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The Interplay of Public Health, Politics, and Economics in COVID-19 Border Control Strategies: A Comparative Study of Brunei Darussalam, UK, China, Germany, and Australia

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Abstract

This study investigates the effectiveness of border control in containing the spread of COVID-19. Through a literature review and discourse analysis, the study examines the pandemic response of China, the UK, Brunei Darussalam, Australia, and Germany, with a focus on their border control policies. The data collected suggests that countries with closed borders were more successful in dealing with the COVID-19 pandemic in terms of health statistics, such as the prevention of infection, hospitalization cases, and death rates. Effective domestic public health measures, including mask mandates and social distancing, were also found to be critical components of successful pandemic containment protocols. However, the study also highlights the impact of domestic and international relations and political perceptions on shaping each government's pandemic response. The role of the economy was identified as the biggest factor contributing to the government decision to close their borders, with regime type considered to a certain extent as it allows for less pushback towards policy changes. Overall, the study suggests that a combination of effective domestic public health measures and border controls is critical to containing the spread of COVID-19.

INTRODUCTION

In light of the World Health Organization's (WHO) documentation, contemporary global history has been persistently marred by numerous disease outbreaks, culminating in epidemics. A variety of 20 distinct causative agents have been implicated in recent years, resulting in diseases such as H1N1 and MERS (Balkhair, 2020). Consequently, infectious diseases have consistently posed challenges for both developed and developing nations.

It is essential to acknowledge that, in the 21st century, the scope and magnitude of global travel networks have reached unprecedented levels. In 2018 alone, approximately 4 billion individuals utilized commercial flights for travel; this figure would substantially increase if land and sea border crossings were considered (ICAO, 2018). This data indicates that over 60% of the world's population participates in international travel. In the context of a pandemic, such travelers could potentially spread diseases across borders.

The World Health Organization advises against implementing travel or trade restrictions for countries experiencing COVID-19 outbreaks. As per their official website, evidence suggests that restricting the movement of goods and people during public health emergencies, such as COVID-19, is largely ineffective and may result in the diversion of resources and exacerbation of harm (WHO, 2020).

This paper will critically examine the justification and political implications for countries that disregard the WHO's recommendations on border control, as well as the efficacy of these political decisions in mitigating the COVID-19 pandemic through border control measures.

The importance of this research lies in addressing the aforementioned questions, which facilitates an examination of the effectiveness and constraints of border control approaches employed by various nations. Consequently, this analysis may inform policymakers in devising evidence-based strategies related to border control for prospective pandemics, incorporating lessons learned from the COVID-19 experience.

World Health Organization

The World Health Organization's Director-General has provided recommendations regarding international traffic and border regulations in response to the spread of

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COVID-19. Initially designated as the 'COVID-emergency,' regions with higher infection rates were labeled as 'Affected Areas,' encompassing the area deemed the source of the infection (Ferhani & Rushton, 2020).

As circumstances have evolved, the WHO's guidelines on international travel and border restrictions have been adapted accordingly. The latest WHO guidelines advise countries to adopt a risk-based approach. According to WHO and UK COVID testing data, international travelers should not be considered a high-risk group (World Health Organization, 2021).

The updated WHO guidelines propose that travelers should not be required to provide proof of vaccination, nor should vaccinations be mandatory for entry or exit from a country. Travelers vaccinated within the last two weeks should benefit from lifted restrictions, such as testing and quarantine requirements. The WHO criteria indicate that individuals who were infected within the last six months are not more contagious. Travelers with a real-time PCR report of COVID-19 infection should also receive exemptions from testing and quarantine requirements. Those who do not meet the aforementioned criteria should undergo a rapid antigen test (World Health Organization, 2021).

The WHO recommends prioritizing international travel for humanitarian missions, emergencies, essential personnel, and the transportation of critical supplies. Risk assessments should be conducted regularly to update border regulation measures. Strict border measures are advised in response to outbreaks of dangerous COVID variants. Countries should adopt precautionary measures and implement more rigorous restrictions on international travel, albeit in a proportional manner (World Health Organization, 2021).

While the WHO recommends opening borders for trade and people, adhering to guidelines for international travel, countries maintain the right to close their borders to protect citizens by implementing measures they deem beneficial. In addition to previously mentioned measures and guidelines, states should open borders to those who comply with personal protection measures throughout their journey, including hand hygiene, mask-wearing, and social distancing. The WHO also advises exploring regional, bilateral, and multilateral agreements, particularly with neighboring countries, to facilitate socio-economic activities.

Furthermore, the WHO has issued recommendations concerning the opening of international borders for trade. Approximately 80% of global trade relies on maritime transport, with seafarers being essential personnel in this respect. Border restrictions have significantly impacted these individuals. Maritime transport depends on aircrew and seafarers (World Health Organization, 2021), who should be granted safe border crossing facilities. The WHO also recommends prioritizing aircrew and seafarers in vaccination programs, as their movement across borders is crucial for a country's economy, even during the pandemic.

China

During crisis situations, such as pandemics, decision-making is often fraught with uncertainty. Centralized governments, however, may find it easier to make and enforce decisions due to decisive leadership, coordination, and the ability to inform, suppress, and educate stakeholders to support government initiatives (Zarloule, 2020). This paper examines the People's Republic of China as a case study, given its authoritarian rule, centralized government, and centralized decision-making process (Dai et al, 2021). China, believed to be the origin of COVID-19, did not have the opportunity to learn from other countries' experiences during the pandemic (Dai et al, 2021). This study aims to analyze China's border closure strategy in combating COVID-19, and how its centralized, authoritarian government may have influenced its approach.

China largely opted to close its borders for much of the pandemic and mostly ignored the World Health Organization's policies on border closures (Zhai, 2021). The case study in the latter part of the research paper will discuss the effects of these strategies by examining key COVID-19 statistics, such as hospitalizations and death rates, as well as the strengths and weaknesses of a centralized authoritarian government in handling the pandemic. China has previous experience in dealing with pandemics and leveraged this experience by using its centralized government to implement emergency measures, such as constructing field hospitals, enforcing lockdowns and social distancing, and enacting various emergency laws (Schwartz, 2012). This demonstrates that a centralized government could potentially play a role in enforcing border control with a unified policy, but the relationship remains inconclusive. This study seeks to address the knowledge gap concerning the correlation between centralized government and border closure strategies on the impact of COVID-19.

The COVID-19 pandemic offers unique insight into the decision-making processes of the international community. China extended border and travel restrictions until mid-2022, with some exceptions. The analysis of China's response to the pandemic has been attributed to its governance and culture, economy, and previous experience with epidemics. Under President Xi Jinping and the Chinese Communist Party (CCP), China's strict border response and other measures were shaped by the central government, social consensus, and authority-based coercive forces (Yan et al., 2020). A culture grounded in Confucian values, with a cooperative populace and an "authority-based consensus" of the CCP, allowed for stringent measures against the pandemic (Yan et al., 2020). The population's willingness to contribute to collective action in containing the pandemic demonstrated the ease with which the Chinese government implemented and maintained strict national border restrictions.

China's geopolitical status as an international power also played a role in its border policies. Fidler (2020) recognized China's geopolitical calculations in its decision-making process to curb the spread of COVID-19 in early 2020. Controlling the outbreak was essential for maintaining global stature, international leadership, and providing a contrast to the rest of the world's actions or lack thereof (Fidler, 2020). China's 2002 SARS outbreak further contextualizes the country's border measures. Compared to the SARS response, China's COVID-19 reaction was drastically different, featuring new public health policies and infrastructures, swift government response, and community collaborations

(Nkengasong, 2020). The recent history and lived experience of the SARS outbreak may have contributed to the intensity of China's border measures in response to COVID-19. The lessons learned from the 2002 SARS outbreak likely influenced China's proactive and stringent approach to the current pandemic. Understandably China's border strategy had adverse effect towards their neighbor Myanmar due to the conflict there but they still tried to send aid despite this (Yuan & Lee, 2023). It is also worth noting that China was able to maintain peaceful relations with Myanmar during the Covid with ASEAN via conflict management schemes (Yuan & Lee, 2023).

China's economic well-being during the pandemic also played a role in its decision to maintain restricted borders. Despite the pandemic's economic impact, China was the first major economy to recover and even grow during this time as they could potentially be motivated to pursue economic recovery (Wang & Zhang, 2021; Demeure & Lee, 2023; Lee & Sims, 2023). The pandemic's forced reliance on digital technologies increased demand and usage, leading to technological innovation that further boosted China's economic stability (Fu et al., 2020). As a result, China's restricted borders aimed to prevent a massive outbreak of imported infections that could damage its recovering economy. Given China's importance as an international economic and political superpower, these restricted borders are justified for the protection of its economic interests. It is important to note that China's border strategy primarily applies to the movement of people and has not significantly affected imports and exports which is in part due to the special economic zones available in China as well as the belt and road initiatives (Ouyang et al., 2022; Sims et al., 2023).

In retrospect, China's decision to maintain border restrictions appears to be a logical solution. With a recovering economy amidst the ongoing crisis, China's refusal to open its borders is understandable. China's political leadership and social practices, combined with the recent experience of prior epidemics, allow for border restrictions without significant public resistance. In fact, it is estimated that China's efforts prevented approximately 1.4 million infections and 56,000 deaths (Qiu et al., 2020).

Brunei Darussalam

Brunei Darussalam serves as an intriguing case study for this research paper due to its successful containment of COVID-19 cases and its position as one of the world's most prosperous countries (Othman, 2021). Furthermore, it is an absolute monarchy with a highly centralized government structure (Wong et al., 2020). Notably, Brunei Darussalam appears to have adopted a more reactive strategy in response to the pandemic, opting to wait for the global situation to improve before making decisions on opening their borders (Hamdan & Case, 2021).

The economy of Brunei Darussalam has demonstrated resilience during the pandemic. According to the International Monetary Fund, the nation's economy was projected to grow by 3.2 per cent in 2021 (Othman, 2021). This economic growth, despite ongoing border closures, suggests that the country's economy has been sustainable even with strict border control measures in place, potentially contributing to the government's decision to maintain this strategy. Another crucial factor to consider is Brunei Darussalam's geographic location on the island of Borneo, sharing land borders with both Malaysia and Indonesia. Both neighboring countries have experienced significant challenges in managing COVID-19. This shared border with countries facing pandemic difficulties could be a key reason why Brunei Darussalam has opted to maintain strict border closures for most of the pandemic period.

According to (Premaratne et al., 2022), it was found that despite the challenges posed by the pandemic, the Brunei economy experienced positive growth during this period. This can be attributed to the country's efforts to enhance economic diversification and reduce its dependence on the oil and gas sector. By facilitating the growth of sectors such as agriculture, forestry, fisheries, wholesale and retail, communication, and non-oil and gas sectors, Brunei was able to sustain its economy even amidst the restrictions imposed by the pandemic.

Australia

Australia, a liberal democracy with a Westminster form of government, has been widely regarded as successful in managing the COVID-19 pandemic compared to other nations (Ritchie & Roser, 2020). Notably, during the pandemic, Australia's economy has shown considerable improvement (BBC, 2021). The country's ability to slow the spread of the disease has been attributed to a combination of factors, including its stable political system, resilient economy, and geographical isolation (O'Sullivan et al., 2020).

The Australian Commonwealth constitution divides key responsibilities among the Commonwealth, territorial governments, and states (O'Sullivan et al., 2020). In March 2020, the Australian Premier established a National Cabinet to facilitate consultation and coordination regarding the handling of COVID-19 among the Prime Ministers of all states and Chief Ministers of all territories. Prior to this, several border restrictions were already in place; however, with the formation of the National Cabinet, these restrictions were extended to all non-citizens and non-permanent residents (O'Sullivan et al., 2020). Moreover, Australia's two major political parties, Labour and Liberal, set aside their differences to collaborate on a unified pandemic policy. This national cooperation was further supported by the Australian Health Protection Principal Committee (AHPPC), which advocated for border closures due to the association between overseas travelers and new cases during the first wave of the pandemic (Duckett & Stobart, 2020). Cooperation is important as it can be reflected in the cooperation between Japan, Korea and China as well during their environmental cooperation (Yuan & Lee, 2023).

The Australian government's prompt response to the COVID-19 pandemic helped preserve the country's economic stability. Accounting for 1.7% of the global economy and having a Gross Domestic Product (GDP) of AUD 2 trillion, Australia has demonstrated economic resilience in the face of the pandemic (International Monetary Fund, 2021). This resilience can be attributed to the government's economic policies. In 2020, the Australian government provided a financial package equivalent to around 18% of the GDP,

supporting both economic and social sectors. Furthermore, as trade was disrupted due to border closures, it was essential to assist labor unions. Consequently, the federal government introduced a subsidy scheme worth $130 billion to help trading sectors (Australian Trade and Investment Commission, 2021). These economic incentives provided the Australian government with the flexibility to implement and extend various border restriction strategies as needed.

Australia's border closure strategy has also been linked to its unique geographical location. Situated between the Pacific and Indian oceans, Australia is a small, isolated continent spanning four environmental zones, from equatorial tropics to cool temperate regions (Spennemann, 2021). This geographical isolation from the rest of the world has facilitated the prevention of disease transmission. Moreover, Australia's lack of shared borders with other countries has enabled policymakers to close international borders effectively.

In conclusion, Australia's success in managing the COVID-19 pandemic can be attributed to several factors, including its stable political system, resilient economy, and geographical isolation. The formation of the National Cabinet and collaboration between political parties facilitated the implementation of border restrictions, while economic policies and subsidies supported the country's financial stability during the crisis. Australia's geographical isolation and lack of shared borders with other countries further contributed to the effectiveness of border closure strategies. As a result, Australia has been able to maintain relatively low infection rates and protect its economy during the pandemic. This multifaceted approach highlights the importance of considering various factors when examining the efficacy of border control measures in the context of global health crises. As the world continues to learn from the experiences of different nations during the COVID-19 pandemic, Australia's success in managing the spread of the disease offers valuable insights into the development of effective strategies for future public health emergencies.

Germany

Due to the highly contagious nature of COVID-19, Germany has imposed numerous restrictions on entry for visitors. Individuals seeking to enter the country must complete a digital registration, provide proof of vaccination or negative test results, and adhere to quarantine rules, depending on their country of origin (Europa EU, 2021). It is noteworthy that entry is permitted for travelers from Schengen states, which include Liechtenstein, Ireland, Norway, and Switzerland, as well as EU member countries and nations with comparatively low COVID-19 rates (EU Schengen, 2021). Travelers from other regions must be fully vaccinated, with the second dose administered at least two weeks before travel (EU Schengen, 2021). This literature review aims to examine the factors underlying Germany's pandemic response strategies.

Germany's government prioritizes the safety of its citizens during the COVID-19 pandemic. Meier et al. (2020) reported that, in the early stages of the pandemic, airlines were prohibited from transporting individuals from high-risk countries to Germany, with exceptions made for German citizens. This precautionary measure likely mitigated the initial impact of COVID-19 in Germany. The German government regularly evaluates high-risk countries. Kupferschmidt (2020) suggested that European countries, including Germany, initially lacked a clear action plan for managing COVID-19, as border controls led to a significant economic slowdown. In response, the government implemented measures to ease restrictions for recovered and fully vaccinated individuals and reduce curfews and contact restrictions for these individuals (Kupferschmidt, 2020). These strategies have contributed to the gradual improvement of Germany's economy since the onset of the pandemic.

Unlike China, which pursued an elimination strategy, Germany aimed to reduce the severity and spread of the pandemic rather than eliminate the virus entirely (Lu et al., 2021). Kuhlmann et al. (2021) observed that countries such as Germany, France, and Sweden focused on implementing restrictive measures to mitigate virus transmission instead of resorting to complete border closures. These measures not only provided certain benefits but also bolstered public confidence in the government's ability to combat the virus.

In conclusion, Germany has employed various border strategies throughout the COVID-19 pandemic, focusing on mitigating the pandemic's severity while maintaining relatively open borders with restrictions for high-risk countries. By emphasizing the safety of German citizens and strict adherence to COVID-19 protocols after entry, Germany has managed to control the spread of the virus more effectively than many other regions worldwide.

United Kingdom

During the initial stages of the COVID-19 pandemic in March 2020, while most countries implemented strict lockdowns and border closures, the United Kingdom (UK) adopted a more lenient approach towards its borders. Despite imposing internal lockdowns, the UK's borders remained open to travelers and returning residents, with certain restrictions in place. The UK's strategy aimed to achieve "herd immunity" but led to negative international responses, with several countries banning UK citizens from entry. A deeper examination of the UK's governance, leadership, and economic concerns reveals the rationale behind their lax border response to the pandemic.

Various studies criticize the UK's overall governance and leadership during the pandemic, highlighting the political nature of their decision-making process. Bowser et al. (2020) argued that the UK's adoption of public health measures was politically driven and insufficient to effectively address the rapid and deadly spread of COVID-19. Colfer (2020) suggested that the UK's decision-making was influenced by its desire to assert its sovereignty and demonstrate its ability to handle the situation independently. This context is particularly relevant in light of the Brexit events and their impact on the UK's perceived international power.

Gaskel et al. (2020) further implicated the UK's governance structure in their inadequate response to the pandemic. Ineffective and overconfident central leadership, poor communication and coordination across government levels, and a tendency to adopt one-size-fits-all policy solutions contributed to a delayed and inefficient COVID-19 response. The UK's ineffective government and leadership,

combined with their ambition to re-establish their global stature, created a precarious situation.

Economic concerns also played a significant role in shaping the UK's border policy during the pandemic. The country sought to preserve economic and social life to the greatest extent possible (Boin et al., 2020), which necessitated maintaining open borders. Prime Minister Johnson viewed domestic lockdowns as causing "unnecessary economic damage" and emphasized Britain's global economic competence (Lilleker, 2021). It can be inferred that Johnson likely considered a complete border shutdown as detrimental to the country's international economic standing.

The UK's lack of experience with pandemics further compounded the problem. Bowsher et al. (2020) noted that the country's inexperience in handling large-scale crises hindered its ability to effectively gather and process scientific information, leading to inadequate public health policies and practices.

Piccoli et al. (2021) provided a counterpoint, arguing that despite the UK's open borders, stringent travel measures at airports helped curb COVID-19 transmission. Nevertheless, numerous studies concur that the UK's open-border policy and resulting herd immunity strategy were driven by economic motives and aspirations to reclaim its pre-Brexit prominence. The UK's relatively porous borders came at the cost of lives (Colfer, 2020), as evidenced by the country having one of the highest mortality rates among similarly developed nations in 2020 (Gaskell et al., 2020).

In hindsight, it is clear that the UK's response was shaped by a combination of factors, including governance and leadership issues, economic considerations, and the country's inexperience in dealing with pandemics of this magnitude. In retrospect, the UK's decision to maintain open borders amid the COVID-19 pandemic serves as a case study in understanding the complexities of balancing public health, economic interests, and political factors during a global crisis.

Cases

The foundation of this research paper involves a comparative analysis of the border control strategies employed by various nations. While some countries have opted to disregard WHO recommendations, others have adhered to the guidelines provided. This research paper investigates the determinants influencing decision-making processes and the respective border control strategies, alongside any fundamental disparities in COVID-19 mitigation outcomes.

Brunei Darussalam, Australia, and China represent governments that have chosen to dismiss WHO warnings, implementing near-total border closures. Conversely, the United Kingdom and Germany have, at certain points, adhered to WHO guidelines in formulating their border control strategies, adjusting these approaches over time to accommodate the evolving situation within their respective countries. This research paper will utilize these nations as case studies to examine the effectiveness of distinct border closure strategies and the factors contributing to the pursuit of these strategies by the respective governments, as well as their impact on COVID-19 transmission rates.

METHODS

In order to scrutinize the influence of border control measures on COVID-19 outcomes, this study employs a detailed qualitative comparative case study approach. Contrary to a quantitative analysis, which hinges on probabilities, the comparative qualitative research underscores the significance of meticulous case selection in strengthening the analytical and explanatory capacity of the research (Mahoney, 2007). Consequently, this research doesn't rely on a random selection of cases, but instead chooses based on a purposeful variation in attributes.

The research intends to acquire data through comprehensive and dependable secondary sources for assessing the efficiency of different border control strategies in selected countries. The basis for comparison will include various indicators such as mortality rates, infection rates, and hospitalization rates. This comparison will help us evaluate the merits and demerits of governments implementing border closure and border opening strategies. The secondary data will be collected primarily from policy reports, academic articles, journals, newspapers, and online resources using keywords like COVID-19, border policy, and World Health Organization.

The selection of the cases will pivot on two major criteria: firstly, countries that introduced and enforced stringent closed-border policies in an attempt to manage the spread of COVID-19 (China, Brunei, and Australia); and secondly, countries that preferred open border policies while employing a combination of strategies (closed and semi-open), depending on their success in managing the pandemic's impact (Germany and the UK). The main analytical tools utilized in this study are discourse analysis and descriptive health analysis, using relevant data from 2019, when COVID-19 emerged, up until mid-2021. The foundational data for these analyses are sourced from the World Health Organization, state news outlets, and academic journals focused on actions taken by different countries.

The research will employ discourse analysis and descriptive health statistical analysis to scrutinize official statements from diverse government departments during the COVID-19 pandemic, as well as key statistical data such as mortality rates, infection rates, and hospitalization rates. The overarching aim of using these analytical techniques is to establish a correlation between the varied border control strategies and their outcomes, which will be assessed using key statistical data. This will assist in addressing the first, second, and third research questions.

By leveraging both discourse analysis and descriptive health statistical analysis, the study will explore the stance of various governments during the COVID-19 pandemic and elucidate the reasoning behind different border control measures. Furthermore, the study will endeavor to synthesize vital statistical data to discern whether factors like mortality rates, infection rates, and hospitalization rates significantly influence countries' border policies.

However, the study acknowledges potential limitations, primarily due to the challenges associated with gathering primary data due to COVID-19 restrictions. Nevertheless, the availability of an extensive collection of secondary data, including statistics and scholarly journals, may coun-

terbalance this shortcoming. Another limitation lies in establishing a causal relationship between border control policies and COVID-19 transmission rates, considering the multitude of other variables such as domestic COVID-19 measures that could potentially obscure the relationship and prove challenging to fully account for.

While approaching this study, we are keenly aware of the complexity of the global health landscape during the COVID-19 pandemic. It is recognized that countries' responses to the pandemic cannot be simply bifurcated into two groups of "closed border" and "open border" strategies. Each nation's unique sociopolitical context, economic strength, healthcare infrastructure, and demographic composition have informed their policy choices and shaped their COVID-19 outcomes.

Therefore, in addition to comparing countries based on their border control measures, this study will also aim to account for some of these variables. To achieve this, a stratified comparative analysis will be applied. This analytical technique will allow us to segment the countries into different categories based on variables such as gross domestic product (GDP), population density, and healthcare expenditure. By doing so, the study hopes to glean insights into how these factors intersect with border control measures to influence COVID-19 outcomes.

In terms of data collection, the research will be primarily based on desk research, which includes review of scholarly articles, policy reports, national health statistics, media reports, and WHO advisories. Due to the dynamism of the situation, the research will also include updates on policy changes and COVID-19 statistics until mid-2021, ensuring the relevance and contemporaneity of the findings.

On the analytical front, content analysis will be employed alongside discourse analysis to extract meaningful information from these data sources. Content analysis will help in identifying patterns and themes in countries' responses to COVID-19, while discourse analysis will assist in understanding the rhetoric and narrative that shaped these responses.

While the analytical framework of the study is designed to be comprehensive, we understand the limitations associated with interpreting causal links from secondary data. The study cannot conclusively establish whether a specific border control strategy directly resulted in a particular COVID-19 outcome. The interpretation of findings will be presented with this limitation in mind. We hope that the nuanced understanding from this research can provide useful insights for policymakers, scholars, and stakeholders in navigating the ongoing global health crisis and future pandemics.

RESULT AND DISCUSSION

Case Study

In this chapter, the case study aims to examine the impacts of COVID-19 on countries by analyzing various data, such as death rates, infection rates, and other relevant statistics. This approach seeks to provide insights into the research questions by understanding how different nations have either adhered to or disregarded the World Health Organization (WHO) guidelines, as well as to comprehend the underlying factors that have influenced their border strategies. By scrutinizing these quantitative indicators, we aim to gain a more profound understanding of the diverse ways in which countries have managed the pandemic and the consequences of their chosen policies.

China

In March 2020, the COVID-19 pandemic compelled countries worldwide to implement various measures to curb its spread. Prior to this, China, the first country affected by the virus, had already initiated lockdowns, including the city of Wuhan, where the virus was first identified. Consequently, China implemented a national border lockdown in March 2020, which has been extended into mid-2022. China's zero-COVID tolerance policy, reflected in its low infection and death rates, demonstrates the effectiveness of stringent containment measures, including its national border lockdown.

As the first country to confront the rapidly spreading respiratory illness, China's pandemic response has been closely scrutinized and analyzed. By July 2020, China's overall pandemic response was considered the continent's "gold standard" (Tian, 2021). The decision to restrict travel within and outside the country effectively reduced human mobility, thereby preventing the spread of infection (Tian, 2021). China's domestic travel restrictions in Wuhan and other regions enabled the Chinese population to prevent 70.5% of the approximately 779 infections that would have otherwise been exported without the travel restrictions implemented in February 2020 (Wells et al., 2020). Data from China's provincial borders and domestic travel restrictions can be used to understand the impacts of its national border lockdown. As an international business hub and a major tourism destination with a billion-person population, China likely averted total catastrophe with its national border policy.

Comparing China's infection and death rates to countries with more porous borders offers insight into the efficacy of its national border lockdown. As of August 2021, China reported slightly over 120,000 infections, nearly 88,000 recoveries, and only 5,600 deaths, with daily infection rates only in the low hundreds (WHO coronavirus (COVID-19) Dashboard 2021). Although other factors, such as internal pandemic prevention measures, must be considered, open border mandates likely contributed to the extreme disparity in daily infections, death rates, and overall confirmed cases in comparison to China. Nevertheless, maintaining stringent border and travel restrictions has not caused any adverse effects. Overall, China's infection rate has been 0.0006%, significantly lower than the global level of 0.31% (Tian, 2021).

Further data collection and analysis are required, considering the ongoing nature of the pandemic. Early models of COVID-19's spread estimated that 40% of China's population would have been infected without any containment measures (Cyranoski, 2020). It is essential to recognize that although China's border restrictions may have contributed to the country's impressively low daily infections and mortality rate, other measures like social distancing, quarantine, and internal travel restrictions within the country also played a significant role. While China's

multi-pronged approach to combating COVID-19 has been successful in maintaining a healthy populace with minimal deaths, more work is needed to determine the most critical intervention (Kraemer et al., 2020). It is also worth noting that China has strong food security due to always stockpiling resources as a form of deterrence from security threats (Ali & Lee, 2022). To date, numerous studies praise China's internal border restrictions during Wuhan's outbreak, but further analysis is still required to understand the impact of China's national border restrictions.

In conclusion, China's multifaceted pandemic response, including its national border policy, has been a critical measure in preventing further infection. Border closures, combined with contact tracing, quarantine, and other measures, have produced only positive effects for countries that implemented partial or full closures as a pandemic response (Karroum et al., 2021). Multiple studies support the notion that border closures, when used in conjunction with other measures, contribute to effective containment efforts. China's success in managing the pandemic serves as a clear example of the benefits of a comprehensive approach.

This research contributes to the existing body of knowledge by highlighting the advantages of a closed border policy compared to the WHO recommendations. It is important to note, however, that border closures should not be seen as the sole solution to controlling the pandemic. Instead, they should be part of a larger, multifaceted approach that includes various containment measures and interventions tailored to each country's unique circumstances.

Brunei Darussalam

Brunei Darussalam is a small country in Southeast Asia that is located on the island of Borneo neighboring both Indonesia and Malaysia and hosts a population of 433,000 (Muhammad, 2015). Brunei registered its first imported case on March 9 2020 and as of 21 March 2021 has detected 206 cases, 188 recovered patients and 3 deaths, the overwhelming number of them are among quarantined visitors. Pre-emptive steps seem to have done an effective job of containing the coronavirus in Brunei (Bodetti, 2020).

Brunei Darussalam has opted for a total border closure since their first case on March 9 2020 and has no plans of reopening their border anytime soon (Abu Bakar, 2020). Through this strategy, the country has managed to have around 333 total number of cases as of 20th July 2021 and out of those 333 total cases, 270 of them have recovered while only having a death rate of 3 (Ministry of Health Brunei, 2021). Brunei Darussalam has not had any local transmission for more than 400 days as of 20th July 2021 with all of their Covid-19 cases coming from essential personnel traveling to Brunei Darussalam (Ministry of Health Brunei, 2021).

It is worth noting that Brunei Darussalam is an absolute monarchy and rules and regulations concerning Covid-19 can be passed down quickly without much bureaucracy (Othman, 2021). Brunei Darussalam economy has also seemed to be improving while maintaining their border closure strategy which gives no reason for the government body to risk opening the country's border anytime soon (Othman, 2021). Judging by the result of the country's Covid-19 cases as well as its economy, Brunei Darussalam's border closure strategy seems to be more beneficial for the country so far.

As Brunei Darussalam has maintained this closed border policy throughout the pandemic, it contributes to the knowledge gap in the World Health Organization's recommendation as well as policies towards an open border would be a burden economically as states would have to bear the cost of a rising infection rate (Mouawad and Ismail, 2021). It is also worth noting that there is evidence suggesting that states who are doing well economically seems to opt for a close border policy as reflected in Brunei's and China's case study and literature review (Tian, 2021). It could also be said that Brunei being a more authoritarian government is able to maintain this close border policy without much pushback from the citizens (Othman, 2021). The economy, as reflected in the literature review, is also an important factor (Karroum et al., 2021).

Australia

As the World Health Organization declared COVID-19 a pandemic, several countries shut their borders to prevent a spread. Some countries had partial closure of borders, some had targeted closure, while some had strict closure. Australia imposed strict restrictions on their borders.

The response of Australia against COVID-19 has been considered to lead to the management and contamination of the virus. Australia announced border closure on March 20 2020, with exemptions for permanent residents, Australian citizens, and their immediate family, including legal guardians, spouses, and dependents.

Australia experienced a second surge of COVID cases during 2020. Even after a massive surge in the spread of the disease, the case did not rise above 1000 in a population of 25.36 million. Australia's success story followed strategies like vigilant testing, quarantine, tracing of cases, lockdowns, and border restrictions to control the disease. Such a low rise in cases has been accomplished even without vaccination (Haseltine, 2021). However, Australia started its vaccination program in February 2021.

According to statistics, in Australia, the first case of COVID was reported on March 4 2020. A sharp incline in cases was observed in a few days. Because of an efficient health care system, the death rate was not as high as other countries had. The present death rate of COVID patients in Australia is 3%. On March 20 2020, a total of 172 cases were recorded. It was then when Australian government-imposed border restrictions.

The cases increased to more than 500 cases a day (Australian Government Department of Health, 2021). Although, the first wave of COVID was contained by the end of April. The rate of hospitalization of the patients rose as the cases rose. Only 1% of the patients were noted to have critical conditions. The remaining 99% showed mild symptoms of the disease.

Australia imposed lockdown strategically in selective areas according to the rise in the number of cases from time to time. This enabled most of the Australian citizens to enjoy their normal life. A second surge in the cases was noted in July 2020. The hospitalization of the patients in-

creased dramatically. The death rate in this wave of COVID was more than the first one, recording 59 deaths on September 4 2020 (Australian Government Department of Health, 2021).

The second wave of disease was considered the absence of control measures and the spread of the virus from quarantine hotels. Nonetheless, Australia was able to control the second wave by its border closure strategy.

The third wave of COVID spread started in June. Yet again, the spread of new cases is thought to begin from quarantine hotels. This time the variant of COVID-19 is more dangerous and lethal. Despite that, the death rate is reduced. According to analysts, the situation would have been worse if Australia had not applied border shut down. More than 400 people are currently hospitalized, out of which about 60 are under intensive care units (Australian Government Department of Health, 2021).

Compared to other developed countries such as the United States, United Kingdom, and Canada, the total number of deaths reported in Australia is only 940 which showcases the strength of a close border strategy. Up until June 2021, Australia has mostly maintained a strict border policy. Through various government statements as well as their health statistics and their economic well-being, it can be seen that Australia is able to maintain this border policy due to their economy being more or less stable as reflected in the literature review.

This knowledge contributes to the knowledge gap as the economic factor could be an important factor in maintaining a close border policy during a pandemic.

Germany

Germany's approach towards reducing the impact of the pandemic while keeping their borders open has been effective, as evidenced by the relatively low number of cases in the country earlier on in the pandemic. As of August 2020, Germany had around 200,000 cases, with a weekly average of 700-900 cases (WHO Coronavirus Dashboard 2021). However, a new wave of cases in early 2021 caused cases to spike to an estimated more than 2,000,000 cases (WHO Coronavirus Dashboard 2021). To mitigate the spread of COVID-19, Germany implemented various border control strategies, as documented in the literature review, to stabilize its economy while keeping the pandemic in check.

It is important to note that Germany is a European country with many neighboring countries that are also dealing with the pandemic, and Germany's border control strategy takes into account various factors to stabilize the country as a whole. According to Germany's policies, the country adopted a hybrid policy that would only lead to border closure if the death and hospitalization rates were astronomically high. Germany's open border policy supported its economy, as evidenced by stable economic performance during the pandemic (Meier et al., 2020).

Overall, it can be inferred from the literature review and news articles that Germany would only opt for a close border strategy if COVID-19 cases, hospitalization rates, and death rates are high. Conversely, if cases remain stagnant or decrease, Germany is likely to maintain its open border policy. In summary, Germany's approach to border control during the pandemic has been effective in reducing the severity of the pandemic while maintaining a stable economy.

United Kingdom

The COVID-19 pandemic has inflicted a devastating impact on the United Kingdom (UK), comprising Northern Ireland, Scotland, Wales, and Great Britain. As of late 2020, over 40 countries have restricted travel from UK arrivals, as the country has remained a hotbed for viral transmissions since early 2020, breaching over 6,000,000 confirmed infections (WHO coronavirus (COVID-19) Dashboard 2021). The UK's response to the pandemic has been widely criticized since day one, being referred to as a total failure, with one aspect of this being the UK's decision to maintain open national borders and minimal international travel restrictions. Inefficient contact tracing and inadequate quarantine measures, coupled with penetrable borders and an overall lack of non-essential travel restrictions, have contributed to the country's overwhelming infections and deaths (Colfer, 2020).

The UK's open borders have remained a peculiar factor since the first confirmed COVID-19 cases in the country had a clear overseas travel history (Liu et al., 2020). Despite the UK border policies constantly changing over time, there was never a precise moment where the country restricted international travel entirely. As of August 2021, the country has experienced approximately 130,300 deaths and over 6,000,000 confirmed cases, with nearly 200,000 confirmed cases in the first week of August alone (WHO coronavirus (COVID-19) Dashboard 2021).

A comparison with Germany, which has a similar population size to the UK, provides a stark point of contrast. Germany closed its borders by mid-March 2020, among other domestic containment measures, and had only suffered half of the total infections of the UK, with only 91,800 deaths (WHO coronavirus (COVID-19) Dashboard 2021). As of August 2021, with minor travel restrictions in place, Germany only had 20,000 new cases in the first week (WHO coronavirus (COVID-19) Dashboard 2021). The UK's open borders have undoubtedly contributed to the country's high infection and death rates, as evidenced by the stark contrast with Germany's comparatively low numbers.

In contrast to the majority of the world closing their national borders or implementing severe travel restrictions, the UK's open and free-for-all border policy arguably contributed to the country's devastating number of infections and deaths. International travel is cited as the main determinant for the severity of the first global wave of the pandemic (Pana et al., 2021).

Across various studies referring to the effectiveness of travel restrictions as a containment measure, timing is a determinant factor. If travel restrictions are implemented in the early stages of a pandemic, they can reduce the transmission of the virus (Neumayer et al., 2021). But because the UK never introduced national travel restrictions at all, they allowed for rampant transmission of the virus to the greatest extent possible, thus resulting in greater infections and death rates. Although there is still the need for exact numbers to implicate the devastating impacts of the UK's

open borders during COVID-19, infections and deaths would have been undoubtedly prevented with early travel restrictions.

Overall, strict border measures are a requirement for saving populations from COVID-19. In combination with government coordination, overall preparedness, and political commitment, strict border control remains a critical component for pandemic success cases (Frowde et al., 2020). Without this crucial aspect of travel restrictions, a country couldn't successfully complete the puzzle of containment. Considering the case of the United Kingdom's overall weak, ill prepared and inadequate pandemic response (Scally et al., 2020), even if the country had been prepared with stringent domestic containment measures, the lack of border restrictions would have still led to failure, and thus further infections and deaths.

The study is also limited by the devastating impact of the UK's overall pandemic response, or lack thereof. Despite being a well-developed country with one of the world's largest economies, the UK's overall governmental inaction led to abject failure, and one of the highest rates of death per capita worldwide (Frowde et al., 2020). The entirety of the country's pandemic response was bungled, leaving it difficult to determine the exact degree of human harm caused by the country's open borders. For now, it remains to be determined if the UK's "herd immunity approach" was more harmful or if open borders were the deadlier policy decision.

While COVID-19 rages on without an end in sight, the UK, in contrast, continues to ease containment measures and social restrictions. Overall, the unrestricted border response represented one aspect of an entirely failed pandemic containment effort. It remains evident that international travel and lack of defined border restrictions definitively contributed to the UK's overwhelming infections and deaths. To what extent remains to be precisely determined but regardless, the UK's open border policy undoubtedly contributed to lost lives and a massively infected population. However, similar to Germany, it is evident that the economy plays an important role in the decision of their border policy as there is a continuous debate in the UK on whether the country should prioritize the economy or the well-being of the citizens (Boin et al, 2020).

To what extent were countries that disregarded WHO recommendations on border control justified in their decision-making?

The issue of restricting international travel and closing national borders remains a point of contention. It's a question that still remains divisively unanswered, and may remain so for the time being. Through both health statistical analysis as well as discourse analysis, a series of conclusion could be brought up concerning this question. To reframe the question – Was it wrong for countries to close their borders? From a moral perspective, dissidents claimed closed borders were a violation of various human rights, including freedom of mobility. From a logical perspective, Anders Tengnell said closing borders was ridiculous, because either way, the virus would still be in the country (Paterlini, 2020).

If posed the aforementioned question, China would likely say that they made the correct decision to close their borders. This decision would be justified by China's pandemic data; despite one of the largest world populations with massive human mobility, China has only suffered a fraction of the infections and deaths of other large countries (China: Who Coronavirus Disease (COVID-19) dashboard, 2021). Germany, Australia and Brunei Darussalam also have success in dealing with Covid-19 in general despite their difference in strategy. As according to the previous literature review, states who has pushed for border control are usually more successful in dealing with the pandemic as reflected in the lower death rates, hospitalization rates and infection rates. Just from the pure data alone, it was right for states to ignore the WHO warnings (Stannard et al., 2020).

Studies completed in the midst of the pandemic support the notion of closed borders, with research providing anecdotal evidence that countries that delayed closing their borders to air traffic had more infections (American Institute of Physics, 2021). So if infections were prevented and lives effectively saved, then countries who closed borders were right to do so. Arguably then, countries with open borders like the UK, were wrong to do so. However, it is hard to say as there are no right answers for this as some countries such as Germany who have had their borders open were able to handle Covid-19 relatively well in comparison to the UK. The unpredictability in the pandemic makes this question hard to answer as there are many variables that would affect the transmission of Covid-19 and more research must be done on this.

Therefore, in a sense it could be argued that countries who have ignored the WHO warnings or who have followed the WHO warnings were both in their right to do so as I believe that each country have adapted and tried their best on making policies that are suitable for the political system as well as wellbeing of their respective countries. However, judging by the research done, just judging by the pure numbers, if success is defined by death rates, hospitalization rates, infection rates and other Covid-19 metrics, the WHO warnings weren't very practical and one would even argue that it was detrimental to states who has followed it in term of health statistics and even to an extent, states who followed the WHO recommendation may have had their economy recover on the short-term like the UK and Germany when they opted for an open-border policy but in the end, the short term benefits outweigh the long term cost in term of economic benefits as the switching cost of a change in policies were more costly than just maintaining one policy over a long period of time (Stannard et al. 2020).

Did countries that ignored WHO guidelines on border control exhibit greater success in managing the COVID-19 pandemic, as evidenced by key statistical data, including mortality rates, infection rates, and hospitalization rates?

Determining whether countries with closed borders were successful in containing the spread of COVID-19 remains a complex question, but evidence suggests that border closure has been effective in containing COVID-19. Domestic public health measures, including mask mandates and social distancing, have also been shown to be ef-

fective in curbing the virus' spread (Behring et al., 2021). However, it has been determined that a country's public health measures, in combination with travel restrictions, can contribute to effective containment protocols (Cyranoski, 2020).

China, Brunei Darussalam, Australia, and Germany have been successful in using various border control strategies to deal with COVID-19. In contrast, the UK's overall ill-prepared and inadequate public health measures, including a lack of border controls, have contributed to a higher number of infections and deaths (Scalley et al., 2020).

Through the research conducted, countries that closed their borders were indeed more successful in dealing with the COVID-19 pandemic in terms of health statistics such as the prevention of infection, hospitalization cases, and death rates. The data gathered shows a clear relationship between border closure and the mentioned metrics. During the time that the UK and Germany had an open border policy, COVID-19 cases increased through imported cases, while Australia, Brunei, and China were able to keep cases low. Literature also indicates that when the UK and Germany chose to open their borders, COVID-19 cases significantly increased over time. Thus, it can be concluded that countries with closed borders were indeed successful in dealing with the COVID-19 pandemic in terms of health statistics alone (Stannard et al., 2020).

Overall, the combination of effective domestic public health measures and border controls appears to be a critical component of successful pandemic containment protocols. However, the decision to close borders is not just based on public health concerns but also influenced by national security and domestic politics. In the case of China, national border closures were used to maintain global prominence on the world stage and rebuild the economy, while Brunei Darussalam and Australia focused on curbing the pandemic and allowing businesses to grow locally through border closure strategies. The UK's decision to maintain open borders during the pandemic was symbolic of the country's attempt to show off their independent stance and reclaim its global status post-Brexit, while Germany had a mixed approach in dealing with the pandemic while trying to adapt to the situation as it saw fit (Colfer, 2020; Fidler, 2020; Whang & Zhang, 2021).

The economy played a significant role in shaping each government's pandemic response. The UK and Germany maintained that open national borders would preserve the economy, while China, Australia, and Brunei Darussalam remained sealed off from the rest of the world to preserve the population's health and preserve business as usual. The authoritarian and centralized regime of Brunei Darussalam and China allowed them to pass policies more efficiently with minimal public consideration, while Germany, the UK, and Australia had to take into account public considerations before pursuing policy decisions. However, through discourse analysis of government statements via news articles and press conferences, as well as health statistical analysis, it is evident that the economy plays the biggest role in the government's decision to pursue various policies, as government policies tend to opt for open borders when their economy is not sustainable during a closed border policy (Boin et al., 2020).

In conclusion, successful pandemic containment protocols require effective domestic public health measures and border controls. While border closure has been shown to be effective in containing COVID-19, the decision to close borders is also influenced by national security and domestic politics, with the economy playing a significant role in shaping each government's response. Ultimately, pandemic containment protocols require a balance between public health concerns, national security, and economic considerations.

What factors influenced governmental decisions to adopt divergent border control strategies in response to the COVID-19 pandemic?

The issue of border control is typically a matter of national security and domestic politics, often taking precedence over international organizations' recommendations. In the cases of China, the United Kingdom, Brunei Darussalam, Australia, and Germany, domestic and international relations, as well as political perceptions, played significant roles in shaping each government's pandemic response. China utilized national border closures to maintain its global prominence and minimize the spread of infection, sparing itself from overwhelming infections and deaths while rebuilding and growing its economy during the pandemic (Fidler, 2020; Whang & Zhang, 2021). Brunei Darussalam and Australia pursued a border closure strategy to focus on the country's health and curb the pandemic, while simultaneously promoting local businesses. The UK aimed to reclaim its global status post-Brexit, maintaining open national borders to symbolize its independent stance in maintaining the pandemic and showcase its individual "greatness" compared to the European Union (Colfer, 2020). Germany had a mixed approach to dealing with the pandemic, adapting to the situation as it saw fit.

All five countries justified their border policies using their respective economies. The UK and to a certain extent Germany maintained that open borders would preserve their economies (Boin et al., 2020), while China, Australia, and Brunei Darussalam remained sealed off to preserve the population's health, thus preserving business as usual. The regime type also played a role, with centralized regimes like Brunei Darussalam and China being more efficient in passing policies with minimal public consideration, while Germany, the UK, and Australia had to consider public opinion before pursuing policy decisions. The research suggests that the economy was the most significant factor in government decisions to close their borders, with regime type playing a lesser role. Matters concerning border control are usually a matter of national security, but this study highlighted that the economy played the most significant role in government decisions, with governments opting for open borders when their economy was unsustainable during a closed border policy.

Furthermore, the political motivations of governments and their desire to maintain their national image and status in the world stage have also played a significant role in their pandemic response. The UK, for example, sought to project an image of independence and strength after its exit from the European Union, and thus opted for an open bor-

der policy despite the risks associated with it. In contrast, China used its closed border policy as a means of asserting its dominance and showing its ability to effectively manage a global crisis.

However, regardless of these political motivations, the economic impact of the pandemic has been a driving factor in government decisions regarding border policies. The UK and Germany, for instance, maintained open borders to preserve their economies, while Brunei Darussalam, China, and Australia pursued closed border policies in order to protect their populations' health and maintain business operations. The economic considerations of governments are further compounded by their regime type, with more authoritarian and centralized regimes able to pass policies more efficiently without as much pushback from the public.

In conclusion, while border control policies during the COVID-19 pandemic have been influenced by various factors, such as national security and political motivations, the economic considerations of governments have played the most significant role in their decision-making. This research highlights the importance of striking a balance between protecting public health and maintaining economic stability during a global crisis.

Discussion

The interaction between public health, politics, and economics plays a crucial role in shaping COVID-19 border control strategies in Brunei Darussalam, the UK, China, Germany, and Australia. While there are similarities and differences among these countries, analyzing their approaches provides valuable insights into the interplay of these factors.

In terms of public health, all countries recognized the importance of implementing measures to prevent the spread of COVID-19. Brunei Darussalam, China, Australia, and Germany adopted stringent border control measures as part of their comprehensive public health strategies. They prioritized the health and safety of their populations by closing borders, implementing strict quarantine protocols, and conducting widespread testing and contact tracing. On the other hand, the UK took a different approach by maintaining open borders, which was perceived as a way to showcase their independence and global status.

Politics also influenced border control strategies in these countries. Brunei Darussalam and China, with their more centralized and authoritarian regimes, were able to swiftly implement strict border control measures without facing significant opposition. In contrast, Germany, the UK, and Australia, with their democratic systems, had to consider public opinion and balance political considerations when formulating their border policies. These differences in political systems led to variations in the timing and stringency of border control measures.

Economics played a significant role in the decision-making process for border control strategies. Brunei Darussalam, China, and Australia prioritized protecting public health over economic considerations, opting for closed borders to minimize the risk of imported cases. In contrast, Germany and the UK, both with stronger economic ties to other countries, faced more complex challenges. They had to balance the need to control the spread of the virus with the potential economic consequences of closed borders. As a result, Germany adopted a hybrid approach, implementing targeted restrictions, while the UK maintained open borders to preserve economic activities.

The similarities and differences in public health, politics, and economics among these countries highlight the complexity of formulating COVID-19 border control strategies. While all countries aimed to protect public health, the varying political systems and economic priorities led to divergent approaches. Brunei Darussalam, China, and Australia prioritized strict border control measures, whereas Germany and the UK adopted more nuanced strategies. Understanding these similarities and differences provides valuable insights into the effectiveness and applicability of different border control measures in managing the pandemic.

Therefore, the interaction between public health, politics, and economics shaped COVID-19 border control strategies in Brunei Darussalam, the UK, China, Germany, and Australia. The similarities and differences in their approaches highlight the complex interplay of these factors. By considering public health priorities, political dynamics, and economic considerations, policymakers can make informed decisions to effectively manage border control strategies during the pandemic.

The interaction between public health, politics, and economics in the context of COVID-19 border control strategies in Brunei Darussalam, the UK, China, Germany, and Australia is complex and multifaceted. Public health considerations are at the forefront of decision-making regarding border control measures. Governments prioritize the health and well-being of their populations, aiming to minimize the transmission of the virus and protect public health. Stringent border closures, travel restrictions, and quarantine measures are implemented to prevent imported cases and reduce the risk of community transmission. These measures are based on scientific evidence, expert advice, and guidance from international health organizations such as the World Health Organization.

However, the implementation of public health measures is intertwined with political factors. Politics plays a significant role in shaping the decision-making process and determining the extent to which public health measures are adopted and enforced. Political leaders face the challenge of balancing public health concerns with other considerations, such as economic impacts, international relations, and domestic political dynamics. The response to the pandemic can be influenced by political ideologies, party agendas, and public opinion. The political environment and leadership styles in each country can determine the level of public trust, compliance with regulations, and the effectiveness of communication strategies.

Economics also intersects with public health and politics in COVID-19 border control strategies. Governments need to consider the economic implications of border closures and travel restrictions. Closing borders can have significant economic consequences, disrupting international trade, tourism, and supply chains. Countries with strong economic dependencies on international trade and tourism

may face greater challenges in implementing strict border control measures. The economic impact of these measures, such as job losses and economic downturns, must be taken into account when formulating policies.

The interaction between public health, politics, and economics is dynamic and intertwined. The effectiveness of border control strategies depends on finding a balance between protecting public health, addressing economic concerns, and navigating political dynamics. Governments must make difficult decisions, weighing the risks and benefits of various measures and considering the unique circumstances of their countries. Collaboration and coordination between public health experts, policymakers, and economic advisors are crucial to strike the right balance and ensure a comprehensive response to the pandemic.

Overall, the interaction between public health, politics, and economics in COVID-19 border control strategies is a complex interplay of factors that requires careful consideration and decision-making to safeguard public health while mitigating economic impacts and addressing political dynamics.

Similarities

The similarities in COVID-19 border control strategies among Brunei Darussalam, the UK, China, Germany, and Australia can be identified in several aspects. Firstly, all countries recognized the significance of implementing border control measures to contain the spread of COVID-19. They acknowledged the need to regulate international travel and limit the entry of potentially infected individuals into their respective territories.

Secondly, these countries implemented various public health measures alongside border control strategies. This included measures such as mandatory quarantine protocols, testing upon arrival, contact tracing efforts, and promoting public awareness of preventive measures such as mask-wearing and social distancing. Additionally, these countries aimed to protect their populations and healthcare systems by prioritizing public health considerations over economic concerns. They understood the importance of minimizing the risk of imported cases and preventing overwhelming outbreaks within their borders.

Furthermore, all countries faced the challenge of balancing the need for strict border controls with the economic consequences of closed borders. While some countries were willing to prioritize public health over economic interests, others had to navigate the complexities of maintaining economic activities while managing the spread of the virus.

Overall, the similarities in COVID-19 border control strategies among these countries lie in the recognition of the importance of implementing measures to regulate international travel, protect public health, and strike a balance between controlling the spread of the virus and mitigating economic impacts. These shared elements reflect the global understanding of the challenges posed by the pandemic and the need for coordinated efforts to combat it.

Differences

Despite the similarities in their COVID-19 border control strategies, Brunei Darussalam, the UK, China, Germany, and Australia also exhibit notable differences based on the information provided in this chat.

One significant difference lies in the stringency of their border control measures. China, Brunei Darussalam, and Australia adopted stringent closed-border policies aimed at minimizing the spread of the virus. In contrast, Germany and the UK implemented mixed strategies, combining closed and semi-open borders depending on the progression of the pandemic. This variation reflects different approaches to balancing public health concerns with the need for international connectivity.

Another difference can be observed in the political systems and governance styles of these countries. China and Brunei Darussalam, characterized by more centralized and authoritative regimes, could implement policies more efficiently with less public resistance. On the other hand, Germany, the UK, and Australia, with more democratic political systems, had to consider public opinion and engage in greater deliberation when formulating and implementing border control measures.

Economic considerations also played a role in shaping their border control strategies. The UK and Germany, for example, emphasized the preservation of their economies and opted for open borders to maintain economic activities. In contrast, China, Australia, and Brunei Darussalam prioritized public health and restricted international travel to preserve the population's well-being, even if it meant short-term economic challenges.

Additionally, differences in the scale and resources of these countries influenced their ability to enforce and implement border control measures effectively. China, as a large nation with significant resources, could impose strict measures and effectively control the spread of the virus. Smaller countries like Brunei Darussalam and Australia could also implement stringent measures more easily due to their manageable population sizes. In contrast, larger and more interconnected countries like the UK and Germany faced greater challenges in containing the virus due to higher population density and extensive international travel.

Overall, the differences in COVID-19 border control strategies among these countries can be attributed to variations in political systems, governance styles, economic priorities, and resources. These differences highlight the diverse approaches taken by countries in responding to the pandemic based on their unique circumstances and priorities.

Rational Choice Theory

Analyzing the rational choice theory in the context of COVID-19 border control strategies in Brunei Darussalam, the UK, China, Germany, and Australia sheds light on the decision-making processes influenced by public health, politics, and economics. According to the rational choice theory, individuals and policymakers are rational actors who make decisions based on a cost-benefit analysis. Applying this theory to the context of border control strategies during the pandemic, we can observe how public health concerns, political considerations, and economic factors intersect (Oppenheimer, 2008).

First, public health considerations serve as a primary driver of decision-making in all countries. Rational actors prioritize the protection of public health by implementing border control measures to mitigate the spread of COVID-19. The potential costs of uncontrolled transmission, such as overwhelmed healthcare systems and high mortality rates, outweigh the potential benefits of open borders. Rational policymakers recognize the importance of preventing the virus's introduction and transmission, leading to the implementation of measures like travel restrictions, quarantine protocols, and testing requirements.

Second, political considerations influence decision-making processes. Rational actors, including political leaders, are responsive to public opinion and political pressures. In countries with centralized regimes like China and Brunei Darussalam, policymakers have the capacity to make swift and decisive choices based on public health imperatives (Riker, 1995). In democratic countries like the UK and Germany, policymakers must navigate complex political landscapes, taking into account public opinion, stakeholder interests, and electoral considerations. Rational actors in these contexts aim to strike a balance between public health protection and political feasibility, adapting border control measures accordingly.

Third, economic factors also come into play. Rational actors recognize the economic costs associated with border closures and travel restrictions. Countries heavily dependent on international trade and tourism, such as China, Australia, and Brunei Darussalam, face a trade-off between public health protection and economic consequences. Rational policymakers seek to minimize economic disruptions by implementing targeted measures that allow essential economic activities to continue while maintaining stringent border control measures. In contrast, countries like the UK and Germany, facing economic challenges due to prolonged border closures, face the task of managing economic repercussions while safeguarding public health.

In summary, the rational choice theory helps explain how public health, politics, and economics intersect in the decision-making processes of border control strategies during the COVID-19 pandemic. Rational actors weigh the costs and benefits associated with public health protection, political considerations, and economic implications to make informed choices. By understanding the rational calculations made by policymakers, we gain insights into the complexities and trade-offs involved in designing effective border control strategies.

CONCLUSION

In conclusion, the effectiveness of border control in containing the spread of COVID-19 remains a complex and contentious issue. However, evidence suggests that countries with closed borders were more successful in containing the virus than those with open borders. While domestic public health measures such as mask mandates and social distancing also play a critical role in curbing the virus's spread, the combination of these measures with border control appears to be the most effective approach.

China, Brunei Darussalam, Australia, and Germany's successful use of various border control strategies to deal with COVID-19 demonstrates the importance of such measures in pandemic containment. Conversely, the UK's failure to implement adequate public health measures and border controls has led to a higher number of infections and deaths.

The research conducted in this paper indicates that a country's decision to close its borders during a pandemic is often influenced by national security concerns and domestic politics. The economy plays a significant role in government decision-making when it comes to border policies. Countries like China, Australia, and Brunei Darussalam were able to pursue closed border policies due to their ability to maintain an effective economy during the pandemic. On the other hand, the UK and Germany, to some extent, had to maintain open borders to preserve their economies, despite the increased risk of infection.

The data gathered shows a clear relationship between border closure and health statistics such as the prevention of infection, hospitalization cases, and death rates. Countries with closed borders were more successful in dealing with the COVID-19 pandemic in terms of health statistics alone. It is worth noting, however, that there are other variables to consider when evaluating the effectiveness of border control, such as regime type and international relations.

Overall, the combination of effective domestic public health measures and border controls appears to be the critical component of successful pandemic containment protocols. The research presented in this paper highlights the importance of taking a comprehensive approach to pandemic containment, considering all variables at play, including national security concerns, domestic politics, and the economy. As the world continues to grapple with COVID-19 and future pandemics, policymakers must take a proactive approach to implement effective public health measures and border controls to safeguard the health and well-being of their citizens.

Moreover, the economic considerations were also found to be a significant factor in the decision-making process regarding border controls during the pandemic. Countries with strong and sustainable economies, such as China, Brunei Darussalam, and Australia, were able to implement and sustain closed border policies, while countries such as the UK were not able to effectively maintain their economy during a closed border policy. Thus, economic considerations can be seen as one of the main driving factors in determining whether to implement border controls.

In conclusion, the question of whether border control works in containing the spread of COVID-19 remains complex and multifaceted. The available evidence suggests that effective domestic public health measures, including mask mandates and social distancing, in combination with border controls, have been successful in containing the virus. However, the effectiveness of border controls is dependent on several factors, including the regime type, the strength of the economy, and the ability of a country to effectively implement and enforce the border controls.

While some countries have been successful in implementing closed border policies, others have not been able to sustain them due to economic or political considerations. Therefore, the decision to implement border controls during a pandemic must be made with careful consideration

of all relevant factors, including the potential economic impact and the effectiveness of domestic public health measures. Ultimately, effective pandemic containment strategies require a multifaceted approach that incorporates both domestic public health measures and border controls.

REFERENCES

Abu Bakar, R. (2020, July 30). *No plans to Reopen BRUNEI borders in August*. The Scoop. https://thescoop.co/2020/07/18/no-plans-to-reopen-brunei-borders-in-august/.

Ali, S., & Lee, T. F. B. (2022). Deterrence measure: A cause for promoting regional instability in South Asia. *Chinese Journal of International Review*, *04*(02). https://doi.org/10.1142/s2630531322500081

AlTakarli, N. S. (2020). China's response to the COVID-19 OUTBREAK: model for EPIDEMIC preparedness and management. *Dubai Medical Journal*, *3*(2), 44–49. https://doi.org/10.1159/000508448

American Institute of Physics. (2021, April 13). Combining mask wearing, social distancing suppresses COVID-19 virus spread: Network model findings could shape public health policy for airborne viruses. *ScienceDaily*. Retrieved August 20, 2021 from www.sciencedaily.com/releases/2021/04/210413110636.htm

Australian Government Department of Health. (2021). *Australia's COVID-19 vaccine rollout*. (2021, August 8). Australian Government Department of Health. https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/australias-covid-19-vaccine-rollout

Australian Government Department of Health. (2021). *Coronavirus (COVID-19) case numbers and statistics*. (2021, August 6). Australian Government Department of Health.https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-healthalert/coronavirus-covid-19-case-numbers-and-statistics#covid19-summary-statistics

Australian Government Department of Health. (2021). *Current COVID-19 cases in hospitals and Intensive Care Units (ICUs)*. (2021, May 18). Australian Government Department of Health. https://www.health.gov.au/resources/current-covid-19-cases-in-hospitals-and-intensive-care-units-icus

Australian Trade and Investment Commission. (2021). *Resilient economy: Australia.* Sydney, Australia: Australian Trade and Investment Commission. https://www.austrade.gov.au/benchmark-report/resilient-economy

Balkhair, A. A. (2020). COVID-19 Pandemic: A new chapter in the history of infectious diseases. *Oman Medical Journal*, *35*(2). https://doi.org/10.5001/omj.2020.41

BBC. (2021, June 2). *Covid: Australia economy climbs back TO Pre-pandemic size*. BBC News. https://www.bbc.com/news/business-57326054.

BMJ Open 2021;11:e042034. doi: 10.1136/bmjopen-2020-042034

Bodetti, A., 2020. *How Brunei Beat COVID-19*. [online] Thediplomat.com. Available at: <https://thediplomat.com/2020/06/how-brunei-beat-covid-19/> [Accessed 16 March 2021].

Boin, A., Lodge, M., & Luesink, M. (2020). Learning from the COVID-19 crisis: An initial analysis of National responses. *Policy Design and Practice*, *3*(3), 189–204. https://doi.org/10.1080/25741292.2020.1823670

Boin, A., Lodge, M., & Luesink, M. (2020). Learning from the COVID-19 crisis: An initial analysis of National responses. *Policy Design and Practice*, *3*(3), 189–204. https://doi.org/10.1080/25741292.2020.1823670

Bou-Karroum, L., Khabsa, J., Jabbour, M., Hilal, N., Haidar, Z., Abi Khalil, P., Khalek, R. A., Assaf, J., Honein-AbouHaidar, G., Samra, C. A., Hneiny, L., Al-Awlaqi, S., Hanefeld, J., El-Jardali, F., Akl, E. A., & El Bcheraoui, C. (2021). Public health effects Of travel-related policies on the Covid-19 pandemic: A mixed-methods systematic review. *Journal of Infection*. https://doi.org/10.1016/j.jinf.2021.07.017

Bowsher, G., Bernard, R., & Sullivan, R. (2020). A health intelligence framework for PANDEMIC Response: Lessons from the UK experience of covid-19. *Health Security*, *18*(6), 435–443. https://doi.org/10.1089/hs.2020.0108

Colfer, B. (2020). Herd-immunity across Intangible borders: Public policy responses TO COVID-19 in Ireland and the UK. *European Policy Analysis*, *6*(2), 203–225. https://doi.org/10.1002/epa2.1096

Colfer, B. (2020). Herd-immunity across Intangible borders: Public policy responses TO COVID-19 in Ireland and the UK. European Policy Analysis, 6(2), 203–225. https://doi.org/10.1002/epa2.1096

Cyranoski, D. (2020). What china's coronavirus response can teach the rest of the world. *Nature*, *579*(7800), 479–480. https://doi.org/10.1038/d41586-020-00741-x

Cyranoski, D. (2020). What china's coronavirus response can teach the rest of the world. *Nature*, *579*(7800), 479–480. https://doi.org/10.1038/d41586-020-00741-x

Dai, Yixin, Li, Y., Cheng, C.-yo, Zhao, H., & Meng, T. (2021). Government-led or public-led? Chinese policy agenda setting during the covid-19 pandemic. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3756660

Demeure, N., & Lee, B. T. F. (2023). Effect of the zero-covid policy on Chinese FDI inflows and government's response: Has the pandemic led to distinctive paradigm change in China's hypergrowth approach to development? *Journal of Strategic and Global Studies*, *6*(2). https://doi.org/10.7454/jsgs.v6i2.1124

Duckett, S., & Stobart, A. (2020, June 4). 4 ways Australia's coronavirus response was a triumph, and 4 ways it fell short. The Conversation. https://theconversation.com/4-ways-australias-coronavirus-response-was-a-triumph-and-4-ways-it-fell-short-139845

EU Schengen. SchengenVisaInfo.com. (2021, August 2). https://www.schengenvisainfo.com/news/who-can-travel-to-germany-this-summer-what-are-the-rules/.

Europa EU. Your Europe. (2021). https://europa.eu/youreurope/citizens/travel/travel-and-covid/germany/index_en.htm.

Ferhani, A., & Rushton, S. (2020). The International Health Regulations, COVID-19, and bordering practices: Who gets in, what gets out, and who gets rescued? *Contemporary Security Policy*, *41*(3), 458-477.

Fidler, D. P. (2020). The Covid-19 Pandemic, geopolitics, and international law. *Journal of International Humanitarian Legal Studies*, *11*(2), 237–248. https://doi.org/10.1163/18781527-bja10010

Fidler, D. P. (2020). The Covid-19 Pandemic, geopolitics, and international law. *Journal of International Humanitarian Legal Studies*, *11*(2), 237–248. https://doi.org/10.1163/18781527-bja10010

Frowde, R., Dove, E.S. & Laurie, G.T. Fail to Prepare and you Prepare to Fail: the Human Rights Consequences of the UK Government's Inaction during the COVID-19 Pandemic. ABR **12,** 459–480 (2020). https://doi.org/10.1007/s41649-020-00151-1

Gaskell, J., Stoker, G., Jennings, W., & Devine, D. (2020). Covid-19 and the blunders of OUR Governments: Long-run System FAILINGS aggravated by political choices. *The Political Quarterly*, *91*(3), 523–533. https://doi.org/10.1111/1467-923x.12894

Hamdan, N., & Case, W. (2021, February 17). *Behind Brunei's COVID-19 success story*. East Asia Forum. https://www.eastasiaforum.org/2021/01/28/behind-bruneis-covid-

19-success-story/.
Haseltine, W. A. (2021, March 24). *What can we learn From Australia's Covid-19 response?* Forbes. https://www.forbes.com/sites/williamhaseltine/2021/03/24/what-can-we-learn-from-australias-covid-19-response/.
ICAO. (2018). *WORLD OF AIR TRANSPORT*. The World of Air Transport in 2018. https://www.icao.int/annual-report-2018/Pages/the-world-of-air-transport-in-2018.aspx.
International Institute for Applied Systems Analysis. (2020, August 3). Evaluating the effectiveness of travel bans. *ScienceDaily*. Retrieved August 20, 2021 from www.sciencedaily.com/releases/2020/08/200803120134.htm
International Monetary Fund. (2021). *World economic outlook update, January 2021*. International Monetary Fund World Economic Outlook: Australia. Retrieved May 29, 2021, from https://www.imf.org/en/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update
Kraemer, M. U., Yang, C.-H., Gutierrez, B., Wu, C.-H., Klein, B., Pigott, D. M., du Plessis, L., Faria, N. R., Li, R., Hanage, W. P., Brownstein, J. S., Layan, M., Vespignani, A., Tian, H., Dye, C., Pybus, O. G., & Scarpino, S. V. (2020). The effect of human mobility and control measures on the COVID-19 epidemic in China. *Science*, *368*(6490), 493–497. https://doi.org/10.1126/science.abb4218
Kuhlmann, S., Hellström, M., Ramberg, U., & Reiter, R. (2021). Tracing divergence in crisis governance: responses to the COVID-19 pandemic in France, Germany, and Sweden compared. *International Review of Administrative Sciences*, 0020852320979359
Kupferschmidt, K. (2020). Europe is locking down again—but its strategy is unclear. *Science*, *370*(6517), 644–645. https://doi.org/10.1126/science.370.6517.644
Lee, B. T. F., & Sims, J. P. (2023). Maslow's hierarchy of needs: A framework for understanding China's soes, smes and Decentralisation. *China Report*. https://doi.org/10.1177/00094455231187692
Lilleker, D. G., & Stoeckle, T. (2021). The challenges of providing certainty in the face of WICKED Problems: Analysing the UK government's handling of the COVID -19 PANDEMIC. *Journal of Public Affairs*. https://doi.org/10.1002/pa.2733
Liu, Y., Tang, J. W., & Lam, T. T. Y. (2020). Transmission dynamics of the COVID-19 epidemic in England. International Journal of Infectious Diseases, 104, 132–138. https://doi.org/10.1016/j.ijid.2020.12.055
Lu, G., Razum, O., Jahn, A., Zhang, Y., Sutton, B., Sridhar, D., ... & Müller, O. (2021). COVID-19 in Germany and China: mitigation versus elimination strategy. *Global health action*, *14*(1), 1875601
Mahoney, J. (2007). Qualitative Methodology and Comparative Politics. Comparative Political Studies, 40, 122–144.
Meier, K., Glatz, T., Guijt, M. C., Piccininni, M., Van Der Meulen, M., Atmar, K., ... & COVID-19 Survey Study group. (2020). Public perspectives on protective measures during the COVID-19 pandemic in the Netherlands, Germany, and Italy: A survey study. *PloS one*, *15*(8), e0236917
Ministry of Health Brunei. (2021). *Highlights*. Covid-19 . Retrieved August 10, 2021, from http://moh.gov.bn/Pages/Home.aspx
Muhammad, A. (2015). *Sejarah Sultan-Sultan Brunei*. Jabatan Perkembangan Kurikulum.
Neumayer, E., Plümper, T., & Shaikh, M. (2021). The logics Of Covid-19 travel restrictions between European countries. Social Science Quarterly. https://doi.org/10.1111/ssqu.13016
Nkengasong, J. (2020). China's response to a novel Coronavirus stands in stark contrast to the 2002 SARS outbreak response. *Nature Medicine*, *26*(3), 310–311. https://doi.org/10.1038/s41591-020-0771-1
O'Sullivan, D., Rahamathulla, M., & Pawar, M. (2020). The impact and implications of COVID-19: An Australian perspective. *The International Journal of Community and Social Development*, *2*(2), 134-151.
OUYANG, H., LI, C., LIU, G., ZHANG, M., & LEE, B. T. F. (2022). Development zones and firm innovation: Evidence from Shanghai. *Chinese Journal of Urban and Environmental Studies*, *10*(04). https://doi.org/10.1142/s2345748122500282
Oppenheimer, J. A. (2008). RATIONAL CHOICE THEORY. *Sage Encyclopedia of Political Theory*, 1150–1159.
Othman, A. (2021, July 17). *Brunei's COVID-19 success story GARNERS global attention " Borneo BULLETIN ONLINE*. Brunei's COVID-19 success story garners global attention. https://borneobulletin.com.bn/bruneis-covid-19-success-story-garners-global-attention-2/.
Pana, T. A., Bhattacharya, S., Gamble, D. T., Pasdar, Z., Szlachetka, W. A., Perdomo-Lampignano, J. A., Ewers, K. D., McLernon, D. J., & Myint, P. K. (2021). Country-level determinants of the severity of the first global wave of the COVID-19 pandemic: An ecological study. *BMJ Open*, *11*(2). https://doi.org/10.1136/bmjopen-2020-042034
Paterlini, M. (2020, April 21). *'Closing borders IS ridiculous': The epidemiologist behind SWEDEN'S controversial coronavirus strategy*. Nature News. https://www.nature.com/articles/d41586-020-01098-x.
Piccoli, L., Dzankic, J., & Ruedin, D. (2021). Citizenship, migration and mobility in a Pandemic (CMMP): A global dataset of COVID-19 restrictions on human movement. *PLOS ONE*, *16*(3). https://doi.org/10.1371/journal.pone.0248066
Premaratne, G., Abdulla, A. S., & Hishamuddin, F. A. (2022). Impact of covid-19 on Brunei Darussalam economy. *Revitalising ASEAN Economies in a Post-COVID-19 World*, 1–30. https://doi.org/10.1142/9789811228476_0001
Qiu, Y., Chen, X. & Shi, W. Impacts of social and economic factors on the transmission of coronavirus disease 2019 (COVID-19) in China. *J Popul Econ* **33,** 1127–1172 (2020). https://doi.org/10.1007/s00148-020-00778-2
Riker, W. H. (1995). The political psychology of rational choice theory. *Political Psychology*, *16*(1), 23. https://doi.org/10.2307/3791448
Ritchie, M., & Roser, H. (2020). *Our world in data*. Oxford Martin School, University of Oxford. https://ourworldindata.org/coronavirus-data
Sims, J. P., Lee, Y.-T., & Lee, B. T. F. (2023). New Chinese Economic Policy to Latin America? A QCA approach to the belt and road initiative. *Chinese Political Science Review*. https://doi.org/10.1007/s41111-023-00244-w
Scally, G., Jacobson, B., & Abbasi, K. (2020). The uk's public health response To covid-19. BMJ, m1932. https://doi.org/10.1136/bmj.m1932
Schwartz, J., (2012), Compensating for the 'authoritarian advantage'in crisis response: A comparative case study of sars pandemic responses in China and Taiwan. Journal of Chinese Political Science, 173, 313–331. doi: 10.1007/s11366-012-9204-4
Spennemann, D. H. (2021). "No Entry into New South Wales": COVID-19 and the Historic and Contemporary Trajectories of the Effects of Border Closures on an Australian Cross-Border Community. *Land*, *10*(6), 2-26.
Stannard, T., Steven, G., & McDonald, C. (2020). *Economic impacts of COVID-19 containment measures*. Covid-19 measures. Retrieved March 2021, from https://www.tourismticker.com/wp-content/uploads/2020/05/Reserve-Bank-Economic-impacts-of-COVID-19-containment-measures.

pdf

Tian, W. (2021). How China managed the covid-19 pandemic*. *Asian Economic Papers*, *20*(1), 75–101. https://doi.org/10.1162/asep_a_00800

Wang, Q., & Zhang, F. (2021). What does the China's economic recovery AFTER COVID-19 pandemic mean for the economic growth and energy consumption of other countries? *Journal of Cleaner Production*, *295*. https://doi.org/10.1016/j.jclepro.2021.126265

Wang, Q., & Zhang, F. (2021). What does the China's economic recovery AFTER COVID-19 pandemic mean for the economic growth and energy consumption of other countries? *Journal of Cleaner Production*, *295*. https://doi.org/10.1016/j.jclepro.2021.126265

Wells, C. R., Sah, P., Moghadas, S. M., Pandey, A., Shoukat, A., Wang, Y., Wang, Z., Meyers, L. A., Singer, B. H., & Galvani, A. P. (2020). Impact of international travel and border control measures on the global spread of the Novel 2019 Coronavirus outbreak. *Proceedings of the National Academy of Sciences*, *117*(13), 7504–7509. https://doi.org/10.1073/pnas.2002616117

WHO. (2021). *Who China joint mission on COVID-19 final report*. Joint mission of Covid-19 report. Retrieved August 13, 2021, from https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

WHO. (2020). *Updated who recommendations for international traffic in relation To COVID-19 outbreak*. World Health Organization. https://www.who.int/news-room/articles-detail/updated-who-recommendations-for-international-traffic-in-relation-to-covid-19-outbreak.

World Health Organization. (2021). *China: Who Coronavirus Disease (COVID-19) dashboard with Vaccination Data*. World Health Organization. https://covid19.who.int/region/wpro/country/cn.

World Health Organization. (2021). *Coronavirus Disease (COVID-19) Situation Reports*. Geneva, Switzerland: World Health Organization.https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

World Health Organization. (2021). *COVID-19 vaccines*. Geneva, Switzerland: World Health Organization.https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines

World Health Organization. (2021). *Joint Statement on prioritization of COVID-19 vaccination for seafarers and aircrew*. Geneva, Switzerland: World Health Organization.https://www.who.int/news/item/25-03-2021-joint-statement-on-prioritization-of-covid-19-vaccination-for-seafarers-and-aircrew

World Health Organization. (2021). *Policy considerations for implementing a risk-based approach to international travel in the context of COVID-19, 2 July 2021*. Geneva, Switzerland: World Health Organization.https://www.who.int/publications/i/item/WHO-2019-nCoV-Policy-Brief-Risk-based-international-travel-2021.1

World Health Organization. (2021). *WHO coronavirus (Covid-19) dashboard: Australia.* https://covid19.who.int/region/wpro/country/au

World Health Organization. (2021). *WHO coronavirus (COVID-19) Dashboard*. World Health Organization. https://covid19.who.int/.

World Health Organization. (2021). WHO coronavirus (COVID-19) Dashboard. World Health Organization. https://covid19.who.int/.

Xiaolan Fu, Jing Zhang & Liming Wang (2020) Introduction to the special section: the impact of Covid-19 and post-pandemic recovery: China and the world economy, Journal of Chinese Economic and Business Studies, 18:4, 311-319, DOI: 10.1080/14765284.2020.1855939

Yan, B., Zhang, X., Wu, L., Zhu, H., & Chen, B. (2020). Why do Countries respond differently to COVID-19? A comparative study of Sweden, China, France, and Japan. *The American Review of Public Administration*, *50*(6-7), 762–769. https://doi.org/10.1177/0275074020942445

Yuan, C., & Lee, B. T. F. (2023). ASEAN in the Conflict Management of the Rohingya Crisis. *Journal of Autonomy and Security Studies*, *7*, 39–60. https://doi.org/https://jass.ax/index.php/jass/article/view/82

Yuan, C., & Lee, B. T. F. (2023). Exploring China's response to the Rohingya Crisis: A liberal perspective. *Journal of Terrorism Studies*, *5*(1). https://doi.org/10.7454/jts.v5i1.1056

Yuan, C., & Lee, B. T. F. (2023). From Rivals To Partners: The Evolution Of Environmental Cooperation Among China, Japan, And Korea. *Global: Jurnal Politik Internasional*, *25*(1), 60–89. https://doi.org/10.7454/global.v25i1.1267

Zarloule, Y., (2020), Framing nationalism in times of a pandemic: The case of Morocco, The COVID-19 Pandemic in the Middle East and North Africa, 55.(Washington, DC: The Project on Middle East Political Science).

Zhai, K., & Hua, S. (2021, June 23). *WSJ news exclusive | China to Keep COVID-19 border restrictions for another year*. The Wall Street Journal. https://www.wsj.com/articles/china-to-keep-covid-19-border-restrictions-for-another year-11624361777.