introduction

Why are some interest organizations more successful in influencing public policy than others? Over the past decades, scholars have sought to answer this question, leading to a wealth of studies identifying various conditions underlying lobbying success (cf. Baumgartner et. al 2009; Binderkrantz and Pedersen 2019; Dür et al. 2015; Klüver 2013; Leech 2010; Lowery 2013; Rasmussen et al. 2018). One, in our view, critical variable, however, has remained largely unexplored: the timing of lobbying efforts. This is surprising given that practitioners tend to stress the importance of timing in their work. As a lobbyist with 20 years of experience in European Union (EU) lobbying declared: "a lobbyist instinctively knows timing is everything. Too often, lobbyists step [too late into] the process. Whatever you say, however useful, will simply be ignored. What you are putting forward has not been delivered at the right time" (McLoughlin 2018). To address this gap in research on interest representation, this article develops and tests a theory of *first mover advantages* when interest organizations seek to influence new policies.

To do so, we build on the literature on firm profitability, market concentration, and organizational survival (Lieberman and Montgomery 1988; Suarez and Lanzolla 2007), which explains why firms which enter a market early, have considerable advantages over firms entering the same market later. Building on these insights, we argue that similar effects apply to interest organizations that try to influence the political process: lobbying at an early stage of a policy's life course should lead to a higher impact on policymaking compared to lobbying at later stages. Yet, just as for firms entering a market, we expect certain limitations to first mover advantages in lobbying, as well. In particular, we expect the first mover advantage to be more pronounced for interest organizations with higher stakes in a new policy agenda compared to others, as well as for organizations that have more resources at their disposal to capitalize on their head-start vis-à-vis other organizations.

We test these expectations based on a new dataset from an extensive elite survey on the activities of interest organizations in the context of the Covid-19 pandemic across 10 European democracies (Austria, Denmark, France, Germany, Italy, Ireland, the Netherlands, Sweden, United Kingdom, and the EU level). The pandemic can be seen as a global and cross-sectoral *focusing event* (Kingdon 1995; Birkland and Warnement, 2016), which has generated demands for new and multi-domain policies in the realm of health and safety, the movement of goods and people, and economic compensation for the disruptions caused by the spread of the disease. Based on survey data from over 1,400 interest organization leaders, we measure an organization's perceived impact on these Covid-19-related policy measures and link this to information about the timing of the same organization's lobbying activity on such policies. By focusing on new and broadly salient policy agendas related to Covid-19, our study has the extremely rare ability to assess the relationship between timing and lobbying influence on new policies across many sectors and political systems. That is because there arguably exists a *time zero* for Covid-policy in early 2020, which allows us to analyze the timing of mobilization on policies, on which organizations have not lobbied before.

Our article contributes to several important debates in the study of lobbying influence on policymaking. Existing studies explain how lobbying influence varies depending on organizational features (e.g. Binderkrantz and Pedersen 2019, Dür et al. 2015, Klüver 2012, McKay 2012;), issue characteristics (Baumgartner et al. 2009; Binderkrantz et al. 2014; Klüver 2013; Rasmussen et al. 2018), patterns of cooperation with political or interest group allies (Heaney and Lorenz 2013; Junk 2019; Lorenz 2020; Mahoney and Baumgartner 2014), the provision of private benefits, such as campaign contributions (McKay 2020, Kalla and Broockman 2016), as well as other strategic choices (De Bruycker and Beyers 2019; Junk and Rasmussen 2019). All these studies de facto assume that the timing of lobbying is constant or

irrelevant. Even in the business studies literature, which recognizes the importance of timing (Georgiou 2004), scholars fail to analyze when and how timing matters for political influence.

In what follows, we, therefore, formulate a new theory of the timing mechanism for lobbying influence. Subsequently, we discuss why the Covid-19 pandemic is an appropriate case to test this theory, and present our extensive data collection efforts. In the empirical section, we find strong support for the impact of timing on lobbying influence, but also show that this is moderated by the affectedness of an organization's interest by a new policy issue. Moreover, the effect of timing seems to vary depending on organizational resources, suggesting that *less* resourceful organizations might benefit *more* from early mobilization than more resourceful actors. Based on these findings, we conclude that timing should get a much more central role in the literature on lobbying influence. We end with a discussion of the most important implications of our analysis and suggest avenues for future research.

Timing and lobbying influence

While rarely explicitly measured, the timing of lobbying has arguably been an *implicit* concern in many studies of interest representation. For instance, one of the controversies between pluralists and economic perspectives of lobbying relates to the ease with which organizations can mobilize political discontent (Baumgartner and Leech 1998; Olson 1965). An underlying assumption in these perspectives is that swifter political action is beneficial for interest organization influence over government decision-making. However, whether this is a valid assumption has hardly been tested empirically (cf. Holyoke 2017; Hanegraaff et al. 2020).

A second important strand of scholarship links the timing of lobbying to the stages of the *policy cycle* (see recent work by Coen et al. 2021a; 2021b). Building on Lasswell's (1956) early work, which divides the policy-making process into discrete stages, scholars have held the assumption that organizations which lobby during the agenda setting stage are more

impactful than groups which lobby at later stages of the policy cycle, such as during the decision-making or implementation stage (Lowery 2013). As Schattschneider declared, 'the definition of the alternatives is the supreme instrument of power' (1975: 66). In this view, timing (understood in terms of the phases of the policy cycle) is among the most important conditions for the political influence interest groups can have. While existing research shows that different types of organizations vary in their lobbying success in these 'phases' of agenda setting versus decision-making (Binderkrantz & Pedersen 2019), there is hardly any empirical evidence to substantiate claims regarding the specific effect of *timing* in lobbying.

We find exceptions in Sutton (1984) and Georgiou (2004) who account for timing in corporate lobbying directed towards government agencies. Based on examples of lobbying on accounting setting standards in the United Kingdom and the United States, Sutton illustrates how advocates have to choose the timing of their activity, and that it might be wiser to choose to lobby 'while the views of the decision-makers are crystallizing' (Sutton 1984: 88), that is, during the early stages of the policy cycle. Georgiou explores the effect of timing in the policy process more systematically, but does not find evidence of a significant timing effect in the case of corporate lobbying targeting accounting standards setting bodies. Finally, recent work by Coen et al. (2021a) explores timing in the policy cycle with a focus on legislative policymaking in the European Union (EU). Based on surveying Members of the European Parliament (MEPs), they show how the lobbying activities directed at MEPs vary throughout the policy cycle[4].

In short, while an interest in timing is implicit in key discussions of lobbying influence, the question of whether *earlier* interest mobilization on new policies leads to more lobbying influence has not really been answered. In our reading of the state-of-the-art literature, there is hardly any concrete theory-building regarding the importance of timing for lobbying, let alone

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[4] Moreover, Coen et al. (2021b) assess business lobbying in the EU at different phases of the policy cycle.

evidence linking timing to lobby influence. In our view, this is likely to be due to the vast complexity of such analyses. For instance, one may argue that the perspective of the policy cycle fails to take into account the interconnectedness of different policy actions, curtailing the investigation of the impact of timing to a micro-level analysis of single and discrete legislative proposals (Howlett et al. 2015).[5] In this view, there is no single policy cycle but rather many, parallel policy cycles involving overlapping issues and stakeholders. An interest organization's success with mobilizing early on one policy might here be endogenous to its mobilization on another, yet related, issue. In other words, early mobilization might be less important if an organization is already part of the policy subsystem of actors involved in discussing and selecting options and courses of government action on a recognized problem.

Indeed, the collection of empirical evidence able to account for such complexity is a major challenge. This is perhaps why the study of the role of timing in lobbying influence remains largely unexplored. With the outbreak of the Covid-19 pandemic, the empirical conditions which allow to collect such evidence are met: The outbreak of the pandemic can be seen as a *time zero*, after which lobbying on a set of new Covid-19 related policies became pertinent. We exploit this extraordinary case to focus the research agenda on the important topic of timing in lobbying processes. However, given that the extant literature, to date, lacks theoretical clarity on why, how and when, the timing of lobbying matters, we instead draw on theories of the firm to formulate a theory of *first mover advantages* that applies to interest organizations that lobby to exert policy influence.

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[5] Despite this criticism, the policy cycle can be a useful construct to investigate timing in lobbying. You (2017) shows that the timing of lobbying may vary between agenda setting and implementation, depending on the characteristics of the policy, e.g. the extent to which interest groups can draw particularistic benefits from the policy.

First mover advantages in the market and the political arena

To build our new theory on first mover advantages in lobbying, we draw on the rich literature on firm profitability, market access and survival. Within this literature, the first mover advantage has gained a central position, both in theoretical development and empirical testing. In this literature, the first mover advantage is generally understood as the benefits associated with a firm's early market access. When a new product is developed and enters commercial markets, those firms which bring the product to the market first, or follow rapidly thereafter, tend to secure a larger market share over time, are more profitable, and survive longer than organizations entering the same economic market later on (Lieberman and Montgomery 1988; Agarwal et al. 2001).

This literature suggests three main *reasons* why first mover firms have an advantage over firms that enter a market later. First, early movers gain a technological edge by entering a market early, meaning they have more time to master the technologies underlying the products which they bring to the market (Lieberman and Montgomery 1988). Second, by entering a market first, firms can monopolize key resources, such as raw materials, employees, contracts with suppliers, and occupy key locations, giving them competitive advantages over late movers (Mueller 1997). Third, early movers have the advantage of building a customer base, engaging in practices of co-creation, which helps customers to become used to and loyal to the brand (Galvagno and Dalli 2014). Combined, these factors lead first movers to have considerable benefits at the expense of firms which enter the market later.

Although different, firms and interest organizations are partly comparable in this theoretical framework. While firms are profit-seeking organizations operating in the market, interest organizations can be understood as influence-seekers, motivated by the need to see

their interests represented in policy outputs (Lowery 2007).[6] As such, early mobilization on public policy is likely entail some advantages, which can be seen as similar to those identified in the theory of the firm.

Obviously, 'early' and 'late' mean different things in the language of commercial firms that seek market shares and interest organizations seeking policy influence. Nevertheless, we see a number of similarities. For profit-seeking firms, an 'early' move is relative to the moment of opening the new target market, while a late entry applies when the market is close to having reached saturation. For influence-seeking interest organizations, 'early' mobilization is relative to the moment in which it recognized that a policy problem might require government action. Public policy scholars have called this the moment in which the problem stream is "ripe" (Kingdon 1995; Birkland and Warnement, 2016; Howlett et al. 2015). At this point, there is a limited window for interest organizations to provide political support and offer policy solutions before participation reaches saturation. As a consequence, the concepts of moving 'early' or 'late' for commercial firms and interest organizations have in common that they both can be defined relative to the length of the opening of a *window of opportunity* - for market entry or political access. Hence, in order to capitalize on an advantage, both profit-seeking firms and influence-seeking interest organizations should prefer to move earlier than competitors rather than later.

Although the ultimate aim of organizational activities (profit maximization versus influence on political decision-making), as well as underlying exchange relationships (with customers or policymakers) vary in the two situations, there are arguably considerable similarities in the way success is achieved: First, interest organizations – just like firms seeking market entry – rely on information asymmetries with competitors to reach their goals (i.e. sway

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[6] It needs to be stressed that firms can be, in behavioral terms, classified as interest groups (Baroni et al. 2015). Our empirical approach takes on such definition and considers firms as influence-seeking organizations together with other interest group categories. However, we have no reasons to expect that first mover advantage theory would apply to firms differently than to other interest group categories.

political decision-makers). Second, interest organizations – just like firms – seek to occupy critical resources helping them to gain access and influence, for which they compete with other actors. Third, interest organizations – just like firms – can benefit from building trust, loyalties and other positive path-dependencies with constituents, as well as policymakers. Of course, these dynamics are not identical in the arenas of market entry and policy influence. In the following, we therefore formulate a theory of first mover advantages in the realm of interest organizations that seek political influence and link it to existing studies of influence over public policy.

A theory of timing in lobbying (I): Why first movers can exert more political influence

Inspired by the aforementioned firm literature, we identify three types of mechanisms which should lead first-mover interest organizations to have an advantage in lobbying compared to organizations which start to lobby later. First, early movers should have a sustained *information edge* over lobbying competitors, since they have more time to acquire and systematize information related to the new topic(s) of concern. Early mobilization might, for example, allow organizations to survey constituents and stakeholders, to do in-house research and/or acquire external input, write policy reports, or influence the media debate on the topic. Importantly, extant lobbying research strongly suggests that *information* is a key resource for lobbying (cf. Klüver 2012; Hall and Deardorff 2006; La Pira 2008; Tallberg et al. 2015; Austen-Smith and Wright 1992). Both resource exchange perspectives on political access (Bouwen 2004; Dür and Mateo 2016, Chalmers 2013), as well as newer empirical studies on lobbying success, highlight the important role of different types of information in exchanges with policymakers (cf. Flöthe 2019). Relatedly, other studies of lobbying stress the importance of aligning the *framing* of an issue with like-minded advocates and/or the understandings of policymakers (Baumgartner and Mahoney 2008; Boräng and Naurin 2015; Junk and

Rasmussen 2019). Early successful framing can arguably lead first-movers to have a *negotiation* advantage over other participants, by setting a so-called *anchor* of initial standards, values or information (Furnham and Boo 2011), which affects the decisions of policymakers and involvement of other interest groups. In all these respects, we argue that timing will be key: More time to acquire information and strategize about its framing should lead to better use of information and expertise by interest groups which, all things equal, should increase their chances to influence public policy.

Second, to be among the first to lobby on a new (set of) policy issue(s) may allow an interest organization to gain *comparative advantages over competitors*, including preempting them from gaining equal or equally meaningful access to political institutions. Like competition between firms in the market, lobbying competition for policy can have characteristics of a zero-sum game (cf. Becker 1983). In the case of interest organizations, this holds, for instance, once the 'carrying capacity' of access has been reached, i.e. once the available time of (relevant) policymakers to interact with interest groups has been exhausted (Gray and Lowery 2004; Hanegraaff et al. 2020). This means that if a certain number of organizations has gained access, it is likely that other organizations cannot gain (relevant) access anymore. By definition, early movers seek access once competition is still low, while competition has increased severely for organizations which start lobbying later on. The risk of gaining no, or less meaningful access (such as with lower ranked officials), is therefore higher for organizations which start to lobby later. This expectation is consistent with findings in organizational ecology studies, which argue that the level of competition is a key source of variation in interest group access and influence (Baumgartner et al. 2009; Holyoke 2017; Hanegraaff et al. 2020).

Third and relatedly, lobbyists that mobilize on a new policy agenda early have time to win the *trust, loyalties and support of other actors*. In addition to competitive forces, there are many collaborative dynamics in lobbying (Holyoke 2009). Early movers can, for example,

position themselves as the main representatives of a cause, lobby camp, or more or less formal coalition (cf. Junk 2019; Lorenz 2020; Klüver 2013). Organizations that start to lobby early are likely to be able to set the agenda in such collaborative efforts with other likeminded organizations, who might jump on the bandwagon later. Moreover, first movers are more likely to become natural coalition leaders (cf. Heaney and Leifeld 2018) and we expect this to provide clear advantages to early movers in terms of influence on public policy: Followers, who weigh up the costs of lobbying alone against those of joining forces with active actors (Hojnacki 1997; Mahoney 2007), can be expected to adjust their positions to *coalition leaders*, who have conveyed their message to different audiences already. Moreover, coalition leaders have more opportunities to subtlety favor their own interests in contacts with policymakers, which should help them to gain more influence over policy outcomes. In short, we see several reasons for expecting first movers to enjoy advantages in the realm of lobbying, as hypothesis H1 summarizes.

> **H1**: *'First mover hypothesis': Interest organizations which mobilize earlier on a new (set of) policy issue(s) have more influence on policymaking on the(se) issue(s), than organizations mobilizing later.*

A theory of timing in lobbying (II): Conditional effects

While we expect a first mover position to provide clear benefits to interest organizations seeking influence on public policy, the theoretical mechanisms we suggest may also entail that some groups are likely to profit *more* from first mover advantages than others. In theories of the firm, a first mover advantage is, in fact, not considered a universal trait, either. These theories expect *some* first movers to be more effective than others (Sandberg 2001), given important factors at the supply and demand-side of market entry. As demand factors, this literature highlights how a stronger match between a product and an unmet demand from

customers leads to higher chances of success for early movers (Suarez and Lanzolla 2007). As for supply factors, it shows that a firm's resources affect whether it can benefit from first mover advantages, because developing, testing and marketing a successful new product has high initial costs, especially for early movers (Suarez and Lanzolla 2007).[7] We expect similar conditional effects due to variation at the supply- and demand-side of lobbying for interest organizations that seek policy influence.

We start with the *demand* side. While firms trying to enter a market depend on the demand by customers for a product, lobbyists depend on the demand of policymakers for their policy-relevant input. This is a central argument in the literature on interest organizations and public policy, where the importance of the demand-side of lobbying plays a central role, be in theories on information provision, exchange relationships or population ecology (e.g. Austen-Smith and 1992; Gray et al. 2005; Leech et al. 2005). From an exchange perspective on interest representation, organizations will only be able to enter exchanges with policymakers if they can offer relevant exchange goods (Bouwen 2004; Berkhout 2013), such as member support, knowledge and expertise, or legitimacy. We argue that, when a new policy problem arises and different solutions are proposed (Kingdon 1995), policymakers have incentives to demand input from organizations that are *affected* by the policy problem.

Affected groups are often named 'stakeholders', and consulting them can be beneficial for policymakers for input legitimacy-related reasons, as well as easing implementation of the resulting policies. Moreover, an actual responsiveness to organizations that are highly affected by a problem might lead to higher output legitimacy and satisfaction of core constituents. For these reasons, we expect policymakers to take a *gatekeeping* role and differentiate between early movers that are more or less affected by the new policy agenda. This expectation is

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[7] There are also contextual conditions limiting the effect of a first mover advantage (see Suarez and Lanzolla 2007). Yet, in our design, we seek to limit the variation on the context by focusing on one set of (Covid-19 related) issues which are salient across countries (see research design). We extensively discuss the potential for generalization to other issues in the conclusion.

grounded on a relatively benign, pluralist view (cf. Truman 1951) applied to interest organizations' access to policymakers (Rasmussen and Gross 2015): Organizations mobilize in response to policy "disturbances", and policymakers will prioritize affected stakeholders to other early-moving organizations, such as rent-seekers, who mobilize out of political opportunism or particularism. Based on this reasoning, we suggest the following conditional hypothesis:

> **H2**: *'Affectedness hypothesis': Interest organizations which are more highly affected by a (set of) policy issue(s) benefit more from mobilizing early than organizations which are less affected.*

Regarding *supply* side factors, we expect organizational resources to be an important moderator of whether interest organizations can actually benefit from being early movers. Critical assumptions underlying our theory are that interest organizations are able to provide relevant information and expertise to policymakers, get competitive access and act as potential coalition leaders. However, an early mover that is not equipped with adequate organizational resources is unlikely to be able to take these roles effectively. An organization that is able to move early, but unable to gather and present information-rich input on an issue, for example, is unlikely to convince and impact policymakers and other stakeholders (cf. Mahoney 2008; Baumgartner et al. 2009). As Flöthe (2019) highlights, resourceful groups are better equipped to produce expertise which is more relevant to policymakers. Similarly, joining and leading coalitions has cooperation and maintenance costs (Hojnacki 1997; Mahoney 2007), which might mean that resourceful groups are better equipped to use cooperation to their advantage. Put differently, low organizational resources might severely limit the extent to which the *potential* advantages of early mobilization can be harnessed. We therefore expect resourceful organizations, which we understand as organizations with higher staff capacities for political

advocacy, lobbying and public affairs (cf. Mahoney 2008), to be able to capitalize more on the advantages associated with mobilizing early than less resourceful groups. Hypothesis 3 summarizes this expectation.

H3 *'Resources hypothesis': Interest organizations with higher organizational resources benefit more from mobilizing early on a new (set of) policy issue(s) than less resourceful organizations.*

Research Design

To assess the influence of interest organizations on policy outcomes we focus on lobbying influence during the Covid-19 pandemic. After evidence of the exponential growth of Covid-19 infections outside of China, the World Health Organization declared the state of pandemic in March 2020. In response to this, European governments pledged to take several new policy actions aimed at blocking the spread of the virus, with a combination of policies concerning health and safety for public spaces, public bodies and private enterprises, the restriction of people's movement and creation of economic support packages to counter the negative effects of the former measures. All of these can be seen as interconnected new policies that only entered the political agenda in early 2020.

Case selection and sampling procedures

Focusing on lobbying during Covid provides us some unique advantages to answer our particular research question: how important is timing for lobbying influence when a 'window of opportunity' opens? The new, highly salient set of policy problems connected to the pandemic hit the population of interest organizations globally and relatively surprisingly and gave all types of organizations strong incentives to mobilize on these issues. These unique

circumstances allow us to analyze – across organization types and sectors - how mobilizing on Coronavirus-related policies earlier on is related to lobbying influence on these policies.

At the same time, we can limit some of the endogeneity that normally comes with studying influence and timing of mobilization. In normal circumstances, an organization that is generally influential in policymaking might be less concerned about mobilizing early if it expects that it will get a voice in the process anyway. The pandemic and its far-reaching policy responses, however, have provoked severe uncertainty among interest organizations, who were not sure to which extent they would get a voice in government decisions.[8] Similar circumstances of uncertainty can be described for policymakers, who had to make tough choices over crisis management policies with relatively little time and information. This situation provides a unique possibility to isolate the impact of timing.

Furthermore, by focusing exclusively on the Covid-19-related policy agenda, we can keep (much) issue variation constant (cf. Mahoney 2007; Rasmussen et al. 2018; Beyers el al. 2018). A disadvantage related to this choice is, obviously, that we cannot generalize our empirical findings to a vast variety of cases, considering we have selected a *salient* issue with *a large scope*. At the same time, however, despite the crisis circumstances and emergency policy-making powers in place in many countries, recent scholarship also indicates that patterns of interest representation are broadly comparable (with, of course, some differences) to non-crisis situations (Rasmussen 2020; Fraussen et al. 2020). This preliminary evidence can be seen as encouraging for the generalizability of our study. With this in mind, we use this case to provide the first empirical test of our novel theory on first mover advantages in lobbying, which we hope future research will apply and expand to a more diverse set of political issues.

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[8] This means that our case is not well-suited to address whether timing matters *differently* for previous insiders than outsiders. Nevertheless, we control for previous levels of access to policymaking in our analysis.

To gather a rich novel data set on the timing of lobbying activities for our study, we conducted an online survey across active interest organizations in ten polities in Europe (Austria, Denmark, France, Germany, Italy, Ireland, the Netherlands, Sweden, United Kingdom, and at the EU-level). These countries were selected foremost based on the availability of comparable lists of interest group populations (see Appendix A for details). At the same time, however, the selected set of countries includes a good mix of different types of welfare states, types of interest mediation systems, political institutions, severity of the global pandemic, as well as robustness of government responses to the crisis. The survey, therefore, provides a good indication of interest group activities and access across (Western) democratic states more broadly.In addition, all polities underwent the first outbreak of the Coronavirus around the same period (with some differences in the timing and severity of lockdown measures we take into account in our analysis).

The survey was conducted among a sample of over 6,000 interest groups and large firms in these ten democracies. Given some firms are not only *profit-seeking*, but also *influence-seeking*, and have been shown to be important lobbying actors (Baroni et al. 2014), we include those firms, which actively mobilized on Coronavirus-related policies, in our study.

The organizations to receive the survey were selected as stratified samples from existing overviews of the populations of politically active organizations in the respective polity. This was done by drawing either on lobbying registers (e.g. Ireland and the EU), or overviews compiled by other researches (e.g. Denmark, Sweden). The stratified samples were drawn to ensure the inclusion of a) similar total samples across countries, and b) similar shares of different types of organizations in each polity. Appendix A summarizes our sampling frame and the sampling considerations for each polity in detail.

Survey implementation and response rates

The survey was in the field from early June to mid-July 2020. It was conducted in the respective country language and in English for the EU, and addressed specifically to the employee in charge of public affairs, communications or political work, where possible.

In our pooled sample, our response rate lies at 22.6%. However, response rates vary considerably between countries, as Table C1 in the Appendix summarizes. This variation is a common pattern in interest group surveys (e.g. Binderkrantz and Rasmussen 2015, Dür and Mateo 2016, Klüver 2013, Junk 2019). The Nordic countries (Denmark and Sweden) in our survey attain high response rates (in our case: ca. 42% and 35%, respectively), the Netherland and Ireland score somewhat lower (at ca. 27% and 23%), followed by Germany, Austria, the EU survey (attracting a response rate of ca. 15% or above). In Italy, France, and the UK low response rates of between 12.5% (Italy) and 7% (UK), which lowers our overall response rate. We include these countries in the analyses (with fixed effects for countries), yet we also show that our findings hold in robustness checks when excluding these low-response countries (see: Table E2 in Appendix E).

As Appendix C, Table C2, shows, we do not see a strong bias regarding organization type in the responses, as ca. 36% of responses are from Business Organizations and Firms, 33% from Professional Organizations and Labor Unions, and 31% from Public Interest and Ideational Groups. To address other potential forms of non-response bias, Tables C3 and C4 in the Appendix show the distribution of responses across 1) lobbying staff resources and 2) perceived affectedness by this crisis. It shows that our sample includes organizations with low (ca. 34% of the observations), medium (ca. 43%) and high (ca. 23 %) staff resources for lobbying, as well as organizations across all different levels of affectedness (between ca. 7% and 36% of observations in each of the five categories). We conclude based on such descriptive analyses, that our data includes the necessary variation to address the patterns we set out to study, that is, how timing affects lobbying influence on public policy (H1) and how lobbying

resources and affectedness impact this relationship (H2-H3). Importantly, as we show in Figures D1-D3 in Appendix D, there is considerable variation in timing across both levels of affectedness and resources, so it is not the case that only highly affected and/or resourceful groups mobilized early.

In the next sections, we present the operationalization of our variables. A summary of them can be found in Appendix D, Table D1. Moreover, Table D2 shows pairwise correlations, and gives no reasons for concern about multicollinearity between distinct variables.[9]

Operationalization of the Dependent Variable

Our dependent variable is an organization's *perceived influence* on Coronavirus-related policies. We measure this by asking respondents to indicate their organization's level of impact on political decisions related to the Coronavirus crisis on a scale from 0 to 10.[10]

Measures of *perceived* influence or success are commonly used in interest groups scholarship (e.g. Heaney 2014; McKay 2012; Binderkrantz and Rasmussen 2015; Furlong and Kerwin 2005). For our purpose, this *subjective* measure of influence from the perspective of organizations themselves is a useful measure, because it can take the multiple channels of influence into account (cf. Dür 2008), rather than prioritizing some arenas (e.g. legislative acts), which would only capture a subset of outcomes for which timing might matter.[11] Importantly, while scarce, the few studies which rely on both preference attainment and self-perceived influence on similar issues conclude that there is no major difference when using either of the measures (Mahoney 2008; De Bruycker and Beyers 2019; Stevens and De Bruycker 2020). This is critical as it means that the self-estimation of influence may be subject to some noise, but is a valid proxy for the actual influence of organizations exerted through many channels of

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[9] In addition, checks for variance inflation based on Model 1 give a mean VIF of 1.45 and no noteworthy outliers.
[10] Appendix B gives an overview of the precise wording of all survey questions used to collect our data.
[11] We acknowledge that organizations may over- or underestimate their influence, yet, at the same time, we have no reasons to believe there are strong incentives in an anonymous survey to willingly misrepresenting an organization's influence.

lobbying (e.g. the executive, the legislature, the media, the bureaucracy), which groups themselves are likely to be aware of and capable of evaluating.

Operationalization of Independent Variable and Moderators

To assess evidence in support of our *main* hypothesis, we operationalize a 'first mover position' (*H1*) based on two survey questions that asked interest organizations when their political activities started to target Covid-19 related policies. We clarified in the survey that this includes policies related to health and safety measures, economic rescue packages, or easing of existing restrictions related to the pandemic. Specifically, we asked respondents to indicate the starting month (March, April, May) of their political activity, as well as the precise week (week 1 to 4) of the month in which their organization's activities started to target Coronavirus-related policies. Based on this, we construct a variable that ranges from 1 "First mover" (corresponding to the first week of March) to 5 "Late mover" (corresponding to movers starting their activities in April and- May), with roughly equal numbers of observations in each category (see Figures D1-D3 in Appendix D).

Given we are interested in the importance of the timing of lobbying on these policies, we exclude all organizations from the analysis that answered that they had "no activity on Coronavirus-related policies" (ca. 400 groups in the sample). In the main analyses, we treat this variable capturing mobilization in different weeks/months of this crisis as a reasonable *proxy* for the *continuous effect of time* on lobbying influence. However, we also show results in Appendix F, where we treat the variable as categorical.[12]

To test our first conditional hypothesis (H2), we measure an organization's *level of affectedness* on the basis of a survey question asking respondents to rate the extent to which

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[12] This shows that the early mover advantage becomes significant as soon as we compare first and third mover (p<0.05 or below for all subsequent comparisons to the first mover). Regarding the interactions, this analysis tentatively supports our findings. We see clear differences between *highly* and *less affected* second movers for examples, but else yet there are considerably larger confidence intervals, given we interact two categorical variables respectively.

the interests of their organization were 'more or less affected by the Coronavirus crisis, compared to other stakeholders' in the respective polity. In the survey, we used a five-point Likert scale ranging from 1 (much less affected) to 5 (much more affected). For the analysis, we grouped this into three categories: less affected, equally affected, and more affected, with comparable numbers of observations in each category.

For our second conditional hypothesis (H3), we measure *lobbying resources* as the number of full-time staff working in public affairs in the organization (cf. Mahoney 2008). We see this as a useful proxy that comes closest to measuring the mechanism we addressed in the theory section: Organizations with higher staff capacities for their political work can provide costly informational resources to policymakers and invest time in convincing and leading allies. To measure these policy-related staff resources, respondents were asked to place their organization in one of five categories, based on how many full-time staff members 'focus on political work, such as advocacy or public relations'. For the analysis, we grouped these into three categories: low (<1), medium (1-4) and high (>=5) lobbying staff resources. As Table C3 in the Appendix shows, we have between 23 and 43 percent of observations in each of these categories. Of course, our moderator variables - organizational resources and affectedness - might be correlated with timing. That is, more resourceful and affected interest groups are also more likely to move early. We address this potential problem of endogeneity in Appendix D and show that timing varies considerably at all levels of affectedness and resources. Our empirical strategy allows us, therefore, to disentangle the mechanisms of timing accounting for these factors.

Operationalization of Controls

In addition, we include three key control variables, which we expect to be related to both the timing of lobbying and perceived influence. First, we control for *organization type* to

distinguish between economic and social groups, which we expect to vary in the degree of mobilization problems they face (Olson 1965). *Economic organizations* include business associations, firms, professional organizations and unions, and think tanks working on economic issues. The category of *Non-Economic organizations* contains cause-centered groups, NGOs, citizen associations, and think tanks active on social issues. The classification of organization type is based on the respondent's answer to two survey questions to characterize the organization and its main (social or economic) focus. Second, we control for whether the organization enjoyed an insider status *before* the pandemic by taking *previous political ties* to policymakers into account. For this, we rely on the frequency of lobbying access before the Coronavirus crisis in form of "contact with politicians at any level of government". We use this information as a dummy variable, distinguishing organizations that had 'no or rare access' (0) from those that had 'at least monthly access' (1) to politicians. Third, we control for an organization's *age* in three intervals (<21 years, 21>years<50, >50 years), as this might affect the ease of mobilization and existing relationships to policymakers. Finally, we include fixed effects for *country*, hereby considering that the influence of interest groups may vary across countries.

Empirical analysis: First mover advantages in lobbying on Covid-19-related policies

We now turn to the multivariate analysis, presented in Table 1. We first test our main hypothesis (H1) on general first mover advantages in lobbying (Model 1). Second, we test two interaction effects with organization-level characteristics to probe our hypothesized mechanisms at the demand-side (H2) and supply-side (H3) in Models 2 and 3. In all models, we employ OLS regressions with country fixed effects. To account for heteroskedasticity in the residuals, we cluster standard errors by sector (list of sectors see Appendix C5) given that observations within a sector are unlikely to be independent.

Table 1: OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors.

	(Model 1)	(Model 2)	(Model 3)
Later Timing	-0.29***	-0.08	-0.29**
	(0.04)	(0.08)	(0.09)
Affectedness (BL: Less affected)			
Equally affected	0.41	1.05	0.42
	(0.27)	(0.62)	(0.28)
More affected	1.02**	2.01***	1.04**
	(0.27)	(0.44)	(0.27)
Staff Resources (BL: Low)			
Medium	0.62**	0.60**	0.76*
	(0.15)	(0.15)	(0.32)
High	1.35***	1.31***	1.03+
	(0.15)	(0.14)	(0.51)
Interactions			
Affectedness # Timing			
Equally affected # Timing		-0.20	
		(0.14)	
More affected # Timing		-0.32*	
		(0.11)	
Staff Resources # Timing			
Medium Resources # Timing			-0.05
			(0.09)
High Resources # Timing			0.12
			(0.15)
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.76**	0.76**	0.77**
	(0.19)	(0.19)	(0.19)
Previous Political ties (BL: No/rare access)			
At least monthly access	0.99***	0.99***	0.99***
	(0.14)	(0.14)	(0.14)
Org Age (BL: under 21 years)			
21-50 years	0.16	0.17	0.16
	(0.15)	(0.15)	(0.15)
more than 50	0.39*	0.40*	0.37*
	(0.17)	(0.16)	(0.16)
Constant	2.31***	1.63**	2.30***
	(0.47)	(0.53)	(0.52)
County Fixed effects	Yes	Yes	Yes
Number of Cases	960	960	960
Number of Countries	10	10	10
R-squared	0.24	0.25	0.25

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

All models include country fixed effects. Coefficients are omitted to limited table length, but reported in Table E1 in Appendix E.

We discuss the *main effect* first: do first movers in lobbying have an advantage over latecomers? Model 1 documents that this is clearly the case. There is a substantial and

significant (p=0.000) relationship between the timing of political activity and the influence these organizations have on political outcomes, according to their own evaluation. Based on Model 1, organizations which lobbied in the first week of March have a predicted self-assessed influence of 4.8 points on a scale of up to 10. This falls to 3.9 for organizations lobbying in the fourth week of March, and down to 3.6 for organizations starting to lobby only in April or May. Put differently, when holding an organization's affectedness, lobbying resources, type of organization, age and previous insider status constant, we see that organizations lobbying later consistently rate their perceived influence lower, with differences in timing making up for ca. 1.2 points on a scale from 0 to 10. This gives clear support for the main assertion of our paper as formulated by hypothesis 1: *Timing clearly matters for lobbying*.

This result is robust to different model specifications that take possible unobserved country-specific contextual factors into account. To account further for variation in policies between countries, Tables E4 and E5 show the results for groups of countries for which lockdown measures were introduced around the same time (IRE, FR, ITA, GER, AUT, DK - we use school closure as reference policy measure) and for the group of countries, which instead had a relatively late (and looser) lockdown (SE, UK, NL). The two groups of countries can be also understood in terms of strictness of lockdown measures, with the first group taking a tougher approach compared to the latter for the month of March to May (Hale et al. 2021). The fact that our results on the main effect of timing replicate within subsets of our data provides further evidence that the significant effect of early mobilization on lobbying influence is unlikely to be driven by contextual factors that our timing variable captures.

Furthermore, our results also show that timing does not matter equally for all organizations. In Models 2 and 3, we test two important conditional effects to see whether a first mover advantage is more beneficial for some organizations than others. First, we hypothesized that the *level of affectedness* by a new (set of) policy problem(s) should matter

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for actually benefiting from on a first mover advantage (H2), given that we expect policymakers to respond quite differently to more and less affected first movers. In general, we see in Models 1- 3 that highly affected organizations by the pandemic have significantly higher influence on Covid-related policies than less affected organizations (p<0.01 or below). Model 2, however, adds clear evidence for an interaction with timing: There is a significant negative interaction effect for more affected organizations (p=0.01). For organizations that are equally affected as an average stakeholder in the polity (compared to less affected) the interaction effect is not significant (p=0.169). The constituent term of timing becomes insignificant. What this suggests is that organizations that are not or hardly affected by (Covid-related) policies do not benefit from moving early on these issues. We plot these relationships in Figure 1, which displays the predicted relationship between a first (or later) mover position and lobbying influence for two groups: those with lower and higher affectedness by the pandemic. Predictions for average affected organizations not shown to ease interpretation.

Figure 1: Predictions of the Level of Lobbying Influence for Early to Late Movers by Level of Affectedness (based on Model 2), with 95% CIs.
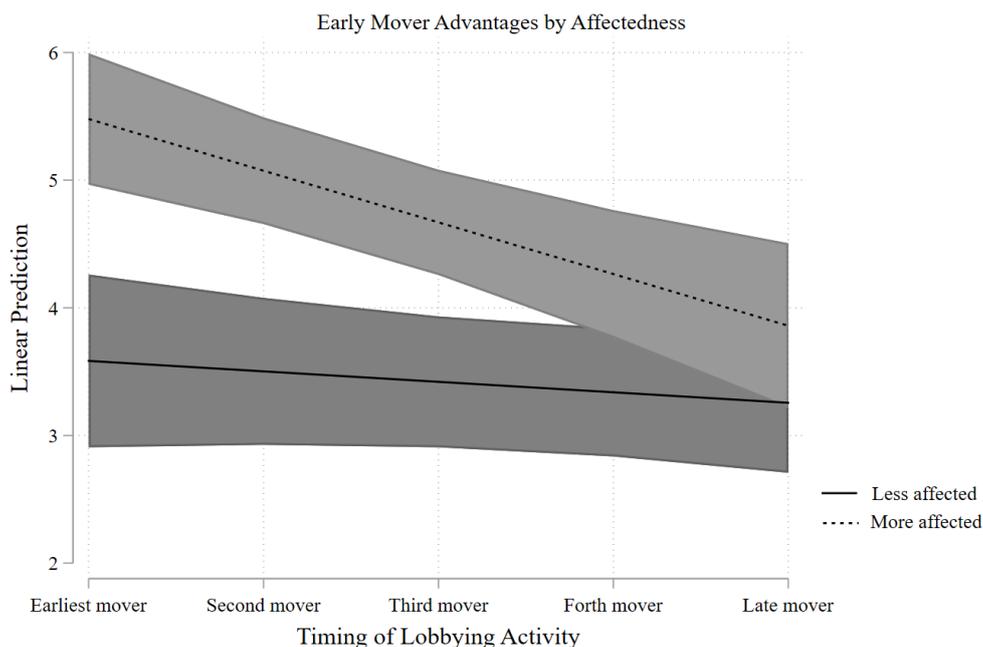
Figure 1 supports our interpretation of the interaction: We see that the predicted influence for less affected groups at different levels of timing (early to late movers) is basically a flat line: For groups that are less affected, moving early does not matter. In contrast, organizations which are highly affected by, in our case, the Coronavirus crisis, profit from a first mover advantage. These are predicted to reach significantly higher lobbying influence (based on Model 2) than highly affected late movers.[13]

Moreover, the effect of timing for affected organizations is quite substantial, considering that for highly affected *latecomers* there is no difference between more or less affected groups. This is a clear indication that a first mover advantage in lobbying is *conditional* on the interests at stake, and only holds for some organizations: in this case, those highly affected by the pandemic. This provides strong support for hypothesis H2, where the demand of policymakers filters out organizations that 'only' move swiftly, for instance for rent-seeking purposes, but are not really affected by the policy issue. Additionally, we observe that highly affected organizations lose out if they move late, in the sense that they lose the advantage stemming from their higher stakes in the policy issue and become indistinguishable from less affected organizations in terms of lobbying influence.

Second, we hypothesized that the *resources* groups have at their disposal matter for how much they profit from being a first mover (H3). Regarding staff size, Models 1 and 2 consistently show, that higher lobbying staff resources are associated with higher lobbying influence on Covid-19 related policies (p<0.01 or below). Looking at Model 3 to see whether resources interact with timing, no significant interaction effect is evident, and the constituent term of the timing of the lobbying activity remains significant and unchanged (p=0.008). To shed more light on the potential effect of lobbying staff resources on the relationship between

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[13] In Appendix F, Figure F1 we additionally plot the marginal effect of timing on highly affected compared to less affected organization. This plot supports our interpretation of Figure 1.

timing and influence, we plot the predicted levels of lobbying influence for early and late movers at different levels of resources in Figure 2.

Figure 2: Predictions of the Level of Lobbying Influence for Early to Late Movers by level of resources (based on Model 3), with 95% CIs

Early Mover Advantages by Lobbying Staff Resources
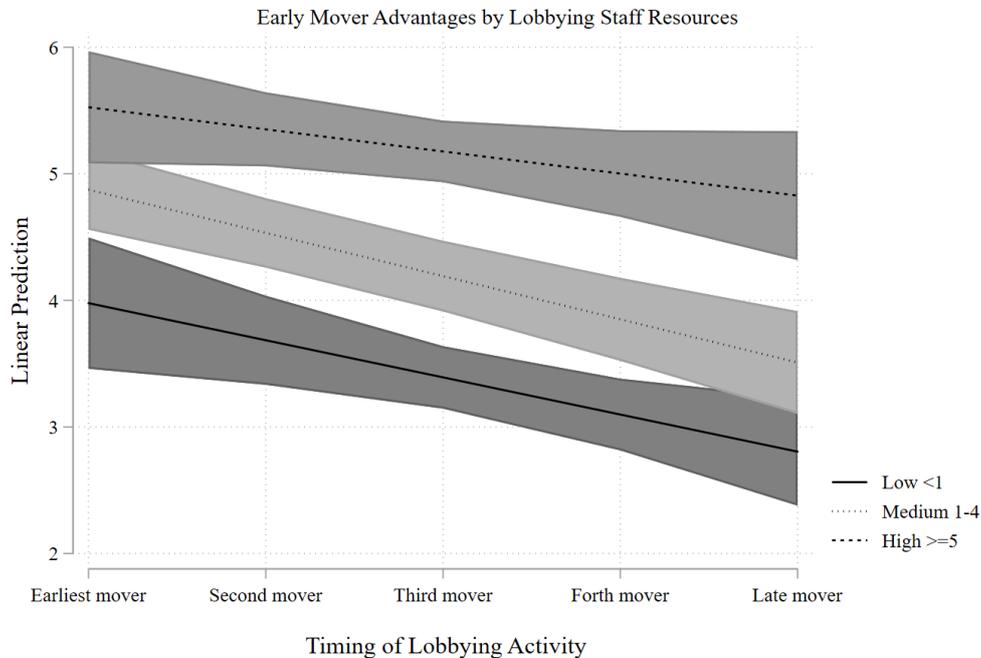
Interestingly, this gives tentative evidence that groups with high resources seem to profit *less* from a first mover advantage compared to groups with lower resources: the slope of the curve is less steep for highly resourceful organizations, for which there is actually no significant difference between predicted lobbying influence as the first or last mover. In contrast, for both organizations with the lowest and with medium staff resources there are significant differences between the predicted influence of early and late movers. This suggests, contrary to our expectation, that for those with *high* lobbying staff resources timing actually matters *less* than for less resourceful groups.

A potential explanation for this finding might be that those with sufficient staff resources to lobby can get meaningful access and influence *no matter when they lobby*. For less resourceful groups, however, moving earlier might actually pay off more, presumably

compensating for having fewer organizational resources. While more resourceful groups generally have higher predicted lobbying influence (p<0.05 in models 1, 3 and 4), less resourceful groups can seemingly catch up some of the gap by moving early. In fact, the difference between groups with high and medium resources becomes insignificant for the earliest movers but the curves clearly diverge significantly for late movers. Although tentative, this is a potentially consequential finding: moving early has the potential to be a 'weapon of the weak', given that less resourceful seem to benefit more from moving early than more resourceful groups. This challenges the classical link between organizational resources and collective action, adding a third factor, namely timing, which appears to lessen the extent to which resources facilitate influence on public policy.[14]

Finally, the *control* variables identify interesting additional findings. *Economic organizations* reach significantly higher perceived influence on the Coronavirus policy compared to non-economic groups (p<0.01). Second, groups which enjoyed an insider status (i.e. more frequent access to policymakers) before the Coronavirus crisis also enjoy more influence on Coronavirus-related policies compared to organizations which gained less access before the pandemic (p<0.001). Organizational age also matters for political influence, as organizations in existence for over 50 years have significantly higher perceived influence than organizations that have been in existence or 20 years or less (p<0.05). Finally, there is noteworthy variation across countries in terms of the perceived influence organizations have had on Covid-related policy outcomes, as we document in Appendix E, Table E1.

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[14] In Appendix F, Figure F2 we additionally plot the marginal effect of timing on organizations with high and medium lobbying resources, compared to less resourceful organizations. Unlike what we expected in H3, the plot for highly resourceful organisation has an upward slope. This sheds further light on our tentative conclusion that less resourceful organizations might benefit more from mobilizing early than highly resourceful organizations.

Conclusion: First come, best served?

In this paper, we explored whether what works for firms seeking early market entry, also works for interest groups seeking influence on public policy. Our analyses clearly show this is the case for Covid-19 related policies we studied across 10 polities in Europe: organizations lobbying earlier have significantly higher perceived influence on these policies than late movers.

However, we also found that not all organizations can profit equally from the benefits associated with being among the first. Our results show very clearly that *interest organizations that are highly affected* by a new (set of) policy problem(s) profit more from a first mover advantage than less affected organizations. Moreover, we find that resourceful organizations are associated with high lobbying influence irrespective of the timing of their activity. However, we also provide tentative evidence that *resource-poor organizations* can benefit from moving early and narrow the influence gap between them and more resourceful groups.

Our findings contribute to several important debates and raise crucial questions for further research on lobbying and public policy. In line with the state-of-the art existing literature, we acknowledge the importance of *organization-level* and *issue-level* factors for lobbying influence, as well as the potential importance of *political ties* and *active competition* (e.g. Leech 2010; Lowery 2013; Klüver 2013; Heaney 2014; Lorenz 2020; Dür et al. 2015). However, we add a focus on a temporal dimension to these dynamics. We hope that future studies of lobbying influence – as well as of access, or inside and outside strategies - can build on our *theory of first mover advantages in lobbying.*

Additional avenues for future research here also relate to our case. The Coronavirus pandemic is, in many ways, an exceptional situation with system-wide impact on the interest group system, and high incentives for all types of organizations to mobilize. Lobbying does, however, often happen in issue niches, which receive much less public and media attention,

with evident consequences for the likelihood of success of an organization's influence attempt. Nevertheless, we believe that our theory of first mover advantages in lobbying can translate to other less salient policy issues, also because recent work suggests that interest representation in Covid-19 times is comparable to non-crisis circumstance (Rasmussen 2020; Fraussen et al. 2020). At the same time, we expect that moving *late* or *early* may lead to different kinds of advantages in different circumstances, especially for actors that seek to protect the status quo. Previous research has documented important differences regarding the influence of interest groups on more or less salient issues (Mahoney 2008; Junk 2019; Rasmussen, Mäder, Reher 2018). It is an important follow-up question whether timing matters more, or less for influence in issue niches and whether, in such scenarios, moving late has its advantages.

Finally, it is important to underline the *normative* implications of our findings. Since we show that first movers have a clear advantage in lobbying, this raises another potential pathway of bias in interest representation and political influence. Organizations which face higher mobilization and collective action problems (cf. Olson 1965) cannot always act as swiftly, which might be a key hindrance for the political influence of marginalized groups. To address such bias, efforts of policymakers should focus on actively pulling such groups into the policy process at an early stage. On a positive note, our findings show that decision makers in Europe during the pandemic have been good at distinguishing between early movers that are more or less affected by the crisis. This documents forces at the demand-side that moderate the mere power of being the first in line in lobbying. We hope that future research will build on our study to explore these demand- and supply-mechanism further.

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Online Appendix

Appendix A: Details on Sampling in each polity

The general sample frame we used was to select a sample stratified by actor type to include ca. 150 business organisations, 150 public and ideational organisations, 150 professional organisations (limited by the number of actually existing unions in the country), and up to 150 trade unions. Moreover, we included 150 companies in each sample, which were added from the latest available lists of the largest companies in each country, when not already included in the several existing samples we relied on. Below we summarize the details on sampling in each country.

DK sample

The sample of Danish interest groups was drawn by building on data from the Danish Interarena project[15] (e.g. Binderkrantz, Christiansen, and Pedersen 2014, Binderkrantz, Christiansen, and Pedersen 2015, Binderkrantz, Christiansen, and Pedersen 2020). From this list of 3,819 organisations that captures the Danish interest group population in the year 2012, a stratified random sample was drawn with priority to the organisations that either had legislative or administrative access in order to increase comparability with other countries and focus on politically active organisations[16]. Along with the process of collecting contact information for this sample of the four actor types of interest (business organisations, profession organisations, identity or ideational organisations, and trade unions), the list of organisations was updated, so that name changes were registered, organisations that had stopped existing were removed, and those that had merged only included one time[17]. This resulted in a stratified random sample of ca. 150 business organisations, 150 profession organisations, 150 identity or ideational organisations, and over 120 trade unions. In order to add a sample of companies, we used a list of the 1,000 biggest companies in Denmark in 2019, according to the annual list published by the newspaper *Berlingske (2019)*. From this list, we

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[15] See also: http://interarena.dk/

[16] Only for professional organisations, a few actors needed to be sampled that did not have this access in order to fill our quotas.

[17] This means that the Danish sample only includes organisations that existed, or are based on organisations that existed, then. To address this shortcoming, we control for organisation age and include country fixed effects in our analyses.

drew the top 150 according to revenue, for which we could collect contact information. The resulting total sample included 739 organisations.

SE sample

The Swedish sample relies on a list of active interest groups that were in contact with all ministries in Sweden in 2011. This plausibly captures the population of politically active groups at that time (e.g. Naurin and Boräng 2012). From this list of 1,744 organisations, a stratified random sample of the group types under study was drawn. Like in the Danish case, the list was updated along with collecting contact information for the sampled actors, for instance to exclude organisations that do not exist anymore. The final sample conforms roughly to the quotas we set with 163 business organisations, 156 professional Organisations, 42 Unions and 146 public and identity groups. In addition, a set of ca. 150 companies was added by relying on a list of the top 500 companies in Sweden in 2018, according to the newspaper *Veckans Affärer* (VA 2018). Again, we sampled the top 150 firms by turnover for the survey. In total, 666 Swedish organisations were sampled.

IE sample

The Irish sample relies on the complete list of active interest groups registered on the publicly available *Irish Register of Lobbyists* for 2020 (SIPOC 2020). As registration is mandatory and enforcement of registration rules are deemed high, this captures the population of politically active groups at that time. From this list of 1,795 organisations, a stratified random sample of the group types under study was drawn. Like in all the other cases, the list was completed along with the collection of contact information for the person responsible for the organization's public affairs. The final sample confirms roughly to the quotas we set with 135 professional bodies and unions, 203 public interest groups and 179 business organizations. In addition, a set of 166 companies was added by relying on a list of the top 1,000 companies in Ireland in 2020, according to the newspaper The *Irish Times* (2020). Again, we sampled the top 150 firms by turnover for the survey. The total number of organisations is 683.

AT sample

The Austrian sample relies on the list of active interest groups registered on the publicly available *Austrian Register of Lobbyists* for 2020 (Justiz 2020). Although registration is mandatory, there were only 166 registered organization when our sample frame was

constructed. This number hardly represents the overall population of politically active interest groups in Austria. From this list of 166 organisations, a stratified random sample of the group types under study was drawn. Like in all the other cases, the list was completed along with the collection of contact information for the person responsible for the organization's public affairs. To reach the quotas we had set for this study, we retrieved the names and contact details of other organizations and unions from the website of the main umbrella organizations representing business, professional interests and labour. Austria is highly corporatists and interest representation of economic and professional interests is heavily centralised, that is, in the hands of a very few but broad and encompassing organizations. There are: two business associations, *Wirtschaftskammer Österreich* and the *Industriellen Verenigung*; one union confederation and a chamber of labour, the *Österreichische Gewerkschaftsbund* and the *Arbeiter Kammer*; nine professional associations; and two agricultural organizations. These centralize the activities of a complexity of suborganizations representing different professional categories and economic sectors. Consulting the websites of these umbrella organizations we managed to complete our list of business and professional organizations. The list of public organizations on the register of lobbyists was completed with a sample of organizations taken from the website of *Spendeninfo (2020*), an Austrian NGO which monitors and collects information about the status of the voluntary sector in Austria. The list of 150 companies was drawn from newspaper articles in *Die Presse (2009)* and *Forbes (2017).* These sampling efforts resulted in a list of 632 organisations for the Austrian case.

FR sample

The French sample relies on the complete list of active interest groups registered on the publicly available *Register of Transparency* for 2018 (HATVP 2018). As registration is mandatory and enforcement of registration rules are deemed high, this should capture the population of politically active groups at that time. From this list of more than 2,000 organisations, a stratified random sample of 655 organizations was drawn in April 2018. For these organizations, the contact information for the person responsible for the organization's public affairs was collected at the time. The final sample confirms roughly to the quotas we set for this study.

IT sample

The Italian database is constructed based on a combination of data sources (see: Pritoni 2019). Firstly, they decided to recur to a very broad list of Italian interest organisations as a starting

point: 'Guida Monaci' (GM n.d). In more detail, GM is a Business Information Company publishing periodic registers of Italian organisations and companies that operate in economic, social, cultural, professional, and public administration area. From this database firms were excluded (see below). As the 'Guidi Monaci' list is voluntary, two more sources of information were added: the 'Transparency Register' set up by the MISE (Italian Ministry of Economic Development) in October 2016; and all interest groups participating in a 'parliamentary hearing' (either in the Chamber of Deputies or in the Senate of the Republic) from the beginning of the XVII legislature (March 2013) and until the end of 2016. This led to a database of 1,277 interest groups from which a stratified sample was taken. Next to this list, we added the top 150 companies by revenue taken from *Report Aziende*, an open online portal managed by the Italian marketing and sales company *Consodata (2018).* In total, this sample of Italian organizations included 704 organisations.

NL sample

The Dutch sample is based on several databases. It relies on the member list of the *Dutch Association of Public Affairs* which represents the interests of public affairs professionals in the Netherlands (BVPA n.d.). In addition, it employs data from an interest group mapping endeavour carried out by Aizenberg and Hanegraaff (2020a, 2020b). These studies have sought to map the active organized interests in both parliament and the news media in a (validated) automated manner for which the register of the Netherlands Chamber of Commerce was employed. An additional search was done in attendance lists of public hearings of the Dutch House of Representatives between 2012 and 2014 ('Hoorzittingen en Ronde Tafel Gesprekken van (commissies van) de Tweede Kamer'). Next, a sample of organizations was included from the *Dutch Pyttersen's Almanak* 2013. This register contains 11,000 Dutch supra-local, non-profit organizations and institutions. This bottom–up approach guarantees the inclusion of citizen groups and associations with relatively low political involvement (Berkhout, Hanegraaff, and Braun 2018). Finally, we added the top 150 firms by turnover for the survey, if not yet included in any of the former databases. From the combinations of these lists, a stratified random sample was drawn for this survey leading to a list of 787 organizations.

DE sample

For the German sample, both the lobby register of the Bundestag (2020) as well as the register of the German Association for Public Affairs Professionals (Degepol n.d.) were employed.

Next to this, a random sample of organizations were selected from the *OECKL* directory, which provides a list of non-profit organizations and institutions. The inclusion of this database guarantees the inclusion of citizen groups and associations with different levels of political involvement. Finally, we added the top 150 firms by turnover for the survey, if not yet included in any former database. From this list, a stratified random sample was drawn for which we searched contact information. In total, this resulted in a sample of 565 organizations.

UK sample

The UK sample relies on a combination of data from the Transparency register (TI n.d.) and an interest group mapping endeavour carried out by Aizenberg and Hanegraaff (2020b). The former set is based on an overview of meetings held with both private and public organizations by both MPs and ranking officials within the ministries during a time span of 2012 and 2017. The second database of organized interests that gained access to the news media and is the product of a query-based search for which the register of Companies House (GOV.UK n.d.) was employed. Finally, the top 150 firms by turnover in GB were added to the sample, if not yet included in any former database. From these sources a stratified random sample was drawn in April 2018 and contact addresses were searched online. This resulted in a list of 570 organizations.

EU sample

For the EU, data collected by Crepaz and Hanegraaff (2020) was used; based on the European Transparency Register (Europa.eu 2020). The authors first downloaded all the all organizations registered in the Transparency register since the start of 2015. In 2016, based on this a random sample of 750 organizations were sampled and coded (type of organization, contact information, etc.). In a later wave, in 2018, an additional 1,000 organizations were coded. Combined, this led to a database of around 1,750 organizations; of which for 1,679 we could retrieve contact information at that time. Either a public affairs official or the director of the organization was send an invitation to participate in our survey. We rely on a larger final sample of ca 1400 organisations for the EU case to cover this large and diverse polity.

Appendix B: Survey implementation, Question wording and Answer Categories

The survey was conducted in the respective country language and in English for the EU sample. Three reminders were sent to participants in all countries in intervals of ca. 1-2 weeks. Where possible, the emails were addressed specifically to the employee in charge of public affairs, communications or political work.

For all variables included in the analysis, we here list the relevant question wording in the English template of the survey. Translations of these in the survey language can be made available upon request.

B.1 Question wording relevant for the operationalisation of timing

General Text:

We would also like to know if and when your political activity started to target Coronavirus-related policies. This includes health and safety measures, economic rescue packages, or easing of existing restrictions. Please indicate the starting month of your political activity.

Question number	Question Label	Answer Category
Q6	We would also like to know if and when your political activity started to target Coronavirus-related policies. This includes health and safety measures, economic rescue packages, or easing of existing restrictions.	March (1) April (2) May (3) No activity on Corona-related policies (4)

General Text:

Which week of the month?

Question number	Question Label	Answer Category
Q7	Which week of the month?	Week 1 (1) Week 2 (2) Week 3 (3) Week 4 (4)

B.2 Question wording relevant for the operationalisation of lobbying resources

General Text:

How many of these [refers to staff] *focus on political work, such as advocacy or public relations?*

Question number	Question Label	Answer Category

Q22	How many of these focus on political work, such as advocacy or public relations?	1 or less (e.g. one part-time) (1) 1 - 4 (2) 5 - 10 (3) 11 - 15 (4) More than 15 (5)

B.3 Question wording relevant for the operationalisation of Organisation Type

General Text:

Which of the following categories best describes your organisation?

Question number	Question Label	Answer Category
Q24	Which of the following categories best describes your organisation?	Company or firm (1) Business interest association (2) Association of professionals (3) Labour union (4) NGO or cause group (e.g. active on environmental protection, development aid, anti-discrimination, etc.) (5) Citizen membership association, such as consumer association or patient group (6) Research institute, think tank, or semi-public organisation (7)

General Text (only for think tanks)

Active on social or economic issues?

Question number	Question Label	Answer Category
Q25	Active on social or economic issues?	Social (1) Economic (2)

B.4 Question wording relevant for the operationalisation of affectedness

General Text:

Are the interests of your organisation, in your view, more or less affected by the Coronavirus crisis, compared to other stakeholders in [country]? The interests of my organisation are...

Question number	Question Label	Answer Category

Q13	Are the interests of your organisation, in your view, more or less affected by the Coronavirus crisis, compared to other stakeholders in [country]?	Much less affected (1) Less affected (2) Equally affected (3) More affected (4) Much more affected (5)

B.5 Question wording relevant for the operationalisation of perceived influence

General Text:

How would you rate the impact of your organisation on political decisions related to the Coronavirus crisis?

Question number	Question Label	Answer Category
Q20	How would you rate the impact of your organisation on political decisions related to the Coronavirus crisis?	Slider (0 = no impact at all; 10 very high impact)

B.6 Question wording relevant for the operationalisation of organization age

General Text:

How long has your organisation been in existence?

Question number	Question Label	Answer Category
Q23	How long has your organisation been in existence?	Less than 5 years (1) 5 - 10 years (2) 11 - 20 years (3) 21 - 50 years (4) 51 - 100 years (5) More than 100 years (6)

B.7 Question wording relevant for the operationalisation of previous ties to policymakers

General Text:

Before the Coronavirus crisis, how often did your organisation, on average, have access to public or political debates in the following ways? Please rate each activity using the below table.

Question number	Question Label	Answer Category
Q11_2	My organisation has contact with politicians at any level of government	Never (1) Less than once a month (2) Once a month (3) Once a week (4) Almost on a daily basis (5)

Note: Q11_2 modified to apply to EU case and saved as Q11_2_EU (My organisation has contact with politicians in national government about EU affairs)

Appendix C: Overview of Responses and their distribution

Table C1: Overview of surveys sent and completed per country

	Surveys Sent	Completed	Response Rate in %
DK	730	304	41.6
SE	650	225	34.6
IR	652	175	26,8
NL	700	161	23.0
DE	549	97	17.7
AT	617	95	15.4
EU	1407	207	14.7
IT	640	80	12.5
FR	617	53	8.6
UK	511	37	7. 2
Total	6343	1434	22,6

Note: minor discrepancies with the originally sampled number of organisations described in Appendix A are due to expired or incorrect contact details, i.e. undeliverable emails.

Table C2. Responses across actor types by country (absolute numbers and share in %)

	Business Organisations & Firms	Profession Organisation & Labour Unions	NGOs & citizen groups	Total
Denmark	107	135	67	309
	34.63	43.69	21.68	100.00
Sweden	62	112	52	226
	27.43	49.56	23.01	100.00
Germany	45	15	32	92
	48.91	16.30	34.78	100.00
Ireland	65	41	71	177
	36.72	23.16	40.11	100.00
Italy	16	29	38	83
	19.28	34.94	45.78	100.00
Netherlands	78	49	36	163
	47.85	30.06	22.09	100.00
Austria	25	35	36	96
	26.04	36.46	37.50	100.00
France	29	14	10	53
	54.72	26.42	18.87	100.00
UK	14	11	11	36
	38.89	30.56	30.56	100.00
EU	72	32	98	202
	35.64	15.84	48.51	100.00
Total	513	473	451	1,437

| | 35.70 | 32.92 | 31.38 | 100.00 |

Table C3: Responses by Staff Resources on Political Work

Country	Low Staff Resources (<1)	Medium Staff Resources (1-4)	High Staff Resources (>=5)	Total
Denmark	101	133	70	304
	33.22	43.75	23.03	100.00
Sweden	101	96	33	230
	43.91	41.74	14.35	100.00
Germany	18	36	40	94
	19.15	38.30	42.55	100.00
Ireland	74	73	25	172
	43.02	42.44	14.53	100.00
Italy	11	45	24	80
	13.75	56.25	30.00	100.00
Netherlands	67	63	31	161
	41.61	39.13	19.25	100.00
Austria	30	28	39	97
	30.93	28.87	40.21	100.00
France	26	16	12	54
	48.15	29.63	22.22	100.00
UK	5	20	11	36
	13.89	55.56	30.56	100.00
EU	51	106	48	205
	24.88	51.71	23.41	100.00
Total	484	616	333	1,433
	33.78	42.99	23.24	100.0

Table C4: Responses by Affectedness

Country	Much less affected	Less affected	Equally affected	More affected	Much more affected	Total
Denmark	13	49	122	85	52	321
	4.05	15.26	38.01	26.48	16.20	100.00
Sweden	17	39	92	52	45	245
	6.94	15.92	37.55	21.22	18.37	100.00
Germany	7	25	32	19	15	98
	7.14	25.51	32.65	19.39	15.31	100.00
Ireland	3	19	58	48	48	176
	1.70	10.80	32.95	27.27	27.27	100.00
Italy	9	16	37	15	8	85
	10.59	18.82	43.53	17.65	9.41	100.00
Netherlands	27	35	64	28	14	168
	16.07	20.83	38.10	16.67	8.33	100.00
Austria	7	18	28	29	20	102
	6.86	17.65	27.45	28.43	19.61	100.00
France	6	14	25	10	2	57
	10.53	24.56	43.86	17.54	3.51	100.00
UK	0	7	12	14	6	39
	0.00	17.95	30.77	35.90	15.38	100.00
EU	15	47	76	42	32	212
	7.08	22.17	35.85	19.81	15.09	100.00
Total	104	269	546	342	242	1,503
	6.92	17.90	36.33	22.75	16.10	100.00

List C5: List of sectors (clustered standard errors)

1) Agriculture, forestry and fishing
2) Manufacturing
3) Electricity, gas, steam and air conditioning supply, water & mining
4) Construction
5) Transportation and storage & Hospitality/Accommodation and food service activities;
6) Information and communication & Financial and insurance activities & Real estate activities
7) Education
8) Human health and social work activities
9) Arts, entertainment & Culture & Sport & Leisure
10) Environment and animal rights;
11) Development and aid & Human rights;
12) Wholesale and retail trade & Consumers.
13) Other

Appendix D: Summary Statistics and Descriptive Overviews

Table D1: Summary of Variables in Final sample for the analysis (i.e. of organizations that have mobilised on Covid-19 related policies)

Variable	Obs	Mean	Std. Dev.	Min	Max
Perceived Influence	960	4.23	2.74	0	10
Later Timing (First Mover)	960	2.91	1.36	1	5
Affecteness (Less Affected)					
Equally affected	960	.34	.47	0	1
More affected	960	.46	.50	0	1
Lobbying Resources (Low)					
Medium	960	.48	.50	0	1
High	960	.25	.43	0	1
Org. Type (Non-economic)					
Economic	960	.69	.46	0	1
Previous ties (No/rare access)					
At least monthly access	960	.44	.50	0	1
Organization age (<21)					
21-50 years	960	.33	.47	0	1
more than 50 years	960	.43	.50	0	1
Country (Denmark)					
Sweden	960	.16	.40	0	1
Germany	960	.07	.25	0	1
Ireland	960	.13	.33	0	1
Italy	960	.07	.25	0	1
Netherlands	960	.10	.30	0	1
Austria	960	.06	.24	0	1
France	960	.03	.18	0	1
UK	960	.028	.17	0	1
EU	960	.14	.34	0	1

Table D2: Correlation Matrix, n=960

	timing	aff_cat1	aff_cat2	aff_cat3	insider gov	orgtyp ebin	lobres _cat1	lobres _cat2	lobres _cat3	age_ca t1	age_ca t2	age_ca t3
timing	1.00											
aff_cat1	0.13	1.00										
aff_cat2	0.08	-0.36	1.00									
aff_cat3	-0.18	-0.46	-0.67	1.00								
insidergov	-0.11	-0.03	-0.01	0.03	1.00							
orgtypebin	-0.19	0.01	-0.02	0.01	-0.01	1.00						
lobres_cat1	0.10	0.01	0.06	-0.06	-0.28	0.05	1.00					
lobres_cat2	0.00	-0.02	0.00	0.02	0.01	-0.06	-0.59	1.00				
lobres_cat3	-0.11	0.02	-0.06	0.04	0.28	0.02	-0.35	-0.55	1.00			
age_cat1	0.13	0.11	-0.04	-0.05	-0.04	-0.06	0.11	-0.02	-0.10	1.00		
age_cat2	0.03	-0.03	0.04	-0.01	-0.02	-0.14	0.05	-0.01	-0.04	-0.39	1.00	
age_cat3	-0.14	-0.07	0.00	0.06	0.05	0.18	-0.14	0.02	0.12	-0.48	-0.62	1.00

Figure D1: Distribution of the Timing of Mobilization
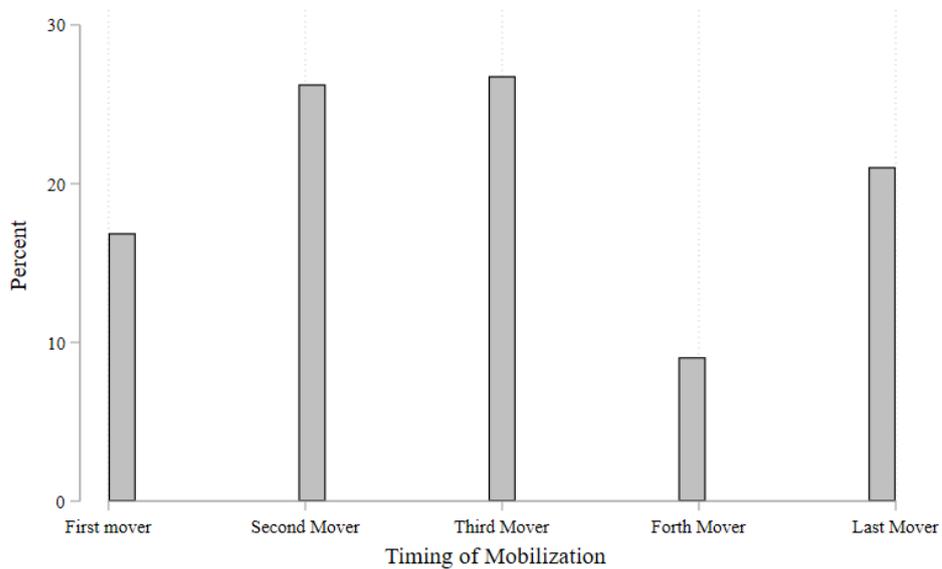
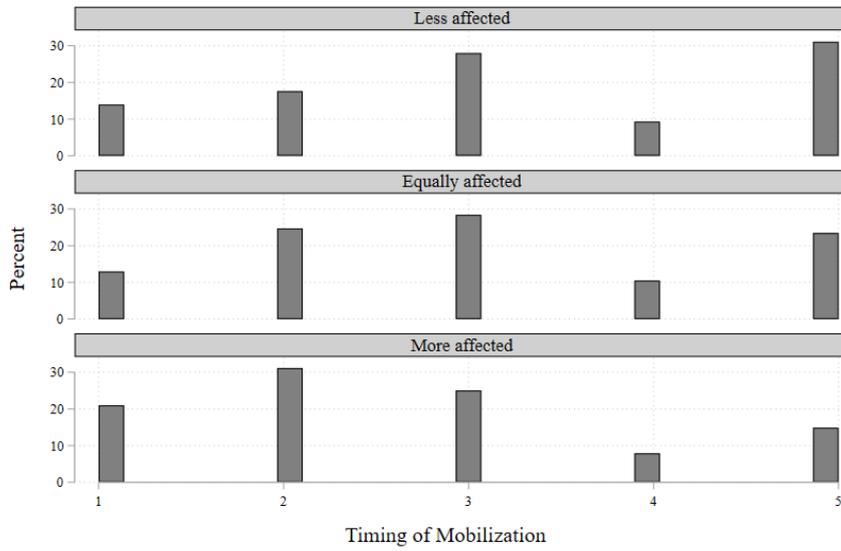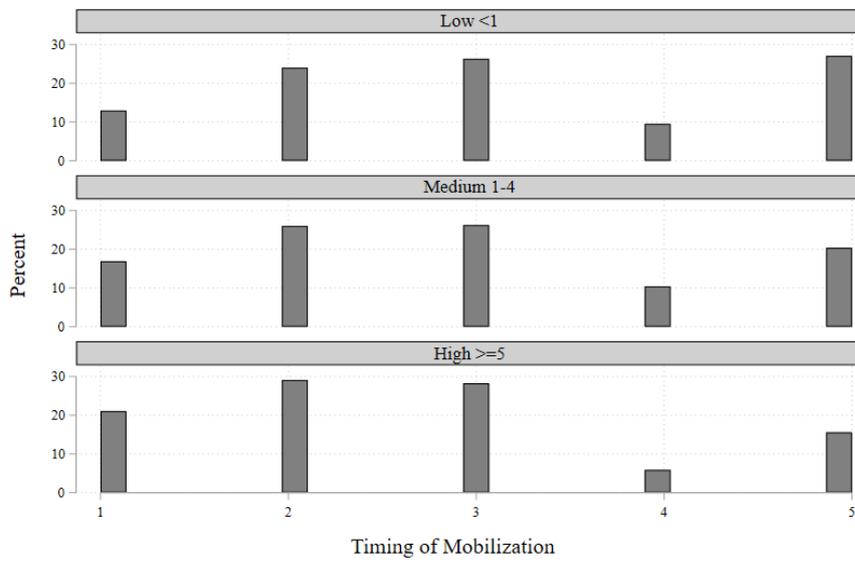*Figure D2: Distribution of the Timing of Mobilization by Level of Affectedness*

Figure D3: Distribution of the Timing of Mobilization by Level of Resources

Appendix E: Further Analysis Details & Robustness checks

Table E1 presents the identical analyses as Table 1 in the main article, but includes country coefficients, which are only omitted from the main article to limit table length. It indicates that there is some polity variation in the levels of perceived influence: Higher levels of influence were reported by interest groups in Ireland, Italy, and the Netherlands (compared to Denmark).

*Table E1: OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors – **showing country coefficients***

	(Model 1)	(Model 2)	(Model 3)
Later Timing	-0.29***	-0.08	-0.29**
	(0.04)	(0.08)	(0.09)
Staff Resources (BL: Low)			
Medium	0.62**	0.60**	0.76*
	(0.15)	(0.15)	(0.32)
High	1.35***	1.31***	1.03+
	(0.15)	(0.14)	(0.51)
Affectedness (BL: Less affected)			
Equally affected	0.41	1.05	0.42
	(0.27)	(0.62)	(0.28)
More affected	1.02**	2.01***	1.04**
	(0.27)	(0.44)	(0.27)
Interactions			
Staff Resources # Timing			
Medium Resources # Timing			-0.05
			(0.09)
High Resources # Timing			0.12
			(0.15)
Affectedness # Timing			
Equally affected # Timing		-0.20	
		(0.14)	
More affected # Timing		-0.32*	
		(0.11)	
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.76**	0.76**	0.77**
	(0.19)	(0.19)	(0.19)
Previous Political ties (BL: No/rare access)			
At least monthly access	0.99***	0.99***	0.99***
	(0.14)	(0.14)	(0.14)
Org Age (BL: under 21 years)			
21-50 years	0.16	0.17	0.16
	(0.15)	(0.15)	(0.15)
more than 50	0.39*	0.40*	0.37*
	(0.17)	(0.16)	(0.16)
Country (BL: Denmark)			
Sweden	-0.01	-0.02	-0.01
	(0.23)	(0.24)	(0.23)
Germany	-0.31	-0.34	-0.32
	(0.31)	(0.32)	(0.31)

Ireland	1.78**	1.78**	1.76**
	(0.46)	(0.47)	(0.45)
Italy	0.86*	0.90*	0.88*
	(0.32)	(0.30)	(0.33)
Netherlands	0.58*	0.62*	0.58*
	(0.25)	(0.25)	(0.25)
Austria	-0.46	-0.45	-0.48
	(0.53)	(0.56)	(0.52)
France	1.28+	1.27+	1.28+
	(0.60)	(0.61)	(0.60)
UK	0.33	0.35	0.34
	(0.39)	(0.41)	(0.39)
EU	0.09	0.09	0.08
	(0.40)	(0.40)	(0.39)
Constant	2.31***	1.63**	2.30***
	(0.47)	(0.53)	(0.52)
Fixed Effects for Countries	Yes	Yes	Yes
Number of Cases	960	960	960
Number of Countries	10	10	10
R-squared	0.24	0.25	0.25

+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

*Table E2: **Analyses excluding low response countries (Italy, France, UK)** - OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors –*

	(Model 1)	(Model 2)	(Model 3)
Later Timing	-0.29***	-0.12	-0.31*
	(0.05)	(0.10)	(0.10)
Affectedness (BL: Less affected)			
Equally affected	0.30	0.55	0.32
	(0.29)	(0.88)	(0.30)
More affected	1.00***	1.94**	1.02***
	(0.22)	(0.49)	(0.22)
Resources (Low)			
Medium 1-4	0.57**	0.56**	0.57
	(0.17)	(0.16)	(0.36)
High >=5	1.43***	1.40***	1.16*
	(0.18)	(0.17)	(0.52)
Interactions			
Affectedness # Timing			
Equally affected # Timing		-0.07	
		(0.21)	
More affected # Timing		-0.31*	
		(0.12)	
Resources # Timing			
Medium Resources # Timing			0.00
			(0.10)
High Resources # Timing			0.10
			(0.16)
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.70**	0.70**	0.70**
	(0.18)	(0.19)	(0.18)
Previous ties (BL: No/rare access)			
At least monthly access	0.99***	1.00***	0.99***
	(0.14)	(0.14)	(0.14)
Org. Age (BL: < 21 years)			
21-50 years	-0.02	-0.01	-0.02
	(0.17)	(0.17)	(0.17)
more than 50	0.26	0.27	0.25
	(0.18)	(0.17)	(0.18)
Constant	2.51***	1.97**	2.57***
	(0.40)	(0.59)	(0.48)
Fixed effects for Countries	Yes	Yes	Yes
Number of Cases	837	837	837
Number of Countries	7	7	7
R-squared	0.24	0.25	0.24

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

All models include fixed effects for polities. Coefficients are omitted to limited table length

*Table E3: **Treating timing as a categorical variable -** OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors –*

	(Model 1)	(Model 2)	(Model 3)
Timing (BL: First mover)			
Second mover	-0.07	-1.09+	-0.13
	(0.19)	(0.59)	(0.62)
Third mover	-0.50*	-0.67	-0.90+
	(0.21)	(0.75)	(0.43)
Forth mover	-1.24**	-1.33+	-1.17**
	(0.29)	(0.64)	(0.29)
Late mover	-0.97***	-0.68	-1.07*
	(0.19)	(0.46)	(0.36)
Affectedness (BL: Less affected)			
Equally affected	0.41	0.22	0.43
	(0.28)	(0.66)	(0.27)
More affected	1.02**	0.85	1.05**
	(0.28)	(0.54)	(0.28)
Resources (BL: Low)	0.00	0.00	0.00
Medium	0.63***	0.60**	0.72
	(0.14)	(0.15)	(0.43)
High	1.34***	1.30***	0.72
	(0.15)	(0.14)	(0.53)
Interactions			
Affectedness # Timing			
Second mover # Equally affected		1.10	
		(0.63)	
Second mover # More affected		1.22	
		(0.74)	
Third mover # Equally affected		0.12	
		(0.82)	
Third mover # More affected		0.28	
		(0.78)	
Forth mover # Equally affected		0.24	
		(0.88)	
Forth mover # More affected		-0.02	
		(0.68)	
Late mover # Equally affected		-0.23	
		(0.66)	
Late mover # More affected		-0.70	
		(0.43)	
Resources # Timing			
Second mover # Medium 1-4			-0.24
			(0.73)
Second mover # High >=5			0.56
			(0.88)
Third mover # Medium 1-4			0.16
			(0.58)
Third mover # High >=5			1.18
			(0.68)
Forth mover # Medium 1-4			-0.54

			(0.59)
Forth mover # High >=5			0.81
			(0.57)
Late mover # Medium 1-4			-0.13
			(0.43)
Late mover # High >=5			0.48
			(0.62)
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.76**	0.75**	0.77**
	(0.19)	(0.19)	(0.19)
Previous ties (BL: No or rare access)			
At least monthly access	0.98***	0.99***	1.00***
	(0.14)	(0.14)	(0.14)
Org. Age (BL: <21 years)			
21-50 years	0.13	0.16	0.11
	(0.13)	(0.13)	(0.14)
more than 50	0.39*	0.40*	0.36*
	(0.17)	(0.16)	(0.16)
Constant	1.92**	2.10*	2.04***
	(0.48)	(0.69)	(0.45)
Fixed effects for Countries	Yes	Yes	Yes
Number of Cases	960	960	960
Number of Countries	10	10	10
R-squared	0.25	0.26	0.25

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

All models include fixed effects for polities. Coefficients are omitted to limited table length

Figure E1: Predictions of the Level of Lobbying Influence for Early to Late Movers by Level of Affectedness (based on Model 2, Table E2), with 95% CIs. Treating timing as a quasi-categorical variable
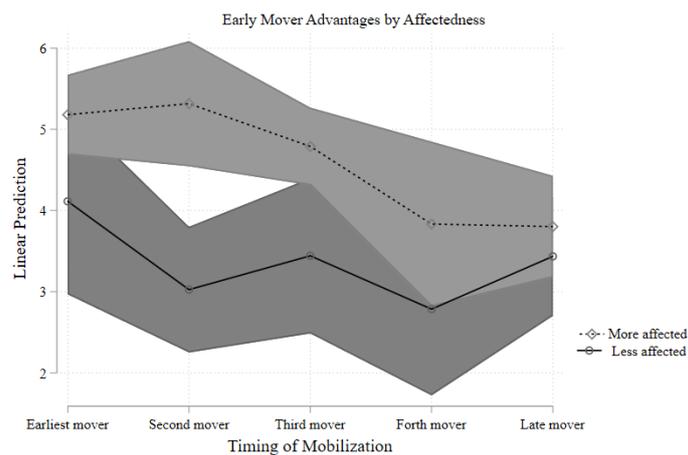

Figure E2: Predictions of the Level of Lobbying Influence for Early to Late Movers by level of resources (based on Model 3, Table E2), with 95% CIs. Treating timing as a quasi-categorical variable
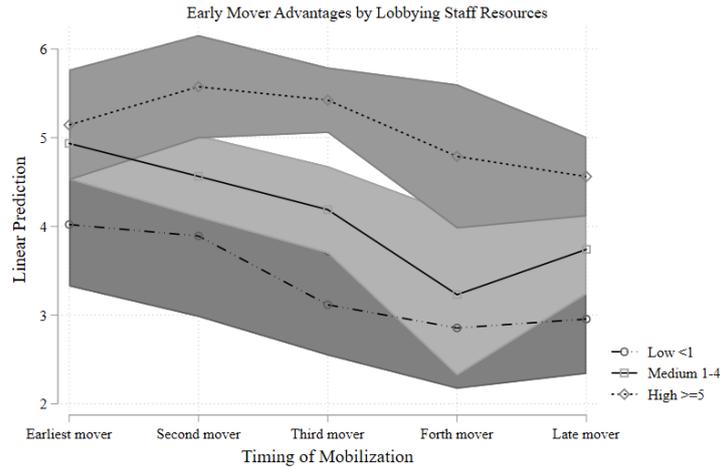
Early Mover Advantages by Lobbying Staff Resources

*Table E4: **Countries that introduced lockdown early and around the same time (ITA, IRE, AUT, GER, DK, FR[18]) - OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors –***

	(Model 1)	(Model 2)	(Model 3)
Later Timing	-0.37***	-0.13	-0.36*
	(0.06)	(0.11)	(0.16)
Affectedness (BL: Less affected)			
Equally affected	0.54+	1.61*	0.56+
	(0.29)	(0.55)	(0.28)
More affected	1.26**	2.15**	1.28**
	(0.36)	(0.53)	(0.35)
Resources (Low)			
Medium 1-4	0.52**	0.49**	0.81
	(0.14)	(0.13)	(0.47)
High >=5	1.24***	1.20***	0.92
	(0.23)	(0.23)	(0.70)
Interactions			
Affectedness # Timing			
Equally affected # Timing		-0.34*	
		(0.15)	
More affected # Timing		-0.29+	
		(0.16)	
Resources # Timing			
Medium Resources # Timing			-0.10
			(0.14)
High Resources # Timing			0.13
			(0.22)
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.61**	0.60**	0.62**
	(0.15)	(0.16)	(0.15)
Previous ties (BL: No/rare access)			

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[18] In these countries, decisions about major lockdown measures such as the closure of schools were taken before March 16th.

	(Model 1)	(Model 2)	(Model 3)
At least monthly access	0.91***	0.91***	0.90**
	(0.21)	(0.21)	(0.21)
Org. Age (BL: < 21 years)			
21-50 years	0.54+	0.57+	0.57+
	(0.30)	(0.30)	(0.29)
more than 50	0.63+	0.64+	0.62*
	(0.30)	(0.30)	(0.28)
Country (BL: Denmark)			
Germany	-0.21	-0.23	-0.21
	(0.32)	(0.35)	(0.32)
Ireland	1.75**	1.77**	1.72**
	(0.45)	(0.45)	(0.44)
Italy	0.87*	0.89*	0.90*
	(0.31)	(0.30)	(0.31)
Austria	-0.41	-0.39	-0.44
	(0.55)	(0.57)	(0.52)
France	1.37*	1.35*	1.35*
	(0.60)	(0.62)	(0.61)
Constant	2.34***	1.58**	2.28***
	(0.35)	(0.37)	(0.44)
Fixed effects for Countries	Yes	Yes	Yes
Number of Cases	549	549	549
Number of Countries	6	6	6
R-squared	0.27	0.28	0.27

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table E5: **Countries that introduced lockdown late (SE, UK, NL[19])** *- OLS regressions explaining organizations' perceived influence on Coronavirus-related policies; with fixed effects for country and clustered standard errors for 13 different sectors –*

	(Model 1)	(Model 2)	(Model 3)
Later Timing	-0.32***	-0.42*	-0.38***
	(0.05)	(0.16)	(0.08)
Affectedness (BL: Less affected)			
Equally affected	0.24	-0.24	0.29
	(0.40)	(1.22)	(0.42)
More affected	0.99*	0.45	1.06*
	(0.39)	(1.03)	(0.41)
Resources (Low)			
Medium 1-4	0.64+	0.64+	0.44
	(0.32)	(0.32)	(0.70)
High >=5	1.20**	1.25**	0.12
	(0.31)	(0.33)	(0.58)
Interactions			
Affectedness # Timing			
Equally affected # Timing		0.12	
		(0.23)	

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[19] In these countries, decisions about major lockdown measures such as the closure of schools were taken later compared to other countries. In the Netherlands, for example, the government decision to close schools was taken on April 6th. While in the UK this happened earlier (20th of March), in Sweden such decision was not taken at all.

More affected # Timing		0.15	
		(0.21)	
Resources # Timing			
Medium Resources # Timing			0.04
			(0.13)
High Resources # Timing			0.37+
			(0.18)
Controls			
Org. Type (BL: Non-economic)			
Economic groups	0.56*	0.56*	0.53*
	(0.22)	(0.22)	(0.24)
Previous ties (BL: No/rare access)			
At least monthly access	1.10*	1.09*	1.15**
	(0.37)	(0.37)	(0.35)
Org. Age (BL: < 21 years)			
21-50 years	-0.52	-0.50	-0.54
	(0.37)	(0.38)	(0.37)
more than 50	0.36	0.36	0.35
	(0.30)	(0.30)	(0.30)
Country (BL: Sweden)			
Netherlands	0.75**	0.71**	0.75**
	(0.20)	(0.22)	(0.19)
UK	0.55	0.55	0.52
	(0.38)	(0.36)	(0.38)
Constant	2.66***	3.04*	2.88**
	(0.53)	(1.02)	(0.69)
Fixed effects for Countries	Yes	Yes	Yes
Number of Cases	332	332	332
Number of Countries	3	3	3
R-squared	0.32	0.33	0.33

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Appendix F: Additional Interaction Plots

Figure F1: Marginal Effect of Timing on Perceived Influence for Highly Affected Organizations compared to Less Affected Organizations (based on Model 2, Table 1, main article), with 95%

Early Mover Advantages by Affectedness: Higher compared to Less Affected Organizations
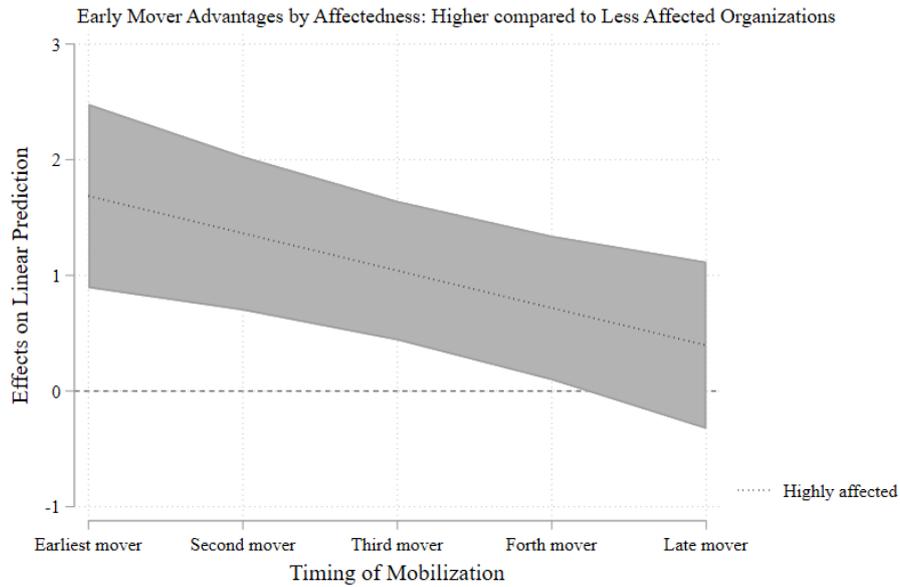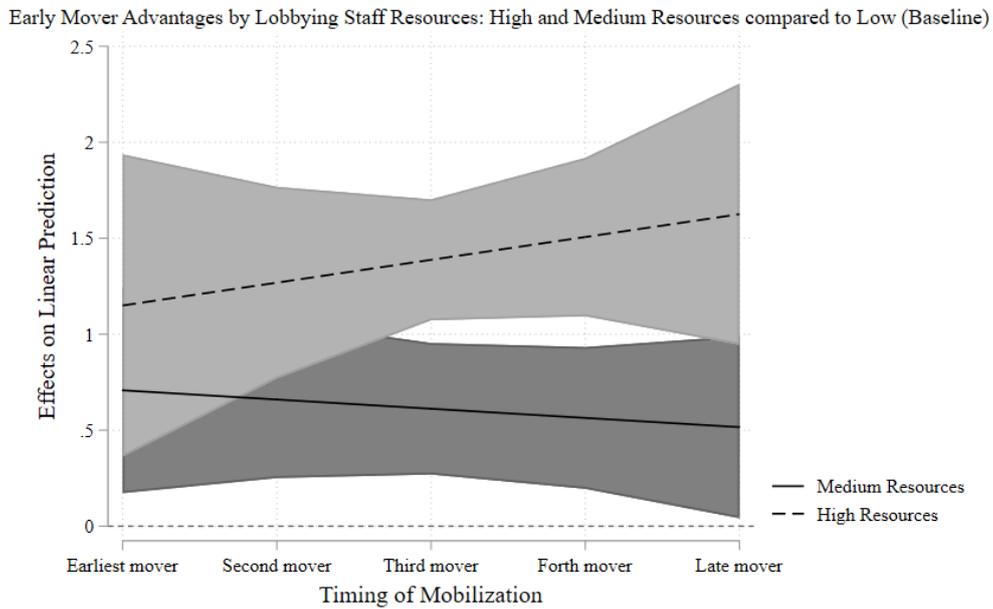
Figure F2: Marginal Effect of Timing on Perceived Influence for High and Medium Resourceful Organizations compared to Organizations with Low Resources (based on Model 3, Table 1, main article), with 95%

Early Mover Advantages by Lobbying Staff Resources: High and Medium Resources compared to Low (Baseline)

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