

Federalism and Public Health Decentralisation in the Time of COVID-19

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Abstract

Federalism and Public Health Decentralisation in the Time of COVID-19

The Coronavirus pandemic has put extreme pressure on public health services, often delivered at the local and regional levels of government. The paper focuses on how countries made changes to the configuration of federalism during the first wave of the pandemic. These changes typically have involved the centralisation and decentralisation of certain health-related activities, as well as the creation of new coordination and funding mechanisms. Specific tools that have been used include an enhanced role of the executive branch (“executive federalism”), the use of centres of government for vertical coordination, as well as the introduction of unique state-of-emergency laws. New horizontal coordination arrangements have also emerged with the more decentralised approaches. The strengths, weaknesses and implementation risks of various approaches are analysed using country examples.

Keywords: Coronavirus, fiscal federalism, intergovernmental coordination, public health services, subnational governments

JEL classification: H11, H70, I18

Résumé

Fédéralisme et décentralisation de la santé publique à l'ère du COVID-19

La pandémie de coronavirus exerce une pression extrême sur les services de la santé publique, qui relèvent souvent des compétences des échelons locaux et régionaux du gouvernement. Ce document examine les modifications que les pays ont apportées à la structure du fédéralisme au cours de la première vague de la pandémie. Ces modifications ont généralement impliqué la centralisation et la décentralisation de certaines activités sanitaires, ainsi que la création de nouveaux mécanismes de coordination et de financement. Des outils spécifiques ont été mobilisés, comme le renforcement du rôle du pouvoir exécutif (« fédéralisme exécutif »), le recours aux centres de gouvernement pour la coordination verticale et l'adoption de lois exceptionnelles sur l'état d'urgence. De nouveaux mécanismes de coordination horizontale ont également vu le jour, suivant une approche plus décentralisée. Les forces, faiblesses et risques de mise en œuvre propres à différentes approches sont analysés, en s'appuyant sur des exemples nationaux.

Mots-clés : coronavirus, fédéralisme budgétaire, coordination inter-gouvernementale, services de santé publique, administrations infranationales

Classification JEL : H11, H70, I18

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Federalism and Public Health Decentralisation in the Time of COVID-19

By Pietrangelo de Biase and Sean Dougherty¹

Introduction

With the COVID-19 pandemic, the institutional design of health services has become more prominent. Governments are using new institutional mechanisms and taking extraordinary measures that would be unusual under normal circumstances. In some countries, significant changes in the configuration of federalism have been made to tackle the outbreak. These changes typically have involved the centralisation and decentralisation of some health-related activities and the creation of new coordination and funding mechanisms. The measures taken have varied significantly among OECD and partner countries; to some extent, the institutional configurations in place before the crisis dictated the institutional changes that countries implemented, including at subnational government (SNG) levels.

This paper builds on a survey on delineation of activities across levels of government performed by the OECD Network on Fiscal Relations across Levels of Government in June 2020 and on a literature review based on multiple academic papers as well as those from the OECD's *Tackling COVID-19* series. This paper thus complements other papers from the Fiscal Network on health policy with a more detailed analysis of the health-related measures taken by OECD and partner countries to tackle the COVID-19 outbreak through the channel of intergovernmental relations through 4 November 2020. The main aims of this paper are to 1) analyse the interplay between federalism and the responses to address the COVID-19 crisis and 2) examine the institutional mechanisms that countries have been using to improve intergovernmental coordination in healthcare under these extreme circumstances.

This paper has three main sections. The first section analyses the regional heterogeneity in the adoption of responses to tackle the COVID-19 health crisis. The second focuses on federalism (the distribution of responsibilities across levels of government) and the institutional mechanisms employed to successfully coordinate multiple levels of government in implementing measures to tackle the COVID-19 crisis. The

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third and last section analyses the drivers and intergovernmental coordination structures that are or were in place to deal with the current pandemic, including the role of political and territorial factors.

The following conclusions/good practices are worth highlighting:

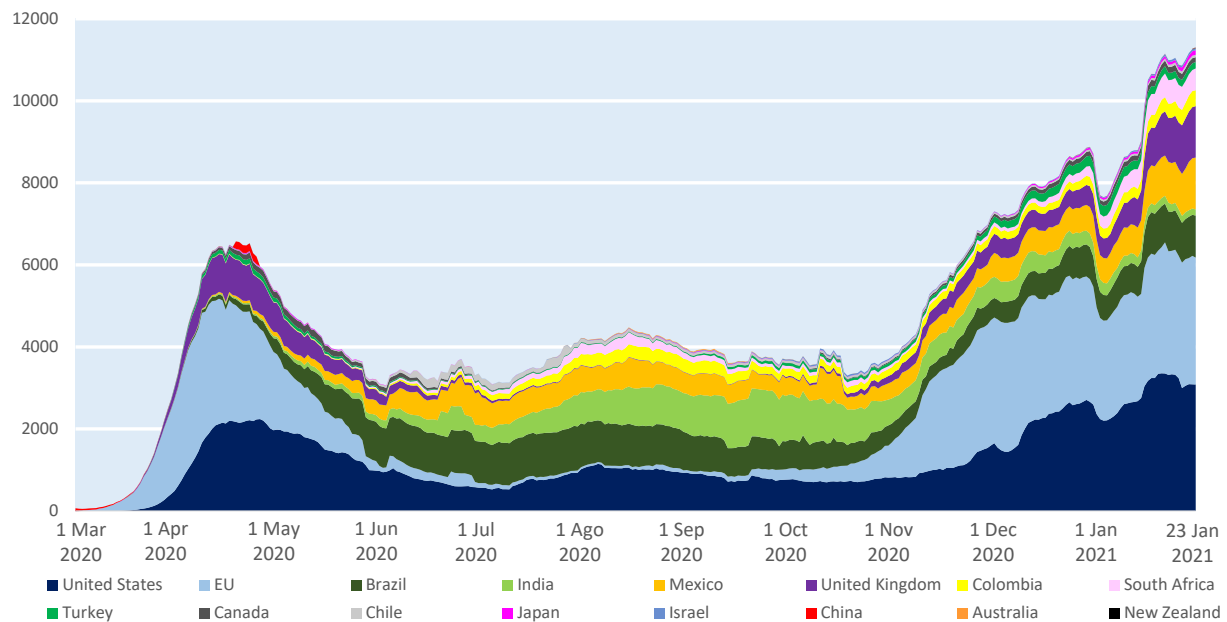
- Among countries that successfully dealt with the first wave of the COVID-19 pandemic (i.e. suffered a relatively small number of cases and deaths), there are examples of both centralised and decentralised approaches. Thus, it seems that the effectiveness of multi-level governance arrangements is what matters, rather than the degree of centralisation or decentralisation of the responses.
- To tackle the first wave of the crisis, more countries responded with a centralisation of responsibilities from lower levels of government. This often involved a central definition of the substance and timing of the measures, with SNGs typically responsible for the operationalisation of the policies.
- Given that healthcare is substantially decentralised in certain OECD countries and there are many shared responsibilities across different levels of government, the implementation of a consistent and effective response requires intergovernmental coordination.
- Countries employed different solutions to align multiple levels of government in implementing responses to tackle the pandemic. Three that are worth highlighting are executive federalism, use of centres of government, and state-of-emergency laws.
 - a) Executive federalism, where intergovernmental processes are strongly guided by the executive branch, can be very efficient in aligning the response across levels of government, but it requires political compromise and a proper communication and management network.
 - b) Strengthening centres of government have been widely used by countries to improve vertical coordination (i.e. the harmonization of actions taken by different levels of government). Authorities from different sectors and levels of government are usually involved in the design of policy responses.
 - c) State-of-emergency laws typically centralise decision-making power in the hands of the executive branch of the central government. Although they can be effective in avoiding debate on the role of each level of government and branch of power, the absence of a multi-level governance structure may jeopardise the ability to implement central government decisions.
- Two areas in which intergovernmental coordination seems to have led to better outcomes in terms of obtaining medical resources/equipment and making them available are through procurement and regulation. Regarding the former, both centralised and decentralised procurement systems can perform well if governments cooperate. Even small cooperative arrangements that involve only information sharing, for instance, can lead to better responses.
- Horizontal coordination can successfully address spillovers, where the impact of policies implemented by one jurisdiction affects other jurisdictions and leads to a more consistent and effective response overall.
- In countries implementing a decentralised response, the emergence of horizontal coordination arrangements has been common. The main drivers for this emergence are: 1) the existence of strong links among the authorities prior to the crisis, 2) bipartisanship, and 3) territorial policy diffusion.

A brief timeline of the COVID-19 crisis

Pandemics know no boundaries. In a highly interconnected world, national boundaries matter little and regional boundaries matter even less. In a matter of months after the first reported cases at the end of 2019, the COVID-19 virus had spread from China across the globe. Rapidly, countries close to China (e.g. Japan, Russia, and Korea) and countries from other continents (e.g. France, Italy, and the United States) confirmed their first cases.

At this early stage of the outbreak, many authorities aimed at containing the virus through targeting clusters of infections, nevertheless, it was clear after a few weeks that the virus had already spread out. The velocity of the spread of the virus caught authorities across the globe by surprise. Time was short to digest the impact of the outbreak. It was clear that countries need to take action, but it was unclear which measures should be taken. Little was known about the actual mortality rate of the virus, nor about the effectiveness of treatments and containment measures. Masks were commonly used only by health workers and lockdowns tended to be more restrictive than those implemented now. It was under this great uncertainty that, in order to protect citizens, governments quickly designed and implemented responses to the first wave of the outbreak. For instance, on 21 February 2020, the day that Italy reported its first COVID-19 related death, the Italian central government announced that public spaces were closed in ten Italian towns in northern Italy (Think Global Health, 2020). In the coming days, governments from multiple countries across the globe followed Italy's responses. This brief timeline overviews the contagion dynamics and measures taken to tackle the first wave of the COVID-19 crisis. Waves of cases are a common pattern seen in virus pandemics, which occurs due to changes in human behaviour and government response over the course of an outbreak (Maragakis, 2020). As of January 2021, many OECD and partner countries are facing the second wave of the COVID-19 pandemic (Figure 1), which is unfortunately causing a growing number of daily deaths, surpassing the severity of first wave for these countries.

Figure 1. Number of COVID-19 related deaths per day in OECD and partner countries



Note: Deaths reported through 23 January 2021. Data were smoothed using a 7-day moving average.

Source: Authors based on country time series data from John Hopkins University (<https://github.com/owid/covid-19-data/tree/master/public/data>).

The full second wave of the pandemic is likely to have different dynamics than the first one. COVID-19 was arguably the most focused-upon research topic in 2020. Doctors now better understand how the virus behaves in the body, and have learned how to more effectively treat patients, which can lead to shorter and less-intensive patient stays and lower mortality rates (Barone, 2020). In addition, shortages of medical, testing and personal protective equipment tend to be now less of a concern than before, since throughout the last months more equipment was produced and supplied. Vaccines are starting to be administered to people in most OECD and partner countries. Lastly, throughout the course of the pandemic, governments sought to design better governance and coordination mechanisms, which can enhance and harmonise responses.

As a result of this learning process, the measures implemented and the process that defined the measures are different in the second wave in comparison to the first wave. This paper is based on data gathered through 4 November 2020 and, thus, explores the measures taken until that point in time. In other words, this research covers the measures taken throughout the entire first wave and early part of the second wave of the pandemic.

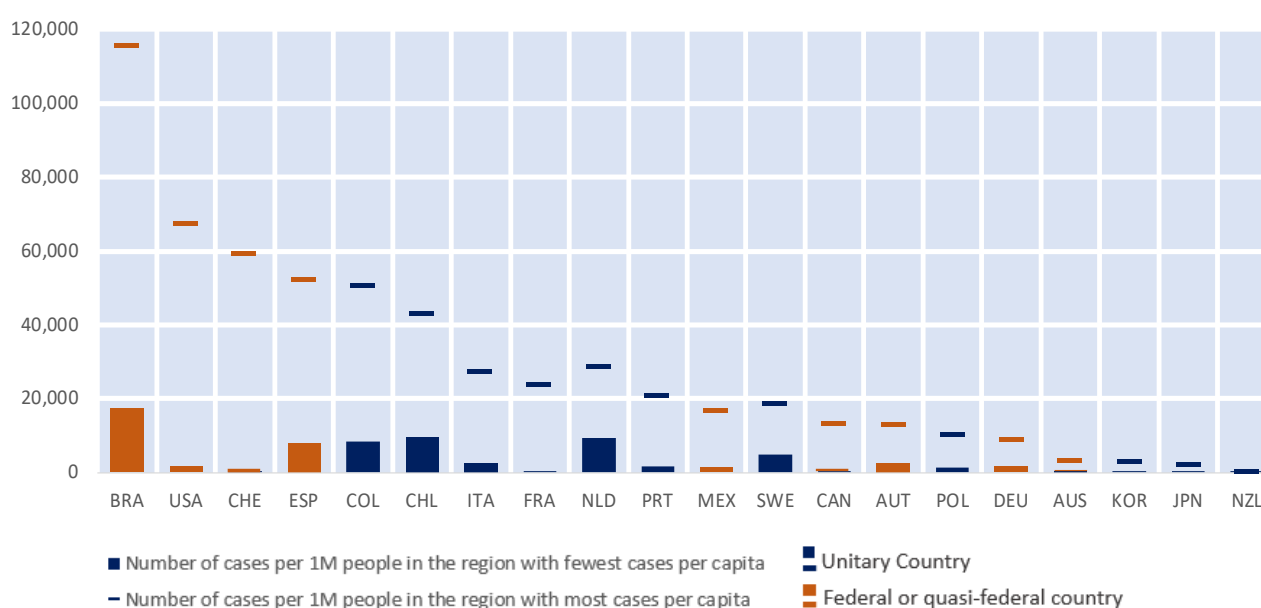
Regional heterogeneity in responses

The COVID-19 pandemic has had asymmetrical impacts across regions

A significant diversity in the adoption of responses to tackle the first wave of the pandemic was observed. In some countries, this heterogeneity was driven by decisions from central governments aimed at tackling asymmetric impacts, while in other cases by subnational governments that, due to their autonomy, can implement their own policies. The main reason for the adoption of different measures within countries relates to the fact that the virus did not affect all regions with the same severity and at the same moment.

On average, the regions (i.e. the level of government that is immediately below the central government) with most cases per capita experienced eight times more cases than the region with the fewest cases per capita. This ratio can be as high as 394 (in Switzerland) but never lower than 2.5 (in New Zealand). Figure 2, below, depicts within-country differences in COVID-19 cases per one million habitants (for a country-specific analysis, see Annex A). Four countries with the most uneven distribution of cases across regions are federal or quasi-federal countries – it is, though, not clear whether these discrepancies bear any relation with the structure of government, with other elements such as social, economic, demographic or territorial factors or with the “randomness” of the contagion.

Figure 2. Uneven distribution of cases across regions within OECD and partner countries



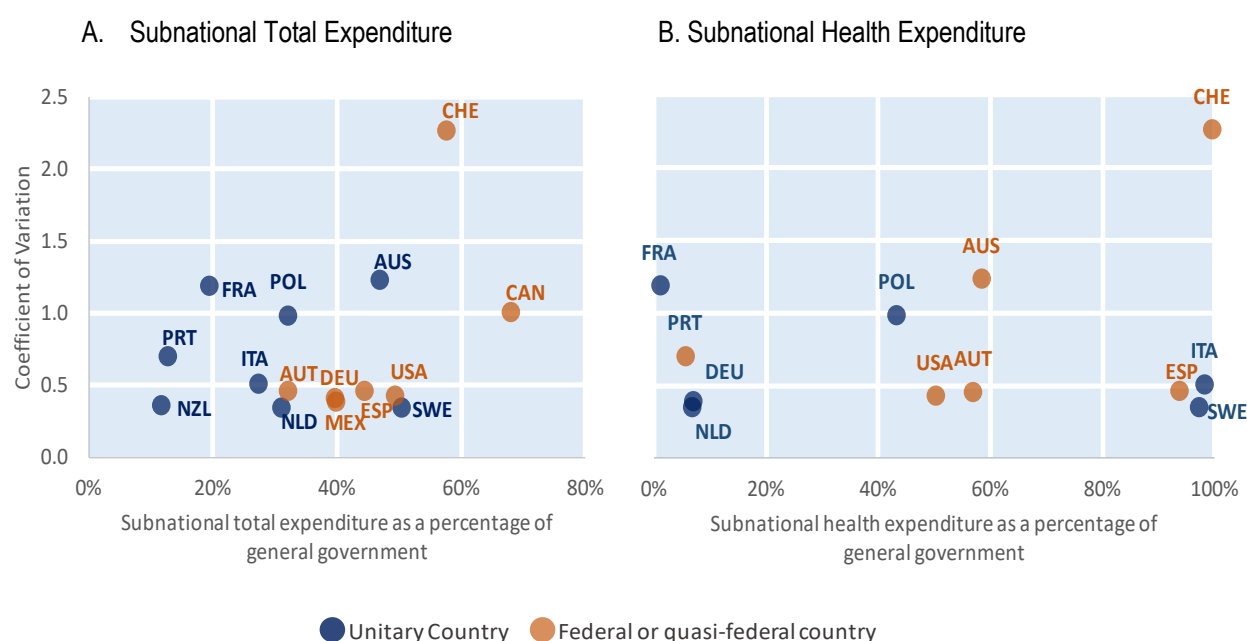
Note: Number of cases refers to cumulative cases reported from the start of the outbreak through 4 November 2020.

Source: Google COVID-19 regional dataset (<https://news.google.com/covid19/map>); except for France (Allen et al., 2020) and Switzerland (Statista, 2020).

Figure 3 explores this idea in more detail by analysing the relation between expenditure and Healthcare decentralisation and the disparity of number of cumulative reported cases through 4 November 2020, per capita across regions. The use of cumulative reported cases was chosen, since it reduces biases related to the fact that cases reported by a country/region over a certain period can be highly dependent on the starting time of the waves in that country/region. While this crisis is not yet over and, thus, these numbers will shift in the future, the use of accumulated reported cases can provide a useful overview of the situation since the start of the outbreak until the beginning of the second wave, although it is affected by the scaling up of testing.

The data suggest that neither the decentralisation of the total expenditure nor the decentralisation of health expenditure have any significant relation with the dispersion of the COVID-19 cases across regions within countries. Furthermore, the same can be said with regard to whether the country is federal (or quasi-federal) or unitary. As a result, it seems that the dispersion of the severity of the crisis, at least in the number of cases per million habitants, does not appear to have any relation with the decentralisation of total expenditure and/or health expenditure across a country. Despite this fact, it is worth highlighting (from Figure 2) the size of the differences in the severity of the outbreak across regions in most countries.

Figure 3. Differences in the dispersion of COVID-19 cases per million habitants across regions within OECD countries



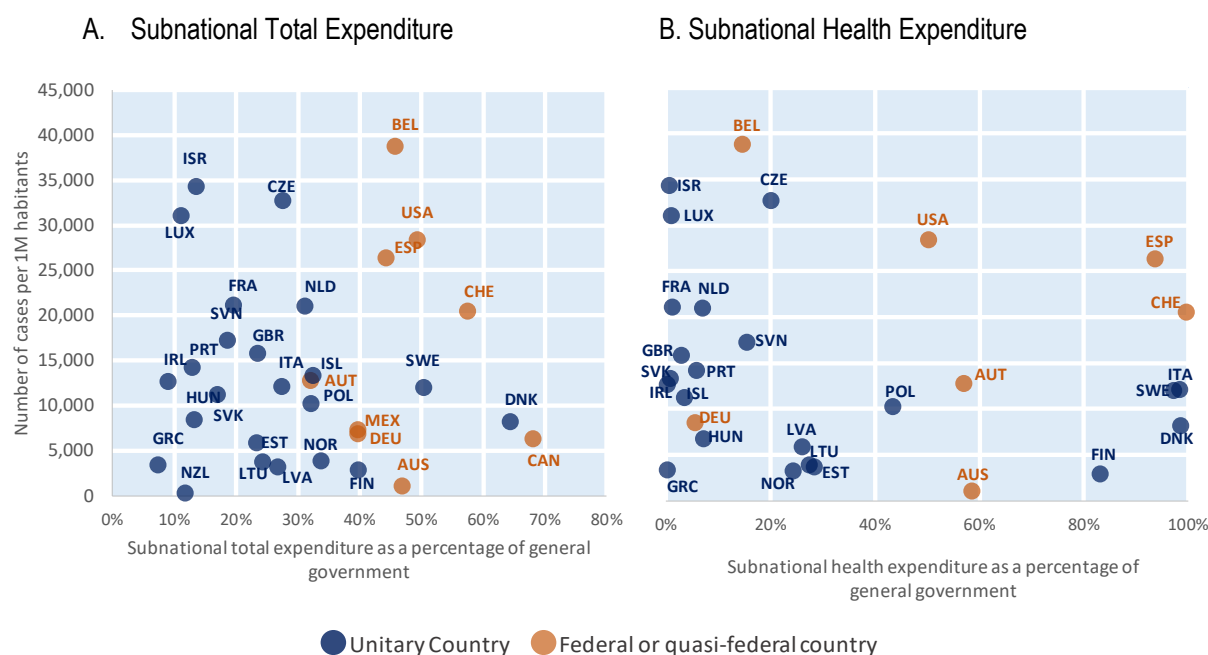
Notes: 1. The coefficient of variation (CV) is a standardised measure of dispersion – it refers to the ratio of the standard deviation to the mean. 2. The CV refers to cumulative cases reported from the start of the outbreak through 4 November 2020. 3. Expenditure data are from 2018. Source: Google COVID-19 regional dataset (retrieved 4 November 2020); OECD Fiscal Decentralisation Database; OECD National Accounts.

There is no apparent evidence that decentralisation affects the dispersion of cases or the severity of the crisis across regions

Another interesting question to be answered regards whether more centralised or decentralised countries were hit harder by the COVID-19 outbreak. That is, given that there seems to be no evidence to assert that decentralisation affects the dispersion of the severity of the crisis across regions, does decentralisation affect the severity of the crisis (in terms of number of cases) in a country? Figure 4 suggests that it also does not. Both the number of cases per capita and the number of deaths per capita did not bear any

relation with health or expenditure decentralisation. Hence, although the severity of the crisis has varied widely across countries, the decentralisation of health and total expenditure do not appear to be a driver of these differences.

Figure 4. Differences in the number of cases per capita of COVID-19 cases per million habitants in OECD countries



Note: 1. Number of cases refers to accumulated from the start of the outbreak through 4 November 2020. 2. Expenditure data are from 2018. Source: Google COVID-19 regional dataset (retrieved 4 November 2020); OECD Fiscal Decentralisation Database; OECD National Accounts.

Re-centralisation of Healthcare activities was more common than decentralisation

The analysis explored in Figure 4 regards the total and health expenditure decentralisation under normal (pre-COVID-19) circumstances. Nonetheless, in order to tackle the COVID-19 crisis, countries frequently changed the delineation of activities across levels of government. Some countries tended to centralise Healthcare services while others decentralise them. Dougherty et al. (2020), through an analysis of country responses to a COVID-19 questionnaire, found evidence that, in order to tackle the COVID-19 crisis, re-centralisation of Healthcare was twice as frequent as decentralisation across OECD and partner countries. The authors highlighted that under a pandemic, extraordinary measures are required to be implemented quickly, potentially by-passing many steps usually taken in policymaking and implementation. As a result, differences in the degree of Healthcare centralisation under normal circumstances and under an acute health crisis can be expected.

Centralisation and decentralisation are not trivial to define and, to some extent, beyond of the scope of this policy brief. Nevertheless, it is worth exploring some elements that can be used to better understand the degree of (de)centralisation in COVID-19 responses. In principle, one approach that can provide a better understanding of the degree of centralisation in tackling the pandemic is to analyse the autonomy that SNGs have in changing the substance, process and timing of the measures recommended by the central government (see Box 1 on the cases from the United States, South Africa and France). The more autonomy to change these elements, the more decentralised the response tends to be and the more variation in measures within a country is expected.

Although at first glance it may seem that timing may not be as relevant as the substance of a response, there is evidence that a sufficiently prompt timing of actions can significantly affect the contagion curve and fatality rates. Due to the exponential nature of the contagion curve, an early containment of the spread of the virus can affect substantially the quantity of people that get COVID-19. In the scenario of early containment, health resources such as hospital beds, doctors, nurses, respirators can be sufficient to treat all patients infected and testing and trace strategies can be easily adopted. For instance, evidence from Texas showed that early adoption of containment measures in some counties were responsible for reducing significantly the spread of the virus (Dave et al., 2020). Huber & Langen (2020) analysed not only timing but the substance (i.e. in this case the rigour of the lockdown) of measures across Germany and Switzerland and concluded that timing was not only crucial to contain the spread of the virus and to reduce fatality rates but also that early adoption of measures is more effective in containing the virus than the imposition of more rigorous measures. Thus, one of the most common institutional arrangements was to centralise the substance of the responses but let SNGs, which often have more awareness of the local situation, vary in the timing of the implementation.

One element that is crucial for allowing SNGs to have room to implement their own policies is financial power. SNGs tend to have less revenue capacity and less access to financial markets than central governments and, thus, in times of severe fiscal distress, fiscal aid from the central government can be necessary – see OECD (2020e) and Dougherty et al. (2020). Financial support from the central government (or lack of it) can be an effective tool to influence subnational policymaking even in decentralised countries. United Kingdom offers a great example of such.

Despite the fact that in the UK the devolved nations (i.e. Northern Ireland, Scotland and Wales) and England could act independently in tackling the COVID-19 outbreak, they have weak fiscal power to raise sufficient funds to take whatever measure they deem necessary (Grace, 2020). Most of their revenues come from rule-based grants from the central government. More specifically, UK devolved nations are entitled to a portion of the funds that the central government spends to tackle the outbreak. Therefore, the amount of subnational resources available for tackling the crisis is dependent on the amount of resources that the central government decides to allocate to that same purpose. As a result, devolved nations have limited financial resources to design and implement their policies, despite their autonomy to do so, which has led to an overall uniform response across the UK.

Box 1. Centralised and decentralised approaches in the United States, South Africa and France

The **United States** offers an example of an almost fully decentralised approach to tackle the COVID-19 crisis, with the federal government mainly providing additional funds through the CARES Act, Medicaid programmes and the Federal Reserve Bank (FED). In comparison to other OECD countries, the United States is one of the more decentralised (refer to Figure 4) and during the COVID-19 crisis, this characteristic became even more pronounced. US lower levels of government have autonomy to impose stricter policies than those imposed by upper levels (i.e. autonomy to change the substance of the policy), to select the appropriate timing for implementation and to operationalise the policy implementation. As a result, SNGs have varied significantly with regards to the policies implemented in terms of substance, timing and process. For instance, while north eastern states imposed relatively strict lockdowns, states that are especially reliant on tourism and sales taxes, such as Texas and Florida, were more hesitant to enforce strict lockdowns affecting their jurisdictions; similarly, governors in small, rural states such as South Dakota and Nebraska tended to take very limited action. These responses contrasted heavily in terms of substance, timing and process with the measures taken by governors in the north eastern states (e.g. New York, New Jersey, Connecticut, and Pennsylvania), who acted early and more aggressively in the implementation of comprehensive restrictions across the states.

In **South Africa**, the COVID-19 pandemic has led the central government to centralised responses, but not fully, potentially due to limitations in its operationalisation. At the initial phase of the crisis the central government has declared a national state of disaster, issued regulations that SNGs must implement and has monitored their implementation through their Department of Cooperative Governance (Steytler, 2020). In addition, a very strict national-wide lockdown was centrally imposed. Nevertheless, since in South Africa SNGs are responsible for the management of hospitals and public schools, measures were operationalised by SNGs with central government oversight. In addition, SNGs were, after five weeks of a strict lockdown, allowed to adjust their responses in case the prevalence of infections was low in the given jurisdiction. As a result, at the initial phase, South Africa's central government controlled the substance and timing of the responses. In a second moment, SNGs could vary with regards to the timing of the implementation. The operationalisation of the responses, though, were always in the hands of SNGs.

France is considered a centralised country, which includes most expenditures. Healthcare expenditure is virtually entirely centralised. It is not a surprise that the French response was, thus, very centralised. From mid-March onwards, the central government has announced and adopted a series of highly homogenous responses that have entered into force throughout the entire country. Many of these measures were taken by over-arching presidential Decrees. They involved lockdown enforcement, prohibition of gatherings and travel, eventually mandatory use of masks in public, among other measures. However, some local governments imposed more rigorous policies, such as Nice and Cannes, where wearing masks in public were mandated before the central government required it. France offers an example of a response that was mostly centralised in terms of substance, process and timing.

Source: Cockerham & Crew Jr. (2020) for the US case, Steytler (2020) for the South African case and Buthe et al. (2020) for the French case.

Both centralised and decentralised responses have their advantages in tackling the pandemic

In theory, it is expected that challenges that require policy homogeneity and that have substantial spill-overs are better approached with a centralised approach. That is because these are among the advantages of having a centralised response: uniformity and more control over regional spill-over effects (i.e. in the context of COVID-19, regional spill-over effects refer to indirect effects of policies taken by one jurisdiction that affect other jurisdictions). In addition to these two advantages, centralised responses tend to facilitate accountability, due to the fact that citizens know clearly the level of government that is responsible for the measures: the central government. In a decentralised setup, responsibility is shared across levels of government and authorities may try to “pass the buck” to other levels of government. Furthermore, a centralised response can facilitate resource (re)allocation since purchases of the necessary equipment (e.g. ventilators, masks) are done on a larger scale and, with centralised information, can be transferred to the regions that need them the most when they are scarce.

On the other hand, in a context in which containment measures (e.g. enforcement of lockdowns, the prohibition of public gatherings, the closure of business, among others) are immensely costly, subnational autonomy can be an important element for each region to select the set of policies that targets the preferences and needs of its local citizens. In addition, when different jurisdictions are allowed to implement different measures, there is room for innovation. Good solutions can be adopted by other jurisdictions through policy diffusion, leading to an overall better and, to some extent, consistent response. The same is true for unsuccessful policies: their failure is likely to affect primarily the region that implemented them and can potentially serve as an example of what not to do. Lastly, since SNGs tend to be more aware of local conditions, they can more rapidly implement policies.

Therefore, at least in principle, the benefits of a decentralised response should be more pertinent when tackling a crisis with asymmetric impacts and with unseen characteristics. On the other hand, a crisis that has substantial regional spill-overs, for instance, in the form of interdependence between subnational measures and in which the necessary resources to handle the crisis are scarce, centralised management can have the edge. The COVID-19 crisis has all these elements and, thus, it is not trivial to determine the optimal degree of centralisation/decentralisation to tackle the crisis.

OECD (2020b) and Dougherty et al. (2019, 2020) discuss the preferred degree of centralisation under an acute health crisis (and in normal times) and they concluded that both institutional options can be justified and might work well to successfully address the COVID-19 outbreak. There are advantages and disadvantages to both, summarized in Table 1, but, regardless of the degree of centralisation chosen, intergovernmental coordination is crucial. In other words, a country can, to some extent, enjoy the best of both worlds in case its intergovernmental coordination mechanism works well.

Three countries that did well overall in tackling the first wave of the COVID-19 pandemic, limiting its economic damage, while using different multi-level governance structures are Germany, Austria and Switzerland (refer to Figure 4). While Germany implemented a decentralised response to tackle the first wave, Austria and Switzerland implemented a centralised one.

Desson et al. (2020) summarised their responses as follows: “To a large extent, these three countries demonstrated the most crucial capabilities for dealing with an infectious disease outbreak of this magnitude: early response in the form of tracking, testing and containing cases and sufficient state capacity to quickly implement policy”. The policy just described is similar to the policy recommended by OECD (2020c), which analysed how countries could avoid shutting down major parts of their economy while containing the virus. The latter piece concluded that the use of test-and-trace accompanied by comprehensive contact tracing and effective isolation of those infected and the support of public health policies, such as mandating mask-wearing in public indoor environments and restricting visits to

care homes and stay-at-home recommendations for the most vulnerable, could reduce the spread of the virus without resorting to strict lockdowns. According to the authors, lockdowns should prioritise restrictions on large public events and international travel and strict lockdowns should be implemented mostly for localised outbreaks. These measures might require a substantial degree of intergovernmental coordination since they are often not under the responsibility of only one level of government. Nevertheless, they can be successfully implemented in both a centralised and decentralised setup (see Box 2 on the DACH region response).

Table 1. Advantages of having a centralised/decentralised approach to tackle the COVID-19 crisis

	Centralisation	Decentralisation
How they usually work in the context of COVID-19	Central government establishes the timing and severity of the restrictive measures across regions in a country	Central government issues recommendations or sets a minimum threshold that lower levels of government can/should follow
	SNGs have small discretion over measures and often have a more operational role	SNGs may take steps far beyond the central guidelines and/or change the timing of the implementation
	Vertical coordination is crucial so SNGs can operationalise in a satisfactory manner the measures stipulated by the central authority	SNGs have autonomy to innovate and make agreements with other jurisdictions, working as a laboratory of measures
Advantages	Standardisation of procedures/uniformity of measures	Allows for a better adaptation to regional needs and preferences
	Systemic view due to a centralisation of information gathering – easier to control spill-over effects	Foster innovation due to experimentation
	Potentially better allocation of resources through the use of health inputs from all regions	Potentially faster adoption of measures due to the knowledge of local conditions and limited geographic scope of action
	Accountability rests mostly on one level of government (i.e. the central government), which can minimise passing the buck to other levels of government	In case suboptimal measures are implemented in a region, the consequences might, to some extent, be restricted to that region

Source: Authors, OECD (2020b), Dougherty et al. (2020) and Buthe et al. (2020).

Box 2. The different strategies pursued by Austria, Germany and Switzerland to tackle the first wave of the pandemic

Context

Austria, Germany and Switzerland are similar in many respects. First, they share common borders with one another and have strong cultural and economic links. Second, their populations are very similar demographically, which is particularly relevant in the context of the COVID-19. Third, all three countries have a similar federal structure – their SNGs tend to have substantial autonomy and their central governments play only a regulatory role in most government functions such as health. Fourth, they all have a system of mandatory universal health insurance that provides Healthcare services for all their population.

Degree of centralisation of the response

Germany adopted a more decentralised response than Switzerland and Austria. While Germany's constitution has more explicitly defined roles for states during emergencies, Austria's and Switzerland's National State of Emergency lack clarity regarding the roles of the different levels of government. As a result, in Switzerland and Austria the central government ended up assuming a more prominent role and was in charge of the definition of the country response. In these two countries, central measures were implemented uniformly across the country. In contrast, in Germany there were no binding nation-wide policies regarding local public protection orders. Nevertheless, in the end Germany's SNGs tended to take similar measures but they differed in timing and stringency of restrictions.

Exit strategies

Austria employed a gradual exit strategy that covered the whole country in a uniform manner. Switzerland, similarly, had a national exit strategy, although cantons could vary in some respects. The German exit strategy, on the other hand, was mostly implemented by the states. German SNGs differed more significantly with regard to their exit strategies than with regard to other policies. States lifted various restrictions on different timelines. Potentially due to the discrepancies in exit strategies, the central government decided to align some of exit responses and announced national-wide measures such as mandatory social distancing and an "emergency brake" mandating the reintroduction of restrictions once infection rates reach a certain threshold.

Conclusion

Although German states were allowed to vary substantially with regards to the substance and timing of the measures that they implemented, they often implemented relatively similar policies while varying mostly the implementation timing. In Austria and Switzerland, uniform policies were implemented in a top-down manner and the timing was roughly the same across jurisdictions.

It is worth noting that in the context of the first wave these countries relied on testing and trace policies and successfully increased their treatment capacity. Measures regarding resources gathering, information collection and test-and-tracing involved multi-levels of government and were successfully coordinated across levels of government. Thus, these three countries offer an interesting example of how difference governance schemes can lead to a successful strategy to tackle an outbreak with a high degree of asymmetrical impacts and spill-overs.

Source: Desson et al. (2020).

Federalism and COVID-19

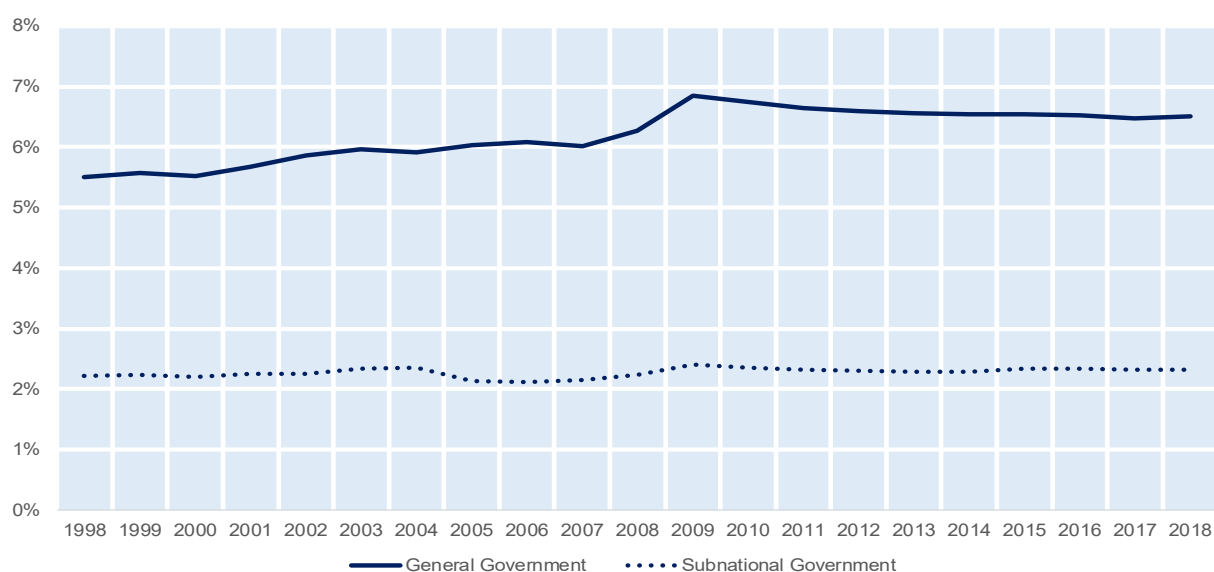
Fiscal Federalism refers to the division of revenue collection and expenditure responsibilities among different levels of government (Musgrave, 1959). As a result, fiscal federalism (hereafter “federalism”) is a concept that applies to all countries that have different levels of government – including unitary states. Oates (1972) motivates this type of decentralisation by highlighting that disregarding cost savings from centralisation, a country’s aggregate welfare will be maximized when each jurisdiction can choose its own public consumption bundle as opposed to when the same bundle is provided across all jurisdictions. Federalism is, thus, a form of governance that is characterised by the protection of divergent policy preferences within a country (Downey & Myers, 2020). It does so by minimising the central coercion by giving autonomy to SNGs so they can pursue their own interests.

In countries where SNGs are more autonomous, it seems reasonable that, to a certain degree, they should be able to have a say with regard to these policies given that, in theory, they can more easily select policies that are preferred by the local dwellers and they bear some of these costs. Despite being a health crisis, measures employed by countries to contain the virus go far beyond the usual scope of Healthcare. Lockdown enforcement, closure of schools, prohibition of large gatherings, closure of regional and international borders are just some examples of measures that are not directly related to Healthcare but have been employed to slow the spread and prevent health systems becoming over-burdened. Many of these policies have a substantial impact on regional economies and they can have an enormous cost..

Nevertheless, this autonomy may create political problems since while SNGs are dependent on the decisions and capacities of other governments at all levels due to spill-overs, they may have little power to influence their decisions. Politically, such a situation can create barriers to collaboration, since authorities may call into question the existing balance of power and narrative regarding the measures that they are supposed to take together, creating a tension with their decision autonomy (Paquet & Schertzer, 2020). Furthermore, the necessary involvement of multiple actors with different interests poses challenges for an efficient response. Countries employed different institutional solutions to this problem.

This section focuses on the different institutional mechanisms that were put to use by countries to better delineate the responsibilities of different levels of government in tackling the outbreak, avoiding political deadlocks. Before delving into them, it is worth highlighting how countries usually delineate health-related activities across levels of government under normal circumstances.

Figure 5. Average health expenditure as a share of GDP for SNGs and general government in OECD countries



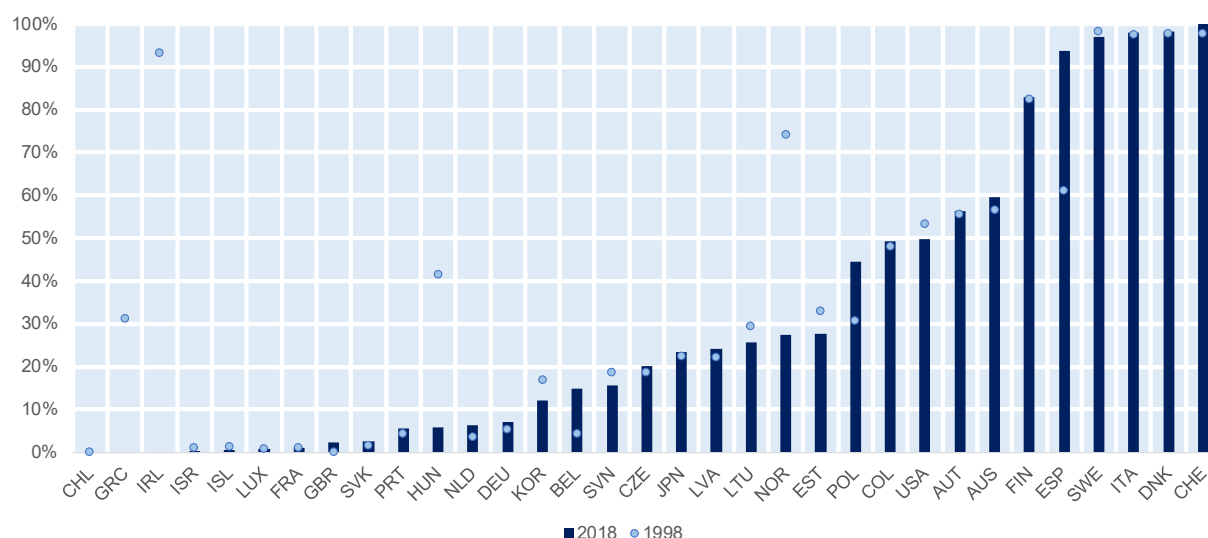
Source: OECD National Accounts COFOG database.

The role of SNGs in the provision of health services is significant and, on average, has remained roughly stable overall in the last three decades

In general, central governments (and social security systems) bear more responsibility for health expenditures than subnational governments (Figure 5, above). Average general government expenditure on health services in OECD countries has increased from 5.5% of the GDP in 1998 to 6.5% in 2018. SNGs have followed the same path but at a smaller pace – their average health expenditure has increased from 2.2% of the GDP to 2.3% in the same period. This increase occurred mostly in the first decade of the 2000 and has remained stable from 2012 onwards.

Looking only at averages masks the fact that shifts in expenditure shares in many countries were significant, with some countries having centralised while others decentralised Healthcare expenditure. Figure 6, below, reveals two important characteristics of Healthcare provision. First, subnational expenditure in Healthcare ranges from 0% to 100% as a share of general government, and is often substantial, averaging a 32% share. Notably, seven OECD countries have a heavily decentralised Healthcare system – Austria, Finland, Spain, Sweden, Italy, Denmark and Switzerland. These countries are mostly federal, quasi-federal and/or northern European countries. Second, although for most countries the subnational share has remained roughly stable in the last two decades, there were some exceptions. More precisely, Greece, Ireland, Hungary and Norway have centralised Healthcare expenditure in the last two decades. Conversely, Belgium, Poland and Spain have decentralised it.

Figure 6. Subnational government health expenditure as a share of general government health expenditure in 1998 and 2018



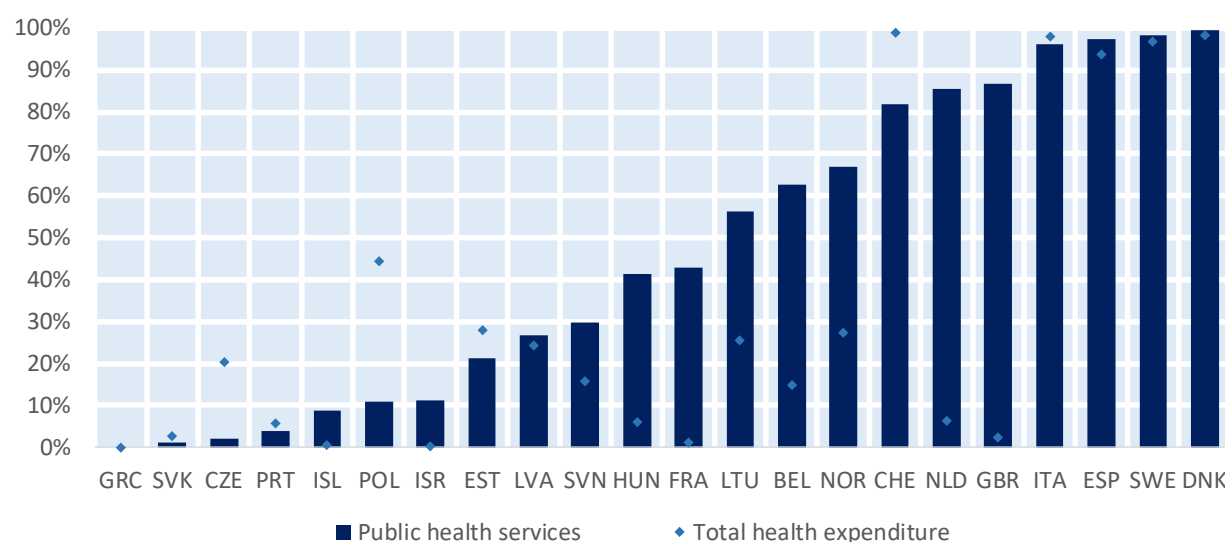
Source: OECD National Accounts COFOG database.

Note: Values used refers to the values in 1998 and 2018 or closest year with available information for the given country.

SNGs often have an important role in implementing policies regarding public health services

Public health services are a sub-function of health in the National Accounts' Classification of the Functions of Government – COFOG. The sub-function includes the inspection, operation or support of public health services such as blood-bank operations, disease detection, prevention, immunisation, inoculation, monitoring, epidemiological data collection, family planning services, preparation and information dissemination. The subnational expenditure on public health services as a percentage of general government varies significantly and in half of the countries analysed (Figure 7) is larger at the subnational level (in Denmark, Sweden, Spain, Italy, United Kingdom, Switzerland, Norway, Belgium and Lithuania). In addition, it is worth noting that public health services can be significantly decentralised even where Healthcare is not. For these reasons, many subnational governments are in charge of testing operations in different countries over the globe (see OECD, 2020b).

Figure 7. Subnational expenditure on public health services as a percentage of general government, 2018



Source: OECD National Accounts COFOG database.

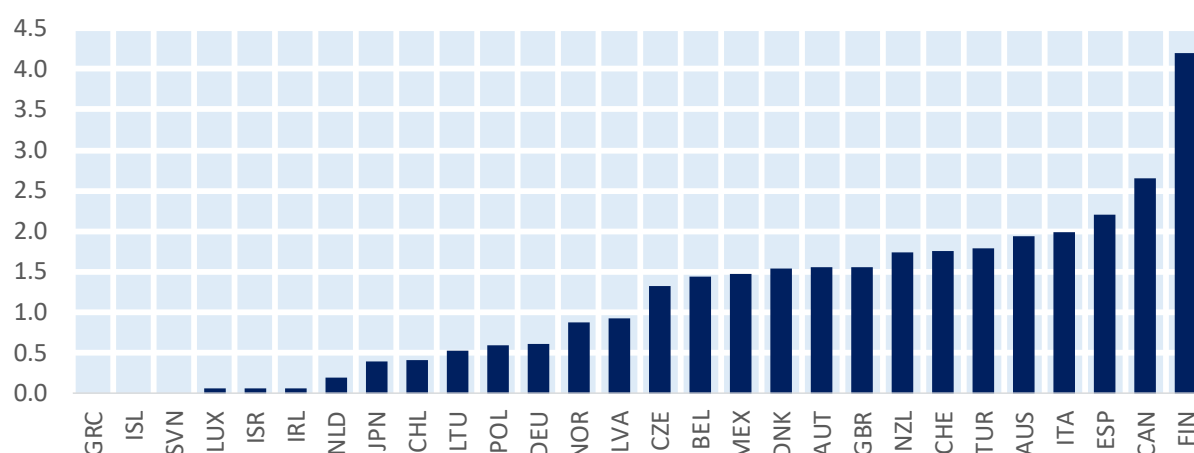
SNGs are often responsible for managing health inputs and budgeting while the central government defines policy and carries out oversight

One common measure of decentralisation is the subnational expenditure share of total government expenditure (showed above for Healthcare and public health services). Nonetheless, although this metric has its merits, it does not capture the usually complicated fiscal arrangements underlying the governance of government functions in a multi-level government system. To complement such metric, the OECD has been working on spending power indicators that aim at grasping dimensions other than expenditure, such as rules and regulations that govern the inputs, processes and outputs of subnational services and the extent to which subnational decision-makers can exert control over it.

Four dimensions of spending power were developed by the OECD Fiscal Network – for more details see OECD/KIPF (2016), Dougherty & Phillips (2019), Kantorowicz & Grieken (2019) and Beazley et al. (2019):

- *Policy autonomy*: The extent to which sub-central decision-makers exert control over main policy objectives and main aspects of service delivery;
- *Budget autonomy*: The extent to which sub-central decision-makers exert control over the budget (e.g. is budget autonomy limited by upper-level government regulation);
- *Input autonomy*: The extent to which sub-central decision-makers exert control over the civil service (personnel management, salaries) and other input-side aspects (e.g. right to tender or contract out services);
- *Output and monitoring autonomy*: The extent to which sub-central decision-makers exert control over standards such as quality and quantity of services delivered and devices to monitor and evaluate standards, such as benchmarking.

Countries differ significantly regarding spending power in Healthcare. Figure 8 shows that spending power values range from 0.06 in Luxembourg to 4.2 in Finland (the maximum of the spending power scale is 10 and the greater the value, the more autonomy SNGs have). It is not a coincidence that in countries in which Healthcare expenditure is the most decentralised, subnational spending power are also relatively higher (for more detail about the decision-making power of SNGs in Healthcare, see Box 3).

Figure 8. Subnational spending power on Healthcare by country

Source: Fiscal Network Spending Power Survey (Fiscal Decentralisation database, <http://oe.cd/FFdb>).

Box 3. Decision-making in Healthcare across levels of government

There is a wide amount of variation between the power of different decision makers. Most power lies with the central government, which is in charge of 62% of decisions (of surveyed countries), in the health sector, on average. Regional governments are in charge of 34%, local governments are in charge of 14% and other decision makers have autonomy over 29% of decisions. Central and regional power is relatively diversified across the four classifications of autonomy; however, the power of local governments and providers is more concentrated in aspects of decision making that involve inputs.

Central governments have the most power in the policy autonomy space, but also exhibit significant power across the other aspects of autonomy. Decisions that are significantly influenced by central governments include: setting the level of taxes which will be earmarked for Healthcare (76% of respondents suggested this is the sole or shared responsibility of central governments); setting the total budget for public funds allocated to Healthcare (78% of respondents); setting the legal framework (e.g., a law establishing objectives, rights and obligations in hospitals) (81% of respondents); and regulating private hospital activity (e.g., setting the rules for concessions and funding) (76% of respondents).

Similarly, the decision making of regional governments is relatively balanced across policy, budgeting, input and output decisions, but is slightly more likely in regard to input decisions. Regional governments are responsible for some important policy decisions resource allocation between sectors of care (e.g., hospital care, outpatient care, long-term care) (42% of respondents).

Decision-making power at the local level is fairly low. Some decisions that local governments are jointly responsible for are: financing the maintenance of existing hospitals (21% of respondents suggested this is the shared responsibility of local governments); hiring and firing staff (24% of respondents); and the planning and provision of necessary hospital infrastructure (26% of respondents).

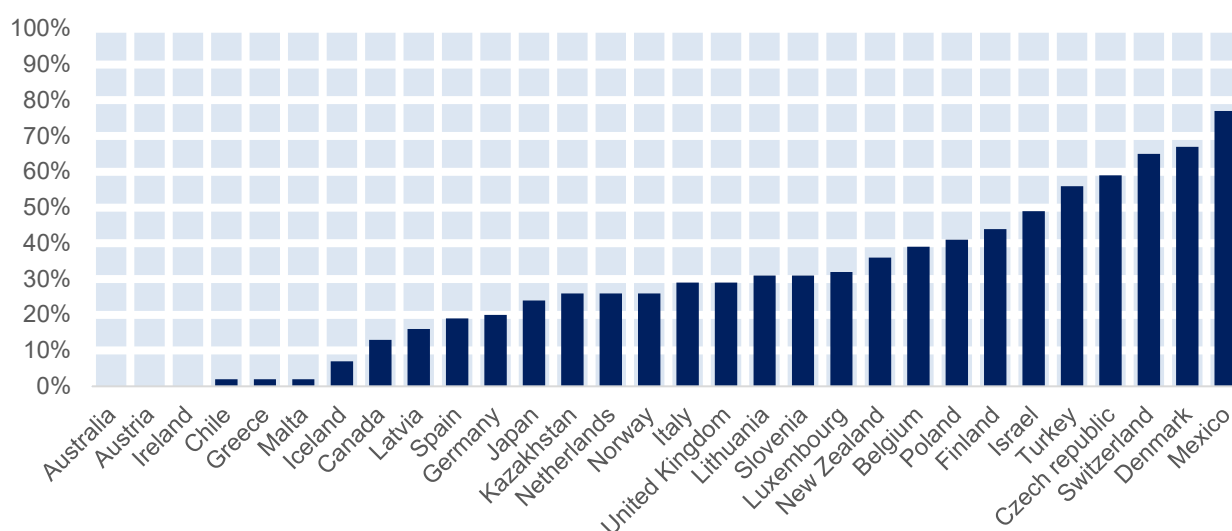
In regard to the spending power index, input and budgeting autonomy are the most decentralised aspects of health services, while output and monitoring is the most centralised. Finland has the most decentralised health service sector overall, including determining the opening or closing of hospital units (42% of respondents).

Source: Dougherty & Phillips (2019)

Many decisions related to Healthcare are shared across levels of government

Efficient decentralised systems typically allocate precise responsibilities and functions to each level of government in order to avoid duplication of services. Nevertheless, multiple levels of government are often tasked with similar responsibilities with regards to health services. In a non-crisis context, there are multiple responsibilities that are shared between different levels of government. Figure 9, below, has an estimate of the extent to which decision-making is shared across government levels, by showing how often more than one box was ticked in the questionnaire (for more details, see Dougherty & Phillips, 2019). It can be noted that usually a substantial share of the decisions regarding Healthcare is shared between different levels of government.

Figure 9. Shared responsibilities in Healthcare across levels of government by country



Source: Fiscal Network Spending Power Survey (Fiscal Decentralisation database, <http://oe.cd/FFdb>).

In extraordinary times, such as at the present moment in which governments have to tackle the COVID-19 outbreak, common routines are disrupted, which entails the necessity of performing promptly unusual activities (e.g. massive testing, introduction of new treatments, provision of emergency basic income support, isolation of infected people in hospitals, and other measures). In this situation, neither a procedure nor a protocol may exist and, thus, multiple levels of government may give conflicting orders. The public may become unsure about which level of government is responsible for the delivery of the services, which also hinders accountability. As a result, in the context of tackling COVID-19 crisis, many measures were implemented by multiple levels of government simultaneously and, sometimes, in an uncoordinated manner (see Dougherty et al., 2020). For instance, in some countries different levels of government were engaged in the purchasing of medical equipment, masks and tests.

It is worth noting that not all redundancy is considered to be harmful. OECD (2020c) highlighted that in a highly complex world of rapid feedback loops and increasingly nested systems, some redundancy can improve the resilience of a response. Although efficiency is desired and typically achieved by maintaining the leanest possible operation, minimising redundancy can lead to a greater vulnerability to shocks. For that reason, OECD (2020a) suggested that having some redundancy in the form of idle capacity can be crucial to handle a health crisis like the COVID-19 crisis – in countries in which health capacity is highly optimised, any additional pressure on Healthcare systems arising from an epidemic or any other public health emergency becomes almost unmanageable.

In the COVID-19 crisis, for instance, although strategic reserves of masks and of other protective equipment from different levels of government might be considered redundant, they have an important role to minimise the risk of scarcity. The same reasoning applies to other resources that might be managed by different levels of government, such as hospitals and staff. As highlighted by OECD (2020a), “lessons from the current crisis shows that the ability to create surge capacity in the three fronts – staff, supplies, and space – is a key characteristic of resilient health systems. In the long run, having excess idle capacity would be a diversion of much needed health systems, which were already experiencing constraints given the growing burden of non-communicable diseases, population ageing, increased citizen expectations, and costs associated with technological development. But the COVID-19 crisis demonstrates the need for flexibility and adaptability in the use of existing resources, as well as planning for responding to surges in demand”..

Due to the distribution of health responsibilities across levels of government, it is crucial for governments to use institutional mechanisms to improve intergovernmental coordination

Due to the involvement of multiple levels of government in Healthcare (especially in public Healthcare), the substantial number of overlapping responsibilities and the complex and political implications of the COVID-19 outbreak, countries have implemented interesting institutional mechanisms to improve the multi-level governance to tackle the outbreak. That is, to improve the delineation of activities across levels of government towards a coordinated response while minimising political hurdles. With different levels of government tasked with similar responsibilities, coordination is crucial for each level of government to focus on the activities that they are better prepared to do, reducing unnecessary redundancy and improving consistency. In normal circumstances, ensuring a high degree of vertical coordination is not trivial since it involves constitutional, legal and administrative aspects. In extraordinary circumstances, however, it becomes even harder – the necessity of prompt decisions and urgent measures may exacerbate vertical coordination problems and results in the worsening of the public service provided when it is needed the most.

To alleviate this problem, countries usually have some institutional mechanism or set of public policies that are put to use when disasters strike. Public policies with that purpose are commonly divided into four categories: mitigation, preparedness, response and recovery (Baird, 2010). Mitigation activities' goal is to eliminate or reduce the probability of occurrence of disasters. Preparedness refers to the planning activities aimed at enhancing disaster response operation (for more on this topic, see Box 4 on the Korean case). Response activities provide emergency assistance for casualties and seek to reduce the probability and magnitude of future damages. Lastly, recovery policies focus on bringing the affected community back to normality.

Institutional mechanisms that are employed to tackle emergencies can include intergovernmental relations elements to improve subnational fiscal capacity, intergovernmental coordination and delineation of activities across levels of government. These are important because commonly SNGs are at the forefront of responses activities since they can mobilise local resources quickly and, in some cases, are in charge of critical government functions – see Dougherty et al., (2020) and OECD (2020i). Nevertheless, depending on the magnitude of the crisis they may lack resources to deal with it and, thus, they might need assistance from other levels of government. In the situation of large-scale disasters, a vertical and horizontal network is needed to improve the effectivity of the responses. In the case of COVID-19, having such institutional mechanisms prior to the crisis might have led to a significant improve in the consistency and effectivity of the response (Downey & Myers, 2020). Here three different institutional mechanisms are analysed: executive federalism, strengthening centres of government and legal actions (i.e. through state of emergency laws).

Box 4. Korea and the preparedness phase

Learning from past mistakes

Korea was hit by multiple disasters throughout the last decades, such as the Middle East respiratory syndrome coronavirus (MERS-CoV) epidemic outbreak in 2015, the Sewol Ferry Disaster in 2014, the H1N1 pandemic influenza in 2009 and SARS in 2003. Notably, the Korean response to the MERS-CoV outbreak demonstrated significant shortcomings in its preparedness for public health emergencies. Korea was the most affected country in the world outside of the Middle East. The government and a number of medical institutions were criticised for, respectively, not disclosing relevant information to hospitals and citizens, and for discharging infected patients unaware of their situation (OECD, 2019).

Fortunately, most of these shortcomings were addressed throughout the last five years. Korea's government: 1) established a dedicated Office of Communications and communication guidelines for officials; 2) invested in public health emergency process; 3) created the Ministry of the Interior and Safety to coordinate and implement measures related to public safety, risk prevention and emergency preparedness, which are to some extent implemented at the local level while the central government controls most of the authority to determine and oversee the measures to be implemented.

Reacting to the COVID-19 pandemic

Korea was able to flatten the contagion curve of the first wave without imposing strict lockdowns or substantially disrupting its economy. Having learnt from past mistakes, Korea implemented a test-and-trace strategy accompanied by the imposition of social distancing measures in the most heavily affected regions. Such a strategy required a prompt production of tests, an early identification of cases, a tracing system to effectively isolate and treat infected individuals and a communication mechanism so that citizens could take the necessary measures without the enforcement of lockdowns.

Korea utilised a public-private partnership (PPP) model in order to test roughly 1% of its population as early as April 2020. The country also made use of roughly 600 screening centres and walk-through screening stations at airports. Public health agencies identified and informed citizens who have been in contact with an infected person. Due to the deficient response to the MERS-CoV outbreak, Korean citizens had agreed that the government could, in order to tackle an epidemic, access and disclose private information of confirmed and potential infected people. In addition, a large-scale urban data gathering platform was put to use to gather data at real time in order to investigate who may have had contact with the virus. These people were notified, tested, placed under self-quarantine and put in contact with Healthcare staff during the self-quarantine.

Regarding treatment capacity, Korea created multiple dedicated treatment centres to increase the supply of beds and took multiple measures to prevent transmission inside these facilities. Regarding communication, officials held daily briefings from 30 January 2020. The government also made available a hotline and a website, and posted news on their social media channels.

To conclude, the rapid implementation of all these policies were likely possible because Korea had prepared its institutional structure and legislation prior to this crisis. Administrative barriers were, thus, diminished and debate regarding the policies to be taken were less necessary than in other countries.

Source: OECD (2020j), You (2020) and Dighe et al. (2020).

Executive federalism

Executive federalism is characterised by the prominence of the executive branch of all levels of government in the implementation of a central/federal government's program (Watts, 1989). As a result, mayors, state governors and the prime minister/president have a key role in defining and implementing a federal/central policy. In the context of COVID-19, executive federalism can be used to align the responses of the executive branches across levels of government, without the need of a legal enforcement that mandates the implementation of certain measures. In that scenario, central authorities from the executive branch, such as from key Ministries and the president/prime minister himself, act as national leaders, guiding discussions, at least to some extent, about the responses. For that purpose, these authorities establish frequent meetings, formal and/or informal, to define and monitor responses.

This institutional arrangement can lead to a rapid and overall efficient response. Nevertheless, there are potential hurdles to a successful use of an executive federalism approach. First, it requires agreement between authorities from multiple parties and from different levels of governments. Institutionally, there is no change in the distribution of responsibility across levels of government, so authorities from different levels of government are only going to act in case they are convinced. If there is a substantial divergence of opinions and no compromise, executive federalism alone cannot force autonomous authorities to follow the proposed solution. Second, in case countries do not have an efficient institutional structure that may help implementing such approach (e.g. frequent meetings between authorities from different sectors and levels of government to discuss national policies; an emergency response system that triggers the start of these meetings with established norms, among others), when a crisis happens it might be challenging to establish such a system from scratch, in a rapid and (considered) legitimate manner (see Downey & Myers, 2020). Third, the small role that legislators play in this structure can create political problems. One country that overcame these hurdles and successfully implemented such an arrangement to tackle the COVID-19 pandemic was Australia. Australia suffered minimum deaths and contained the virus rather well through an overall consistent and efficient response (for more details, see Box 5).

Box 5. Implementation of Executive Federalism in Australia and Belgium

Australia

In Australia, SNGs are in charge of managing the public hospital system while the central government provides about half of their funding (see Figure 6). The private sector is also funded to some extent by the central government and also plays an important role in Australia health system. In addition, Australia's SNGs are also responsible for the management of most crisis, as defined by the law and constitution.

The Council of Australian Governments (COAG) as the National Cabinet

Australia successfully coordinated actions across levels of government in order to tackle the COVID-19 crisis through the use of executive federalism. In the Australian case, the key body that was put to use to coordinate action was the Council of Australian Governments (COAG). This Council has brought together the Prime Minister and the Premiers of the States as well as the authorities in charge of sectorial policies from Ministries, territories and states. It existed prior to the COVID-19 pandemic, having been formed in the 1990s as part of the implementation of policy reforms and deregulation. In a typical year, the COAG meets once or twice in order to discuss relevant matters and to improve intergovernmental cooperation through joint decision-making and oversight of the implementation of policies. Historically, the Prime Minister sets the agenda and has, thus, a leadership role.

In the months following the pandemic outbreak, the COAG developed such a prominent role in managing the COVID-19 crisis that it was known as the “National Cabinet”. Important changes were made in their governance to adapt to the severity of the current crisis. The COAG organised meetings much more regularly – on a bi-weekly basis. In addition, the scope of the discussions was widened to encompass multiple topics related to the COVID-19 crisis such as health, economy, education, transport logistics, law and order, among others. In order to handle such a variety of topics, different councils that respond to the COAG were created, each involving authorities from specific sectors from different levels of government. These technical councils have been crucial to provide a technical position to the executive authorities, which are from both sides of the political spectrum and, thus, minimising the political role in decision-making.

One specific council whose role is worth highlighting is the role of the Australian Health Protection Principal Committee (AHPPC). The AHPPC focuses on public health emergency management and disease control and is chaired by the Chief Medical Officer of the Australian government and composed of the Chief Health Officers of the states and territories. The body is in charge of developing protocols that are used as a basis to support a consistent approach regarding the containment of the virus and treatment of the infected – including the restrictions of movement/mass gatherings, closure of schools, among others. Potentially, one of the most interesting elements of this specific body regards the fact that the National Cabinet agreed that their advice will have the status of a COAG advice. For that reason, this council’s technical advice can, to some extent, “bypass” some political discussions.

Conclusion

Australia’s response was largely consistent and effective. Although the rate of infection has varied across jurisdictions (see Annex on Australia) and despite the significant subnational autonomy in health policy and disaster management, most SNGs implemented a similar policy in terms of process, timing and substance. The COAG was crucial to create consensus in such a decentralised country.

It is worth highlighting that one factor that might also have helped Australia is its relatively sparse geography, combined with the possibility of closing regional (and national) borders and the relatively small numbers of states in the country. There are only 10 states and territories in Australia. In comparison, there are 50 states in the United States, 32 states in Mexico, 27 states in Brazil, 17 autonomous communities in Spain, 16 states in Germany, 10 states in Belgium and 10 provinces in Canada. This smaller number of states might have helped Australia to achieve the necessary consensus for a successful implementation of an executive federalism arrangement. Despite this fact, it cannot be underestimated the importance of having a legitimate institutional mechanism for supporting intergovernmental cooperation in place before the COVID-19 crisis hit.

Belgium

Belgium is a federal country that has recently decentralised some important elements of their Healthcare system (to recap, see Figure 6). Belgian states enjoy a significant autonomy and do not respond directly to the central government in many matters. With regards to crisis management, the Belgian central government is, in principle, responsible for defining the policies (i.e. substance) while the SNGs are responsible for their implementation (i.e. process).

The Crisis Management Committee and COVID-19

In times of crisis, authorities from different levels of government and sectors form a crisis management committee that is responsible for planning an effective and consistent response across the country. Such arrangement was used to handle past crisis such as the terrorist bombings of Brussels in 2016.

Belgium started to use this committee in response to the COVID-19 crisis on 12 March. Similarly to the Australian COAG, this committee draws upon advice from a technical body that includes a scientific committee formed by medical scientist from multiple Belgium universities. Based on technical advice, the Crisis Management Committee implemented many measures aimed at tackling the pandemic. For instance, this includes closure of schools, partial closure of commerce, limitations on public transport use and the imposition of lockdowns.

Throughout the first wave of the COVID-19 outbreak, it became clear that responses aimed at tackling the COVID-19 crisis have substantial costs and affect civil liberties. The Flemish and the French-speaking authorities diverged with regard to the measures to be taken. At that stage, the former defended measures less harmful to economic activity, while the latter defended more severe measures such as rigorous lockdowns. As a result, due to difficulties in compromising, a parliamentary coalition formed to grant special powers to the central government.

Despite this centralisation of powers, SNGs are still autonomous to operationalise some centrally imposed measures. As a result, in some respects, SNGs implemented different policies – for instance, with regard to the purchases of medical equipment and allocation of staff.

Conclusion

Belgium already had a system for emergency preparedness in place – the Crisis Management Committee, which was used for tackling other crises. Nevertheless, due to the split party system, and huge consequences of the measures taken, there were some obstacles to compromise. Belgium overcame these difficulties through a centralisation of powers, granted by a new parliamentary coalition. The Belgian case is an example of the challenges that a country can face in responding to a crisis.

Source: Rozell & Wilcox (2020), Downey & Myers (2020), Wilkins (2020) and Bursens (2020)

Centres of government

It is worth highlighting that executive federalism should not be confused with vertical coordination and cooperation. Although executive federalism involves vertical coordination, it has an additional element: the prominence of the executive branch. Multi-level governance mechanisms involving the executive branch of different levels of government can be employed without being considered an “executive federalism approach”, in case the executive branch does not have such a prominent role. One tool that, if used alone, cannot be considered executive federalism regards the use of centres of government.

Centres of government refer to the body or group of bodies that provide direct support and advice to Heads of Government and the Council of Ministers, or Cabinet (OECD, 2020c). In order to tackle the COVID-19 crisis, multiple countries are using or strengthening their centres of government. During this crisis, their main role is to coordinate policy responses across levels of government and areas (e.g. health, transport, economy, among others) and to monitor the development of the crisis. Usually, centres of government do not involve other levels of government but due to the territorial aspect of the crisis and to key role of SNGs in tackling the COVID-19 crisis, multiple OECD countries are now involving SNGs into these bodies (at least temporarily).

According to OECD (2020d), in addition to bringing SNGs into these bodies, some countries are also appointing coordinators from outside the centre of government, such as public health officials (e.g. France, Ireland, United States) or official with a background in economic and trade issues (e.g. Colombia). In this manner, the body can benefit from their specific expertise that is particularly relevant to this crisis.

Some of these centres of government were created with the sole purpose of handling emergencies (e.g. Chile, France), while in others existing structures were adapted to tackle this specific crisis (e.g. Belgium, Italy).

In addition to centres of government, countries are also using a myriad of institutions and bodies to improve coordination. In a sample of roughly 20 OECD and partner countries, in order to improve multi-level governance, nine countries reported to be using only existing institutions, seven countries to be using both new and existing institutions and one country to be using only new institutions (Dougherty et al., 2020). Some of these new institutions have a very narrow focus (e.g. Finland created a new institution to share data), while others a broader one (e.g. Italy created a scientific-technical committee that has a supporting role in monitoring the state of the epidemic and providing guidelines on lockdowns and travel restrictions decisions).

Countries are also re-orienting the purpose of some institutions in a manner that they can be used to coordinate actions across levels of government (e.g. Poland established the “COVID-19 Counteraction Fund” that, although is not a mechanism of multi-level governance, is facilitating coordination across levels of government). Often these institutions are holding regular meetings (sometimes virtually), involving scientists and leading authorities from multiple levels of government. These institutions/bodies are having a crucial role in harmonising the responses of different levels of government and jurisdictions.

State of emergency laws

Another institutional framework that has been put to use to support vertical intergovernmental coordination and the delineation of roles across levels of government regards state-of-emergency laws. In contrast to the executive federalism approach, in countries in which state-of-emergency laws were enforced, legislators had a key role in defining the responsibilities of different levels of government in tackling the crisis.

The idea of these laws is as follows: first, there is some triggering criterion in which under certain circumstances some actors (e.g. the Prime Minister, President or the Congress) can declare a state-of-emergency; second, when in force, this state-of-emergency defines the powers and roles of different levels of government and branches of power, in a way that an emergency can be handled in a more efficient manner. Often this mechanism concentrates power in the hands of the central executive branch of government. As a result, these laws can be an efficient tool to overcome potential political hurdles associated with the discussion related to the definition of roles of different levels of government and branches of power.

Despite these benefits, there are some hurdles that may hinder the effectivity of this institutional mechanism. First, in case the law is not clear enough, discussions can be necessary to define how the state-of-emergency works and, thus, the outcome can be neither a rapid nor an efficient solution. It is worth highlighting that since states-of-emergency are not commonly proclaimed, it is, unfortunately, common to have unclear legal statutes. Second, changes in the delineation of roles across level of government and branches of power can be inefficient in case they are not accompanied by changes in the management process. For instance, a state-of-emergency that centralises the decision-making is more likely to be effective in case the information necessary for making decisions is also centralised; therefore, in case a country operates in a highly decentralised manner, it can be difficult to achieve this centralisation of information in the short-term, making the centralisation ineffective. In addition, a drastic change in the way in which organisations works can be tough to implement at the rapid pace that is necessary to tackle an emergency. Box 6 explores some examples of OECD countries that used state-of-emergency laws to tackle the COVID-19 outbreak.

Box 6. The role of state-of-emergency laws in Germany, Italy, Spain and Switzerland

Germany

In Germany, under normal circumstances, legal competences on health matters are distributed across levels of government. Nevertheless, if parliament declares a nationwide epidemic emergency, the Federal Health Ministry can regulate by legislative decree a wide range of issues such as: immigration control; the duty of transport operators and airports to cooperate and to provide information and data; the supply of medical goods; temporary suspension of medical standards; the limitation of patent rights; and coordination and data exchange with states and scientific institutions. During the COVID-19 pandemic, the parliament declared a nationwide epidemic emergency, and the central government used this power to better coordinate responses.

Nevertheless, despite this legal centralisation of power, differently from other countries explored in this Box, Germany's states have maintained a significant degree of autonomy (for more see Box 2). In other words, Germany's federal government did not use this power to impose national-level measures, but rather to better coordinate the responses across levels of government. As a result, many of decisions, such as regarding the reopening of schools, mandatory use of face mask in public transports and shops, among others, were defined jointly by different levels of government.

Italy

Italy's state-of-emergency law defines that in emergencies, the central government may govern through decrees. These decrees are valid for two months and can be extended in case they are adopted as formal laws by Parliament. In other words, the state-of-emergency gives to the executive branch of the central government a temporary but substantial amount of power that can be used to implement any necessary measure within limits of the general principles of the legal system, even in case SNGs oppose them. SNGs are free to impose more strict regulations, however.

Although Healthcare is heavily decentralised in Italy (refer to Figures 6 and 8), the central government was in charge of the design of the national response. This power was used to establish a national-wide lockdown and to stop all non-essential production and commerce. Due to the fact that the crisis has had a very asymmetric impact (see Annex on Italy) and to the enormous economic losses that these measures entail, pressure from SNGs to restore some of their autonomy obtained success and the central government decided to devolve some powers to SNGs throughout the first wave. Given the dramatic initial phase of the crisis in Italy, it is interesting to note that its number of cumulative cases per capita since the beginning of the crisis through early November 2020 is not among the highest (refer to Figure 4).

Spain

The state-of-emergency approved in Spain enabled each administration to retain its powers in the ordinary management of its services in accordance with current legislation, although all health authorities became under the direct orders of the Minister of Health. Spain's central government had almost full control of the design of the policies to be implemented in order to tackle an emergency.

It is worth noting that health expenditure and policy are heavily decentralised in Spain (refer to Figures 6 and 8). This forced the central government to make an additional effort to guarantee the operational capabilities to manage the whole national health system at the early stages of the crisis. For instance,

this included improving the coordination of health databases to track the use of health resources and treatment of patients in hospitals, laboratories or for epidemiological surveillance. It is worth noting that, under normal circumstances, decentralisation of health management was not a problem in Spain – with a strong health system in part through its successful decentralisation of healthcare (Spain offers an interesting case of successful decentralisation, for more see Costa-Front, 2013)

Like other countries, Spain suffered from shortages of medical equipment and supplies at the early stages of the crisis. The central government complemented the purchase of sanitary material of the regional governments with difficulties during the first weeks of the pandemic. Furthermore, nation-wide measures in such an asymmetric crisis (see Annex on Spain) has led to potential disproportionate economic impacts, leading to criticism from the more advanced regions. Five regional governments refused to sign a joint declaration on the perimeter confinement in large cities of the region that led the incidence of the pandemic at the end of September.

Then the central government had to reinforce all the coordination tools between the different administrations, both at the level of heads of government such as for those responsible of health, through existing multilateral instruments or newly created bilateral instruments.

The Spanish case offers an interesting lesson of the difficulties of a central response while the existing instruments are reinforced or new additional instruments are created to support coordination across levels of government.

Switzerland

Switzerland used at least three different types of state-of-emergency laws during the pandemic. First, in late February, the Swiss Federal Council announced a 'particular situation', which has concentrated canton's power in the hands of their executive branch – they had the power to take measures without needing the canton parliament's approval. Nevertheless, in mid-March, it was clear that the crisis had national proportions and, thus, the federal government announced that the country entered in an 'extraordinary situation', which transfers the competences from the cantons to the executive branch of the central government. Nevertheless, some effects from such a proclamation were not clear. For instance, the extent to which federal decrees apply equally to all cantons and the extent to which cantons are entitled to take further measures in an independent manner were not clearly defined by the law.

Despite this lack of clarity, the Swiss federal government often consulted the cantons prior to taking measures, which might have minimised political problems. Measures were, though, applied uniformly across the whole country, which has led to a rather consistent response from a highly decentralised country. Example of nation-wide measures taken by the Swiss government are restrictions of nonessential businesses, the closure of schools, and quarantine measures. Gradual phase-out of these measures was also implemented with a substantial amount of uniformity across the country. Overall, this approach proved to be relatively successful for Switzerland (see Figure 4). Despite the lack of clarity of the state-of-emergency announced and the centralisation of powers in the hands of the central government, Switzerland was able to avoid intergovernmental confrontation and successfully fostered intergovernmental cooperation through the use of consultation.

Source: Milbradt (2020), Buthe et al. (2020), Palermo (2020), Kölling (2020) and Altherr (2020).

Intergovernmental coordination in the context of COVID-19

The above section explored the interplay between federalism and COVID-19 responses, highlighting overall multi-level institutional arrangements used for tackling the COVID-19 outbreak in a more effective and consistent manner. Nevertheless, in addition to these broad multi-level arrangements, there are many other means through which intergovernmental coordination and cooperation can be improved. Some involve multiple levels of government but regards only some specific sectors/activities, such as procurement and regulation. Others are broad but only involve the same levels of government. This section explores these more restricted arrangements.

Regulatory processes

Some of the measures that are necessary to be implemented to treat patients and to contain the spread of the virus require regulatory approval. The process of regulatory approval often involves multiple steps and certifications such as permits, inspections and enforcement guidelines (OECD, 2020g). For instance, new diagnostic tests, treatment and vaccines are being developed and in case the normal approval path is followed, they can become available too late to be used extensively. Thus, under this extraordinary circumstance, the simplification of some processes in order to haste the regulatory approval can be justified. One particular way to accelerate the necessary regulatory approval without necessarily increasing the risks of a rapid approval is through intergovernmental coordination. For decentralised regulatory system, jurisdictions can consider valid tests, permits and inspections that were conducted in another jurisdiction. For centralised regulatory systems, a potential improvement to deal with this crisis regards the partial delegation of the trial to sub-investigators and to local sites (OECD, 2020d).

Procurement

Input management is one of the most decentralised areas in Healthcare (see Box 3) and, thus, it also is one of the areas that, without intergovernmental coordination, an inconsistent response can easily emerge. In addition, the lack of coordination can have substantial impact on the availability of the necessary equipment across a country since SNGs may engage in intergovernmental competition, leading to excessive purchases at high prices (OECD, 2020f). Intergovernmental coordination can, hence, have an important role to reduce the costs and increase the availability of medical equipment across a country.

During emergencies, collaborative and coordination actions in procurement are especially important to avoid awarding an expensive contract to suppliers to secure a transaction. In the context of COVID-19, hence, multiple types of collaborative arrangements have been established across OECD countries (see Box 7). These arrangements do not necessary involve all levels of government and all aspects of a procurement system. Even relatively simple arrangements can yield substantial results.

Some examples of institutional arrangements employed to better coordinate procurement activities are OECD (2020f): 1) a temporary centralisation of the purchases; 2) joint procurement arrangements

involving jurisdictions at the same level of government; 3) sharing information about prices and suppliers. The first two measures can generate economies of scale, avoid intergovernmental competition and help avoid duplication of stock. The third measure can be a useful tool to increase the understanding on the constantly changing purchasing environment, avoid unnecessary competition, identify key supplies and share good practices with regards to, among others, the effectiveness, availability and logistic of products.

According to OECD (2020f), increased centralisation of purchasing medical and health products has been adopted in Canada, Colombia, Latvia, Germany, Korea, Estonia, Italy, Lithuania, Poland, Spain, Switzerland and Slovakia, among others. Note that despite Germany's decentralised response (see Box 2), the procurement system was one of the activities that was centralised. Decentralised procurement systems in combination of an intergovernmental coordination arrangement can also lead to a successful outcome, such as in Italy (see Box 7).

Box 7. Different approaches to improve procurement systems

Centralisation of procurement in Switzerland

Switzerland offers a good example of how a heavily decentralised country can implement a centralised procurement system under extraordinary circumstances. In order to ensure the supply of medical equipment and personal protective equipment (PPE), Switzerland's central government centralised the procurement of essential medical goods that cannot be acquired through regular procurement channels. The Army and the Federal Office of Public Health were tasked with the procurement of, respectively, 1) medical devices and PPE, and 2) medicines. Given that procurement is decentralised under normal circumstances, it was necessary for the central government to establish a channel to distribute the purchased goods. In each canton a distribution centre was established and in case goods are lacking, the central government can require cantons to redistribute part of their stocks to others.

Combination of centralised and decentralised procurement approaches in Italy

In Italy, the central government, through its Civil Protection Department, has focused on coordinating the regional procurement systems instead of centralising the procurement process. The general idea has been for the central government to coordinate the purchase of goods and to supply additional goods to Italian regions in need. These additional goods supplied are purchased by the central government itself. In that arrangement, SNGs maintained their autonomy without leading to predatory competition for goods, since they could obtain the necessary goods from the central government in case they lack supplies. It is worth noting, though, that this arrangement involved medical equipment, but not the purchasing of drugs, which was kept decentralised.

Source: OECD (2020f).

Data management

The OECD (2020a) has explored the importance of having reliable and up-to-date data in order to better detect, prevent, respond to and recover from COVID-19. Notably, data can be leveraged to improve the effectivity of test-and-trace policies, which has been considered among the most effective strategies to reduce contagion while minimising restrictive measures that have significant economic costs (also see OECD, 2020i). Nevertheless, using data for that purpose is not trivial if data is dispersed across different institutions and levels of government. In this regard, countries with standardised national electronic health records that produce high quality data can more easily extract value from their data to tackle COVID-19

(Mello & Ter-Minassian, 2020) . Among these countries are Austria, Canada, Denmark, Estonia, Finland, Israel, Singapore, Slovakia and the United Kingdom (OECD, 2020a).

In cases in which the central government has only limited access to SNGs' health data and in which this data is neither standardised nor gathered rapidly, during an outbreak such data infrastructure can be challenging to be used effectively (Carinci, 2020). Nevertheless, some countries have been able to overcome these challenges and have made a good use of their decentralised health data systems.

Austria, Germany and Switzerland are a good example of how decentralised data can be leveraged to tackle the COVID-19 pandemic (Desson et al., 2020). Subnational health departments in these three countries are responsible for gathering data on suspected and confirmed COVID-19 cases and sharing this data with the central government, who made them available online. In other words, data gathering was decentralised, and the system used to consolidate the regional data centrally managed. At the very beginning of the crisis, reporting obligations for other types of information were not standardised in Germany and, thus, varied significantly across regions. Nevertheless, as early as 4 March 2020, the central government introduced case, surveillance, diagnostics and communication guidelines, standardising the information obtained. The Austrian government at the beginning of the crisis was able to publish an online COVID-19 dashboard with national-level data provided by Austria's SNGs. Switzerland followed a similar path while using a centrally developed algorithm to gather and consolidate the regional data.

Horizontal coordination

Horizontal cooperation/coordination refers to the cooperation between jurisdictions at the same level of government. Horizontal coordination can be a complement to vertical coordination or, in some cases, a substitute. In countries that are employing a decentralised response (e.g. Brazil, Mexico, United States), horizontal coordination can have a prominent role to deal with regional spill-overs and improve the overall regional consistency of the response.

There are multiple elements that improve the chances of the emergence of intergovernmental coordination arrangements. First, the existence of horizontal cooperation arrangements prior to the crisis can substantially facilitate cooperation during the crisis (see Box 8). That is because these arrangements already have established a proper communication channel that can be easily and rapidly adapted to align responses. Second, even in case there is no official cooperative arrangement in place, frequency of contact between authorities from different jurisdictions can have a key role in fostering collaboration in times of crisis (see Box 8). As Mallinson (2020) put it, with regard to the United States, "prior state collaborations and interpersonal relationships among public officials, even in completely unrelated policy domains, make future collaboration easier". Third, territorial diffusion effects - the tendency for the adoption of policies by one jurisdiction to influence the likelihood of the adoption of similar policies by neighbouring/other jurisdictions. The mere fact that two jurisdictions share a common border can increase the likelihood of the emergence of a collaborative response. Indeed, the proximity also makes these jurisdictions more vulnerable to spill-overs from one another and, thus, collaboration become even more necessary. Fourth, bipartisan coordination happens when a party uses instruments at its disposal to coordinate the actions of competing political authorities, such as state governors (Bennouna et al., 2020).

It is worth noting that these drivers of intergovernmental coordination are so strong that, in some countries, they tend to influence the substance and timing of SNGs' responses more than the subnational severity of the crisis. For instance, Buthe et al., (2020) explored this topic in four countries (France, Germany, Italy and Switzerland) during the first wave of the pandemic and found that, in general, decentralised responses have led to a more heterogeneity in a country's response patterns but there was only a small link between the rigorousness of the responses and the severity of the crisis at the local level.

In other words, although the heterogeneity of the measures was, indeed, presented in countries that implemented a more decentralised approach, not necessarily regions that were being more heavily affected by the pandemic were the regions that were taking the more stringent policies. In the same vein,

Kettl (2020) found that in the United States, partisan political effects were a better indicator of the substance of the subnational response than the local seriousness of the outbreak. Bennouna et al. (2020) also found evidence of partisan effects in the substance of the subnational measures but this time in the United States and Mexico. In addition, territorial diffusion effects have been found across Brazil, Mexico and the United States (i.e. SNGs tended to take similar measures as neighbouring jurisdictions).

Box 8. Horizontal Coordination in Brazil and in the United States

Brazil's Northeastern Consortium

Brazil is a federal country with 26 states and a federal district. The Brazilian response to COVID-19 pandemic has been heavily decentralised. Governors are in charge of defining and implementing a large portion of the responses. For instance, they are responsible for enforcing lockdowns, mandatory use of masks, hospital management, among others. Due to the substantial autonomy that states have kept during the crisis, there has been a significant heterogeneity in the adoption of measures within the country. Nevertheless, some states are coordinating their responses with one another.

A cooperative arrangement that is worth highlighting regards the “Consórcio Nordeste”. “Consórcio Nordeste” is an interstate group that was created in 2019, prior to the COVID-19 crisis, in order to improve policy coordination in the northeast region of the country. The “Consórcio Nordeste” is a formal group established by the Law of each member state. Despite the recent creation of this group, a Northeast Governors' Forum already existed before. This forum had its role extended in 2019, leading to the creation of the “Consórcio Nordeste”.

When the COVID-19 crisis hit, the “Consórcio Nordeste” has shifted its priorities towards tackling the COVID-19 outbreak. First, the “Consórcio Nordeste” created a scientific committee to provide technical advice to the states. Second, a joint procurement process was established. Third, an emergency health brigade was created to improve the capacity of the states to handle the crisis through, among others, the re-allocation of personnel across states. Fourth, “Consórcio Nordeste” developed an application that consolidated the information related to COVID-19 from the member states. This information was used to carry out simulations and to develop scenarios to guide policymaking.

The “Consórcio Nordeste” has played, thus, an important role in making recommendations that were, in many cases, adopted by its member-states. Some recommendations given by the “Consórcio Nordeste” were related to social isolation, articulation between state and municipal health departments, articulation between research groups, orientation regarding mask use, traffic restriction, and the definition of hygiene and sanitation requirements, among others. As a result, the “Consórcio Nordeste” offers an interesting example of how existing arrangements between SNGs can be reoriented to tackle the COVID-19 crisis, potentially leading to an overall consistent response.

Horizontal coordination arrangements in the United States

To tackle the first wave of the pandemic, the United States implemented an extremely decentralised response, in which the central government had a small role in coordinating SNGs (see Box 1). Nevertheless, in many regions, cooperative arrangements between states and local governments have emerged. The first was the multistate collaboration arrangement between New York, New Jersey, Connecticut, and Pennsylvania. These states have coordinated action related to the closure of schools, nonessential business, parks, among others. Naturally, since these states share borders with one another, in case responses are not coordinated, spill-overs might jeopardize containment measures. A few days afterwards, other neighbouring states joined the partnership (i.e. Rhode Island, Delaware, and Massachusetts).

It is worth noting that this first cooperative partnership might have been facilitated by the fact that the four member states worked together before, during a marijuana legalisation summit that strengthened the links between the authorities from these states. Many other states across the country followed the example from these states and engaged in cooperative arrangements. For instance, similar arrangements emerged in the West Coast (California, Colorado, Nevada, Oregon, and Washington) and Midwestern (Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio, and Wisconsin).

The US case shows two interesting drivers of horizontal coordination: the existence of links prior to the crisis and diffusion. Regarding the former, the first horizontal arrangement was facilitated by the fact that the authorities from these states participated in the same summit, which strengthened their links. Regarding the latter, following the example from north-eastern states, similar cooperative arrangements were implemented by other states and even local governments. This reveals the interesting nature of federalism that can lead to a “laboratory” of practices that, when successful, are also implemented by other jurisdictions. Such diffusion effects can improve the overall consistency of a country’s response.

Sources: Fernandez & Pinto (2020), Benton (2020) and Mallinson (2020).

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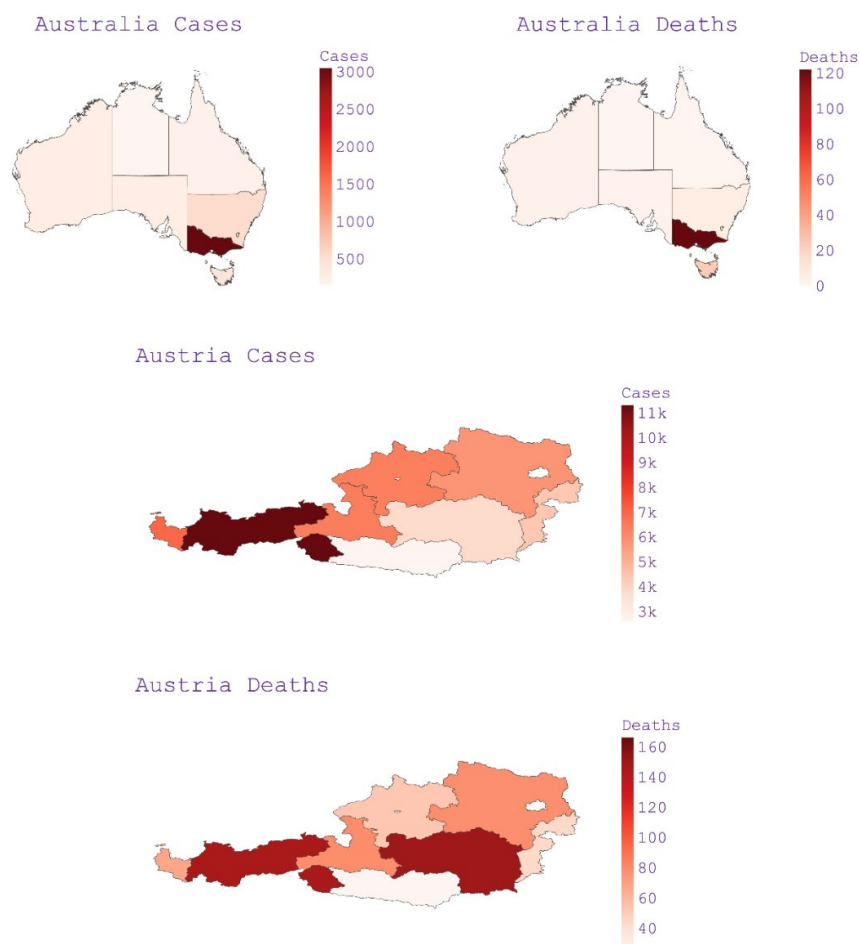
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Annex A. Asymmetric impacts of the COVID-19 crisis by country

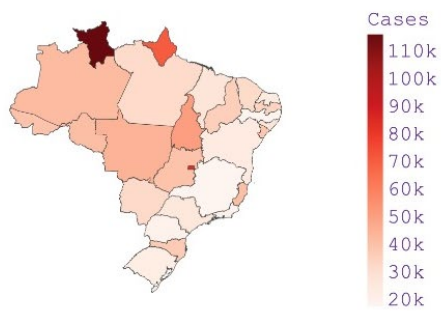
Source for all countries except Switzerland: Google COVID-19 dataset, accessed on 4 November 2020. Retrieved from: <https://news.google.com/covid19/map?hl=en-US&gl=US&ceid=US%3Aen>

Source for Switzerland's cases and deaths: Statista, accessed on 4 November 2020. Retrieved from: <https://www.statista.com/statistics/1107224/coronavirus-covid-19-switzerland-by-canton/>

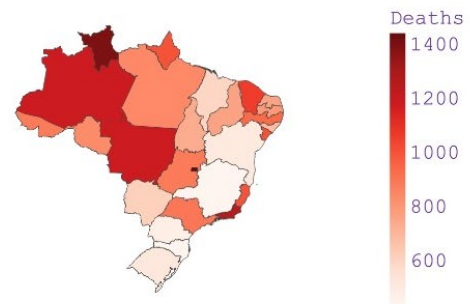
Note: Different scales were used in each plot to highlight differences within countries. All values refer to ratios per 1 million inhabitants.



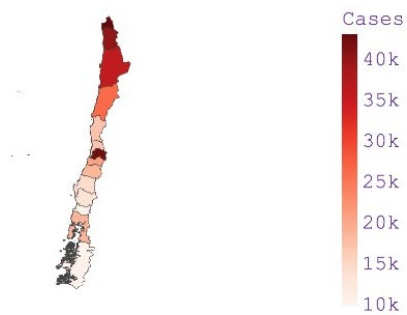
Brazil Cases



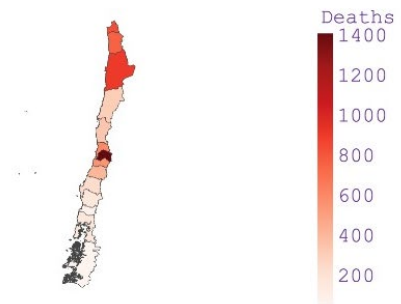
Brazil Deaths



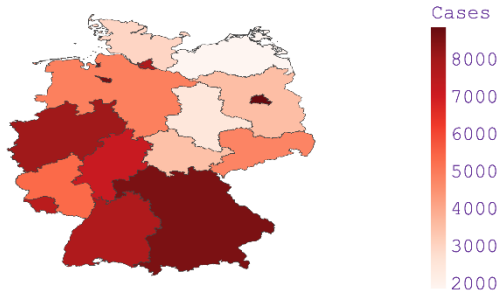
Chile Cases



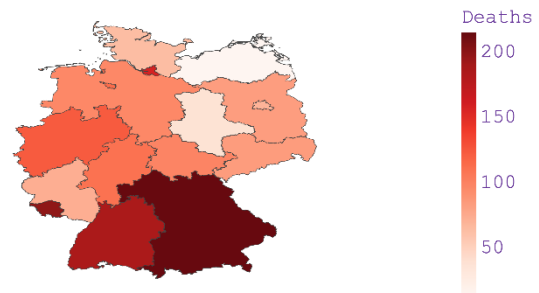
Chile Deaths



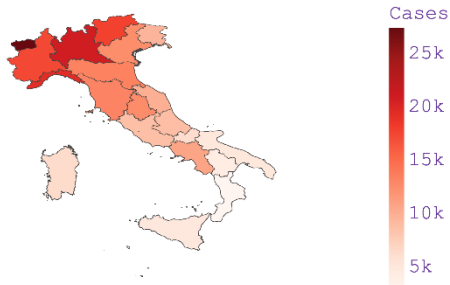
Germany Cases



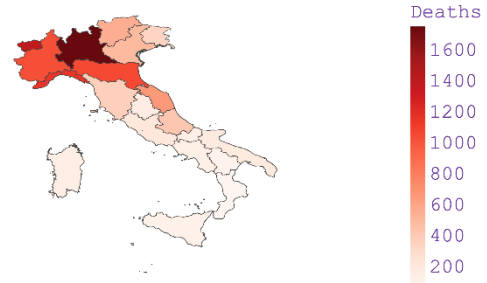
Germany Deaths



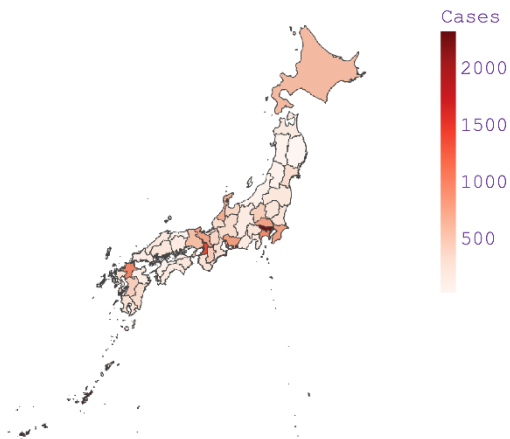
Italy Cases



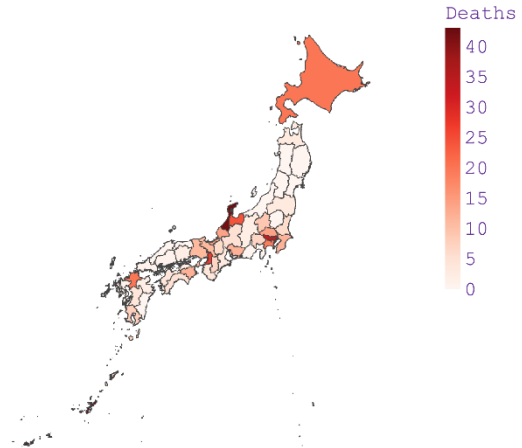
Italy Deaths



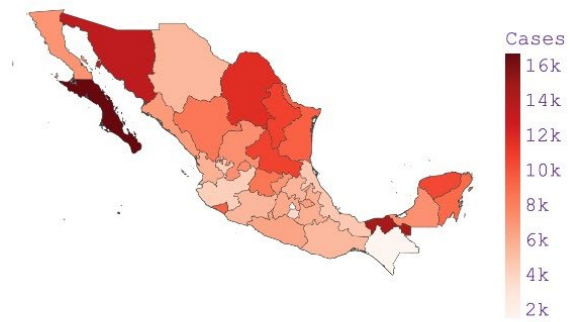
Japan Cases



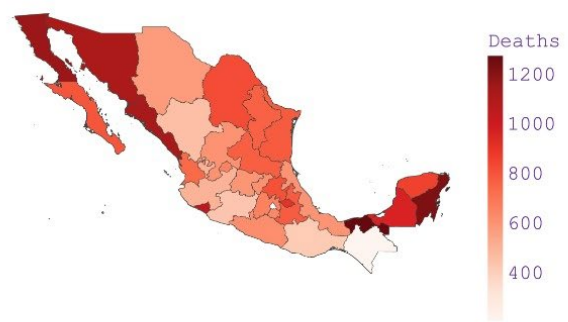
Japan Deaths



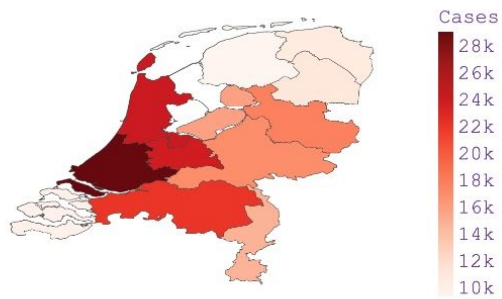
Mexico Cases



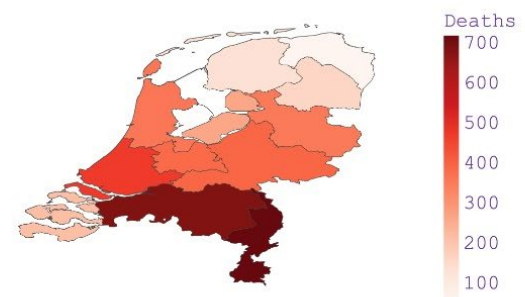
Mexico Deaths



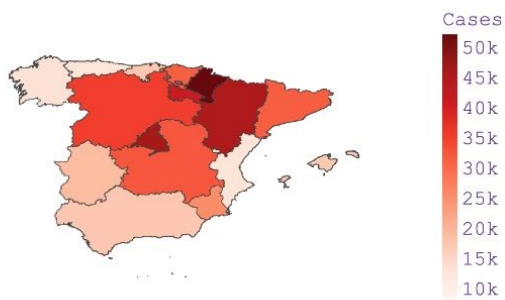
Netherlands Cases



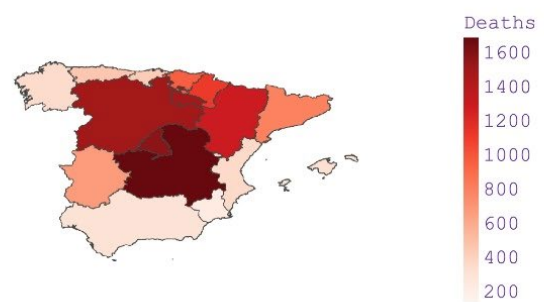
Netherlands Deaths



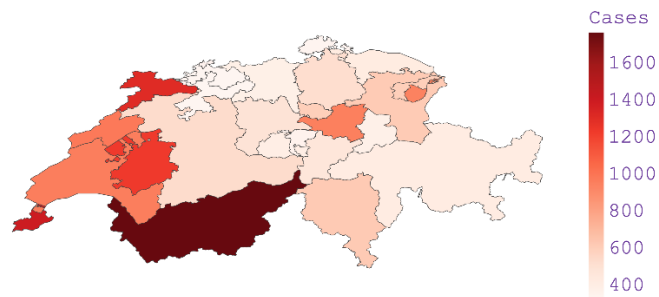
Spain Cases



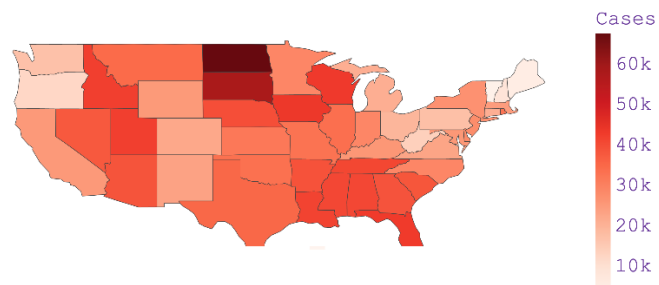
Spain Deaths



Switzerland Cases



US Cases



US Deaths

