Mapping COVID: PSIRU working papers for PSI August 2020

COVID-19: Country case studies

August 2020

Tue Anh Nguyen tue.nguyen@bsg.ox.ac.uk Blavatnik School of Government, University of Oxford,

Vera Weghmann v.weghmann@gre.ac.uk PSIRU University of Greenwich

David Hall halldj@gmail.com visiting professor, PSIRU University of Greenwich

NOTE: This paper was completed with data correct up to August 2020.

The Public Services International Research Unit (PSIRU) investigates the impact of privatisation and liberalisation on public services, with a specific focus on water, energy, waste management, health and social care sectors. Other research topics include the function and structure of public services, the strategies of multinational companies and influence of international finance institutions on public services. PSIRU is based in the Business Faculty, University of Greenwich, London, UK

Contents

1.   Africa

A.   Mauritius

The Republic of Mauritius is an island state in the Indian Ocean with 1.3 million inhabitants. On the outbreak of the pandemic, the World Health Organisation (WHO) predicted through economic modelling that per capita Mauritius would be among the highest affected by Covid-19 i, among other factors, due to its high population density – it is the 10th most densely populated country in the world – and its high connectedness to other countries – one million tourists visit Mauritius annually.ii

Yet, quite the opposite turned out to be the case. Mauritius responded extremely quickly and well to the Covid-19 pandemic. In total Mauritius only had 322 Covid-19 cases and ten death and by the 11th of May 2020 it became Covid-19 free. iii Mauritius resilience might not come to a surprise to some, such as the Nobel prize winner Joseph Stiglitz, who pointed out that there is a lot the West could learn from Mauritius budgeting and its strong welfare state.iv Mauritius has a strong public health care system. The government provides free-of-charge primary, secondary and specialized medical care to all citizens, and primary healthcare to foreigners. Drugs are dispensed at pharmacies free of charge. v It's healthcare system as a ratio of 3.4 hospital beds per 1,000 people, which is more than some Western nations have, including the UK, the US and Canada.vi Mauritius allocates almost 10 per cent of its GDP to social protection measures. Approximately 73 per cent of all health services are provided by the public sector and for free. viii The remaining 27 per cent are offered by the private sector and payable

Measures to fight the pandemic were taken long before the country recorded its first Covid-19 case. Already on the 22 January, the Government of Mauritius started screening people on arrival at its airport. Also, in January it started to restrict flights from China and soon also from Europe.x From 28 the Mauritian authorities quarantined visitors from countries with a high number of cases.xi The first three cases of COVID-19 in Mauritius were detected on 18 March 2020 (all coming from abroad).xii Mauritius then introduced lockdown measures, closing schools and only essential services were operating, it closed its borders except for repatriation flights for nationals who were stranded abroad and only people with a work access permit signed by the authorities were allowed to travel. xiii Around a week later, when 42 cases were recorded on the 24th of March, it even implemented a 'sanitary curfew', closing supermarkets, bakeries and shops with immediate effect. xiv The country also tested, and contact traced its population. On 12 May, the government there said it had carried out more than 73,500 tests, which is the equivalent of 61 tests for every 1,000 people - a higher figure than in Germany at that point. xv

The fact that most public services are in public ownership and control enabled Mauritius to effectively respond to the Covid-19 crisis. During the Covid-19 crisis the government increased its already well-developed health care system even further. Five dedicated Covid-19 testing centres were set up outside major hospitals; 18 doctors were appointed to answer calls at a special coronavirus hotline; hundreds of hospital beds were identified and isolated for Covid-19 patients. xvi Furthermore, the publicly owned airline, Air Mauritius, was repurposed to import ventilators and personal equipment from all over the world. xvii Over 5

million US$ (Rs208 million) were made available to the Ministry of Health and Wellness for the acquisition of new medical accessories and equipment. xviii Its majority publicly owned broadband. xix doubled data availability and extended digital TV access for individuals at no cost in order to

incentivise citizens to stay at home and for business to continue xx It also broadcasted online classes for school children on national television. xxi

Mauritius implemented several economic protection measures, which included generous wage assistance schemes, the distribution of food, and support for the self-employed and those working in the informal sector. xxii It also amended legislation to ensure that people cannot be disconnected from their water or electricity services if they fall short to pay their bills. xxiii Both water and electricity services are publicly owned and managed. xxiv

Moreover, members of parliament contributed 10 per cent of their salary to a special Covid-19 solidarity fund. xxv To deal with the economic effects of the Corona crisis the parliament introduced a new taxation system. On 15 May 2020, the COVID-19 (Miscellaneous Provisions) Act, 2020 (the "COVID-19 Act") was adopted by Mauritian Parliament. xxv

B.   Nigeria

Lesson 1: Early lockdown in Lagos prevented a fast spread of Covid-19 but at the same time the lockdown fuelled domestic violence.

Lesson 2: An extremely underfunded heath care system and further budget cuts in the health care sector in the middle of the pandemic prevents Nigeria to deal effectively with the pandemic, putting its citizens and health care workers at risk.

Lesson 3: Clear and cohesive communication from the government is key so that citizens know and follow Covid-19 guidelines. In Nigeria, the lack of clear communication created fertile ground for conspiracy theories and misinformation.

By mid-August sub-Saharan Africa has not faced the high numbers of Covid-19 cases and deaths as it was predicted by the media. Nigeria, the continent's most populous nation, recorded its first case on the 29th of February and by mid-August it only recorded 47,290 cases and 956 death.[i] These are relatively low numbers in a country with over 200 million and with a dense urban populations and socioeconomic challenges.[ii]

There are several explanations of why Nigeria has not been as hard hit as other regions in the world, one is that its population is very young.[iii] But moreover, like many other African countries, Nigeria reacted quickly to the pandemic. A strict lockdown was imposed in Lagos in mid-March.[iv] International airports, schools, universities, stores and markets were closed and public gatherings suspended.[v]

However, while the lockdown in Lagos contained the spread of Covid-19 it had a very harsh side-affect: a sharp increase of Gender Based Violence. In Lagos a three-fold increase in the number of telephone calls received in domestic violence hotlines were reported in one month after the lockdown. Nigeria is not alone in this situation, but it reflects a global trend of increased gender-based violence in lockdowns. [vi]

Figure X: Number of reported cases of Gender Based Violence in Nigeria in March and April 2020
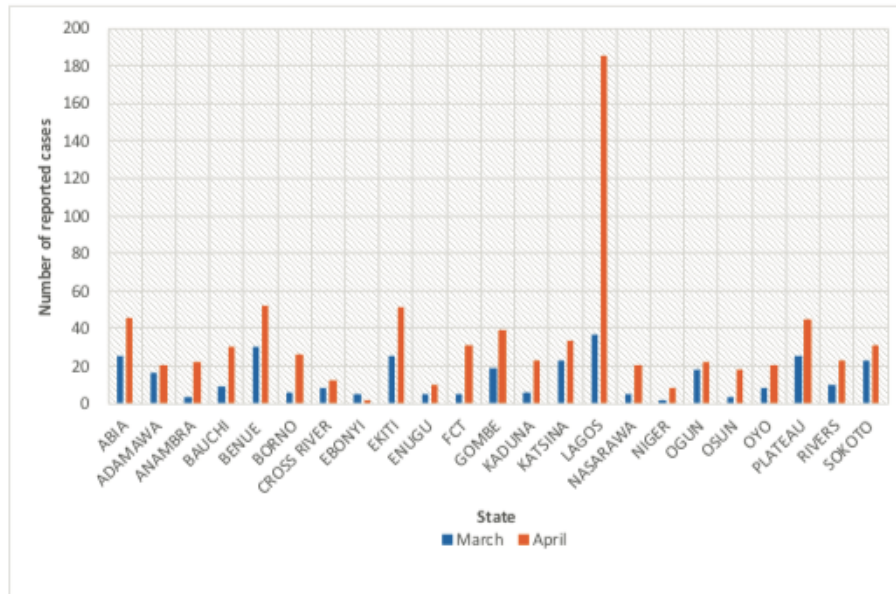
Source: Nigeria Federal and State Ministries of Women Affairs.

While Nigeria pioneered with innovative testing mechanisms such as drive through testing, [vii] the countries testing capacity was limited and further complicated as most of the people testing positive were asymptomatic.[viii] The lack of testing and accurate data on Covid-19 across the country limits Nigeria's ability to tackle the coronavirus.

Furthermore, Nigeria's response to Covid-19 was severely impacted by its limited resources. In 2020 the government allocated only 4.5 per cent of its budget on health care, which is significantly less hat the 15 per cent target set by the AU in 2001.[ix] Instead of increasing the health budget in times of the pandemic the Nigerian government announced to further cut its funding for local, primary healthcare services by more than 40 per cent this year.[x] The lack of investment in the sector not only results in a shortage of hospital beds, medical equipment and health care personal but it also created unsafe working conditions for health care workers.[xi]

Nigeria's federal system provided a challenge for dealing with the pandemic. While the country's Covid-19 strategy was developed nationally it is relied on enforcement in individual states, which was often lacking. Competition between states and led individual governors to downplay the cases of Covid-19 in their states. As such, health advisors argued for more unity and cohesion in tackling Covid-19. [xii]

In the void of clear and cohesive communication from the governments public mistrust, misinformation and disinformation emerged. This mistrust was fuelled by media reports that phrased Covid-19 as a "disease of the elite" and conspiracy theories emanating from religious groups and online media.[xiii] For example, pastors from the *Christ Embassy Church which was* established in Lagos in the late 1980s and currently has around 13 million followers around the world, spread the conspiracy that the Covid-19 is linked to the rollout of 5G networks.[xiv]

Economically, Nigeria has also been hit hard by the sharp decline in oil prices as a consequence of Covid-19. [xv] The IMF projected that Nigeria's economy will fall by 3.4 per cent in 2020, due to the consequences of the pandemic but and the crash in oil prices.[xvi]

C.   South Africa

Lesson 1: Imposing a strict lockdown is not effective in preventing the spread of Covid-19 if the majority of the population cannot follow it.

Lesson 2: Self-organised community responses in townships provided a social security network based on solidarity and improvisation to people excluded from public services.

Lesson 3: While the alcohol ban led to a decrease in the overall mortality rate despite Covid-19 in the early stages of the pandemic, the alcohol ban also led to a surge in unemployment as jobs in the alcohol industry were cut.

South Africa is one of the countries with the highest number of Covid-19 cases in the world, despite an early and hard lockdown in the end of March when the country had recorded just 400 cases. The country shut its non-essential economic activities and also banned the sales of alcohol in order to reduce alcohol-related hospital admissions in order to have more capacity on emergency wards for Covid-19 cases.

Due to the alcohol ban murder rates have fallen by over 60 per cent and other violent crimes also decreased significantly and so did traffic accidents. In the early stages of the pandemic the overall mortality rate in the country was lower than in previous years despite of Covid-19.[xvii] However, the alcohol ban also led to many people losing their jobs in a country that already has an unemployment rate of over 30 per cent and predictions say that South Africa's unemployment could increase to 50 per cent by December 2020. [xviii] Over one million jobs in South Africa are in the alcohol industry alone with people working in the restaurants, bars and township taverns also losing their jobs due to the ban.[xix]

Despite the early and strict lockdown measures Covid-19 surged exposing, once again, the inequalities in the provision of basic services. [xx]

Twenty-six years after apartheid, the health care system is still a two-tier system, divided between those who can afford private health care and an overburdened and underfunded public health system for those who cannot, which are mostly Black citizens.[xxi]

Moreover, the advice of the South African government did not match up with the lived realities of people in townships. The government instructed its citizens to follow disease control guidelines adopted in Western countries that were simply impossible to follow for people in townships living in overcrowded accommodation and no running water at home.

However, South Africa demonstrated its resilience through community organising. Not only did large solidarity networks emerge to respond to deal with the huger crisis;[xxii] in the Lenasia township near Johannesburg the community managed to source advanced medical equipment and set up a parallel healthcare system with 60 units of critical care rooms set up in bedrooms with oxygen concentrators. [xxiii]

2.   Americas

A.   Argentina

(inc contributions by JE Castro)

- Early lockdown

- trust in government politics
- coordination between national/provincial/municipal/state bodies

Argentina is the only large country in Latin America which has managed to maintain a consistently lower level of Covid19 deaths per million population. Despite a rise in cases in June, following a relaxation of the lockdown outside Buenos Aires, the trend in deaths remains nearly level, and still much lower than other large countries. The great majority of cases have occurred in the Great Buenos Aires area, housing around 14 million people, including the capital city. The government has acted rapidly to build new hospitals and provide equipment, particularly intensive care units with respirators. This has been remarkable, because the government took office in December 2019 and not only inherited the country in a state of near default, but also the previous government led by President Mauricio Macri had closed the Ministry of Health and seriously reduced investment in the sector. In a few months the government of President Fernandez mobilized teams from the National Scientific and Technical Research Council who have produced rapid tests for the identification of COVID19 and therapies based on the application of plasma from recovered patients to boost the immune system of infected people.

Part of this is clearly due to an early lockdown decision, which suspended all business activity except for food shops, pharmacies and supermarkets.: 'Argentina swiftly imposed a national lockdown, and appears to have successfully flattened the curve of contagion. "You can recover from a drop in the GDP," Fernández has said about his decision to implement an early lockdown. "But you can't recover from death."' The response was also coordinated with state governors and city mayors, so that public sector resources were mutually reinforcing. This is remarkable given that the governors of important provinces, including the capital Buenos Aires, belong to the right-wing opposition that lost the national election in 2019, but have accepted the need to work in coordination with the national government and prioritize public health.

Public support and acceptance of the lockdown has been high: President Fernandez' approval rating rose rapidly in response to his decisions over lockdown. He has conducted the crisis with pragmatism, achieving much success in developing cooperation with provincial and municipal governments. In addition, his success has been partly attributed to the traditional working-class trust of the Fernandez' Peronist party: "Fernández can rely on Argentina's disciplined Peronist party, which has historically been on the side of the most disenfranchised, so informal workers, who make up 49% of the workforce, trust Fernández to provide solutions." This public support has been more important because the country is still in economic crisis, with inflation nearing 50% and the country's creditors, including the IMF, threatening to force it into default. Fernandez has now managed to obtain a $1.8bn loan from the Inter-American Development Bank. Although the most affected groups in economic terms have been the low middle class and the poor, and particularly those living in the slum areas, the government has reacted rapidly providing economic relief and providing funding schemes that pay part of the salary of formal employees to reduce the number of redundancies.

B.   Chile

The failure to provide health or economic support for the marginal communities can be seen in the case of a slum settlement in the northern Chilean town of Antofagasta:

> Elizabeth Andrade, a community leader of the Los Arenales *macro-campamento*[9] in
> Antofagasta, says: "I am concerned about the conditions in general, and the little presence

of the government. I just spoke with a neighbour who asked me for money because in a month, she runs out; now, one hears it as something normal. [I'm] seeing that and how the neighbours ask when they are going to vaccinate us."[10] The problem in the *campamento* is serious, in large part due to abandonment and hesitant performance of local authorities in this case, where, in addition to socio-economic vulnerability, there is also the fact that many people are immigrants in a nation where xenophobia is on the rise. "There are things like the housing conditions or the families who have been harmed in their work by the crisis. The great majority have been fired. They used to work in restaurants and construction, activities that ceased because of the pandemic. There is also the issue that about 80 percent of the macro-slum are immigrants, so we feel that we are even more invisible than before"[11]. The government announced measures on water supply and emergency health kits which was read as a measure to keep people clean but not actually alleviate the challenging situation of living being a highly vulnerable population during one of the most aggressive planetary outbreaks since 1918[12]. It is concerning that other aspects that would give some certainty to the immigrant population, such as food and employment security, are not part of the government's plans so far. In fact, the government is doing exactly the opposite. For instance, the 6th April 2020 the executive promulgated a legal body named "Law of protection of the employment due to COVID-19"[13] which allows employers to suspend hiring contracts and do not pay the salaries during the pandemic but allows the employees to keep their job positions. Protecting the companies and not the workers seems to be the motto of this measure. (Chile: Protect the campamentos! By **Francisco Vergara Perucich and Camillo Boano** UCL Bartlett DPU May 2020)

C.   Colombia (Medellin)
  i.   Early lockdown
  ii.   strong local government services and capacity
  iii.   Income support scheme 'Medellín Me Cuida' enables poor to respect lockdown
  iv.   local information system using municipal services and utilities to track economic needs, provide grants, tests, oxymeters, and limit access to metro

The performance of Colombia as a whole has not been very good, with a cumulative death rate of 4.1 per 100k. This has been exacerbated by inequalities, lack of public healthcare, state violence, and ineffective government response: "Indigenous people of the small municipality of Leticia (Amazonas) have been harshly affected, with 1,962 cases and 71 deaths. Institutionally, some departments have no capacity in terms of infrastructure – including intensive care beds – and border regions are of particular concern. Duque's government was criticized for its slowness in taking political measures and its difficulty in responding to the economic challenges of the pandemic, particularly affecting women, migrants and informal workers. In addition, militarization was prioritized in some departments of the country in order to control populations and 'guarantee compliance with the compulsory preventive isolation decreed by the national government'. In this way, confinement has not meant a relief from violence, on the contrary. And this violence is classist, gendered, racialized."

But the second-largest city, Medellin, with a population of 3.7 million, has so far performed much better, with a death rate of only 0.3 per 100k in mid-June.

The city is in the province of Antioquia, which locked down early, about 5 days before the rest of the country. Like other cities, Medellin recognised that it needed to provide financial support for families to enable people to observe the lockdown, without being economically driven to resume economic activity, and used its resources as a provider of public services to organise this most effectively.

People were asked to register online for an income support programme, Medellín Me Cuida (Medellín Takes Care of Me), including their family size and their electricity contract with the [municipal utility EPM](#) – which helped identify the family and enabled the city to ensure that each household got one grant. The scheme has made it easier to observe the constraints, providing "two payments of 100,000 pesos ($28), [enough for a family to survive](#) for some weeks when many have suspended paying rent and utility bills. People in Medellín have respected the lockdown more than other Colombians." The information is also used as part of the tracking system through which people can report symptoms, and then get tested, supplied with oximeters if necessary, and quarantined at home. The metro also then uses the data in the system to suspend travel cards of families of an infected person. In June there was a rise in cases, and in deaths, with the death rate rising from 0.3 to 0.7: still much lower than other cities in Colombia, and very low by global standards.

In June the [Colombian Government Suspended its Fiscal Rules, allowing deeper deficit Spending throughout 2020 and 2021.](#)

D.   Costa Rica

  v.   Quick response by government

  vi.   Universal healthcare system

  vii.   Culture of collective action

  viii.   Widespread testing

The first confirmed case of Covid19 in Latin America was diagnosed in Costa Rica in March, but the government reacted immediately by banning mass gatherings, closing schools and non-essential businesses, requiring people to work from home where possible, and closing the country's borders. The lockdown was very widely observed, which [the health minister has said](#) was: "due to the very favourable response from a population that understands the challenge we're facing." This reflects a long democratic and socialist tradition in Costa Rica – including having no armed forces.

Costa Rica has a unified and universal healthcare system, on which it spends a higher proportion of GDP than the average OECD country. This allowed the country to start testing and tracing early, using [a network of 'sentinel' doctors](#) to detect cases of Covid-19. It was also identified by an [academic article](#) as a key factor: "that increases the likelihood of patients needing health care to seek medical services without worries about future debts or lack of access to medical services"

E.   Cuba

  ix.   Universal public healthcare

  x.   International solidarity

Cuba has managed to control Covid-19 effectively and keep deaths down to less than 1 per 100,000. The country has the advantages of being an island, but also responded early, applied strict rules

including compulsory masks and quarantining of affected people, and used the systematic door-to-door checking that was already [part of its outstanding public health system](#).

It has also provided medical support for many countries during the pandemic, continuing and extending ["Cuba's remarkable history of sending medical teams to the world"](#), and of joint ventures in biotechnology. It has sent over 800 doctors to help 15 countries deal with Covid: Cuba [sent doctors to Lombardy](#), the worst affected region in Italy, helping create an emergency field hospital; sent 200 doctors to [South Africa](#).

F.   Ecuador (Guayaquil)

 xi.   University initiative, systematic information gathering for tracking

 xii.   Local council/mayor initiative

 xiii.   Extra resources for public health workers and facilities

 xiv.   Financial support for families in lockdown

[Guayaquil](#), the largest city in Ecuador, was very badly affected by an initial outbreak of Covid 19 during a holiday period, with a death rate in April 2020 which was 10 times the normal level, and unburied bodies in the streets.

The (right-wing) government of Ecuador was widely criticised for not introducing an effective lockdown, nor a test, track and trace system, nor for providing extra resources for hospitals to cope with the outbreak: "What failed here was [a terrible health system that isn't even good enough for normal times](#), let alone a pandemic. [And corruption, to the highest degree."](#)

The problem was [exacerbated by cuts in Ecuador's healthcare system imposed by the IMF](#) over the previous 3 years: "before this pandemic, Ecuador had cut its healthcare spending and conducted a series of layoffs in its Ministry of Health. Between [2019](#) and [2020](#), approximately 8 per cent of the staff were terminated…. part of an [International Monetary Fund (IMF) loan programme](#) which led to a US$1 billion reduction in spending on public employment over three years. Before this crisis, [an aggressive crackdown on protests](#) against the measures already claimed many lives."

But by July the epidemic in Guayaquil was more controlled, because of three factors.

Firstly, [a 32 year old urban planner at the University of Guayaquil, Hector Hugo, created a multi-disciplinary team including doctors, epidemiologists and international experts to systematically map Covid-19 cases.](#) The data was collated and delivered to a task-force of doctors working on a voluntary basis, to identify priority areas by: 'micro-zoning, working in neighbourhoods with a higher concentration of cases'. This was presented as an integrated public health strategy to all levels of government and [finally accepted by the municipality of Guayaquil](#). The initiative grew out of the 'Delta project', a comprehensive attempt to integrate the university into the city based on [inclusiveness, sustainability, and community participation](#).

Secondly, 'brigades' of health workers were sent into the affected areas - including the poorest slum neighbourhoods - to find and diagnose patients, and then either send them to hospital or get them to self-isolate at home. The brigades also distributed locally produced masks, food, and advice on the importance of washing hands and social distance.

Thirdly, the mayor, Cynthia Viteri, allocated serious resources: $35 million for healthcare - an extra 500 doctors, temporary hospitals, the construction of 40,000 mobile health centres, and purchasing test kits – and $50million to support employees in small and medium businesses, providing the economic support which enabled people to observe quarantine and the curfew.

G.   Paraguay

Paraguay imposed an effective lockdown, and has achieved relatively low death rates. However, these were achieved using brutal enforcement by military and police, 'quarantining' the poor in 'detention centres', and cutting public service workers wages to save $52million.

There has been vocal criticism of the government for the brutality of the militarised enforcement of lockdown, and for corrupt capture of public funds intended to deal with the pandemic: a doctors' leader said "corruption has surged even more strongly, if there is an explosion of the disease, we're going to be helpless".

The effectiveness of the lockdown threatened starvation for many because the government failed to provide economic support to workers who had lost their livelihoods, exposing the inequality of the country. Alicia Amarilla, national coordinator of the Organisation of Rural and Indigenous Women, said: "We're going to see many more difficult situations come from this crisis – we're in a country with far too much inequality. We know that the government won't take privileges away from those that have them."

H.   Surinam

WHO Aug 2020: Suriname is preparing to come out stronger from COVID-19:

"As the pandemic highlights the gaps in the country's health system, the Government is acting quickly to drive its response, engaging partners, reaching remote communities through primary health care and building a strong foundation for universal health coverage. About 90% of Suriname's landmass is characterized as tropical rainforest. In the most remote villages reside indigenous communities who need access to effective primary health care. This is just one of the many challenges that Suriname's health system faces. COVID-19 has further highlighted its small health

workforce: just eight physicians and 23 nurses per 10,000 people, health infrastructure that is still being developed and limited emergency response capacity, among others. … In January 2020, when the world became aware of the threat of COVID-19, Suriname's Ministry of Health convened a Public Health Response team headed by the Director of Health. It started developing standard operating procedures aligned with the country's pandemic influenza preparedness plan. Together, PAHO/WHO and the Ministry of Health developed guidelines for quarantine management, monitoring of ports of entry, protocols for early detection and screening and clinical management."

I.   Uruguay

xv.   Democratic tradition/ trust in institutions

xvi.   Good public healthcare system

xvii.   Use of online tech to take on non-Covid health work

xviii.   Use of airport as drive-in cinema

Uruguay has a good public sector health system.

The recently elected centre-right government of Uruguay acted immediately, not by a compulsory total lockdown, but by asking citizens to practice voluntary social isolation: "responsible freedom." There was a very high level of compliance, attributed to public trust in the democratic system, as stated by the foreign minister: "For me, that's the big lesson of all this. The trustworthiness of institutions". The country also introduced testing and tracing very early, and developed its own Covid19 diagnostic texts.

The government made it easier for people to comply by providing safe alternatives to normal outings. After the cancellation of most flights the main airport was adapted as a drive-in cinema and concert venue – with airport toilet facilities available, too.

The country re-opened its schools on June 1. It has taken on a much higher level of public debt.

3.   Asia-pacific

Region: Central and South Asia

A.   India

Lesson 1: Preparedness and Optimal Window of Time

Lesson 2: Strict deployment of unique public health strategy of quarantine, contact tracing and testing thanks to grassroots leverage

Lesson 3: Innovative and transparent public health communication to quell anxiety, build trust as well as enhance citizen's knowledge and cooperation in fighting the virus

Lesson 4: Social mobilisation to support vulnerable communities

National response

India reported its first case on January 30 (MoHFW, 2020), but authorities persisted that cases were one-offs with no local transmission. COVID-19 was initially underestimated due to other priorities on

the government's agenda (Debraj Ray, S. Subramanian, 2020). Afterwards, India has seen exponential growth in the number of cases, which led to a highly criticized 'draconian' nationwide lockdown on a nation of 1.3 billion people with police brutality, a lack of transparency, and a lack of compassion (Vidya Krishnan, 2020). India's lockdown measures are rated at the high end of the University of Oxford's COVID-19 Government Response Stringency Index (University of Oxford, 2020). Central government's COVID-19 response is counterproductively punishing the most vulnerable in society without instituting a robust official support system to address the root cause problems with public health and safety. About 400 million people working in the informal economy in India were pushed to the brink of falling deeper into poverty due to catastrophic consequences caused by the coronavirus crisis (India Economics Times, 2020).

Kerala

Although Kerala, the state with over a population of 35 million, detected the first three cases on January 30 among a group of students returning from Wuhan (China), Kerala has reported 13,275 cases of COVID-19 as on 21 July 2020 and 40 deaths with an impressive case fatality rate of 0.3% (versus 2.5% average in total India and 4.3% on global) (WHO, 2020). Kerala's success in fighting COVID-19 can be attributed to not only the state's legacy of education, previous experience in dealing with past outbreaks and the state's development of the public healthcare infrastructure but also its early, well-synchronized and inclusive state action plan which leverages on a variety of community assets.

Lesson 1: Preparedness and Optimal Window of Time

Long before the first diagnosed case and just three days after being informed about the novel coronavirus in China, Kerala's Health Minister Shailaja began to take action by setting up a control room, facilitating inter-sectoral coordination, instructing 14 other health districts in Kerala to follow suit. In January, Shailaja ordered Kerala's four international airports to start screening incoming passengers and put those with symptoms to a government facility, where they were tested and isolated. Their samples were flown to the National Institute of Virology 700 miles away. By February, she was able to convene a 24-member state response team coordinating with the police and public officials across Kerala (Faleiro, 2020). A high-level committee led by the Chief Minister, Health Minister, Chief Secretary and the Principal Secretary of Health has been convened to monitor, coordinate and guide collaborative and participative actions in the field. The State Control room led by the Principal Secretary, Mission Director, National Health Mission, Directorate of Health Services, and Directorate of Medical Education; and its various sub-committees are tasked with closely monitoring of COVID-19 response. The State and the District Control Rooms played a key role in formulating advisories and guidelines; and guiding the early interventions focused on saving lives. The State Emergency Operations Centre (SEOC) and the office of Kerala State Disaster Management Authority provided support to the Health Department for response and mitigation efforts. Early release of technical guidelines on contact tracing, quarantine, isolation, hospitalization, infection prevention and control, and purposeful capacity-building for all cadres of health and other interlinked departments helped bring the situation under control.

Lesson 2: Strict deployment of unique public health strategy of quarantine, contact tracing and testing thanks to grassroots leverage

Kerala government adopted strict public health protocols. Although the general incubation period of the virus is 14 days, Kerala enforced 28 days of home quarantine. Essential goods were delivered at door to people under home quarantines at the local government's cost (Sulaiman et al. 2020). Apart

from 650 COVID-19 centres in hostels, educational institutions and unoccupied buildings, a big number of isolation wards were set-up in all medical colleges, districts and general hospitals (Sulaiman et al. 2020).

In addition, from early March, the state screened all international passengers. Village committees informed the health department about new arrivals and ensured those remained in quarantine in case a person managed to skip airport screening. In hotspots of Kasaragod and Kannur districts, some village panchayats even launched call centres, connecting those quarantined with the authorities (Maneesh & Aicha 2020).

Kerala utilized a selective testing strategy rather than mass testing for the whole population. Four main groups prioritized for testing consisted of (1) healthcare workers who contacted with Covid-19 patients (25,000 testing kits), (2) government staff with public contact (20,000 kits) and essential service providers (5,000 kits), (3) self-isolated people at home (25,000 kits), and (4) all senior citizens (20,000 kits) (Sulaiman et al. 2020). This approach is critical to protect the most vulnerable subsets, impede the spread of coronavirus with limited testing reagents supply in such a short time period.

Lesson 3: Innovative and transparent public health communication to quell anxiety, build trust as well as enhance citizen's knowledge and cooperation in fighting the virus

During this crisis time when information is evolving and inconsistent, public communication plays an important role in creating clarity and catalysing positive behavioural compliance (Mendy et al., 2020).

Kerala deployed counsellors, celebrities and Key Opinion Leaders (KOLs) to help deliver messengers to its citizens in the most resonating way. Actor Mohanlal and Mammooty have appeared on a video stressing the need for social isolation and care (Babu, 2020). The government had former Indian football team captain IM Vijayan talk to migrant workers. Kerala government launched a successful awareness campaign 'Break the Chain' on March 15 before the state lockdown on March 23 to promote the importance of hand hygiene, physical distancing and cough etiquette. Hand washing stations were installed in strategic locations, including exit and entry points of railway stations etc. to cultivate behavioural changes. "Break the Chain" campaign got a further boost as the state's focus on literacy and women's education helped it achieve near 100% vaccination levels and cultivate a culture of personal hygiene. A survey, conducted in 12 countries by the World Health Organization in 2005, highlighted that hand-washing with soap after defecation had a prevalence of 34% in Kerala, the highest among the states/countries surveyed. Hence, when the state initiated its 'Break the Chain' campaign during the COVID-19 outbreak, the campaign served to reiterate practices of hand-washing and use of sanitisers. Local authorities mandate that citizens hold an umbrella when in public places to promote involuntary social distancing by distributing umbrellas produced by Kudumbashree - Kerala 's poverty eradication and women empowerment programme.

Kerala government also committed to transparency in crisis communication to reduce the spread of the rumours by having Chief Minister Pinarayi Vijayan hold a telecast live press conference every evening to answer all the queries related to the outbreak and optimizing a variety of communication channels to disseminate official public health information. The Kerala Arogyam portal was launched by the Department of Health and Family Welfare with comprehensive information on COVID-19. Covid Jagratha portal and Directorate of Health Services website was introduced by the Department of Health and Family Welfare with comprehensive information on COVID-19. Kudumbashree formed close to 1.9 lakh WhatsApp groups with 22 lakh neighbourhood groups (NHGs) to educate on key safety measures as advocated by the government during lockdown.

Lesson 4: Social mobilisation to support vulnerable communities

While the central government's enforcement of a strict and sudden lockdown for weeks failed to provide adequate medical and economic support for its citizens, especially the underprivileged groups, Kerala went the extra mile in creating a safety net for some of the ones in most needs. Right after the announcement of the national lockdown, Kerala offered shelter in nearly 20000 camps and meals for thousands including about 150,000 migrant workers during the quarantine period. The Kudumbashree Mission's volunteers helped launch community kitchens (Shaju Philip, 2020). Community Kitchen initiative through the Local Self Government Department (LSGD) with the support of Kudumbasree has provided more than 8 651 627 free meals to the labourers, those who are in quarantine, isolation, destitute and other needy persons. Distribution of millions of cooked meals and provision of free ration under the Public Distribution Scheme to those in need shows the proof of a well-thought response and compassionate relief strategy.

Kerala was able to encourage strong public collaboration from different local organizations and civil societies in the production of medical equipment to guarantee the supply of drugs, masks, gloves, sanitizer for front line healthcare workers and serve community needs. The Kudumbashree Mission has coordinated many volunteers joining hands to make masks. Kerala prisoners also contributed to the hit in the production of 3.25 lakh two-layered cotton facemasks and 5,000 litres of sanitisers while there was a significant shortage of manpower (Krishnachand, 2020).

Kerala government also stressed the importance of psychosocial services to acknowledge stress-related illness and create healing environments, especially to those most vulnerable. Telemedicine portal e-sanjeevani provided psychosocial support via tele consultation across the State and Ottakalla oppamunduto to the vulnerable population. 1143 mental health professionals, including psychiatrists, psychiatric social workers, clinical psychologists and counsellors have been deployed to provide support to people in quarantine. Counselling service is also provided to frontline workers working in corona outbreak control activities. Till date, the psychosocial services have reached out to 11 68 950 people in the state.

Kerala made strides in its efforts to ensure subsistence through income transfers for vulnerable populations. 55 lakh elderly and disadvantaged have received Rs 8,500 as welfare payments. The welfare funds disbursed Rs 1,000-3,000 per person for an equal number of workers. A food kit was sent out to each family to support food needs during social isolation time. Interest-free consumption loan of Rs 2,000 crore has been distributed by April, 2020 (Isacc, 2020).

B.   Pakistan

Lesson 1: Government's vague public messaging - A country of disbelief and distrust in government

Lesson 2: Gaps in the pandemic management at provincial and national levels

Lesson 3: Authority battle between state and hard-line clerics

Pakistan recorded 274,799 confirmed cases with 6,035 deaths, which ranked the country the 14th globally in terms of total number of cases as at 7 August 2020. The social, political and cultural context of the country hindered its ability to fight against coronavirus with resistance created by community dynamics, local/religious beliefs, political instability, economic fragilities, and a lack of trust in government and institutions (Shaikh, 2020).

Challenges of Pakistan

Geographic location: A densely populated Pakistan with around 220 million inhabitants acts as a catalyst for the spread of virus. Additionally, the border countries of Pakistan including China, India, Iran, Afghanistan either experienced Covid-19 for the first time or encountered the highest numbers of Covid-10 mortalities in Asia.

Low literacy rate: The literacy rate of Pakistan was 59 per cent in 2017, among the lowest literacy rates in the world (Plecher, 2020). It would be challenging to convey the information and communication and mobilize its citizens for globally aligned actions.

Religion: Under the influence of religious propagandists, Covid-19 is a conspiracy hatched by non-Muslims to keep believers from worshiping at mosques and following their religion. Performing pilgrimage, religious congregations in Pakistan rooted for the transmission of novel pathogens as social distancing could not be maintained.

Struggling economy: Before the COVID-19 outbreak, Pakistan's economy was struggling to stay afloat with twin deficit problems (fiscal and current account), drastic decline in exports and foreign remittance, growing public debt (Sareen, 2020). Being afraid of economic collapse could hamper a complete knockdown policy to save its economy.

The case of Pakistan provides a unique story about how an Islamic country combated the coronavirus outbreak with three major issues as listed below.

Lesson 1: Government's vague public messaging - A country of disbelief and distrust in government

There was no unified statement and an orderly policy to inform, educate, and protect the masses against the threat of Covid-19, which was considered a rapidly spreading conspiracy theory with unclear origins. The most obvious reason for the spread of this conspiracy theory is the government's unclear and ambiguous public messaging (Khattak, 2020). Even before coronavirus grabbed national headlines, more than half of Pakistanis (55%) believed Khan and his ministers were incompetent (Gallup Pakistan, 2019). When the country was hit by the pandemic, Prime Minister Khan's speeches which downplayed the nature of the virus by considering it nothing more dangerous than the common flu coupled with his government's flip flopping announcements – a lockdown, a smart lockdown and finally no lockdown, all without flattening the COVID-19 curve — further deepened the disbelief and distrust among the Pakistani (Khattak, 2020). Without details and explanation in his public message, Imran Khan, Pakistan's prime minister spoke against the benefits of lockdowns and said 'deaths would rise anyway', urged citizens to follow the standard operating procedures (SOPs) guiding social distancing guidelines and 'living with the virus' approach. The media raised the concern why the country needed to follow the SOPs whilst their prime minister had refused the health benefits of lockdown and whether the SOPs were necessary. Yet thanks to the government's contradictory public messaging, a majority of Pakistanis still haven't registered the danger. Thus, the widespread violations of the SOPs have its root from weak message from the top (Afzal, 2020)

Many citizens live in a state of denial and disbelief. WhileImran Khan's government said the drop in the daily number of new coronavirus cases in July was due to its "smart lockdown" strategy, others believe that the trend could be a result of misreporting and inadequate testing. A government official in a semi-urban district in Punjab province noted that he had direct orders from his superior to omit numbers by almost half, which resulted in his report that the number of newly confirmed cases were 34 new cases instead of 63. A deliberate misreporting at the district level raises concerns regarding the accuracy of the official figures nationwide (Bari, 2020).

Lesson 2: Gaps in the pandemic management at provincial and national levels

Decentralization of power and resources has resulted in lacking national healthcare response in Pakistan. The management of Coronavirus on the provincial and national levels has laid bare gaps in governance and structural issues. The 18th Amendment of the Pakistan Constitution in 2010 specifies that healthcare is a 'provincial responsibility'. This was an effort to build democracy with decentralized power by establishing the prime minister and ministers as the federal government and gave more governing powers to provinces (Bremmer, 2020). However, the Covid-19 outbreak reveals the problem of power delegation in Pakistan. For instance, there was a dispute between Isalambad authorities (the capital of Pakistan) and the Federal Government in re-opening border policy with Iran. While the provincial authorities of Isalamabad concerned they did not have sufficient resources to enact a quarantine regime at the Pakistan-Iran border, with isolation of returnees in accordance with health protocols, the Federal Government favoured cross border trading to keep the wheels of their economies running; hence it ignored the local pleas and decided to reopen the border (Karim, 2020). There was a call for immediate activation of the highest level of national response management protocols to ensure the all-of-government and all-of-society approach to fight against COVID-19. To do so, the corporation and alignment between provincial and national levels is critically urgent (Noreen et al., 2020)

Lesson 3: Authority battle between state and hard-line clerics

The battle of social and political power between state authority and hard-line clerics brought out contradicting measures for public safety in Pakistan. Dealing with religious congregations in times of epidemics could be challenging. Most world religions prescribe congregations of its adherents at local, national, and international levels as part of their faith (Quadri, 2020). The gathering proved a perfect transmission point, infecting indeterminate numbers of Pakistanis, at least two Kyrgyz citizens and two Palestinians who flew home and introduced the virus to the Gaza Strip. A similar gathering of Tablighi Jamaat in Malaysia infected more than 620 participants who then returned to half a dozen countries across Southeast Asia (Ur-Rehman et al., 2020). Islamic countries like the Kingdom of Saudi Arabia, Kuwait and Qatar had imposed restrictions on congregational prayers at mosques amid the current COVID pandemic through fatwa. While religious congregation could be root for the transmission of novel pathogens, there was a delay in the decision of Pakistani government about the imposition of a ban on mosque prayers and large religious gatherings, due to fear of a backlash from Islamist groups (Noreen et al. 2020).

While clerics were fully aware of the transmission risks at their mosques where worshipers gather to perform ablutions together before cramming into the mosques, shoulder to shoulder in supplication, they persisted to protect their bottom line: money and influence for fear of losing their social and political control over society if mosques were closed during such a major event as Ramadan. Under pressure from hard-line clerics, the Pakistan government has failed to ban religious gatherings at the behest of the mullahs by signing an agreement that let mosques stay open for Ramadan as long as they followed 20 rules, including forcing congregants to maintain a six-foot distance, bring their own prayer mats and do their ablutions at home.

4. **Region: East Asia and Asia Pacific**

A. **South Korea**

Lesson 1: Tests, tests, tests

Lesson 2: Thorough contact tracing

Lesson 3: Timely and transparent public information

During the first wave of Covid-19, South Korea was fighting with quick and decisive institutional capacity-building efforts in diagnostic testing, tracing contacts, isolating confirmed and suspected cases, providing treatments, and encouraging social distancing accurately. Without closing businesses, issuing stay-at-home orders, or implementing many of the stricter measures adopted by other high-income countries, South Korea relied on digital surveillance technologies to excel the above efforts on a large scale and flattened the epidemic curve quickly (Ariadne Labs, 2020). It took around 34 days (from 3rd March to 17th April) for South Korea to reduce the number of new infections from 851 to 22 with the low mortality rate of 2% (Ahn, 2020).

The success of South Korea as well as its active civic participation in the Covid-19 control could be related to its previous experience with MERS-CoV in 2015 (Oh et al., 2020; Kim, 2020). Learning from its flawed response to MERS, South Korea attacked the novel virus with improved preparedness, a well-functioning national health insurance system, ample human resources and infrastructure. There was a strongly constructive collaboration among key institutions such as the President's office, the Ministry of Health, the Korean Centers for Disease Control and Prevention (Ariadne Labs, 2020). Local governments at the city and the provincial levels had autonomy to develop and implement emergency response within the national government's emergency response framework.

Notably, there was a high level of civic awareness, voluntary cooperation in adhering to personal hygiene measures, complying with self-quarantine measures, maintaining social distancing in South Korean.

Around 89.1 percent of the surveyed public granted support to the tracking measure using CCTV footage, which shows a positive public perception of the government policy (Jo, 2020; Chan, 2020). Local businesses also worked closely with the government. The two Korean conglomerates, Samsung and LG, allowed its training facilities to be used as treatment centres for COVID-19 patients with mild symptoms whilst NGOs willingly provided food and survival kits for those under self-quarantine order (Lee, Heo & Seo, 2020)

As many countries are transitioning to the reopening phase, South Korea's experiences may offer worthwhile lessons about how to keep case numbers low without limiting most activities.

Lesson 1: Ramped up testing capacity

South Korea harnessed public-private partnerships to ramp up rapid and widespread low-contact testing as well as facilitate the creation of test kits in the lab.

The private sector was able to rapidly develop test kits due to its strong research capability. A Seoul-based start-up managed to reduce the test results from 24 hours to only 6 hours thanks to artificial intelligence-powered automated production. This was a response to the Korean Center for Diseases Control (KCDC)'s direction towards private companies to produce a diagnostic reagent within a week of the first case diagnosis. The government also simplified the process of and swiftly returned approvals of diagnostic reagents which acts as a catalyst for fast tracking of testing kits generation and production (United Nations, 2020). Thousands of test kits were manufactured daily, with the number reaching up to 100,000 kits per day in March. By April 24, 118 institutions were licensed to

run diagnostic test (Fisher & Sang-hun, 2020). Collectively, these institutions had the capacity to run an average of 15,000 tests (and up to 20,000) per day (Ariadne Labs, 2020).

South Korea also pioneers innovative low-contact testing approaches via drive-through and walk-through diagnostic tests to reduce health care worker exposure and enhance capacity within a short window of time. By April 1, about 80 drive-through centres were in operation with the ability to test thousands of people each day.

Lesson 2: Comprehensive contact tracing

Tracing capacity was enabled by past experience and technological innovation

In the aftermath of the MERS outbreak in 2015, South Korean legislators had tailored a playbook in preparation for any following outbreak. It allowed authorities to extract surveillance footage, credit card histories and GPS data of both confirmed and potential patients. Specifically, there was an amendment in the article 76-2(2) of South Korea's Infectious Disease Control and Prevention Act (IDCPA) that allows the ministry of health to have extensive legal authority to collect private data, without a warrant, from both already confirmed and potential patients (Kim, 2020). Based on that legislation background, KCDC runs the contact tracing system that uses data from 28 organizations including National Police Agency, The Credit Finance Association, three smartphone companies, and 22 credit card companies to trace the movement of individuals with COVID-19 (Ahn, 2020). The system can accurately track the infecteds' movement data.

Combined with mass testing, and public disclosing of information campaigns, tailored information about the infected persons' age and gender, and a detailed log of their movements, gathered by KCDC, was sent via text messages to South Koreans. This information helps people target their social distancing more effectively rather than rationing all activities together (Argente, Hsieh & Lee, 2020).

Lesson 3: Public response and trust building

Timely and transparent public information system counter panic, foster public trust in government's responses, and enhance compliance with public health guidance.

Backed by legislation, transparent public communication played an important role in cultivating public trust and ensuring that the citizens comply with government guidance. Gleaning crisis communication lessons from MERS 2015, the South Korea government committed early on about absolute transparency with the public by sharing every detail of how this virus is evolving, how it is spreading and how the government responds. As soon as the first Covid-19 case was confirmed on January 20, South Korea had immediate response in setting up a comprehensive and speedy testing regime; and provided concurrent real-time information dissemination to the public (Cha & Kim, 2020). KCDC has made it easy for citizens to access up-to-date and accurate information or any revisions to regulations including through twice-a-day press briefings, targeted alerts through text messages, 1339 Call Centre, websites, and mobile applications (KCDC, 2020). Transparent public communication played an important role in cultivating public trust and ensuring that the citizens comply with government guidance. Approximately 65% South Korean residents trust their government in policy response during Covid-19 pandemic thanks to progressively reduced number of new cases and significant efforts of the government to flatten the

B.   Australia

Lesson 1: Timely and Effective Border Control and Lockdown

Lesson 2: Utilize telehealth and virtual hospital combining with integrated app-based and traditional contact tracing

Lesson 3: Saving the economy can come at a high cost
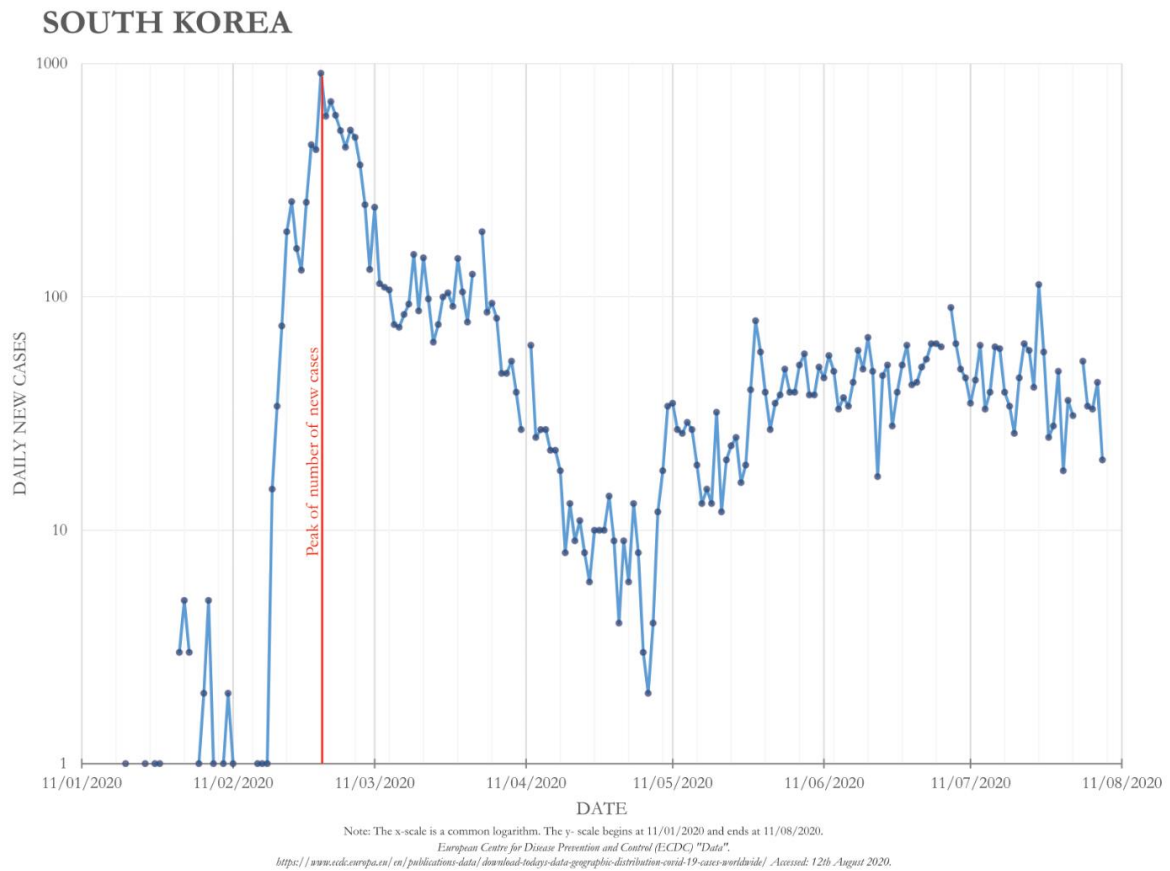
SOUTH KOREA

Figure 1 Daily Covid-19 Cases in South Korea (as of 11 August 2020) (Author's Own)

In the first wave, Australia's response to Covid-19 has been viewed as fairly reasonable with the development of telehealth and virtual hospitals that extends the reach to a wide range of patients, especially those in rural areas, while managing to introduce a combination of stimulus packages. Most measures taken by the Australian government are aligned with those in other developed countries. The lockdown measures seem to be effective in the first wave of lockdown as Australia successfully brought down the record to below 50 daily cases since mid-April. During the first wave, up until April 15, Australia reported 6447 cases with 63 deaths. There are criticisms that Australia could have controlled the situation better if it had shut international borders earlier, during the early stage, and utilized contact tracing apps. Here, lessons from the first wave's responses in Australia are discussed, knowing that Australia is not a prime example of success.

Lesson 1: Timely and Effective Border Control and Lockdown

In the beginning phase of the coronavirus outbreak, Australia's response was not fast and intensive enough. Before the first confirmed case, biosecurity officials began screening arrivals on flights from Wuhan to Sydney. However, checks at border were limited to self-identification screening, which is not as objective such as scanning for body temperature. The first confirmed case was on 25 January 2020, in Victoria. The government immediately blocked flights arriving from China, and later on, Iran, South Korean, and Italy. Australia quarantined around 600 Australians arriving from Wuhan and the

surrounding Hubei province on Christmas Island. This act was condemned by many at the time, yet, having been defended by the government that believed all cases must have been directly imported from Hubei.

It took nearly 2 months after the first confirmed case for the government to establish policies on social distancing rules, limited gatherings, and shutdown of non-essential services (on March 15), then closed border to all non-residents (March 20). This slow reaction has led to the peak of the pandemic in Australia by the end of March with 537 daily new confirmed cases and almost 5,000 total cases.

Lesson 2: Utilize telehealth and virtual hospital combining with integrated app-based and traditional contact tracing

Australia had its own strengths in the fight against the pandemic. The government established apps, tools, and channels such as COVIDSafe app, Coronavirus Australia app, Australian Government WhatsApp channel for COVID-19 to keep citizens informed of daily situations. COVIDSafe app, an enhanced manual tracing app that uses Bluetooth to collect users' contacts within 21 days to the government database was state-funded developed.

Since mid-March, Australian government has provided citizens free-of-charge telehealth consultation via phone or video with general practitioners (GPs), specialists, nurses, and mental health allied health workers. Telehealth alleviates the accessibility gap in rural areas, obviates the need to travel, and encourages people to seek support due to its convenience. On February 3rd, Australia opened the first virtual hospital lifting the increasing pressure on hospital emergency, ICU departments, and their front-line staff. Virtual hospitals enhance and mitigate the telehealth system's limitations by remotely tracking the condition of patients from their own home, thus, supporting older people to live independently, improving access to care for rural patients, and utilizing the availability of the front-line staff and medical students. However, the reach of telehealth initiative and digital contact tracing to older people is uncertain due to the lack of accessibility to smartphones and poor internet connections.

Lesson 3: Saving the economy can come at a high cost.

The Australian government aimed to reduce unemployment by a combination of different stimulus measures. The government's economic main support packages are the JobKeeper and JobSeeker, which was announced 1 day after the order to shut down non-essential services on 29th March. JobKeeper is a wage subsidy program that offers to pay employees' wages for eligible firms which are affected by the pandemic. JobSeeker are a fortnightly payment to unemployed workers during this hard time. It is claimed that these packages are supporting 3.55 million workers, which is about 25% of the Australian workforce.

On 26th May, PM Scott Morrision announced the JobMaker and JobTrainer plan, which are future plans focusing on recovery. The program will provide a $1.5 billion fund on educating and training skilled workforce as well as about $3 billion targeted package on infrastructure sector, screen and creative industry. Moreover, Australian residents can tap into their superannuation fund with a maximum draw of $10,000 for each of the financial year 2019-20 and 2020-21. The government also provides immediate cash flow for SMEs that are unable to generate enough cash to afford rent and bills in term of loans or one-off rent relief payment. Other supports for local business consist of tax incentive or deferral of tax liabilities until January 2021.

Despite all those efforts, in June, the unemployment rate in Australian jumped to 7.1% with the youth unemployment rate of 16.1%. Australia's economy shrank by 0.3% in the March quarter. However, it is estimated that the economic support package has saved around 700,00 jobs which lowers the unemployment rate by 5% already. However, the unemployment rate is still projected to peak at 10% at the end of the year before markets can recover.

KPMG estimated that the spending on those packages as of 4 June totals $259 billion or 13.3 percent of GDP in the span of 3 months. As a result, Australia's budget deficit was $86 billion in the financial year ending June 2020, compared to the forecast of $5 billion budget surplus at the beginning of the year, and that budget deficit is the highest since World War II. More debt is expected in the 2020-21, and the net debt can grow to $677 billion, more than a third of the country's GDP. While most countries introduce costly stimulus packages to save the economy and save jobs, how these packages endure through the next wave(s) and whether they certainly made a difference to the rate of recovery later on is still unknown.

C.   New Zealand

Lesson 1: Effective, Stringent and Early Lockdown

Lesson 2: Public Mobilisation and Public Trust

New Zealand has been considered as one of the most successful countries in tackling the Covid-19 pandemic so far. New Zealand determined to attack it head on, aiming to fully eliminate the infectious virus by introducing early lockdown and social distancing measures.

Despite initial resistance and doubts about the economic impacts from critics, the government of NZ has proved the chosen strategies as effective. As of 28 June, NZ recorded an accumulated 1557 cases, 22 deaths with only 21 current active cases and 78 cases since May[1]. The country exemplifies the importance of righteous leadership, consistent policies well-informed by scientific evidence and transparent, thorough public communication. Hence, the government, led by PM Jacinda Ardern, has earned the trust of the people in the first wave of the virus and it hopes to maintain the success through the upcoming phases.

Lesson 1: Effective, Stringent and Early Lockdown

On February 28th, NZ recorded its first case, a citizen in her 60s who returned to Auckland from Iran[2]. At 28 cases mark, on 19 March, the government decided to close its border for international visitors and returned citizens will have to spend 14 days in government-controlled isolation. A week later, PM Jacinda Arden implemented the most stringent lockdown, which is stage 4[3]. Only a limited number of

---

[1] "COVID-19 - Current Cases," Ministry of Health NZ, accessed August 5, 2020, https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-current-cases.

[2] "New Zealand Confirms Case of Covid-19 Coronavirus," RNZ, February 28, 2020, https://www.rnz.co.nz/news/national/410625/new-zealand-confirms-case-of-covid-19-coronavirus.

[3] On March 2020, NZ government introduced the covid-19 alert system

essential businesses were permitted to carry on, including border agencies, media, people in building and construction of essential projects, courts staff, couriers and bank workers. Supermarkets, dairies, food banks and pharmacies were allowed to operate while even butchers, bakers, farmer markets and fruit shops were asked to shut down. Restaurants were also closed as dine-in and takeaway were banned. Schools needed to move online. Within a month of lockdown, NZ successfully flattened the curve.

NZ's particular geography[4] and low population density[5] may have helped some policies work more effectively. However, if put in comparison to Australia, the true determinants for NZ's success must have lied in how the government prioritised public health and implemented rigorous measures from the early on.

The government is cautious when it comes to easing lockdown. New Zealand initially planned to stay in alert level 4 for 4 weeks. However, coming to the end of that period, PM Arden announced to extend for further 5 days, even when the country had seemed to successfully contain the virus spread as its transmission rate[6] was 0.48 while the overseas rate was 2.5[7]. On 28 April, after 9 consecutive days of single digit number of daily new cases, the country officially moved to alert level 3. Under level 3, people were still instructed to stay home unless for food, work, exercise or medical reasons. Some businesses like restaurants can open for takeaway but social distancing practices must be in place. After 2 weeks (12 days of single digit and 2 days of no new cases on 12th and 13rd May), NZ moved down to level 2. And on 8 June, after almost 3 weeks of zero cases, NZ for the first time had no more active cases of covid-19 in the whole country. Only then, the country moved to alert level 1, lifting restrictions on work, school, sports, domestic travel and gathering size. However, border controls were still in force with mandatory 2-week quarantine for outside returnees.

- Level 1: The disease is contained
- Level 2: The disease is contained, but the risk of community transmission remains
- Level 3: High risk the disease is not contained
- Level 4: Likely that disease is not contained

Level 4 is the highest level with range of lockdown measures to try to contain the virus outbreaks

[4] NZ is located in the middle of the South-Western Pacific Ocean, with the nearest country, Australia, about 2,000 kilometres away.

[5] NZ has small population of 4.9 million, and low density (115 people/square kilometre, compared with 8,358 of Singapore, 527 of South Korea, 281 of United Kingdom or 36 of United States).

[6] Transmission rate or the reproduction number is used to reflect how infectious a disease is. The rate of 1 means that 1 infected person in average will transmit the disease to 1 other person. When the rate is less than 1 then the total number of infected individuals is declining and vice versa.

[7] "Covid-19: Government Extends Lockdown to Monday 27 April," RNZ, April 20, 2020, https://www.rnz.co.nz/news/national/414678/covid-19-government-extends-lockdown-to-monday-27-april.
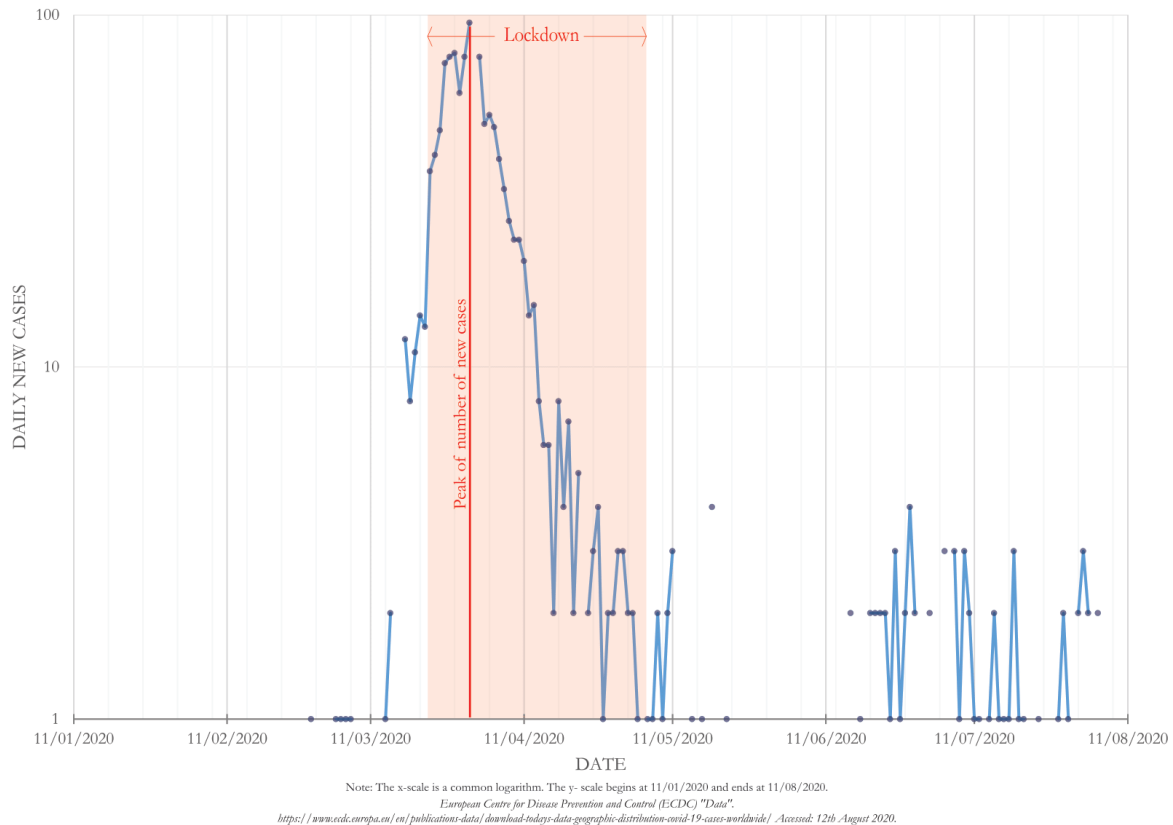
Figure 2 Daily New Cases and Lockdown in New Zealand (as of 11 August 2020) (author's own)

Lesson 2: Public Mobilisation and Public Trust

Since the beginning of the outbreak, the Government's leadership has combined relevant expert knowledge, public education efforts, and mobilization of state resources that helped New Zealand rapidly achieve rapid and complete control over COVID-19 pandemic[8]. The government applied a multi-sectoral approach in its policy responses. Prime minister, Ardern, is the leader alongside with public service, health expert, and senior officials in the COVID-19 Task Force[9].

To build trust between the government and citizens, New Zealand government decisions were guided by scientific advice, facts, evidence, and a willingness to listen to experts[10]. New Zealand focuses on informing and educating the public about coronavirus by several reinforced and hard messages in government advertising and press conferences. In order not to make people feel overwhelmed by

---

[8] Suze Wilson, "Pandemic Leadership: Lessons from New Zealand's Approach to COVID-19:," *Leadership*, May 26, 2020, https://doi.org/10.1177/1742715020929151.

[9] "The People Leading New Zealand's Fight against Covid-19," RNZ, March 31, 2020, https://www.rnz.co.nz/news/covid-19/413048/the-people-leading-new-zealand-s-fight-against-covid-19.

[10] Australian Government Department of Health, "Our Medical Experts," Text, Australian Government Department of Health (Australian Government Department of Health, March 26, 2020), https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/government-response-to-the-covid-19-outbreak/our-medical-experts.

hard messages, Ardern, New Zealand Prime Minister, has launched informal, chatty, and personable Facebook Live to demonstrate an empathetic concern for the affected New Zealand population. Daily press briefing, set speeches, Facebook Live sessions, government advertising and websites help the leader attentively address the practicalities, i.e. disrupt normal daily routine, along with soliciting feedback to unite and build trust with citizen[11]. Additionally, enabling kindness initiative, a creative response of the New Zealand government to COVID-19, asked all New Zealanders to be kind and offer support to others when the country moved to alert level 4[12]. As a result, most New Zealanders have been supportive of the government's social mobilization effort shown by the result from an international poll that 88% New Zealanders surveyed "trust the government to make the right decision around the response to COVID-19"—higher than developing countries like the US and Japan[13].

5.   Region: South East Asia

South East Asian nations have been dealing fairly well in comparison to Latin America and Western Europe in terms of the rate of infection and the number of deaths so far. It's worth noting that there are 3 countries that have close trading relationship with China with no deaths in the first wave. They are Vietnam, Laos and Cambodia with total population of more than 121 million people[14]. Yet, in the second wave, South East Asia is now experiencing rising cases with local transmission.

A.   Philippines

Lesson 1: Effective Lockdown requires consistency and civil participation

Lesson 2: Low-income people support must come from the government

Lesson 3: Preparedness of Public Health system

Lesson 1: Effective Lockdown requires consistency and civil participation

Having imposed a controversial lockdown strategy, criticised for violence and strictness, the Philippines has not succeeded in reducing the number of Covid-19 cases as intended.

In mid-March, President Duterte imposed one of the world's longest and strictest lockdowns to curb the coronavirus spread. Metro Manila and non-essential businesses were shut, people were told to stay home. Between March 17 and July 25, Philippine police made 76,000 arrests and recorded more than 260,000 violations of curfew or lockdown rules. In April, the President stated that quarantine breakers would be shot dead by the military. The government also used questionable military-style

---

[11] "(1) Watch | Facebook," accessed August 4, 2020, https://www.facebook.com/watch/?v=221367342256725; "(1) Live | Facebook," accessed August 4, 2020, https://www.facebook.com/watch/live/?v=210287716712976&ref=watch_permalink.

[12] "Prime Minister: COVID-19 Alert Level Increased," The Beehive, accessed August 2, 2020, http://www.beehive.govt.nz/speech/prime-minister-covid-19-alert-level-increased.

[13] Toby Manhire, "Almost 90% of New Zealanders Back Ardern Government on Covid-19 – Poll," *The Spinoff* (blog), April 8, 2020, https://thespinoff.co.nz/politics/08-04-2020/almost-90-of-new-zealanders-back-ardern-government-on-covid-19-poll/.

[14] Population of Vietnam is 97.4 million, of Laos is 7.3 million, of Cambodia is 16.7 million (estimated by UN in 2020)

strategies such as house-to-house inspections and asking neighbours to report suspected cases. More than 900 complaints alleging torture, inhumane treatment, arrests, or detention were made to the Philippines' Commission on Human Rights. However, so many exemptions have been made to the lockdown of the capital, Manila, that the rule practically makes no sense. Millions of business owners, workers, and government officials were granted a waiver. They travel in and out of the capital on a daily basis, which could have made them asymptomatic carriers of Covid-19.

Yet, as restrictions were eased in June to revive the economy, the Philippines' cases have jumped to more than 100,000. This is the second-highest number of Covid-19 infections and deaths in Southeast Asia, behind Indonesia so far.

Lesson 2: Low-income people support must come from the government

Strict lockdown of more than 2 months since March has disrupted economic activities significantly. Unemployment rate to spike to the nation's record high of 17.7% in April, jumping from 5.3% in January 2020. Until June, 2.6 million people had lost their jobs during the lockdown with the forecast of up to 10 million who could be unemployed this year as a result of the pandemic. The economy contracted 0.7% in the first quarter of 2020, and further 16.5% in second quarter, the biggest blow in the country economy in nearly 4 decades.

In May, the Philippines decided to gradually lift its restrictions to reignite the economy. Meanwhile, many low-income people had to go out to make daily livings, daily records of new covid-19 cases were reported. In response, the government provided cash aid to around 18 million low-income households, especially households with monthly income of less than ₱10 thousand (approx. 200 USD) under the national government's social amelioration program. The emergency support for vulnerable groups and individuals is expected to cost the government ₱595.6 billion (US$12 billion). Also, the government is expected to spend additional ₱1.1trillion (US$22.2 billion) on fiscal and monetary policies to boost the economy.

However, to what extent the economy recovers is still doubtful as domestic spending plummeted when family income shrank, and citizens further cut their spending amid uncertainty in the future job market.

Lesson 3: Preparedness of Public Health system

As a result of inadequate health care system, the Philippines has the second-highest mortality rate due to COVID-19 among the ASEAN countries. Healthcare system in the Philippines experienced a shortage of adequate health facilities and equipment, i.e. personal protective equipment (PPE), mechanical ventilators, and hospitals with ICUs and isolation beds, and an insufficient number of health workers outside the metropolitan area.

To cope with the issue, the Department of Health partnered with private sectors to meet the surge in demand COVID-19 (.). Additionally, the non-existence of Centres for Disease Control and Prevention in the Philippines also makes it hard for the country to deal with the pandemic.

B.   Singapore

Lesson 1:

Lesson 2: Income Inequality matters.

In the fight against Covid-19, Singapore has knowingly utilised a range of technological developments successfully to contain the first wave.

As a highly connected country, Singapore continuously undertook precautionary measures even before any case was identified. Ministry of Health, Singapore (MOH) widely updated on the situation in Wuhan, issued warnings to travel advisory boards and preschools since January 2nd. Immediately after the first imported case was identified on 23rd January, screening and travel restrictions were imposed at borders. A multi-ministry taskforce was set up 4 days after. Singapore's response was not only fast but also thorough. The government announced sector-specific advisories to all businesses and institutions in the country, from clinics, hospitals, transportation companies, shipping businesses, hospitality and premise owners to offices and schools.

Imported cases were the initial source of infection, which was rationed by travel restrictions. Yet local transmission was unavoidable. Singapore prepared its citizens well-ahead of all other countries with distribution of masks (on Feb 01), importation of hand sanitisers, thermometers and protective gears (on Feb 17), and domestic production of vitro test kits by Singapore's own Biotech (on Mar 04)[15]. With nearly 80% of smartphone penetration, Singaporeans are susceptible to the idea of contact tracing via government-developed[16] TraceTogether app using Bluetooth technology[17]. Around 37%[18] of the population have voluntarily downloaded the app since its launch on March 20th. However, the recent spike in the number of cases, mainly clustered in migrant workers' dormitories, revealed Singapore's economic inequality, which then may be the driving force for further local transmission. The government then quickly developed and handed out for free TraceTogether tokens, an alternative to TraceTogether app but more suitable for non-smart-phone users, the elderly and the poor. On June 28th, 10,000 seniors received the first batch of tokens[19]. The government hopefully combines both app and token to reach universal contact tracing within the country soon.

---

[15] Ministry of Health, Singapore Covid-19 Updates: https://www.moh.gov.sg/covid-19/past-updates

[16] The app was developed by Government Technology Agency (GovTech) and Ministry of Health. https://www.smartnation.gov.sg/whats-new/press-releases/launch-of-new-app-for-contact-tracing

[17] Statistica reported 4.65 million smartphone users in 5.69 million Singaporeans in 2020. https://www.statista.com/statistics/494598/smartphone-users-in-singapore/

[18] Figure by TraceTogether: https://www.tracetogether.gov.sg/

[19] https://www.straitstimes.com/singapore/10000-seniors-get-first-batch-of-tracetogether-tokens

C.   Vietnam

Lesson 1: Effective Manual Contact Tracing

Lesson 2: Social and Business Mobilisation

Lesson 3: Public Health System: Alert, Quarantine, Testing and Medical Insurance

On January 16th, the Ministry of Heath (MOH) issued warnings to all government agencies and 5 days later, to hospitals and local clinics via <CDC> system. Vietnam, and Hanoi in particular, is no stranger to epidemics. The SARS and MERS epidemics put the country's health authorities in constant alertness and the Minister of Health set up the national system of pandemic alert.

This system proved its value on January 23rd, when the first cases of Covid-19 in Vietnam were quickly identified. 2 Chinese nationals from Wuhan, travelling along the country via Hanoi's port, were showing symptoms and the local clinic in <city> which was warned 2 days earlier notified the central government straight away. Realising that there must have been many more cases unidentified or asymptomatic passing through the border every day, the National Steering Committee on Epidemic Prevention, led by Deputy PM Vu Duc Dam, was set up immediately on January 30th. 2 days later, PM <name> announced National Epidemic Warning. The whole nation was on a heating bed. On February 3rd, when 7 cases were confirmed, all schools were closed, no public or religious events were allowed. All activities in the country were halted, to fight Covid-19. Then, there were <number> of cases in Wuhan and no European or American nations took any action yet. Vietnam was deemed 'overreactive' and 'draconian' in its approach by many political respondents.

The country went into lockdown effectively from March 30th to May 2nd starting when the PM announced the Nationwide Pandemic. Vietnam introduced strict measures, focusing on ensuring that all people stayed at home and should have expected to work from home if possible and encouraged businesses to reduce commuting. Economic activities were halted. Government officials had to alternate working hours and days whilst all education, entertainment and food businesses must be closed. As the world's top rice exporter, Vietnam decided to temporarily stop exporting rice as well as health-related equipment. To compensate for economic losses, the government directed Electricity Vietnam (its monopolistic state-owned power producer) not to increase electricity prices (which are due to be increases quarterly), delayed tax payments and collaborated with state-owned banks and SBV (State Bank of Vietnam) to introduce low-interest loans to help businesses through the period. Independent shops and restaurants are encouraged by the government to go online, supported technically by the government's agencies. The widespread popularity of sharing economy companies including Grab (motor taxi app) and Now (food delivery app) played a highly important role in maintaining employment for many businesses in the gig economy.

It could be said that social mobilisation was a major factor in the country's virus containment. The government prioritised public education of the status of Covid-19 via official government website set up by the Ministry of Health which does not only update the location and status of infection cases, but also acts as communication portal for children and adults. Beside national television's daily special segment on Covid-19, advices and warnings are sent to each and every mobile users through mass messages, every day, directly one from the Ministry of Health, and one from their local leader. Official health information, therefore, was clear, timely and uniform.

Vietnam's position in global supply chain came into use. Rapid vitro test kits were quickly developed by military doctors and MoH. 5000 first kits were produced on March 17th. Hanoi, the city with most cases and a hub of transportation, bought 200,000 tests in March alone. On March 20th, Vietnam produced enough to start exporting to other countries, including the US. With 2 hours for results, this test kit is essential for containing virus infection right at the point of border control so far (for most cases were imported) and for the upcoming opening-up period. Knowingly poor in the number of ventilators (only 300 per 4 million population in the capital of Hanoi), Vietnam could not afford even a slight chance of community infection. Face masks and PPE production were instantly stepped up by utilising current textile manufacturing facilities. In April, 50 textile companies produced 8 million N95 masks per day and a complete set of PPE for healthcare workers at the cheap price of £3/set, with quality controlled tightly by iCERT, MoH. Cloth masks, which had been popular in the cities due to air pollution, are now being produced at home and by independent companies at a faster rate. Exports of these health equipment already started in March but rationed at maximum 25% of total output by the government for domestic use.

Notably, the government managed to coordinate its network's key state-owned companies in telecommunication, media, utilities, health, transportation, defence and manufacturing effectively so that the country could still run without economic activities by the private sector. The government pledged a $30bn for public investment in

Vietnam resumed rice exports on May 1st and schools were reopened on May 04th. For now, the country is basically back to normal with zero death and only 22 patients in treatment[20]. However, the national task force has not been disposed of, border has not yet opened, all businesses must follow new Health and Safety regulations. Vietnam is still on alert for the second wave.

6. Europe

A. Greece

Lesson 1: Despite severe cuts in the health care budget, the national healthcare system was key in addressing the pandemic

Lesson 2: The Mitsotakis government used the crisis as a pretext to rush through outsourcing deals that hand over the management of Covid-19 to private companies.

The circumstances of dealing with a pandemic were far from ideal in Greece. Since 2008 the country had battled with austerity measures and especially the health care budget was cut, with a 50 per cent reduction in funding for public hospitals between 2009 and 2015.[xxiv] Consequently 54 of the 137 hospitals were closed and the remaining ones had their budgets cuts by 40 percent.[xxv] And more than 13,000 doctors and over 26,000 other healthcare workers lost their jobs between 2009 and 2016. [xxvi] The understaffing in hospitals is severe. Currently there are around 5,000 jobs for hospital doctors vacant and there is a shortage of approximately 25,000 nurses.[xxvii] There were only 560 intensive care beds before the Corona crisis while 2,000 would have been needed according to international standards.[xxviii]

Yet, Greece seemed to have managed with the pandemic far better than other countries. Parts of it was due to luck, as the pandemic hit the country much later than other European nations, giving Greece time to learn its lessons from Italy. But it was also due to Greece's quick and effective response. In mid-March, just two weeks after the first confirmed infection, restrictive measures were

---

[20] As of July 12th, there are 372 cases, in which 350 were discharged and tested negative, 22 are being treated in hospital. Data from (Ministry of Health, 2020)

introduced, for example larger schools were and events cancelled.[xxix] Shortly after, a full lockdown started on the 22 March.

Apart from going into lockdown quickly Greece also managed to swiftly increase its health care capacity, in particular in regard to PPE and hospital beds. By the 16th of April the country had 400 additional hospital beds and by the 27th of April Greece had almost doubled its intensive care beds to 1017. One public hospital in Athens, the Pammakaristos General Hospital of Athens, was turned into a specific Covid-19 hospital, separating the Corona virus patients from other ill people.[xxx]

Greece success is based in its (remaining) publicly owned and controlled public health care sector. Not only was the quick increase in intensive care beds provided by public hospitals.[xxxi] But also the publicly owned Pharmaceutical Research and Technology Company (IFET S.A.) imported and distributed essential pharmaceutical products and medical supplies, including PPE, to the National Health System.[xxxii]

Yet, there is a shadow side to Greece's response to the pandemic. The Mitsotakis government used the crisis as a pretext to rush through outsourcing deals that hand over the management of Covid-19 to private companies.[xxxiii] There is a severe lack of transparency about these deals. For example, a private company was awarded with a €20m Covid-19 public awareness campaign. The exact details on why this company was chosen, what the deal entails, and the exact costings are not revealed to the public; despite parliamentary requests, the government has refused to disclose these details. Also, the Ministry of Migration and Asylum has been accused of bypassing standard procurement procedures and awarding contracts worth millions of euros to private companies while claiming that these contracts are "confidential". Yet, some investigative research suggests that these deals with the private providers have been overpriced and lacked planning.[xxxiv]

B.   Germany

Lesson 1: a good public health care system with universal access enabled Germany to successfully deal with the pandemic

Lesson 2: Germany's fatality rate is low as it successfully shielded the older population

Lesson 3: The trends of a decrease in hospitals and hospital privatisation could be exacerbated through the covid-19 pandemic.

Germany was well positioned to deal with the pandemic, it had a good functioning public health care system and expert scientific institutions it could utilise in its response to Covid-19. Health care is universal and well-funded, with Germany, the fourth largest economy in the world, spending 11 per cent of its gross domestic product on health care. It is leading in Europe in terms of hospital beds per people ratio (with 8.3 beds per 1000 people) and also ranks among the top five EU countries in the number of nurses (13.2) and physicians (4.2) per 1000 people.[xxxv] Germany's intensive care beds were not over-stretched and Germany could even fly in and treat Covid-19 patients from France and Italy.[xxxvi] Yet, like other countries Germany experienced a shortage of PPE for health care workers, which sparked a national protest of health care workers posing naked in order to raise awareness about the vulnerable position health care workers find themselves in. [xxxvii]

There is universal access to health care in Germany as health insurance is mandatory for all citizens and permanent residents of Germany. Almost 90 per cent of the population are covered through statutory health insurance, which is financed through income-related contributions borne by employers and employees and supplemented by the state. While unemployed people and benefits receivers are also covered by the health insurance system refugees and asylum seekers are not

covered by the statutory health insurance but they basic medical and emergency treatment.[xxxviii] Around 10 percent of the population are covered through private insurance.

Due to its aging population Germany was at a higher risk to face high fatality rates due to Covid-19, as more older than younger people die from the virus. Yet through a combination of high levels of testing (the highest in the EU) and especially among high-risk people and health care and in nursing homes workers, contact tracing and shielding of the older population, the number of infections among people who are older than 70 was half of that in Italy (19 per cent in Germany, vs 39 per cent in Italy). This is believed to be one of the main reasons why the fatality rate in Germany is much lower than in other European countries; as of May 2020 the fatality rate was 4.6 per cent compared with 14.1 percent in Italy and 12 percent in Spain.[xxxix] However, the death rates were with 37 per cent as of May 2020, highest in care homes and shelter facilities, such homeless shelters, community facilities for asylum-seekers, repatriates and refugees and prisons. Nonetheless, this is a much lower proportion than in other European countries, such as Belgium, France, Norway, Sweden where the death rate in care homes, shelter facilities and prisons was higher than 50 per cent.

Apart from its properly funded health care system and also the fortunate position of having hit by the Covid-19 pandemic later than other European countries, such as Italy, many also attribute Germany's successful response to Covid-19 to its political leadership.[xl]Angela Merkel has been praised for her evidence-based and consensus-oriented leadership style.[xli] Public trust in the government is high;[xlii] and Germany's hard right party, the Alternative fuer Deutschland (AfD), which has significantly gained in popularity since it was founded in 2013, has seen a drastic decline during the pandemic.[xliii] The public followed the guidance of the government and so Germany never had a full lockdown, the guidance was voluntary and people remained free to leave the house for walks as often as they liked. Physical distancing restrictions were, however, in place. One month after its first case on the 27th of January, mass gatherings and travel were increasingly restricted and in late March Germany enforced strict physical distancing guidelines, banning groups of more than two people and the closure of most businesses. The government also did not introduce surveillance mechanisms.[xliv]

Currently, more than a third of hospitals are privatised – and roughly one third is run by the municipalities and one third run by non-profit providers. Also, the vast majority of nursing homes in Germany are privately run.[xlv] The corona pandemic showed again that it is the state – with taxpayers' money – that steps in in times of need and not the private providers. Again, it means, profits are privatised while losses socialised. [xlvi] Privatisation of hospitals means that management decisions put economic efficiency over well-being. Planned surgeries are much more lucrative than emergency care. This can mean, for example, that private hospitals are not keen to treat corona patients in order not to lose lucrative patients.[xlvii] To work around this the German government tried to economically incentivise the treatment of corona patients by offering hospitals 560 Euros per day for each bed that is kept free for Covid-19 and a one-off payment of 50,000 euros for each new intensive care unit.[xlviii]

While the corona pandemic demonstrated the importance of public and universal health care there is a risk that the pandemic will accelerate the privatisation of hospitals in Germany. Already, before the pandemic there were two trends regarding Germany's hospitals, namely a decrease in hospitals and a steady increase in privatisation.[xlix] In 2000 there were 2242 hospitals, but by 2008 this was reduced to 1925 hospitals (see Figure x). Consequently, also the number of hospital beds were reduced significantly.[l] At the same time, while in the year 2000 21,7 per cent of the hospitals were privatised this increased to 37.5 per cent in 2018.[li] Neoliberal think thanks such as the Bertelsmann Foundation and other lobby groups have pushed for a while for an increased marketisation of hospitals, in especially further privatisation and a decrease in the number of hospitals – the bigger the more profitable, is the mantra. Suggesting that there was a "oversupply" in health care, a 2019 report from

the Bertelsmann foundation argued that the number of hospitals should be cut by more than a half.[lii] A study from 2018 showed that especially municipal and regional hospitals risk privatisation. [liii] The public hospitals are under pressure as government funding has shrunk, in real terms, by a third since 1991.[liv] The same study also showed that private hospitals employ less staff than municipal hospitals, and are less likely to have staff on full time contracts, moreover private hospitals are more likely to outsource cleaning and catering to other private providers. Low wages are the consequence and trade unions have pointed out that in some private hospitals the lowest wages are below the minimum wage.[lv] Yet, it is exactly this over-capacity, by not running hospitals in line with a tight profit margin, that allowed Germany to deal well with the pandemic.[lvi]

Figure x: Number of hospitals in Germany 2000-2018:
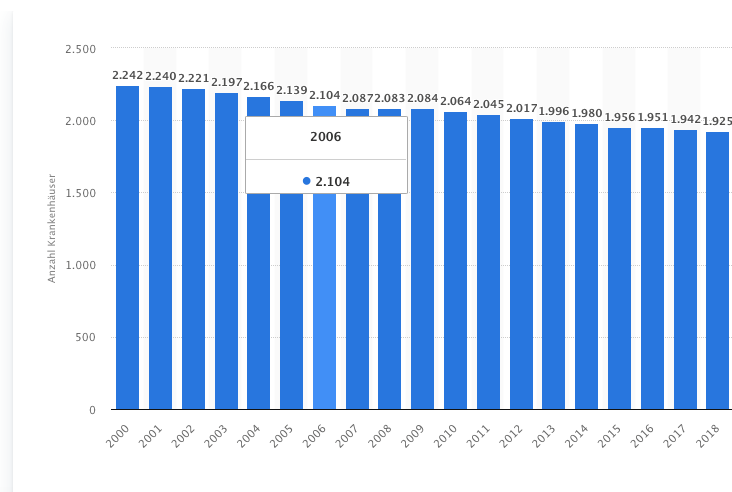
Source: Statista

In terms of economic recovery plans, Germany committed 130 billion euros to pandemic recovery, of which 30 per cent will be spend on activities that will cut emissions[lvii], such as subsidies for electric vehicles, improving building energy efficiency and enhance public transport networks.[lviii]

The UK has experienced the second highest death rate of coronavirus in the world, 68 per 100,000 population (as at mid-July 2020), despite having one of the best universal public healthcare systems in the world, the NHS. The UK government introduced lockdown too late, lost public confidence that there was a clear and universally applicable set of rules, struggled to provide adequate protection for hospital, care home, and public transport workers, failed (in England) to set up an effective system of test, track and trace, had very poor collaboration with regional and local governments and community organisations, and relaxed restrictions without sufficient regard to worker or public safety.

People from black and minority ethnic groups (BAME), including key workers in health and social care, have been harder hit by Covid-19. The data shows that this disproportionate impact of Covid-19 on BAME groups is due the relative deprivation of BAME population, with lower incomes, more crowded housing, higher stress from low social status, and higher likelihood of working in 'frontline' work – and that relative deprivation is itself due to racism. As professor Michael Marmot of UCL states:

> "Health follows a social gradient…not just in the UK but everywhere. [The link between] deprivation and COVID-19 mortality is really similar to the gradient in mortality from all causes… Because of systematic disadvantage – racism – black people are more likely than the general population to be in deprived circumstances….structural racism is a cause of excess COVID-19 mortality in BAME communities."

The major factors behind the UK's poor performance are also clear: austerity, outsourcing, and right-wing nationalist ideology. A series of governments since the financial crisis of 2008 had applied austerity policies, cutting resources especially for local public services; since 2012 the NHS has been opened up for outsourcing of all elements; business interests have a strong and increasingly institutionalised influence on government policy-making; and right-wing nationalist ideology has become increasingly influential.

Austerity policies created problems by cutting capacity to deal with epidemics. The NHS carried out an exercise code-named 'Cygnus' in 2016 to plan for a serious epidemic, which identified lack of resources in care homes and under-staffing of local councils, but the recommendations were ignored and not published. The NHS had created a stockpile of PPE and other equipment in case of an epidemic, but the stock was reduced by 40% in the six years before Covid19 as part of austerity

measures. In 2017 the government rejected a recommendation for an increase in the PPE equipment stockpiled because it "would substantially increase the cost". The fragmentation of the NHS in 2012, designed to encourage outsourcing, abolished regional NHS structures and "created major barriers to coordination". Local authorities in England were not involved in the UK government's planning of the response to Covid19.

The initial UK government response was to reject a general lockdown, on the basis that people would not observe it, and to reject the idea of universal testing, and instead to allow the epidemic to develop to "build up some degree of herd immunity". It also formally downgraded the seriousness of Covid19, and downplayed the need for significant restrictions - on 3rd March the prime minister said he was happy to shake hands with Covid19 patients and that people should 'basically just go about our normal lives'. In response to strong lobbying, major sporting events – such as a huge 4-day horse-racing event at Cheltenham on 16 March - were allowed to go ahead. This 'herd immunity' approach, strongly influenced by libertarian ideology, was then reversed after modelling showed that it would potentially lead to 500,000 deaths. By the time the UK introduced a lockdown on 23 March, "almost two months of potential preparation and prevention time had been squandered", and this delay alone is estimated to have cost an extra 20,000 lives. There has also been substantial pressure from UK companies for the government to relax the lockdown restrictions.

The NHS had already been subjected to a long-term process over 25 years of outsourcing NHS services and supplies. Even the procurement process itself was outsourced to private companies who then awarded monopoly contracts for supplies of PPE, warehousing, logistics, and IT services.

The government has continued this process in 2020, by outsourcing every possible part of the new resources spent to control the Covid19 epidemic, instead of strengthening the capacity of the NHS. This includes PPE, testing, tracking and tracing, and has led to repeated problems:

- the warehouse stockpiling PPE for just such an emergency was unable to deliver to hospitals, with workers describing the system as 'chaotic' and insufficient, out of date stock.
- The government gave an emergency contract to Deloitte to sort out the system, but this was described even by suppliers as a "disaster", with Deloittes trying to source PPE from China and ignoring offers from local communities, universities and small businesses in the UK, who all reacted rapidly to offer to start producing PPE locally.
- A new system to supply PPE to care homes and GPs was outsourced to a company whose CEO is a leading donor and supporter of the Conservative Party: but the system was too slow, and care homes and councils were still "not able to access sufficient supplies of PPE".
- Contracts to operate drive-through coronavirus testing centres were awarded without competition to Deloitte, which sub-contracted other outsourcing specialists Serco, Mitie, G4S and Sodexo to manage the centres. These arrangements have failed, with the centres being reported as "too far away", the wrong tests being sent out, results being lost, and others being sent to the wrong person
- The track and trace work in England has been outsourced to Serco, under yet another uncompetitive contract, which Serco hope will "cement the position of the private sector" in the NHS. This too has proved a disaster, failing to contact thousands of people in the worst-affected areas, while ignoring the potential role of local councils.
- The government issued a contract for a tracking app to a software firm with links to the prime minister's special adviser. The app failed to work, and has been cancelled.
- private hospitals have been seeking to gain outsourcing contracts from the NHS for many years, and gained hugely from Covid19 when the UK government required all private

hospitals to make themselves 100% available for NHS work, under contracts worth £400million per month whereby the government pays all the running expenses of the private hospitals to be available for NHS work. The companies persuaded the UK government to extend this deal with a £5 billion contract for the next year, but the Treasury reportedly refused to endorse this.

- Even the work of organising meal vouchers for 1.5million children from poor families was outsourced to a contractor, Edenred, whose system then proved unable to cope with the demand.

The flattening of the curve and relaxation of restrictions has been followed by further outbreaks of cases caused by employers using unsafe working practices, especially where migrant workers are employed: "In the US, Europe and Asia, poor working conditions in care homes, meat plants and factories have helped to spread the virus." A second wave of Covid 19 forced the second lockdown lockdown in the city of Leicester where cramped clothing sweatshops were employing workers with Covid symptoms, paying far below the minimum wage, to supply highly profitable online clothing retailers such as Boohoo. Outbreaks also emerged in meat factories in Ireland and Northern Ireland, where people had to work and eat too close to each other: migrants from all continents make up the vast majority of the workforce in the meat industry.
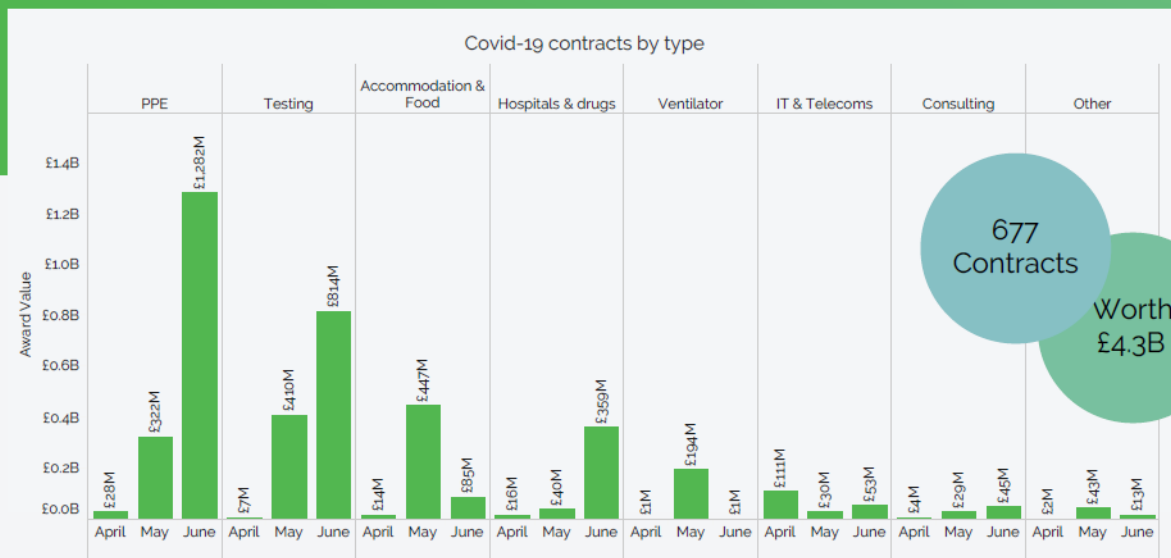
Value of published contracts has doubled in the last month

The UK public sector has now published £4.3bn worth of Covid-19 contracts. £2.6bn worth were published in June alone.

PPE is now the single largest sector, accounting for a third of the total Covid-19 contract value – see next page for more details.

Other areas of growth in the last month have been in healthcare related contracts - primarily testing, hospitals & drugs.

Covid-19 contracts by type

	PPE			Testing			Accommodation & Food			Hospitals & drugs			Ventilator			IT & Telecoms			Consulting			Other		
	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun
	£28M	£322M	£1,282M	£7M	£410M	£814M	£14M	£447M	£85M	£16M	£40M	£359M	£1M	£194M	£1M	£111M	£30M	£53M	£4M	£29M	£45M	£2M	£43M	£13M

677 Contracts

Worth £4.3B

tussell

Sweden has traditionally been regarded as a model social democratic country with strong technocratic public services, and currently has a government led by the social democrats. However in response to Covid19, unlike nearly all other European countries, Sweden has not applied a general lockdown. Bars and restaurants remained open, restrictions on activity are voluntary, schools have remained open, little effort was taken to protect care homes, and there has been no recommendation for the use of masks. The importance of testing has been downplayed, with one of the lowest testing rates in Europe, and contact tracing was abandoned in March, and in June "the resources and training are still lacking".

The Swedish government says the policy objective has been to slow the epidemic and so protect the healthcare system, but a group of leading Swedish doctors and scientists argue that it is in effect a policy of 'herd immunity', allowing large numbers of people – mainly younger and fitter - to develop immunity so that the virus cannot spread.

This has been supported by a strong nationalist rhetoric, so that Anders Tegnell, the chief epidemiologist heading the policy, has been described as "the incarnation of Sweden's soul", criticism is rejected with "a sense of wounded national pride" , and a very senior epidemiologist has suggested that the high death rate in care homes is partly due to staff who are refugees or asylum seekers and do not fully understand Swedish.

But the policy is not working. In mid-July, even in the capital Stockholm only 10% of people were immune. According to comments in the FT, many people with Covid symptoms have been refused admission to hospital. One man of Turkish origin was flown to Turkey where he was treated and recovered.

And the cumulative death rate per million population is one of the worst in the world, worse than the USA.

> "Sweden can be used as a model, but not in the way it was thought of initially. It can instead serve as a control group and answer the question of how efficient the voluntary distancing and loose measures in Sweden are compared with lockdowns, aggressive testing, tracing and the use of masks. In Sweden, the strategy has led to death, grief and suffering. On top of that, there are no indications that the Swedish economy has fared better than in many other countries. At the moment, we have set an example for the rest of the world on how not to deal with a deadly infectious disease."

i https://www.aa.com.tr/en/africa/nigeria-registers-423-new-covid-19-cases-6-deaths/1939167

ii https://theconversation.com/getting-to-grips-with-the-covid-19-outbreak-in-nigeria-143943

iii https://www.preprints.org/manuscript/202007.0181/v1

iv https://www.devex.com/news/politics-gets-in-the-way-of-nigeria-s-covid-19-response-97720

v https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#N

vi https://nigeria.un.org/sites/default/files/2020-05/Gender%20Based%20Violence%20in%20Nigeria%20During%20COVID%2019%20Crisis_The%20Shadow%20Pandemic.pdf

vii https://www.aljazeera.com/indepth/opinion/problem-predicting-coronavirus-apocalypse-africa-200505103847843.html

viii https://www.sciencemag.org/news/2020/07/it-s-tricky-thing-covid-19-cases-haven-t-soared-nigeria-could-change

ix https://www.bbc.com/news/world-africa-52372737

x https://www.theguardian.com/global-development/2020/jun/10/nigeria-to-cut-healthcare-spending-by-40-despite-coronavirus-cases-climbing

xi http://covid19.ncdc.gov.ng

xii https://www.devex.com/news/politics-gets-in-the-way-of-nigeria-s-covid-19-response-97720

xiii https://theconversation.com/getting-to-grips-with-the-covid-19-outbreak-in-nigeria-143943

xiv https://www.fes.de/referat-afrika/neugikeiten-referat-afrika/covid-19-in-nigeria-once-again-religion-stands-in-the-way

xv https://www.ft.com/content/334cfaf6-e876-45b3-9a54-8f0c4cc5c0c4

xvi https://www.weforum.org/agenda/2020/07/what-covid-19-means-for-the-shrinking-fiscal-space-for-education-in-nigeria/

xvii https://www.bbc.co.uk/news/world-africa-53515608

xviii https://www.theguardian.com/world/2020/may/31/south-africas-alcohol-ban-has-given-massive-boost-to-criminal-gangs

xix https://www.bbc.co.uk/news/world-africa-53699712

xx https://theconversation.com/pandemic-underscores-gross-inequalities-in-south-africa-and-the-need-to-fix-them-135070

xxi https://uk.reuters.com/article/us-health-coronavirus-safrica-response-a/how-inequality-and-poverty-undermined-south-africas-covid-response-idUKKCN24W1OL

xxii https://theconversation.com/local-networks-can-help-people-in-distress-south-africas-covid-19-response-needs-them-138219

xxiii https://news.sky.com/story/coronavirus-south-african-community-starts-own-covid-19-healthcare-system-as-government-response-falters-12049062

xxiv https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01163-0/fulltext

xxv https://www.freitag.de/autoren/der-freitag/austeritaet-ist-toedlich

xxvi https://www.freitag.de/autoren/der-freitag/austeritaet-ist-toedlich

xxvii https://www.br.de/nachrichten/deutschland-welt/gut-abgeschnitten-griechenland-und-corona,RzSSkvp

xxviii https://www.br.de/nachrichten/deutschland-welt/gut-abgeschnitten-griechenland-und-corona,RzSSkvp

xxix xxix

xxxhttps://www.covid19healthsystem.org/countries/greece/livinghit.aspx?Section=2.1%20Physical%20infrastructure&Type=Section

xxxi
https://www.covid19healthsystem.org/countries/greece/livinghit.aspx?Section=2.1%20Physical%20infrastructure&Type=Section

xxxii
https://www.covid19healthsystem.org/countries/greece/livinghit.aspx?Section=2.1%20Physical%20infrastructure&Type=Section

xxxiii https://www.theguardian.com/commentisfree/2020/jun/16/pandemic-greece-public-finances-covid-19

xxxiv https://www.theguardian.com/commentisfree/2020/jun/16/pandemic-greece-public-finances-covid-19

xxxv https://ourworldindata.org/covid-exemplar-germany

xxxvi https://www.independent.co.uk/news/world/europe/coronavirus-germany-italy-france-hospital-treatment-covid-19-a9440906.html

xxxvii https://www.theguardian.com/world/2020/apr/27/german-doctors-pose-naked-in-protest-at-ppe-shortages

xxxviii https://krankenversicherung.com/krankenversicherung-ohne-einkommen

xxxix https://ourworldindata.org/covid-exemplar-germany

xl https://www.theatlantic.com/international/archive/2020/04/angela-merkel-germany-coronavirus-pandemic/610225/

xli https://www.ft.com/content/d79a157d-c1bc-49e4-a8b1-f8800fc4f012

xlii https://www.orfonline.org/research/the-good-the-bad-and-the-ugly-germanys-response-to-the-covid-19-pandemic-66487/

xliii https://www.ft.com/content/d79a157d-c1bc-49e4-a8b1-f8800fc4f012

xliv https://www.orfonline.org/research/the-good-the-bad-and-the-ugly-germanys-response-to-the-covid-19-pandemic-66487/

xlv https://www.fr.de/meinung/starker-staat-alle-13758868.html

xlvi https://www.merkur.de/wirtschaft/coronavirus-tagesschau-ard-private-krankenhaeuser-kliniken-patienten-gesundheitssystem-stresstest-covid-19-zr-13590702.html

xlvii https://www.merkur.de/wirtschaft/coronavirus-tagesschau-ard-private-krankenhaeuser-kliniken-patienten-gesundheitssystem-stresstest-covid-19-zr-13590702.html

xlviii https://www.tagesspiegel.de/berlin/leere-stationen-kaum-ops-warum-krankenhaeuser-trotz-schutzschirms-in-finanzielle-not-geraten/25754400.html

xlix https://de.statista.com/statistik/daten/studie/2617/umfrage/anzahl-der-krankenhaeuser-in-deutschland-seit-2000/

l https://de.statista.com/statistik/daten/studie/157049/umfrage/anzahl-krankenhausbetten-in-deutschland-seit-1998/

li https://de.statista.com/statistik/daten/studie/2617/umfrage/anzahl-der-krankenhaeuser-in-deutschland-seit-2000/

lii https://www.bertelsmann-stiftung.de/de/themen/aktuelle-meldungen/2019/juli/eine-bessere-versorgung-ist-nur-mit-halb-so-vielen-kliniken-moeglich

liii http://www.rwi-essen.de/media/content/pages/publikationen/rwi-materialien/rwi-materialien_122.pdf

liv https://www.cicero.de/wirtschaft/krankenhaus-im-ausverkauf/52424

lv https://www.cicero.de/wirtschaft/krankenhaus-im-ausverkauf/52424

lvi https://www.dw.com/de/weniger-krankenhäuser-nach-corona/a-53155819

lvii https://www.bloomberg.com/news/articles/2020-06-16/lessons-from-germany-s-green-virus-recovery

lviii https://www.businessgreen.com/news/4016109/green-recovery-germany-unveils-plans-eur40bn-climate-spending-surge