

A World of No Lockdowns:

A comparative research study on two countries, South Korea and Sweden, who both made the decision to not impose a national lockdown during the COVID-19 pandemic.

A paper by six Bachelors of International Economics candidates at the University of British Columbia:

Shritanjay Bhatia, Utkarsh Sikka, Isha Trivedi, Sanna Uppal, Julia Brockley and Nikita Navaneeth

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Introduction

The COVID-19 pandemic has plagued the world for the last few months. The novel coronavirus was first reported in December 2019 in Wuhan, China when a cluster of patients with pneumonia was observed and reported to the World Health Organization (WHO). By 12 January 2020, the full genome of the new virus had been sequenced and shared by an expert in China. The disease's peak began in China and slowly spread across the globe via unaware and unrestricted travelers. The WHO declared the outbreak a Public Health Emergency of International Concern on 30 January and a pandemic on 11 March¹. As of 28 November 2020, more than 62.1 million cases of COVID-19 have been reported in more than 188 countries and territories, resulting in over 1.45 million deaths².

The declaration of the virus as a pandemic resulted in several countries going into lockdown, implementing policies such as work from home where possible, closures of schools and public spaces, bans on large gatherings, and restricted or halted travel across borders. The extent of lockdowns differed from country to country depending on the governmental assessment of the severity of the situation, including their analysis of the tradeoff between preventing the spread of the virus and maintaining normal levels of economic activity.

In this study, we compare two countries and their responses to the pandemic: Sweden and South Korea. Both countries opted not to impose a strict legal lockdown and instead primarily relied on its citizens to obey guidelines and recommendations. Sweden opted to leave its commerce sector mostly unrestricted, unlike most other countries. It chose to ban public events but kept restaurants and malls open, advising people to work from home and practice social distancing. While Sweden's constitution legally protects freedom of movement of people, the public was expected to follow a series of voluntary recommendations. South Korea, on the other hand, actively engaged in rapid and extensive testing via mass screening, isolation of infected individuals, and a test, trace, and quarantine strategy for those exposed to the virus^{3,4}.

We use a confined metric of six categories to compare the measures that the two countries took in their respective no-lockdown economies. We consider their cultural dispositions, initial state of healthcare, monetary and fiscal policy responses, use of technology, individual supply chains, and the impact of governmental policies and their execution on national politics.

Literary Review and Methodology

Multiple sources outline the economic impacts of the virus, citing a fall in exports and growth in the two countries. Andersen et al. (2020) engaged in a comparative study about the fall in consumption in Sweden versus Denmark¹, while the Kamerlin and Kasson (2020)² study focused on analyzing the effectiveness of the self-isolation approach taken by Sweden on its economy. We gathered information on the extent of medical testing being done in these two countries, new technologies being used to combat the virus, and the political and cultural impacts of the policies implemented by the two governments during the pandemic. Also, the study by Tikannen et al. (2020)³ was used

to establish Sweden's existing healthcare system in order to better understand and compare the changes it went through during this period. While there have been reports individually analyzing the impacts of the virus in each country, we saw none that directly compared Sweden and South Korea. Our research focuses on comparing the lockdowns in two countries who took similar approaches in principle but saw vastly different results because of their cultural and circumstantial differences as well as the finer details of their respective executions. Since the news surrounding the virus is rapidly changing, we relied on newspaper articles as our main sources of data keep up to date with those changes. However, our research is limited by the news that was available to us at the time of writing, hence it may not be up to date with current developments. In addition, since the pandemic is a phenomenon that has been discussed only in the last few months, our research is not heavily dictated by academic and peer reviewed journal articles or research papers. Instead, we primarily relied on less comprehensive and more expeditious sources such as global news coverage, opinion articles, and interviews.

Cultural Factors

While Sweden is known for being one of the most highly developed welfare states in the world, Swedish society is more individualistic than collective. Government policies like individual taxation of spouses, easier access to student loans, and a strong emphasis on child rights and facilities for the elderly work towards decreasing the dependence of an individual on familial, religious, and state-run systems and institutions; such policies encourage the development of an independent and individualistic society that tends to invest in human capital to increase individual autonomy. Their societal framework is less close-knit compared to that of South Korea. Individuals consider benefits for themselves and their family more strongly than for all of society. The easy relationship between the state and individuals in recent decades has allowed for most citizens to view the state as an efficient and benevolent entity¹.

Amid the coronavirus pandemic, the Swedish government chose not to opt for a complete lockdown. They imposed measures that advised (rather than instructed or mandated) people to socially distance from non-family members and banned gatherings of over fifty people; however, unlike in many other countries, schools, bars, restaurants, and other locations and institutions that are considered important to the community were allowed to remain open. Given that Sweden's coronavirus response was more geared towards individual responsibility and looser restrictions, there were significant differences in the de facto behaviors engaged in by various demographics. As the government encouraged life to continue as usual as much as possible, it was not rare for people to attend crowded bars, swarming public transport, or restaurants amid the pandemic. Mask-wearing, as it was neither mandated nor strongly recommended early in the pandemic, was scattered. As expected, a demographic that was particularly hard hit in this country was the elderly, specifically those living in nursing homes. In nursing homes in Sweden, employees are often hired on short term contracts or are working there for temporary employment; as a result, this role is often filled by younger workers working multiple jobs². It is argued that due to the lack of a lockdown, it was easier for these younger workers, who would have more points of contact with the

virus, to introduce it into nursing homes. Additionally, while the government banned visitors to nursing homes, it did so too late; hence, it was easy for the virus to enter the facility via asymptomatic family members. Towards the end of April, Health and Social Affairs Minister Lena Hallengren stated, "We failed to protect our elderly. That's really serious and a failure for society as a whole."³

The Swedish people put a great deal of faith in their government and the policies they recommended. Thus the government chose to take more lax measures towards the control of the virus and rely on citizens acting with voluntary responsibility when it came to stopping the spread of the virus by working from home when possible, cutting non-essential travel and self-isolating when sick. "No one is alone in this crisis, but each person has a heavy responsibility," said Prime Minister Stefan Löfven.

It is reported that many in the capital took the government's advice and implemented the recommended changes, but there were also those who chose not to take the appropriate and necessary precautions, instead choosing to host parties with more than fifty people, go out clubbing, meet up at crowded bars, etc., further highlighting the differing prerogatives between demographics. Younger Swedes, influenced by a more individualistic society, were more likely to ignore or only loosely follow the government recommendations; without social pressure or familial obligations, they were unafraid of contracting and spreading the virus.

More than half of all Swedish homes are made up of one resident, which many officials believed would help curb the spread of the novel coronavirus. Swedish citizens tend not to be overly social: they don't sit next to one another on public transport, don't engage in small talk with strangers, etc. Social distancing was not altogether very different from Swedish norms regarding personal space, so the guideline to remain six feet apart from non-family was not a large adjustment.

Swedish labor laws also offer generous policies when it comes to sick leave. Employers encourage workers to stay at home even if they have mild symptoms like coughs and colds to avoid others falling sick. Therefore, it was believed that people with mild symptoms of the virus would choose to stay home and avoid spreading the virus. Being one of the most digitally advanced countries in the European Union, it was also easier for more citizens to work from home when needed. According to an article published by the BBC, prior to the coronavirus pandemic two thirds of Swedes already opted to work from home at least some of the time⁴.

Sweden also allegedly hoped to develop widespread herd immunity among its citizens through exposure; however, officials have denied that this hope was the main objective of the government decision to take a less severe approach to combat the spread of the virus. It was reported that only 6.1% of the population developed an immunity to the virus, which is much lower than what is needed to achieve actual herd immunity and protect vulnerable populations. The concept of herd immunity largely untested when it comes to the coronavirus and the duration of immunity following recovery from infection has been shown to not last beyond a couple months in most patients; thus this strategy was and continues to be unsuccessful in Sweden⁵.

South Korean culture is more collectivist, evolving from the shared understanding that individual safety measures enhance the safety of the community and generally produce better outcomes. The pandemic necessitated that intensive safety measures be undertaken by all citizens, at the expense of some rights and liberties that interfere with communal safety. South Korea does not have the same fraught history of fighting for individual rights as some Western countries, and in general the population prioritizes security and wellbeing over privacy. There are both high expectations about and a high level of faith in the amount of respect people have for their families and communities, and subsequently, there is social pressure to resist from engaging in reckless behavior⁶.

There is an above-average population of older individuals in South Korea (about fifteen percent compared to a global average of nine percent), making it all the more important for the population to be responsible and abide by pandemic guidelines. Lockdown was overwhelmingly not enforced, since people stayed at home of their own accord when possible and adhered to recommendations regarding masks, handwashing, social distancing, etc. if they had to leave the house. The government chose to allow small gatherings and socialization, within reason, in an attempt to ensure that the South Korean economy would not significantly falter in the wake of Covid-19. Not only was there already a shared pre-pandemic cultural expectation that sick individuals would act responsibly to limit exposure, but South Korea's prior experience with the MERS epidemic meant that citizens were more accustomed to the restrictions that came with attempting to lessen the spread of a highly contagious disease. There is a high level of trust between citizens and the government specifically related to health measures; for example, in the 1970s and '80s, the South Korea government successfully employed a strategy of nationwide stool-testing for elementary school children to eliminate the significant issue of widespread parasite infestation. The children of that era are now adults and parents themselves, having maintained faith in government leadership in measures related to community health⁷.

Not only is South Korean culture exceedingly accepting of people living with their parents until they establish their careers or get married, but there is a cultural expectation that children will one day live with and care for their elderly parents. While many young adults live in single-family households, especially in metropolitan areas, it is not uncommon for families to live together in other parts of the country. Responsibility for parents and elders is instilled in children and culture, creating social pressure to avoid individualistic and selfish behavior that may cause harm to the rest of the family⁸.

South Korean patients who test positive for the coronavirus had the advantage of universal healthcare, availability of designated quarantine facilities, government-provided supplies to maintain a standard of cleanliness and continue monitoring symptoms, and even a government-subsidized salary while isolating or recovering. This generous package made it exceedingly easy for citizens to act collectively responsible without sacrificing comfort or finances^{9,10}.

While both Sweden and South Korea decided not to impose a legal lockdown, trusting its citizens to act responsibly, their respective cultural expectations and other historical factors affected the way

citizens behaved. South Koreans acted preemptively, wearing masks and staying home, because they didn't know much about the virus. Swedish citizens generally limited social gatherings, but assumed the virus was noncontagious while asymptomatic, which turned out to be incorrect. The perceived individual responsibility differed based on the social mindset. While Sweden's culture influenced its citizens to act in a more individualistic manner, which was to their detriment, South Korea's focus on collective outcomes resulted in more responsible behavior in retrospect.

Initial State of Healthcare

Another factor that makes Sweden one of the world's most developed countries is its provision of universal healthcare for its citizens. Annually it spends more than 10.6% of its GDP on health care expenditures, whereas most countries spend only around 9.9% of their GDP on healthcare expenditures¹. As a result, a limited amount of additional expenditures was made in Sweden when the pandemic hit, ensuring no permanent damage or significant additional costs to the Swedish healthcare system.

However, Sweden had the lowest rates of COVID testing in comparison to its Nordic neighbors despite having a strong and well-established healthcare system². This low rate of testing did not result in a lower rate of positive tests; rather, Sweden had the highest death per capita and highest rate of positive tests compared to other Nordic countries³. Due to a low number of administered tests, the hurdles to get tested were probably very high, meaning that only people who exhibited many symptoms of the novel coronavirus were given tests. This resulted in a high rate of positive tests, though not as an accurate representation of the population. Only thirteen percent of Swedes have private insurance in addition to publicly available universal healthcare, which under normal circumstances highlights the strength of the public health system; but in this case, there was a shortage of performed tests that the small private sector failed to make up for⁴.

Although the Swedish government spends so much on its health care system, it failed to cater to its biggest population strata: older and retired citizens. Health care expenditures being a significant part of the Swedish GDP in an average year could be a reason why it failed to meet the needs of older people. The greater need for medical resources would put a lot of pressure on the national saving, which acts as a potential threat to the country's long-term growth and stability. Thus, a limited healthcare budget was allocated towards COVID testing and medical support available for patients who test positive. While it limits the stress on the healthcare system, it causes severe harm to the citizen's health and leaves them unsupported during a time of need. A population primarily reliant on public healthcare being stopped from accessing it is likely to undergo tremendous amounts of stress and unknowingly spread the virus to others.

Like Sweden, South Korea boasts a universal healthcare system which is highly regarded. In 2018 Korea spent 8.1% of its GDP on healthcare, and its system covers 100 percent of the population. Though this surely contributed to South Korea's success with 'flattening' their curve (which refers to slowing the rate at which new cases occur to prevent overwhelming the medical system),

perhaps their greatest asset was their preparedness for a pandemic following the MERS outbreak they experienced in 2015. South Korea amended the Contagious Disease Prevention and Control Act (CDPCA) after the MERS outbreak to allow for intensive contact tracing and data collection, permitting them to roll out intense Covid-19 contact tracing without first encountering troublesome legal barriers.

Though the extensive use of data collection has been described by some as a violation of personal freedoms, the measures taken by the South Korean government have proved to be highly effective, evidenced by the country's sharp decline in daily cases since February. The widespread social acceptance of these intrusive policies reflects the public's trust in the government and the country's collectivist society. This social culture within South Korea has itself discouraged the spread of Covid-19, according to several reports of individuals being harassed or shunned for not wearing masks in public.

When Covid-19 cases began appearing in South Korea in January 2020, the South Korean government responded swiftly by working with private biotech companies to develop a test. Having private and national healthcare systems join forces allowed a test to be developed and reproduced rapidly, and by the end of February nearly every hospital in the country was issued a supply of test kits. Private and public companies collaborated again in administering these tests, setting up over 600 drive-through testing locations with the total capacity to test up to 20,000 individuals per day⁵.

Both South Korea and Sweden have well-established universal healthcare systems in place which enabled them to bear the stress Covid-19 brought on their systems. South Korea had the advantage of having experienced the MERS outbreak and were able to respond quickly to the encroaching threat of Covid-19 and organize their healthcare resources to efficiently cater to the highest number of people.

Both countries prioritized citizens and their wellbeing, but the approach they took to cater to it was very different. Sweden focused on supporting its citizens by keeping the economy afloat and providing economic stability while South Korea took a more direct and personal approach to tackle the virus itself. The resulting rise in cases in Sweden juxtaposed to the flattening of South Korea's curve demonstrates which approach achieved the goal better of protecting its citizens. In economic terms, Sweden's unorthodox approach did little to protect its citizens, as its economy fared little better than other countries that did impose stringent lockdowns of businesses and workplaces⁶.

South Korea focused on contact tracing and quashing the virus while Sweden focused on keeping its economy afloat. While both the countries prioritized maintaining the wellbeing of their citizens without imposing strict lockdowns, their methods and overarching goals differed. Sweden hoped to keep its economy afloat and maintain its economic health which as a result limits the consequences of job loss, rise in poverty and depression. but South Korea's main aim was to quash the virus and protect the health of its citizens. Taking utilitarian approaches, both countries wanted to achieve the greatest good for the greatest number of people in the long term.

The Use of Technology

Sweden has been known to be a technologically advanced country. However, it has been unable to capitalize on its state-of-the-art technology to respond to Covid-19. The only avenue where the Swedish government used their technological resources was to bolster their local businesses' "digital transformation"¹. Due to work from home mandates, online platforms have become a primary source for business revenue in the pandemic. Companies that were already operating their business through these digital platforms found it easier to maintain their revenue while others did not. Therefore, the government has provided support to local businesses in order to help them in making a successful digital transformation.

Interestingly, Kuoppamäki and Östlund's study (2020) highlights how older Swedish citizen's usage of digital technologies helps them maintain their mental health during this pandemic. The increase in the usage of digital media by the older population strata of Sweden during COVID-19 specifically to use the text messages feature shows how technology is helping the older generation stay connected to others in a time when meeting others physically is not possible. While this was not a result of the government using their state-of-the-art technology, it does show the positive effect for technology and its usage on Swedish citizens². However, it also goes to show how the Swedish government failed to use its technological resources which perhaps could have helped curb the country's high death rate of 65.61 per 100,000 citizens³.

South Korea has used technology and AI extensively to battle the coronavirus. One great success of the South Korean government is its smartphone application, Corona 100m. This application shows the location of a patient infected with the virus, the date when the infection was confirmed, the nationality, age, and sex. Corona 100m provides an alert to an individual if the user is approaching a place that was used by a COVID patient. This ensures that citizens are aware of the businesses and locations that are safe to visit. The app worked hand in hand with smart city tracing systems, allowing health authorities to track the past mobility of infected individuals by accessing images from surveillance cameras and credit card transactions making it easier to find contaminated zones and identify those who were potentially infected. Even though the app was not imposed as a "mandatory download" it quickly became the second most downloaded app in Korea. The app, though owned and run by the government, was developed by the private sector.

South Korea also implemented a strict tracking system that records location data for all new visitors to the country. People who violate quarantine rules are mandated to wear bracelets that track their location. Earlier in the pandemic, applications on phones were used to ensure quarantine rules were being followed. However, it was easy to cheat the system by simply leaving phones at home. This led to the implementation of a bracelet that connects via Bluetooth to the visitors' phones, informing authorities in case of any quarantine or isolation violations⁴.

However, these apps have sparked concern over privacy issues. Following the MERS outbreak in 2015, South Korea passed legislation that explicitly allows government officials to publish personal information of infected patients to the public, including a detailed log of their movements. When

someone tested positive for COVID-19, an alert message was sent out to all people who lived nearby and people who crossed paths⁵, with all these details. Often personal and intimate details like overnight “love motels” or clubs that the person had been to were also disclosed. With information this detailed it has been possible to identify the person at hand, exposing these patients to the social and public stigma of being a COVID-19 patient. This breach of privacy could in fact lead to lower testing as people who have symptoms may not want to be tested and identified. Yet, due to overall public trust and support, the government has managed to sustain these apps and limit spreading of the virus.

South Korea also developed an AI speaker Nugu with an artificial intelligence called “Aria”, built specifically for the elderly to maintain their mental health during the pandemic. The speaker, released in May 2020 by SK Telecom, can provide news, music, and internet searches via voice command. It can also administer quizzes to monitor the memory and cognitive functions of its elderly users. Their search history and voice over patterns are also monitored to track the mental wellbeing of Aria users; a visit by public health officials is triggered if topics searched frequently on search engines indicate a rising state of loneliness. Despite the invasive nature of “Aria”, more than three thousand South Koreans, most of them above seventy years of age, have given the SK Telecom speakers permission to listen to them 24 hours a day since their launch in 2019⁶. The technology has reduced human contact in welfare services while still providing the elderly with support. This is key in a country that has an aging population and high poverty rates among retired individuals.

Besides this, SK Telecom also designed Robots that use AI to remind people to take health measures in different vicinities⁷. They scan the surroundings to identify people who are not wearing masks or social distancing to do so. They also check people’s body temperature through visual scans and thermal scans. They dispense sanitizer and act as an all-inclusive coronavirus-proofing station. They can disinfect ninety-nine percent of a building in an area that it covers to ensure safety for public use.

South Korea has also used AI in automation and manufacturing, allowing for an increased number of available test kits. This was mass produced by Seegene, a company that started working on testing kits even before the first case was detected in South Korea⁸. The company used AI to develop tests that would give COVID results within 4 hours. They came up with a solution that was the size of a teardrop that could be used on 100 blood samples. Using automation, they tried to provide these tests within South Korea and other countries.

Both countries had an impressive level of technological resources available to them. However, the way they directed technological resources has been starkly different. Technology in South Korea was used to ensure citizens’ safety, whereas in Sweden it was used to minimize negative impacts on the healthcare system.

Monetary Aid

Following Sweden's regulations to help curtail the effects of the pandemic, the government in Sweden enacted a broad range of measures providing monetary aid. These measures aimed to minimize the impact of COVID-19 in the country on citizen's health, companies wellbeing and critical services while, ensuring easy availability of that health care resources remain available, limit the impact of the pandemic on critical services, help alleviate the impact on people and companies, providing more information when required to ease concern among the public about the virus. This ensured that measures were taken in a timely manner. The measures primarily aimed to provide help to businesses affected by the pandemic with emergency economic relief and financial assistance. Since the policies in Sweden were more like recommended regulations as opposed to being stringent rules, the policies were more geared to helping ease the economic impact of the regulations. The measures are designed to help Swedish businesses through the dramatic short-term effects of COVID-19 and to ensure that businesses are in a good position to emerge strong when the most difficult period is over, and the economy must recover.

One of the main measures is the state loan credit guarantee, aimed primarily to support SMEs whereby the government agrees to take on up to 70% of loan risk when banks and credit institutions lend to companies. About SEK 100 billion has been sanctioned in this regard, and the maximum loan per company is SEK 75 billion, which could be up to and no more than 250 million in assessed exceptional cases¹.

The Swedish Export Agency set aside SEK 500 billion, to provide support to SMEs and exporting companies for financing working capital, by increasing its guarantee limit from pre pandemic 50% to 80%, and for large companies up to 75%. The Swedish Export Corporation has also received an increase to SEK 250 billion to finance loans to export companies. In September, the government allocated 3.5 billion SEK for 2020 and 1.5 billion SEK for 2021 to be paid out to compensate for 75% of losses in revenue related to COVID, with a cap of 120,000 SEK per sole trader².

In addition, the government has released a short-time work allowance policy. This offers employers the possibility to reduce employees' working hours and wages instead of initiating layoffs and receive financial support from the Government to compensate for a significant part of the costs for retaining the employee. An employer may receive the support for a period of six months, covering for a maximum 75% of reduction costs. The policy offers reduced hours in 20%, 40%, or 60% of total and 80% beginning the month of May.

There is also in effect a tax deferral policy, which allows companies to defer payment of employers' social security contributions, preliminary tax on salaries and VAT. The reduction in rental costs measure offers a temporary discount on fixed rental costs for companies in specific exposed industries. If a property owner and the tenant agree on a rent reduction, the state will cover 50% of the rent reduction, capped at 25% of the fixed rent. Lastly, the Government assumes the entire cost of all sick pay during 1 April to 31 May 2020 for all employers³.

Being a first world developed economy, Sweden continues to stand up for international principles and commitments and to support multilateral organizations working to fight the pandemic and its

impacts. The country vows to contribute core support so that organizations like the UN, International Red Cross Movement and multilateral development banks have the flexibility to take action as required. To this effect, Sweden allocates 1% of its GDP, approximately SEK 52 billion, to official development assistance. Sweden's support is aimed at helping to build resilient health systems in low and middle-income countries in need, increasing access to vaccines, and reducing the socio-economic impacts of the pandemic. Sweden supports the 'Team Europe' approach, which involves collaboration between EU members and financial institutions to support partner countries. Sweden also supports the UN Secretary General's appeal for a global ceasefire since the pandemic threatens to worsen ongoing conflicts within and between countries. In addition to this, Sweden has so far allocated around SEK 264 million to the COVID-19 response specifically. This includes SEK 120 million for humanitarian response, with SEK 40 million allocated to UNICEF, SEK 30 million to UNHCR, SEK 30 million to the ICRC, and an additional SEK 40 million to WHO's Contingency Fund for Emergencies⁴.

South Korea provided broad monetary aid to businesses and households to offset reductions in economic activity. Firstly, they supplemented incomes for those who needed to stay home from sickness in an attempt to curb the spread of COVID-19, which, combined with existing social pressure and technological tools, kept the rate of spread lower than other countries in the initial stages of the pandemic. While the motives for aid were very similar between the two countries, compared to Sweden, South Korea's aid packages did not direct a significant majority of their money to businesses as opposed to individuals. Fiscal and monetary policy was created in response to the pandemic at the same time that behavioral changes to limit the spread were recommended⁵.

The first supplementary aid package from March 2020 included KRW 10.9 trillion for virus prevention, medical treatment, SME loans, and support for households. The second package, passed at the end of April, had an additional KRW 14.3 trillion for emergency relief transfers to households. In early July, the third package was approved, and it provided a total of KRW 35.1 trillion, comprised in part of a government revenue reduction, financial aid to companies, disease control, and the expansion of employment opportunities⁶. In September, a fourth package was agreed upon, providing an additional KRW 7.8 trillion for SMEs, employment support, support for low-income households, and daycare support for families with young children⁷.

In the first few months following the global pandemic response, some banks allowed loans to be rolled over for SMEs. Tax credits and reductions for landlords, SMEs, and companies expanding operations in South Korea were approved. Individual tax relief in a variety of areas was also announced. To prevent a potential future liquidity crunch, the Bank of Korea pledged to start purchasing local bonds in late March. The benchmark interest rate was cut down significantly by the Federal Reserve⁸.

South Korea had an early monetary aid response to the pandemic, attributable both to its proximity to the virus's epicenter and its experience with the financial impacts of the MERS epidemic. Sweden enacted policies to mitigate what it expected to be the dramatic short-term consequences of the pandemic on employees and businesses while trying to limit the strain on the healthcare system.

Both countries acted to support its citizens and domestic companies in various ways, continuing to evolve their methods over time.

Supply Chain

Swedish officials stated that the idea behind the less restrictive lockdown was to ensure that the policies implemented were economically and socially sustainable in the long run (as they assumed the pandemic would last for a long time). This approach allowed for small GDP growth in the first quarter of 2020 with a smaller decrease in consumption than its neighbors and a small increase in exports. However, despite the lighter lockdown, most economists predict that Sweden will still be hit with an economic contraction due to the large dependence on exports. Exports make up around 30% of the Swedish GDP and a fall in foreign demand of Swedish exports will result in around a 10% drop in exports and a 7% drop in economic output and the whole economy is said to contract by about 8%¹.

Although bars, restaurants and other businesses remained open during the pandemic, citizens chose to social distance and avoid roaming in public areas, causing a drop in business revenues. Industries that were hit particularly hard by the virus were manufacturing, auto supply, and tourism. Many large manufacturing plants, such as Volvo, had to temporarily close to account for safety during the pandemic.

Sweden is also largely involved in global value chains; hence Swedish producers are susceptible to production shocks that may occur due to disruptions in other parts of these global value chains.

Zabi (2017) determined that Sweden was one of those countries where household debt was rising. High household debt will make citizens more vulnerable to the effects of job losses and increased expenditure caused by the virus².

Anderson, Hansen, Johnansenn and Sheridan (2020), engaged a comparative study between consumer spending in Sweden and Denmark (who imposed more restrictive policies in response to the virus) and concluded that the difference in consumer spending between the two countries is around 4%. They concluded that most of the economic contraction was caused due to the virus regardless of the social distancing policies imposed by the government³.

Most of the South Korean government's decisions with regard to the pandemic were taken with the goal of balancing two things: minimizing the spread of the coronavirus and minimizing the economic contraction that would inevitably result in a country with a GDP that is heavily reliant on exports. Exports fell by about a quarter in April, causing South Korea to see its worst economic slump since 2008. As a response, the President of South Korea announced the creation of an industry stabilization fund to support airlines, autos, electric power, general machinery, shipping, shipbuilding, and communications; it was established with KRW 40 trillion and was to be run by the Korea Development Bank. Its biggest trading partners are China and the United States, which, due

to their size and individual circumstances, were disproportionately affected; the former was the epicenter of the virus, and sustained the worse economic damage in the first half of 2020, while the latter struggled to manage cases due to a decentralized government with little semblance of a pandemic response plan combined with a large population of citizens resistant to guidelines and skeptical about the issue itself⁴.

The South Korean economy contracted 1.2%, which was the first contraction since the Asian financial crisis. While consumption fell, the three stages of the governmental aid package included emergency household income and loans to SMEs and provided discounts to boost consumption. Having experienced the financial effects of the MERS epidemic, the government was acutely aware of where to direct their aid efforts, and as a result the contraction of their economy was much smaller compared to the international average⁵.

Political Impact

Sweden and South Korea's decision to not impose lockdowns had different implications for their policies and stemmed from the experience of their respective governments. In Sweden, authorities argue that the strict mandatory lockdowns imposed in other nations were both unsustainable over the long run and could have serious secondary impacts including increased unemployment and mental health issues. The government's aim was based on the idea that most citizens would follow the recommended regulations, since Sweden is a place with a very strong embrace of government authority. Studies conducted in Sweden stated that a lot of Swedes went well beyond the official recommendations for social distancing, individually taking the actions that in other countries were mandated. About 58% of Swedes did not meet friends, and 74% stayed home during their spare time, researchers reported in May¹. Sweden's recommended restrictions produced results similar to those in countries with stricter policies because so much of the population was willing to voluntarily self-isolate.

The main aim of imposing light restrictions was to help protect the health care system of the country. A study conducted by researchers at Uppsala University in Sweden and the University of Virginia School of Medicine shows that despite the high death toll, the health care system and intensive care units in the country have not become overloaded due to voluntary self-isolation and limited provision of resources. The study found that predicted prognosis and models in existence predicting whether it is worth spending medical resources on people or not may have been a factor in ICU admission, because older patients were found more likely to die than to be admitted to the ICU². This is a shocking revelation, and the high rate of deaths among the elderly has been the evidence to this reasoning. In general, the public is dissatisfied with the protection in old age care homes as well. IVO, the Health and Social Care Inspectorate, reported that 75% of complaints from the public and care workers were about lack of facemasks and other protective equipment in care homes. Doctors in Sweden have also expressed alarm over the low importance authorities seem to be giving to the plight of older and vulnerable people³.

Another aspect of the government's strategy that experts theorized was implicit and slightly controversial was the idea that rather than contain the spread of disease, the country could achieve herd immunity by allowing a proportion of the population to be infected, but at the expense of deaths among the vulnerable. However, this does not appear to have been realized. Serology studies looking at how many Swedes have contracted the coronavirus, and who are then potentially protected from another infection for some time, have ranged from about 6% to 14% in the Stockholm area. This is far lesser than the 60% or so that experts say will slow down transmission⁴.

A largely vocal factor of the policies is protecting the Swedish economy, and as seen earlier has been implemented in the form of monetary aid for businesses. As we have seen earlier, the economic contraction still occurred, in terms of GDP reduction and unemployment increase, which was similar to the numbers in other Nordic countries like Denmark that had imposed a lockdown. In short, Sweden suffered a vastly higher death rate while failing to collect on the expected economic gains it previously aimed to.

Looking on the other hand at South Korea, the lockdown was not mandatory either; while there were not as many restrictions, the protective measures taken were much more extensive. The government's successful campaign against the virus provided a boon for Moon and his progressive party in the election when they were re-elected. South Korea's COVID-19 policy was forged in light of previous public-health crises. In 2002, the SARS outbreak killed several hundred people in East Asia and the 2009 H1N1 influenza killed several hundred South Koreans. From these epidemics, South Korean public-health officials recognized the necessity of early testing and the importance of isolating new patients to prevent secondary infections. Mainly, 2015's Middle East Respiratory Syndrome, or MERS, created the playbook that the country has used in the face of COVID-19⁵. In response to MERS, South Korea rewrote much of its infectious-disease-prevention legislation, which is what it has used in the face of the COVID-19 pandemic. To fast-track testing, it gave laboratories the green light to use unapproved diagnostic kits during a public-health emergency. Learning from its previous experience, South Korea was extra careful and gave extended access to health authorities on various things such as CCTV footage, geolocation data of patients' phones, and these implemented strategies allowed South Korea to deal with the lockdown in a more systematic way to curtail the spread of the disease and yet not completely restrict the daily life of its people.

While the governments in both South Korea and Sweden are widely trusted, their citizens' approval of their COVID-19 policies has been mixed. In April, 31% of respondents in a survey with 1600 Swedes believed that Sweden's method of minimal lockdowns coupled with recommended social distancing was not "forceful enough"⁶, but a majority (63%) of citizens reported a high degree of confidence in the government's capacity to handle the crisis⁷. Since this time, trust in the government's handling of the virus has fallen, with only 45% of voters reporting this same degree of confidence in June. This is likely because the 'trust-based' measures the country has implemented have largely failed. They have fallen short both from an economic standpoint as Sweden's economy has fared little better than neighboring countries that imposed strict lockdowns⁸, and from a health standpoint as Sweden's death toll is dramatically high for a country of its small population⁹. Sharp critics have arisen amidst the crumbling of the Swedes' confidence;

among them are 22 high-profile scientists who are urging politicians to adopt stricter measures.

The diminishing trust seen in Sweden is inverse of the trend in South Korea, where citizens have been “extremely satisfied” with their government’s response to the virus. This was largely unexpected — the onset of Covid-19 within South Korea was ominous; by late February, the country was experiencing the largest outbreak outside of mainland China. President Moon Jae-in was already reeling from political scandals related to corruption within his administration, and with the added pandemic pressure was expected to lose the legislative election in mid-April. However, the country’s success with the president’s stringent ‘trace, test, and treat’ approach saw Moon’s approval rating rising as the COVID-19 curve flattened. It rose from 44% to 67% in the first week of March, then continued to rise to 71% in the first week of May when infections in the country hit single digits¹⁰. He was re-elected with an absolute majority, and voter turnout in the election was 66.2% higher than in any parliamentary elections held since 1992¹¹.

While South Korea is touted as a role model for other countries to imitate their pandemic responses after, Sweden is looked to by many as a lesson for how not to respond to the COVID-19 crisis. Sweden’s deaths translate to 65.61 per 100,000 people, much higher than the totals of Norway (6.17), Denmark (14.08), and Finland (7.12)¹². Furthermore, Sweden’s testing rate has been significantly below that of many European countries, especially in the early days of the pandemic. As a result, Sweden’s Nordic neighbors have excluded it from their travel bubble and many other European countries have closed borders or placed quarantine restrictions on Swedes. This international backlash to Sweden’s lenient policies and high death rate came much to the annoyance of Sweden’s chief epidemiologist Anders Tegnell, who believed “it was as if the world had gone mad and everything we had discussed was forgotten.”¹³ In contrast, South Korea has earned praise from the World Health Organization and other nations for its pandemic response.

Both countries hence did not have mandatory lockdowns, and their governments and health officials were the ones that imposed restrictions and vocalized the measures to the public. However, the response to the policies were very different, since the policies implemented were still very different in the countries. In Sweden, the government’s approval rating fell as a result of the ill effects of the lax measures, whereas in South Korea, a previously failing government was in fact re-elected as a result of citizens’ positive response to the regulations. Having previously dealt with similar situations, South Korea addressed the spread of virus by being vigilant in its contact tracing and testing measures, whereas the Swedes stood by their regulations, despite facing backlash, claiming that their regulations would show more positive effects in the longer run. However, both countries suffered economically, but what was different was that Sweden had claimed that their lax measures would protect economic downturns, which did not seem to be the case.

Conclusion

Six factors were analyzed to determine the differences between Sweden and South Korea in regard to their respective no-lockdown strategies: culture and history, the healthcare system, utilization of

technology, aid for citizens and businesses, supply chain consequences and responses, and policy decisions. The results indicate the presence of logical chains of events in each country beginning with their historical background and continuing in their reactions and responses to the challenges brought on by the novel coronavirus. While some results of each country's strategies were immediate, the long-term consequences remain to be seen. It will likely be a combination of factors, including the length of the pandemic, that determine the lasting impacts of Sweden and South Korea refraining from imposing mandatory nationwide lockdowns.

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