FOLLOW-MY-LEADER

HOW CAN WE EXPLAIN DIFFERENCE IN OECD COUNTRIES' DISEASE PREVENTION POLICIES?

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Why and *how* countries initiate policies aimed to mitigate COVID-19 disease transmission is a key issue for decision makers and anyone affected by these policies. This article analyzes the adoption timing of various disease prevention policies across the OECD during the spring of 2020 and discusses these patterns as an example of public officials' decision making under time pressure and extreme uncertainty.

Following the COVID-19 outbreak, unprecedented policy decisions have been implemented by countries worldwide to slow the spread of the contagious SARS-CoV-2 virus. These policies generally focus on increasing social distancing among citizens and range from public health recommendations and information campaigns to radical restrictions on citizens' movement and behavior, including school and workplace closures, travel and transportation restrictions, curfews and quarantines. Most COVID-19 disease prevention policies have since been rolled back in many countries but are likely to remain in policy-makers' toolboxes for a 'second wave' of the virus, as well as for future pandemics. It is thus of vital interest to decisions makers at large to ponder why and how such policies were enacted in their country, region and domain of interest, and the effectiveness of various policies in preventing the spread of the infections disease.

A comprehensive study we carried out during the spring reveals some interesting patterns of when various COVID-19 disease prevention policies were enacted among OECD countries. A key finding is that countries seem to have engaged in a game of follow-my-leader, where one country based its policy decisions on the policy decisions of their neighbours. We discuss the reasons for such decision making, how it differs across countries with various government structures, and what top decisions makers can learn from this.

Why did countries adopt very different COVID-19 disease prevention policies at different points in time?

While medical researchers and public decision makers struggle to understand and handle questions related to the effectiveness of these policy measures, a key task for social scientists is to explain why decision makers in states responded the way they did during the early outbreak of the pandemic.

There are of course many explanations for why there is variation between countries in their implementation of COVID-19 transmission mitigation policies, most obviously that they were differently exposed to the virus at specific points in time. Countries also differ in their underlying public health conditions, and as such have varying degrees of sensitivity to an outbreak, which in addition may affect their ability to handle the spread. Given this heterogeneity, country-specific policies are needed. A long tradition in research on decision making, however, shows that also less obvious factors can play an important role – especially under conditions of uncertainty [1].

We know from studies on e.g. radical innovations, policies, and corporate reporting standards that when the effect of important but costly decisions are highly uncertain, decision makers often do what others do, meaning that implementation is often guided by emulation. One motivation is that the action taken by similar decision makers provides cues for learning – perhaps those decision-makers know something that one does not yet know oneself? Another motivation may be the fear of becoming 'a laggard' that fails to implement potentially life-saving policies at an appropriate time. Faced with an uncertain evidence base regarding the actual transmission and fatality rates of the COVID-19 virus, and a limited evidence base surrounding policy efficacy in differing contexts, public health authorities and governments have been faced with the necessity to decide rapidly whether to enact or abstain from policy options with uncertain trade-offs.

Given these complexities, it could be expected that each country would evaluate the timing by which they introduce such interventions carefully and tailor the exact timing to its specific needs. It is therefore surprising to see how homogenous countries have been in the timing

of the adoption of policies applied to the whole country. Figure 1 shows that four out of five standard policies (cancellations of public events and gatherings, school closures, workplace closures and restrictions on internal mobility) spread to about 80 percent of the OECD countries within a period of two weeks in March. Given how different these countries are in terms of the preparedness of their health care systems, their population demography, and the degree to which the pandemic had taken hold in the county at this time, it is striking how similar they are in the timing of policy adoption.
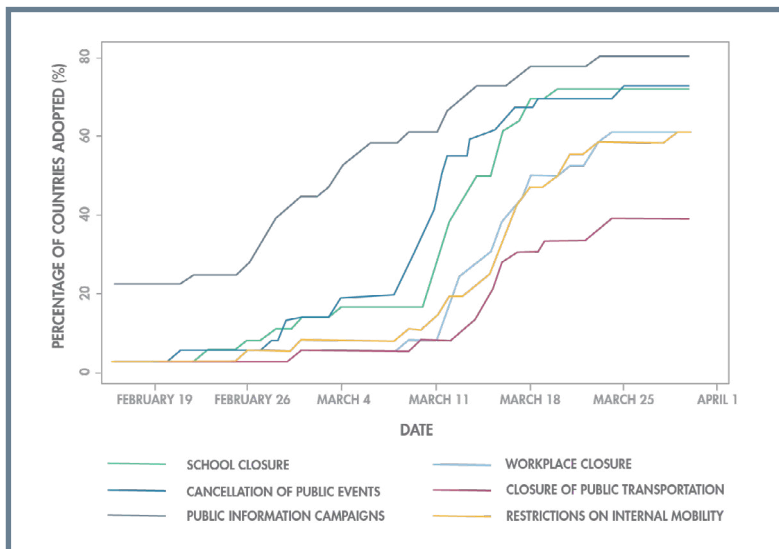

FIGURE 1: ADOPTION OF COVID-19 TRANSMISSION MITIGATION POLICIES IN THE OECD

What can explain the homogeneity in countries' timeliness of enacting COVID-19 disease prevention policies?

If the introduction of policies had been based mainly on factors such as confirmed infections and deaths, the country's demography and intensive care capacity, policy adoption would have been more spread out over time. If epidemiological and demographic factors do not explain their timing, what does? There is another branch of research that

can explain them, namely the study of diffusion of interventions – how policies "rub off" on one country from another. In particular, we know from research that countries tend to be particularly eager to adopt policies introduced by their closest neighbors.

A key reason for the homogeneity in the timing of launching various COVID-19 disease prevention policies proposed by risk assessment experts is that policymakers faced tremendous uncertainty regarding their ability to assess the possible consequences of action versus inaction. This uncertainty made informed cost-benefit analyses of alternative courses of actions all but impossible [2]. Since the consequences of an uncontrolled pandemic may be disastrous, mostly everyone ran in the same direction, at the same time, taking precautionary action rather than assessing pros and cons of various policies. Stanford University's epidemiology professor John Ioannidis [3] explains this as follows: *"Policymakers feel pressure from opponents who lambast inaction. Also, adoption of measures in one institution, jurisdiction or country creates pressure for taking similar measures elsewhere under fear of being accused of negligence."* As a consequence, he notes, *"priorities can become irrational".*

However, our analysis also shows something unsettling. Democratic countries tended to react differentially from autocratic countries such as China, Hungary and Poland. While it may be seen as safe and prudent that democratic regimes are more cautious regarding policies that impinge on civil liberties and privacy, centralized decision making has been argued by some to be advantageous when it comes to responding to pandemics

Figure 2 shows bar charts from statistical modeling of key factors influencing the timing of policy adoptions. A value below 0 means that a factor negatively influenced the urgency of decision to introduce restriction policies, and a value above 0 means that the factor positively contributed to it. The vertical lines on top of the bars show how statistically uncertain our conclusions are. If the vertical line crosses 0 it means that there is no general statistically verified relationship between the par-

ticular driver and policy adoption. The figure shows that the numbers of hospital beds decreased the urgency to adopt restriction policies by 30%. Population density had overall the strongest effect and enhanced the urgency to adopt restriction policies by 100%. Surprisingly, the daily death rate did not predict the policies included. However, decisions to adopt restriction policies were strongly influenced by the number of neighboring countries adopting similar policies with a factor of 30%. Figure 2 also show that countries with a higher level of electoral democracy were 6% slower in adopting policies related to national measures to mitigate COVID-19 disease transmission.
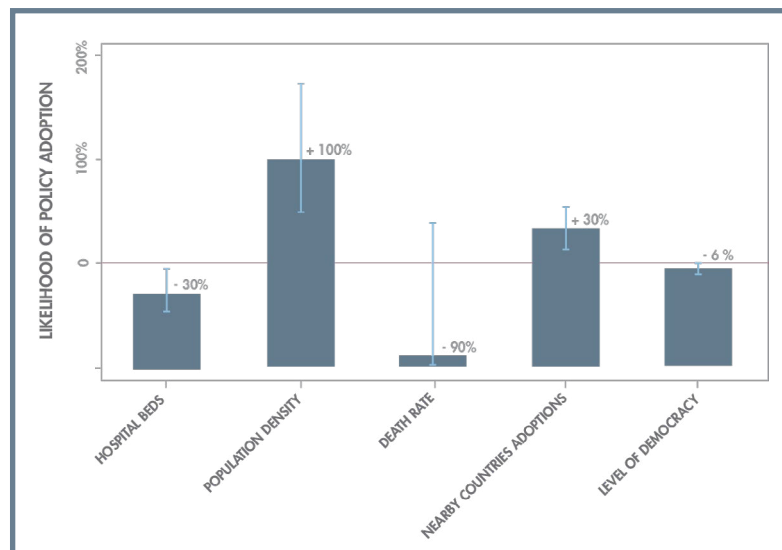

FIGURE 2: FACTORS INFLUENCING ADOPTION OF COVID-19 POLICIES

How were COVID-19 disease prevention policies enacted in the OECD?

We do not know yet which restriction policies have been effective. However, what we can say is that the implementation of polices to achieve social distancing has been very different across nations. While, for instance, Finland closed schools and placed its capital in a quarantine, neighboring Sweden has been seen as an 'experiment' because of its reluctance to ban internal movement, close all schools and workplaces

[4]. The trade-off between the capacity to protect the public health and citizens' freedom has been a central debate during the COVID-19 crisis, and will probably continue well after it.

Also when it comes to *how* COVID-19 disease prevention policies were enacted, we find differences between more or less democratic countries. We focused our analysis on the OECD countries since these represent a group of countries that are relatively homogeneous from an economic perspective, which means that the alternative cost of policy adoption will be similar across these countries. Furthermore, these countries have similarly well-developed health care systems and in general, most of them are countries with quite well-developed democratic institutions. Despite these commonalities in economic and democratic structure, we find stark differences in *how* COVID-19 disease prevention policies were enacted across the OECD. Our analysis also shows that not only were countries with stronger democracies slower to enact strict policies limiting people's freedom of mobility, work, and schooling in the face of the pandemic, they were also less strict in the number and type of policies adopted over time, such as when choosing between 'voluntary' and 'mandatory' policies, and when choosing to enact policies regionally or nationwide.

Widening our focus from the OECD to the whole world, one can note that as of early May 2020, over 100 countries had enacted various forms of emergency legislation concentrating power further in the executive. Estimates from the V-Dem institute at the University of Gothenburg suggest that 82 countries are at high or medium risk of 'pandemic backsliding' on democracy. A challenge for democratically elected decision makers is also to maintain long-term stability and people's trust in their governments, civic institutions, and their fellow human being. Initially during the pandemic, autocratic China and other countries were heralded as role models in curtailing the spread of COVID-19 but were later criticized for not releasing actual disease data to the public and other countries, and for fabricating evidence, detaining journalists, opposition activists and anyone criticizing the official response. Sur-

veys in Spain before and after the pandemic suggests that the COVID-19 pandemic may have caused an increase in public preferences towards more technocratic and authoritarian governments. If restrictions in civil liberties due to the ongoing COVID-19 pandemic are more rapidly adopted by countries already experiencing a decline in democracy, this indicates that such countries are susceptible to further autocratization in the face of exogenous chocks such as pandemics.

How can the effectiveness of COVID-19 disease prevention policies be gauged?

For decision makers facing an unknown and rapidly spreading pandemic, the continuous analysis of data and re-evaluations of the pros and cons of various policies are crucial, since the efficacy of various transmission mitigation polices is highly uncertain and widely debated. Most of the policies carry a heavy economic cost to countries. Closing schools means that parents need to stay at home, closing workplaces puts jobs and firms at risk and closing borders limits the economic exchange among nations. By observing new development in their own and other countries and analyzing the data those developments produce, decision-makers can seek to gradually decrease the uncertainty related to the policies they consider. As risk scholar Timo Ehrig and business professor Nicolai Foss argue, such a 'learning as one goes along' process is not a process that follows any predetermined path, but rather a search for the right responses partly shaped by existing institutions and policies [2].

Only by doing so can top decision-makers follow the request by the World Health Organization's Director-General to "innovate and learn"1 as they seek to handle the pandemic. As we have seen in our analyses of OECD countries' initial response to the pandemic, much of such 'learning' seems to be primarily driven by mimicry rather than adaptation to necessity. As much of Europe and North America have now de-escalated their previously strict COVID-19 disease prevention policies, further behavioral and social science research on countries' po-

licy responses to the pandemic is therefore important as we move along during the uncertain path of handling the next stage(s) of the pandemic. Initiating or abandoning containment measures too early, or too late, risks undermining the efficiency of the interventions taken. As we have seen, COVID-19 disease prevention policies also come with significant economic and welfare costs in terms of unemployment, social and mental well-being, etc. How can decision-makers adopt policies that are sustainable in the long-term? Are regional policies in particularly exposed areas more effective than national policies? Such knowledge is dearly needed, but can only be created by policy-makers being mindful of decisions taken and move beyond 'following the neighbor'.

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