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**Cross-border Barrier and Cross-border Cooperation in Pandemic Crisis:
The Case of the Öresund Region**

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Abstract

In the current European context, the cross-border cooperation ensures free movement, and barriers at borders would not hinder economic flows and citizen's mobility. The border regions featuring high levels of cooperation across the border line usually display decentralizations of national power as the local municipalities play a central role in decision making, which corresponds to the structure proposed in Multi-level Governance (MLG). However, the COVID-19 crisis has made the territorial borders dramatically more important in the pandemic. Based on the background, this study then aims at examining the extent to which cross-border barriers amid crises and cross-border cooperation have been affected. The aim is achieved by conducting a case study to investigate the research question of "How have the corona-related entry policies introduced by Denmark and Sweden affected the cross-border mobility in the Öresund Region". The findings based on the empirical materials obtained from netnography and semi-structured interviews indicate that the cross-border barriers are reinforced during the pandemic. The imposition of the strict border controls and temporary border closure not only demonstrates the re-centralization of state powers, but also shows how fragile the initially stable and harmonious cooperation between Nordic countries is because of the respective unilateral and inward-looking national decision-making during the pandemic. Finally, we argue that the COVID-19 crisis has exacerbated the existing barriers in the Öresund Region and brought the two European countries back to the age of borders, which leads to a halt in free movement and a low point in Nordic cooperation, and ultimately created a high-level of uncertainty, confusion, and mistrust among residents in the region.

Keywords: *Cross-border Mobility, Cross-border Barriers, Multi-Level Governance, Cross-border Cooperation, COVID-19, Borders, Öresund Region*

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1. INTRODUCTION

1.1 Research Background

The term “Border” or “Borders”, as well as relevant concepts such as “boundaries” and “frontiers”, typically represent a physical existence that comes from “the demarcation and the construction of the buildings, defenses, and system of communication” (Paasi 1996, P. 27). In relation to geographical thoughts, border involves something more than the physical lines that constitute the margin of national states; instead, it encompasses processes of politics and society, which can be seen from everyday practices (Berg & Van Houtum, 2003; Moyo, 2016; Novak, 2011). In this sense, the border contains both material and symbolic meaning in many ways (Anderson & O’Dowd, 1999; Nshimbi & Moyo, 2020). The process of globalization has somewhat erased the nation-state borders and enhanced the gradual integration of border regions because it enables people, goods and services to flow in a more liberalized way (Nshimbi & Moyo, 2020; Tevera, 2020). Thus, a higher level of connectivity can potentially be functioning across national borders, while an enhancing degree of mobility of people and goods is allowed. Specifically, border cities or border regions feature a dense environment for interaction between various stakeholders, despite the possible separation resulting from regulatory, cultural, linguistic, and currency differences (OECD, 2019). Nevertheless, regardless of the growing interaction between both sides of the border, different elements, including crisis, health safety and security, might raise the cross-border barrier as these would inevitably impact the territorial consideration of respective authorities. In other words, it is possible for governments to introduce stricter policies (e.g. Entry rules) under these circumstances. Therefore, cross-border integration can easily be influenced and even interrupted by certain issues, making the current discussion of cross-border cooperation and integration remains complicated in some capacity.

In a European context, a multinational integration has primarily taken place from various aspects through the establishment and policies of the European Union (EU). Regarding the territorial issue, the Schengen Agreement signed in 1985 essentially abolished the internal border check within the Schengen Area, which guarantees free movement to more than 400 million EU citizens,

along with those non-EU nationals who legally present (i.e., living in the EU or as tourists visiting the EU, exchange students or for business purposes) in this area (European Commission, 2021).

Further to that, cross-border cooperation, which primarily aims to assure the free movement where barriers at borders would not hinder economic flows and citizens' mobility (European Union, 2021), has come into focus among European countries. In this situation, the assemblage of different scales of cooperation areas enables different authorities to unite in joint projects that transcend existing national borders (Reitel et al., 2018), further enhancing the level of regional integration between the member states of the EU.

1.1.1 Cross-border Cooperation in the Öresund Region

In Scandinavia, the Öresund Region, which comprises eastern Denmark and Skåne in southern Sweden, has been an acknowledged example of cross-border cooperation and integration in the past few years. The Öresund Bridge opened in 2000 connects the two countries by land, constituting a more integrated land transport network in this region and indicating a significant turning point that dramatically accelerates the integration process (Nauwelaers et al., 2013). In specific, the Öresund fixed-link has kickstarted the cross-border integration, reconfiguring the region as a mobility zone, rather than two regions separated by the short-sea barrier and an intangible national border. Since then, a cross-border metropolitan region has been emerging (Jensen & Richardson, 2004). Over 4 million inhabitants are currently living in this area, with a number of them traveling across the border between Denmark and Sweden every day, taking advantage of the simple, fast, and straightforward cross-border movement enabled by the transport network.

Huge investments in the advanced transport infrastructure framework in the Öresund Region have significantly increased the Region's accessibility and flows to the rest of Europe. Since the Öresund Bridge was opened in 2000, it has witnessed a massive increase in cross-border activities such as business development, educational network, research innovation, commuting, and immigration, reflecting an increasing integration between the two coasts. Moreover, another

northern fast ferry link over the 4-kilometer-wide sound connects Helsingborg to Helsingør, the closest point from Sweden to Denmark (Nauwelaers et al., 2013).

The existing road and rail connections via the Öresund Bridge enable a maximum of 1.3 million traffic capacity to cross the strait within an hour (Danielewicz, 2020). Since the Öresund Bridge was opened in 2000, the traffic flow via railway and road on the Öresund Bridge has widely exceeded the prognoses – now there are over 11 million passenger trains travel across the bridge in one single year. The opening of the Öresund Bridge has also increased the demand for local cross-border travel between the Denmark and Sweden areas. For example, it has made it possible to commute across the Danish and Swedish national border every day. In particular, 18,500 people commute across the Bridge daily, and almost 23,000 Danish citizens live in Skåne, while around 11,000 Swedish people live in Zealand owing to the differences in the tax systems of the two countries (SYDSVENSKAN, 2020).

Apart from the transport aspect, the overall administrative and political structure in the Öresund Region can be characterized as ‘very fuzzy’ (Berg & Löfgren, 2000) and practically amounted to a non-governance arrangement (Metzger & Olesen, 2016). OECD described such a governance model of the Öresund Region as “governance without a government” (OECD, 2003). Both Denmark and Sweden are decentralized countries with a significant devolution to the local levels, giving the sub-national governments of Zealand and Skåne a favorable and autonomous position to develop cross-border initiatives (Greve & Rydbjerg, 2003).

The most important governance institution at the transnational level is the Öresund Committee (Öresundskomiteen), a political steering committee founded in 1993 in the cross-border region (Metzger & Olesen, 2016), which plays an important role in the integration efforts. The organization described itself as a platform for regional collaboration, lobbying for Öresund’s interests at the national and European levels (Danielewicz, 2020). However, in 2016, local and regional politicians and the national authorities decided to reorganize the Öresund Committee to The Greater Copenhagen Committee (GCC, formerly known as Greater Copenhagen & Skåne Committee). This rebranding was to raise the profile of the region internationally. Nevertheless,

compared to the state government, the Committee remains a relatively weak political institution since many severe cross-border obstacles, such as social security and pension entitlements, labor legislation, institutional mismatches in the taxation systems – are still only solved on the national level (Cars, et al., 2013; Hasselgren & Lundgren, 2014).

Although the Öresund Region is characterized by an advanced economy context and the difference in income and wealth gap on both sides of the strait is limited (OECD, 2003), the border still creates different dimensional barriers that constrain the cross-border flow of people, goods, and information (Hajer, 2000). Overall, despite the notable administrative and political structural differences between Sweden and Denmark, the Öresund is still recognized as a widely publicized flagship model of European cross-border regionalization and integration processes (Perkmann, 2003; Hospers, 2006).

1.1.2 The Öresund Region amid the COVID-19 Crisis

The COVID-19 pandemic has been a global crisis challenging the world. Ever since March 2020. With the spread of the novel coronavirus and the increasing number of infected cases, most countries have launched restrictions and stay-at-home orders in order to contain the virus and to prevent the limited medical capacity from collapsing (Gössling et al., 2020). While transport is the vector that enables passengers to travel across different spaces, it can also be the vector for the spread of disease. Being aware of the fact that the faster the travelers can move, the faster the virus can spread, governments have banned almost all kinds of “unnecessary travel”. The Danish and Swedish authorities are no exceptions. Most of the foreign nationals are prohibited to enter the countries according to the tighter coronavirus guidelines.

On March 12, 2020, one day after the WHO announced that the coronavirus outbreak had become a pandemic, a national level of lockdown was implemented in Denmark, which is ahead of almost all other countries in Europe (Baker, 2020). This is also the first time Denmark closed borders to Sweden since the establishment of the Öresund regional cooperation. On the other side of the Öresund Strait, the Swedish government has never imposed any form of strict

measures within the Swedish territories like other countries had done, not to mention the lockdown. The most important reason is that according to the Swedish Constitution, personal freedom of movement within Sweden and across Swedish borders is guaranteed, so that the Swedish government is not allowed to impose any national lockdown like Denmark (Jonung, 2020).

Despite the different approaches adopted by the governments, like most countries in the northern hemisphere, after the summer ‘reopening’, both Denmark and Sweden have witnessed a significant increase in the number of confirmed cases in the second half of 2020. This became especially obvious when the “Winter Surge” (or the second wave) of the pandemic has come. The colder weather makes it more difficult for the body to fight respiratory infections, coupling with the lack of effective therapeutic medicine and the delayed progress in vaccine research and development, it was no surprise that the number of infected cases in the northern hemisphere increased significantly (Kossakovski, 2020). Since October, the daily coronavirus infection cases in the two countries have surpassed the previous peaks compared to the first wave (see Figure.1 and Figure. 2).

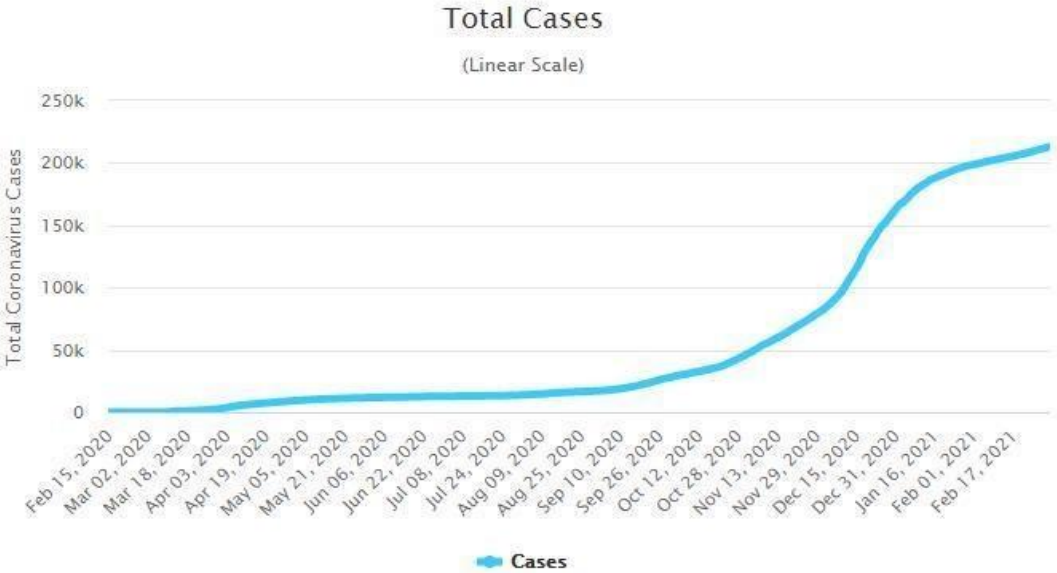


Figure. 1 Linear Scale of Total Confirmed Cases of Covid-19 in Denmark until February 2021.

Source: Worldometers (2021)

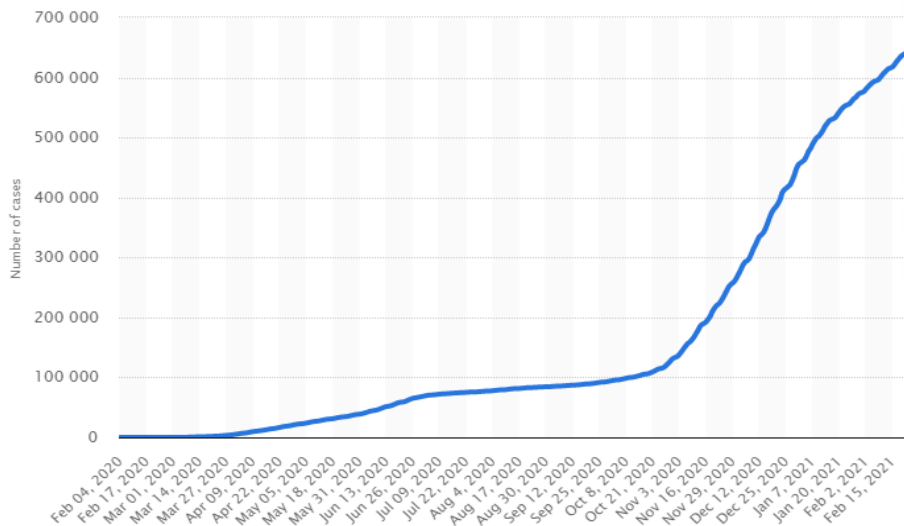


Figure. 2 Linear Scale of Total Confirmed Cases of Covid-19 in Sweden until February 2021.

Source: Statista (2021)

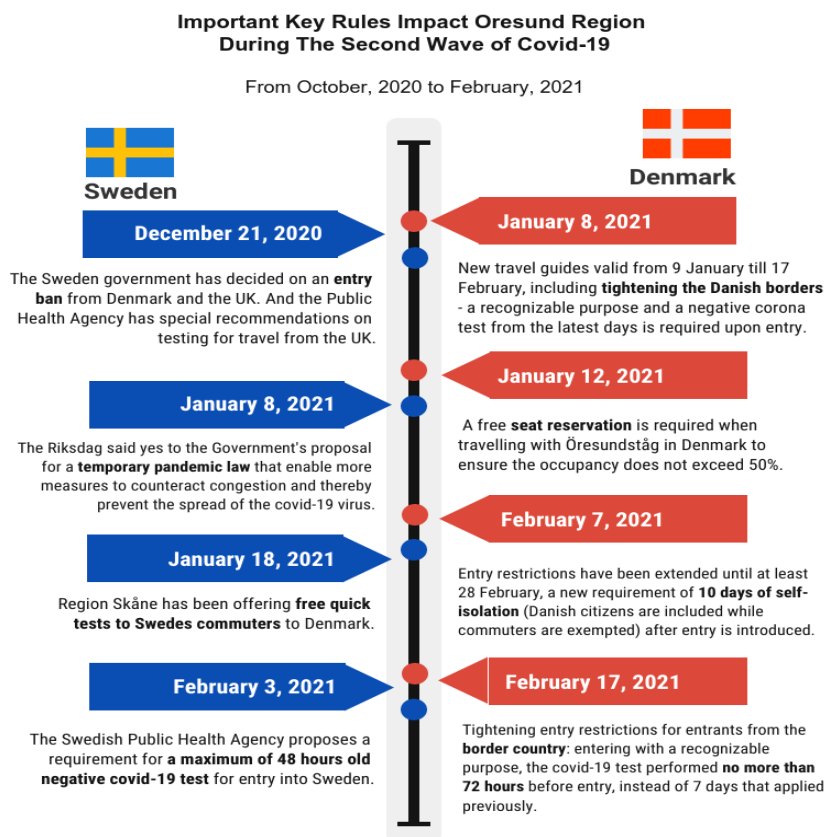


Figure. 3 Important entry rules released by both countries regarding the second wave of the pandemic until February 2021. Source: The Authors

Due to the rapid increase in the confirmed cases, in order to avoid the spread of new, more contagious virus from abroad, since October 2020, not only has the Danish government once again begun to take measures to restrict the daily lives of citizens, but the Swedish government has also issued stricter restrictions than the first wave. Figure. 3 above outlines some of the important key rules issued by the Danish and Swedish governments during the second wave of the pandemic that have a significant impact on people in the border regions such as the Öresund Region.

The most important aspect is that when the border is closed, border control measures for entry have become unimaginably strict by tightening the test and isolation requirement for people traveling to Denmark. As of February 17, 2021, the Danish government introduced stricter entry requirements for people from border countries (including Skåne), so that in order to be able to enter Denmark, one must have a recognizable purpose (i.e., commuting, visiting immediate family members, etc.) and a negative COVID-19 test result performed no more than 72-hours before entry, instead of 7-days that applied previously. Correspondingly, after the Swedish Government announced the entry ban on all arrivals from Denmark and the United Kingdom from entering Sweden before Christmas in 2020, stricter entry regulations were introduced on February 3, 2021, stating that a negative COVID-19 test taken no more than 48 hours is needed when entering Sweden.

In addition to stricter entry rules, specific regulations have been implemented for cross-border transport between Denmark and Sweden. In terms of land transport, starting from December 2020, border controls were carried out on vehicles passing through the Öresund Bridge in both directions. Those who drive across the Öresund Bridge must fulfill certain requirements to enter both countries. With regard to public rail transport, the Öresundståg became the only operator providing train services between Denmark and Sweden after the Swedish National Railway Company (SJ) suspended all trains to and from Copenhagen. The occupancy of each train was controlled and monitored for the purposes of maintaining social distance and reducing the risk of transmission.

1.2 Research Objectives

Territorial borders become dramatically more important in the pandemic. At the same time, the mobility of cross-border travelers has been impacted to a great extent. The stricter entry rules implemented by both Denmark and Sweden have significantly reduced the number of cross-border travelers in the Öresund Region. The previously prosperous development of cooperation across the border featuring a decentralization of state power remains questionable in the pandemic. Based on the background, the purpose of this study is therefore to discuss the cross-border barriers as well as to understand the condition in cross-border cooperation between the two countries, namely, Sweden and Denmark, in the Öresund Region at the time of the COVID-19 pandemic. To achieve the research objective, we specifically focus on how cross-border mobility is impacted. Special attention will be paid to the experience and attitudes of cross-border travelers (e.g., commuters, people traveling for extended family purposes) in this region. In this sense, a research question is identified: **How have corona-related entry policies affected the cross-border mobility in the Öresund Region?**

While the current pandemic crisis is unprecedented and still ongoing, with respect to its significant impacts and the bilateral governments' different responses, examining the current situations can be instructive. Thus, the findings of this study should provide policymakers in the Nordic countries with implications that entail more flexibility, regional thinking and consistent decision-making in border areas to maintain a solid and sustainable cross-border cooperation between countries in times of crisis.

1.3 Disposition

The remaining sections of this thesis are structured as the following. The next part reviews the literature and theories regarding border studies. Specifically, it involves the concept of cross-border barriers, mobility, cooperation, and governance, in order to form a theoretical framework of this thesis. The third chapter introduces the methods adopted to obtain data. We conducted both a netnography study and semi-structured interviews to better fulfill the research objectives. After this, there comes the analysis of data collected, in which we identified different themes.

The following section presents the discussion that expands the analysis of data in the previous section based on the theories. Finally, we conclude this thesis by answering the research question and giving suggestions for the future.

2. LITERATURE REVIEW

2.1 Conceptual Definitions of Borders

Every border is the outcome of a long history of evolution and sometimes represents a 'historical scar.' In the European context, the history of Europe is closely linked to the constant formation and rearrangement of national administrative boundaries (AEBR, 1997), which is commonly referred to as the term 'borders' (Lundén, 2018). In an integrated Europe, considering the gradual disappearance of border controls and restrictions, border as a material manifestation of state sovereignty seems to have lost its importance in favor of transnational mobility of people, goods, and services (Opilowska, 2020). Simultaneously, the far-reaching changes in the political geography of Europe in the territorial states, either in their degree of demarcation or openness of borders, has assisted in constituting a new concept of border (Lundén, 2018).

One of the particularities of understanding contemporary borders or border regions is to require some general theoretical and historical contextualization of borders (Anderson & O'Dowd, 1999). First, it is crucial to clarify the exact meaning of a 'border' or 'borders' since border(s) are perceived as a theoretical cornerstone to understand further and utilize more contextual concepts such as cross-border cooperation, cross-border barriers and related cross-border issues. In this sense, according to Lundén (2004), a border concept includes non-territorial interpretations. Border is also defined as 'originally a zone along a boundary, the territorial line divides (independent) states' (Lundén, 2004, P. 13)'.

In post-modern terms, borders' recent interdisciplinary studies have shifted the study of borders as institutions or lines to border-ing, a noun status to a verb. Borders are departing from the perspective of bordering processes that are now deeply embedded in the concepts of migration (Walters, 2009), flows and networks (Castells, 1996), and regional identity (Paasi, 2002). For conducting research regarding border issues, Van Houtum (2000) identifies three forms of methods. The first one has been the cross-border cooperation approach, which highlights that borders are conceptualized as artificial barriers that create social and economic distance, which must be overcome to build a united Europe (Terlouw, 2012). In Knowles & Matthiessen's (2009)

study on the barrier effect of borders on Öresundbron, they believe that borders are artificial barriers that impede interaction and depress the demand for international transport because people see borders as a dividing line between a ‘familiar and unfamiliar’ society (Hopkins & Dixon, 2006), resulting in less knowledge of cross-border opportunities than domestic ones. Secondly, using people as the research object approach shows that borders are “living spaces” that carry the history that saw them being conceived and evolved; they also have meaning through everyday practices and the experiences of living in them (Brenner & Elden, 2009; Paasi, 2003). Therefore, in this view, borders are viewed as social constructions influencing the perception and behavior of people who live along the borders (Van Houtum, 2000). Drawing on this point of view, Newman (2006) further claims that the studies of borders should be conducted focusing on individual border narratives and experiences, reflecting the impact borders exert upon the daily life practices of people living in and around the borderlands. Third, in essence, borders function as physical barriers that impede accessibility (Matthiessen, 2004), which is particularly relevant to the discussion of mobility. Likewise, in another study on pre- and post-bridge cross-border functional integration in the Öresund Area (Matthiessen, 2004), Matthiessen believes that with the establishment of the Öresundbron, the borders, as time and distance barrier, was dramatically reduced and that the land-sea bottleneck is also eliminated, thus increasing regional accessibility, productivity, economic growth, and competitive vitality.

Moreover, Paasi & Prokkola (2008) argue that borders should be considered under two different contexts. In the national contexts, borders stand for where the social powers are rooted, which in a way relies on the symbolic and physical enlargement of spatial socialization. They label this kind of border as emotional landscapes of control because we learn the borders and their meanings primarily based on historical grounds. On the other hand, in the context of European integration with the current increase in the flows of people and goods, borders have become part of new control and surveillance infrastructures that can be labeled as the technical landscape of control, which is commonly referred to as border control. In sum, borders are complicated dynamic processes which represent the construction of social practices and symbols.

2.2 Cross-border Mobility

Recently, there are diverse and novel forms of mobility that constitute a multidisciplinary paradigm. Mobility studies mainly emerge from the phenomenon of postmodernism and globalization and their connection to the global movement of people and things in contexts of migration and transnationalism (Sheller & Urry, 2006). Cross-border mobility is one of the main aspects among these recent mobility studies.

2.2.1 Mobility

Mobility, or the freedom of movement, has become significant in modern times. Typically, people have equated increasing mobility with increasing freedom of movement. The basic understanding of mobility is the ability of getting from point A to point B, which is an act of territorial movement and has been predominantly conceptualized as a circular or temporary movement (Cresswell, 2006). As a focus of anthropological research, the notion of mobility emphasizes the circulation of the spatial and temporal flux of the human social world in various states and forms, and, as such, there are various implications in the trajectories of movement between human agents, physical objects, intangible information, ideas, and capital (Norum, 2020). In turn, the slippery and intangible nature of mobility makes it an elusive subject to study.

Generally speaking, mobility refers to the socio-cultural processes surrounding movement. Cresswell's (2006) understands mobility as socially produced motion through three aspects. Firstly, human mobility refers to the most abstract, closest to the empirical reality of pure motion. At the same time, it can also be something that can be observed, measured, and analyzed by modelers, theorists, and planners. Second, mobility is conveyed through the production of meanings, and these meanings are often ideological. In this way, mobility becomes synonymous with freedom, with transgression, with life itself, etc. Third, mobility is practiced, experienced, and embodied. The way we experience mobility and how we move are closely connected to meanings given to mobility through representations. Similarly, representations of mobility are based on the ways in which mobility is experienced and embodied (Cresswell, 2006).

Mobility is a process that clearly affects all people, and much movement is undertaken in groups rather than as individuals. Götz & Ohnmach (2016) propose a different definition of the term mobility. Firstly, they consider mobility from the spatial dimension. Spatial mobility refers to the mobility of individuals and objects in a physical-geographical space containing time and space constraints. Secondly, under the social-spatial aspect, mobility is defined as the availability of opportunities within a social space to meet such needs as eating, sleeping, working, exercising, and enjoying life, etc. Other than these two aspects, from socio-cultural dimension, mobility refers to the individual's quality to find and change socio-cultural position and status to master new cultural patterns in different environments (Shpektorenko & Oleksiivna, 2020). Therefore, mobility is believed to be connected to attitudes, values, and orientations (Götz & Ohnmach, 2016). Likewise, by expressing differing preferences and tastes that influence daily behavior and practices, lifestyles also comprise individuals' attitudes, values, and orientations (Bourdieu, 1984). Furthermore, mobility is primarily important because it alters people, places, and societies (Pooley, 2016). Thus, all of such flows as daily commute or migration have impacts beyond the movement itself.

The concept of accessibility is of importance when it comes to the discussion of mobility. For example, it can be related to Götz & Ohnmach's (2016) spatial dimension of mobility, which has a focus on physical and geographical aspects. Although it may be argued that accessibility is an elusive concept with no consensus about its definition and formulation, almost all definitions of accessibility attempt to be used as a measure instrument (Sherman, 1974). For instance, accessibility may be used to examine the (un)even distribution of economic activities or the balance of performance development in different regions. Good accessibility and connectivity are key prerequisites for fostering regional and European competitiveness. More specially, accessibility can be seen as an exploratory measure in understanding people's needs and behavior (Reggiani et al., 2011). In relation to the border issues, promoting connectivity and accessibility-movement between border areas is one of the most critical factors in the process of territorial integration and cross-border cooperation (Castanho et al., 2017).

2.2.2 Cross-border Commuting: An Inner-European Labour Mobility

European countries are no longer independent entities under the process of European integration but are closely intertwined and connected (Mau & Verwiebe, 2010). State borders used to function as conflict and contact zones that separate territorial units, languages, cultures and regional identities, but the strengthening of cross-border cooperation and partnerships between institutions has led to a re-bordering of European territory (Perkmann, 2003). Simultaneously, the constant flow of goods, people, capital, information, and knowledge has also redefined the meanings and reconfigured the function of borders (O'Dowd, 2002). European Single Market and territorial integration have largely contributed to cross-border mobility in the European Union (Buch et al., 2009), making cross-border commuting an important point under the context of European cross-border cooperation.

Fries-Tersch et al. (2018) regard cross-border mobility as one form of labour mobility. It refers to a citizen who resides in one country but is employed in another and who, for this purpose, moves across the state border on a regular basis. Cross-border commuting is such an institutionalized form of labor mobility (Wiesbock et al., 2016) which has been shaped by ongoing social transformations resulting from the process of European enlargement and major restructuring of the economic, political, and legal systems. Buch et al. (2009) suggest that the remarkable growth in cross-border commuting nowadays is due primarily to the discrepancies and the proceeding integration of labor markets on both sides of the border. Wiesbock et al. (2016) summarize several factors that contribute to cross-border commuting patterns. First, institutional settings and regulatory restrictions have a fatal influence on the patterns of labor mobility. Also, structural differences, such as the labor market disparities, unemployment rates can explain the direction of commuter flows. Other conditions such as housing costs can be regarded as the 'push' factor, while employment opportunity in the labor market and wage differences can be the 'pull' factors in this situation (Pucher et al., 2016). Second, historical and political patterns of cross-border cooperation and mobility play an essential role in fostering labor movements. Furthermore, human, cultural, and social capital and socio-demographic characteristics as relevant explanatory factors can promote or limit processes of mobility as well.

2.2.3 Free Movement: An Intra-European Mobility

Initially, free movement across national borders in Europe was viewed as a utopia in the first half of the 20th century. Then, it became as a long-term goal, a practical and realizable direction in the process of post-war European integration. In the past decades, European institutions have strongly encouraged intra-European mobility through various constitutive, regulative and distributive policies and programmes, such as the cases of EURES, Schengen, and Erasmus. These broad and persistent policy efforts aim to spur the movement of citizens and then to achieve a more integrated and efficient economy by enhancing the cross-border mobility of people. The abolition of restrictions on mobility within national borders, the introduction of European citizenship, and the adoption of the Schengen system that eliminates EU's internal borders have indubitably been the most significant events during this process (Torpey, 2000). In addition, the entry into force of the Maastricht Treaty in November 1993 was an important milestone in the long process of achieving full free cross-border mobility through the official adoption of the status of a European citizen (Ettore, 2015).

One of the cornerstones of the development of the EU is the principle of free movement within the EU (Scholten & Van Ostaijen, 2018). The EU has created an unprecedented borderless area, where not only capital, goods, and services but also people can move around relatively freely. Walzer (1990) points out that freedom of geographical mobility is of paramount importance in substantiating liberalism. In this case, the European citizenship introduced in 1993, is undoubtedly one of the most important constitutive policies affecting transnational geographical mobility within the EU (Ettore, 2015). European citizenship qualified freedom of movement as an individual and a fundamental right, allowing Europeans to immigrate and live in any country in the EU and receive the same treatment as national citizens of that country.

From a theory-based economic viewpoint, intra-European mobility is seen as a necessary complement to monetary union in the labor market. Mundell (1961) put forward an argument that in regions where under the same currency policy, the geographical mobility of labor is regarded as a sort of employment insurance, an economic adjustment mechanism against possible labor-market imbalances that may occur in a supranational economic system. The

argument provides the most solid macro-economic theoretical basis for free movement in the EU (Braunerhjelm et al., 2000; Sapir et al., 2004). Similarly, there are other complementary arguments like intra-European mobility can act as a productivity enhancer (Kostoris, 1999) by providing the match between labor supply and demand (European Commission, 2007), or as a sort of innovation trigger (Florida, 2002) boosting technological progress.

From a political perspective, freedom of movement is regarded as a powerful driver of European integration, capable of settling with nationalism and underlining a supranational collective identity:

“If this freedom of international movement became general, nationalism would cease to be a problem; or at any rate, communication gaps engendered by cultural differences would cease to be significant and would no longer produce nationalist tensions”. (Gellner, 1983, P. 118)

In this way, intra-European mobility is considered a legitimacy tool of the EU (Rother & Nebe, 2009). Mobility within the European Union makes individuals aware of the role of the EU and their own Europeanness (Recchi, 2008). In short, European integration has created a borderless region in which the traditional power of the national state to control citizen's travel and settlement choices has been restricted. In other words, the European free movement regime has been established on a political infrastructure of a unique 'human mobility system.' (Ettore, 2015)

2.3 Cross-border Barriers

2.3.1 Barriers and Barrier Effects

The existence of borders, which mark the limits of a country's jurisdiction, prompts direct and indirect obstacles to citizens' lives, business activity, and several other territorial development domains (Medeiros, 2016). Nijkamp et al. (1990) acknowledge barriers are given by 'nature' (mountains, rivers), created for the purpose of 'congestion' (discrepancy between demand and supply), 'fiscal' (visa costs), 'institutional' (costs involved in crossing a border between different jurisdictions), 'technical' (incompatibility in railway systems of various countries), and barriers

that give rise to the existence of other barriers, such as cultural, language and information barriers. In general, barriers encountered in the process of cross-border cooperation and regional integration can be divided into (i) soft, mental factors (cultural, social, and non-physical), and (ii) hard, technical factors (political, physical, and administrative). Östhol (2011) applies both hard (regulative) and soft (cultural) aspects in the physical and administrative barriers for cross-border cooperation. He argues that problems often arise from implementing unified regulatory rules in which institutions and administrations constitute the principal barriers; identity, knowledge, and cognition, which shape understandings of the neighbors, play a crucial role in cultural differences (Kiprianoff, 2005).

The military, administrative, and socio-economic policies of different countries have strengthened borders and historical developments, thus causing a barrier effect (Kiprianoff, 2005). This barrier effect has had a serious impact on the people in the border regions. Medeiros (2010) distinguishes the barrier effect into the dimensions of accessibilities, cultural-social, environment-heritage, institutional-legal, and economy-technology. Rietveld (2012) argues the main effect of borders is that borders discourage spatial interaction. Hence, through the investigation of the nature of the barriers implied by borders, Rietveld (1993, 2012) suggests that spatial interactions are governed by five main barrier effects of borders: preferences of consumers, public sector policies, institutional differences, lack of information on foreign destinations, and infrastructure-related costs. Almost all border effects focus on the adverse effects of borders on spatial interaction. In some cases, borders may also stimulate spatial interaction. Other scholars indicate that the barrier effect interferes with the process of innovations (Button & Rossera, 1990). In turn, this influences the evolution and the outcomes of the cross-border cooperation process in a given border area.

2.3.2 Three Existing Cross-border Barriers

The European Commission (2016) considers the barriers in the processes of cross-border interactions at an individual level from legal and administrative, cultural (language), and physical perspectives. Such consideration departs from a cross-border commuter's point of view given their crucial status in the development of cross-border cooperation within Europe.

In some capacity, cross-border barriers can be embodied from the previously mentioned notion of mobility in a European context. The existence of transaction costs in the form of those cross-border barriers and mobility costs is mainly to blame for the low cross-border mobility. Gottholmseder & Theurl (2007) argue that border obstacles that hamper bilateral interactions lead to spatial discontinuities in economic structures. In this vein, cross-border barriers tend to increase transaction costs associated with cross-border commuting (Buch et al., 2009). Moreover, differences in legal and administrative systems on both sides of the border and language and culture disparities and physical accessibility might directly or indirectly affect cross-border mobility (Buch et al., 2009; Hansen, 2000). Although legal and physical border barriers have been reduced during the ongoing process of European integration, legal and administrative barriers still exist, particularly with regard to cross-border commuting. Hansen (2000) notes that taxation and social security issues usually rank the most critical impediments for commuters because they have to face two different national systems. However, the differences in taxation or social security systems caused by the two countries might also create incentives for cross-border commuting. The constant process of reducing physical and administrative barriers has opened an avenue for an increasing level of cross-border mobility (Medeiros, 2016). Accordingly, the discussion of barrier issues in border regions should be closely tied to the concept of cross-border mobility.

2.3.2.1 Legal and administrative Barrier

One remarkable restraint in the legal and administrative barriers is on employment because the barriers make it demanding for people to live on one side of the border while working on the other. Such barriers are especially relevant at open borders where cross-border commuting rate is high (Medeiros, 2018). To elaborate, there are several important factors that contribute to this barrier. The most vital of these is the differences in taxation and social security systems (including health care and pension systems) that create difficulties and place a burden on cross-border workers and are also considered as the main obstacles to workers' mobility. At the same time, as a result of different legislation, both countries have seen a situation in which employees are in some ways deprived in both countries of the benefits to which citizens are entitled, leading to a high level of insecurity and instability for the individuals concerned.

The general complexity of administrative procedures is another crucial illustrative aspect. It is often manifested by the lack of knowledge of workers with the rules that apply on the other side of the border and the unfamiliarity of public administrations with the situation involving cross-border workers. Simply put, it can be attributed to the issue of a lack of information. This issue can be seen from both internal and external sides. Internally, within the state, there exist issues of a lack of harmonization between national systems, inadequate coordination between national administrations, including incompatible administrative rules, regulatory arrangements, and problems of inappropriately transferring information between systems. In the meantime, departing from an external point of view between the two countries on the border, the question of administrative competencies is manifested by the asymmetry between administrative structures on different sides of the border and the inconsistency of the law enforcement actions of the same public administrative agencies.

Moreover, the cross-border cooperation framework is not adequate for all types of cooperation across the border. Given the differences in legal and administrative competencies hinder the possibilities of broader and more structured cooperation, solutions to these problems may transcend the competencies of local authorities at a cross-border scale and need to involve regional, even national-level power. Therefore, it leads to the general uncertainty of cross-border solutions.

2.3.2.2 Language Barrier

Another type of barrier is language barrier, which is believed to be highly relevant to the other forms of barriers. The existence of a wide range of different official languages in Europe is still regarded by the European citizens as a key obstacle on several occasions of their lives (Medeiros, 2016). Knowing the language of a neighboring country is of great importance to cooperation between the local authorities of both sides. As a result, language becomes a barrier sometimes mentioned when legal and administrative barriers or the interests of cooperation between public authorities are involved.

Furthermore, the language barrier can lead to socio-cultural differences and a lack of mutual

trust. Because cultural exchanges and language are seen by many to achieve understanding its social and cultural norms, conversely, speaking different languages might contribute to misunderstanding, ambiguity, tensions even mistrust, sometimes undermining the sense of belonging to certain regions. The degree of information acquisition is also obviously related to language barriers. Language barriers, not just for cross-border workers but also for public administrations dealing with them, here are described as an inability to access information, which can be related to the complexity in the aforementioned legal and administrative barriers.

Results from academic literature also point to the role of language barrier resulting in low mobility within Europe. According to the Eurobarometer (2010), the main administrative difficulties faced by workers moving to another member state in the country of destination are the general complexity of administrative procedures, which corresponds to the lack of clarity in administrative requirements, forming the legal and administrative barriers simultaneously. The difficulty in understanding the administrative processes due to language differences is one of the critical reasons. Similarly, Bonin et al. (2008) conclude that language and cultural barriers are an important obstacle to regional mobility in Europe and suggest that promoting language learning can be a means of increasing mobility in the EU.

2.3.2.3 Difficult Physical Access Barrier

The difficult physical access has also been a significant barrier in a European context. Similar to the other kinds of barriers, difficult physical access provokes many concerns including lack of infrastructure, low quality/safety of infrastructure, insufficient upgrading and maintenance, lack of integrated public transport systems at the border, lack and low frequency of connections, different rules and standards about transport, congestion and long commuting time, and the cost of crossing the border (European Commission, 2016).

The very high relevance of the barriers to physical access regarding public transport infrastructure affirms that cross-border mobility is a must in the cooperation between states in the border regions. On the other side, cross-border commuting is also heavily influenced by the availability, capacity and quality of cross-border physical accessibility (Medeiros, 2018).

Therefore, cross-border public transport infrastructure constitutes another critical factor in the European integration process and the improvement of physical cross-border accessibility because it enhances the mobility of cross-border commuters and facilitates cross-border exchange and contacts in trade and social relations.

2.4 Cross-border Governance

Cross-border governance, in some cases, can be understood as cross-border metropolitan governance (Durand & Lamour, 2014). Cross-border metropolitan areas are a function of the growing interdependence between metropolitan catchment areas, people, and markets across national borders (ESPON, 2018) and governed by complex governance relations between diverse actors through multiple and concurrent instruments and different administrative structures (Barres, 2021). It represents a dynamic structure of urban agglomerations that have been keeping evolving and cooperating under the recent changes in the territorial cohesion framework of the EU. Cross-border metropolitan areas are usually embedded in multi-national settings, formed by different domestic institutions, which are often characterized by different bureaucratic hierarchies and cultural background, different languages, and political paradigms. Nonetheless, new governance challenges emerge alongside functional integration across a wide variety of policy areas including infrastructure, labor, education, transport, and social welfare, etc., which requires political coordination by bilateral authorities.

As known, the border is conceptualized as a barrier that must be overcome to build a united Europe (Terlouw, 2012). The constant strengthening of cooperation between local and regional authorities across the border and the establishment of new cross-border regions have led to the diminishing importance of the border as an obstacle to the interaction between the two countries. The rise of cross-border relations is frequently associated with the decentralization of the nation-state and the emergency of a new form of European governance - multi-level governance, which is another crucial stake for understanding the driving forces of territorial integration in today's Europe (Nelles & Durand, 2014).

2.4.1 Multi-Level Governance (MLG)

In the past few decades, different from the conventional and universally known top-down governance characterized by a hierarchical relationship in which the highest level participates in the control of other participating levels, the EU has introduced and widely applied an open and flexible mode of governance, multi-level governance (MLG) (Zelano, 2018). Contrary to the traditional and strictly hierarchical-centralized governance, multi-level governance refers to the more comprehensive process of building a new European polity or a novel form of bourgeois domination across multiple centers of authority (Hooghe & Marks, 2003). In cross-border metropolitan areas, multi-level governance is vital because it strengthens cooperation and the creation of hybrid systems among interdependent partners at different territorial levels, as well as consensus on priorities for the development of the entire cross-border region (Jessop, 1999).

Multi-level governance was first proposed to capture the development in EU cohesion policy (Bache, 2012). In its early manifestation, MLG refers to “continuous negotiation among nested governance at several territorial levels, and in which supranational, national, regional and local governments are integrated into the overall policy network of the region” (Marks, 1993, P. 392). At this stage, multi-level governance focused mainly on intergovernmental relations, emphasizing the increasingly important role of subnational local governments in EU politics. Governance is thus about control and authority (Holman, 2004). In specific, under multi-level governance, power has been slipped from central states both up to the supranational cross-national level and down to the subnational local level (Marks et al., 1996). But MLG scholars still believe that the state remains an essential part of contemporary governance. In this sense, state adaptation and innovation are a characteristic feature of complex multi-level governance (Bache, 2012).

Multi-level governance highly connects to the processes of Europeanization, regionalization, and decentralization in the European context. Europeanization brought about a new mode of inter-organizational connection and saw the dynamics of mutual adjustments (patterns of adaptation) of institutions under multilevel interactions (Jordan, 2001). Similarly, multi-level

governance emphasizes power-sharing and decentralization between levels of government rather than the accumulation of authority. Governments at different layers of authority form cooperative policy networks through variable combinations (Benz & Eberlein, 1999). The Europeanization of policy-making is the new public context that affects state policies (Esmark, 2007), and the multi-level governance system is a process that enables the exercise of state power and implementation of policies at a cross-border scale. Here, multi-level governance implies engagement and influence, which shows a mutual dependency through the intertwining of policy-making activities and each others' resources, with no one activity being superior to the other (Stephenson, 2013). In the context of the increased importance of regional integration, the concept of new regionalism brings the idea of multilevel governance with increased relevance (Hooghe & Marks, 1996). New regionalism recognizes that flexible and cooperative governance instruments of multi-level governance is the most effective way to deal with cross-border related problems (Barres, 2021). The concept also recognizes the autonomy of local authorities and political actors and examines cross-border cooperation from a bottom-up perspective, underlining local authorities' use of cross-border cooperation as a tool to achieve their goals in cross-border regions (Böhm, 2014).

Here, cross-border cooperation can be considered as a particular form of collaboration between contiguous regional authorities (instead of the national ones) across the national borders" (Oliveras et al., 2010). In essence, the multilevel view of governance applicable to cross-border cooperation focuses on governance structures at the cross-border level, without direct EU or national involvement and intervention. From this point of view, cross-border cooperation is understood as a networked governance structure that transcends national jurisdictions with the aim of developing cross-border joint initiatives (Noferini et al., 2020). Cross-border cooperation therefore serves as a form of convergence between the vertical and horizontal coordination involved in territorial governance. Simultaneously, it plays a vital role in eliminating barriers caused by the existence of different administrative systems in the EU.

As stated at the beginning of this section, European borders as barriers become more psychological than physical ones since this psychological barrier is the product of the

combinations between various administrative, legal, and cultural systems (Van Houtum & Van der Velde, 2004). However, Metroborder (2010) research notes that the asymmetries between different national administrative and legal structures represent the most frequent and significant obstacle to implementing effective common cross-border strategies. Moreover, contrary to the perception that borders are more permeable today, some countries still dominate and exercise their influence as gatekeepers to the external actions by local authorities. Therefore, some attitudes of central government and state-specific regulatory contexts remain obstacles to the implementation of cross-border joint initiatives (MOT, 2017). Although cross-border cooperation involves numerous actors, each of which function in its own system of local governance and has a different distribution of power on either side of the border, it has always depended on the state and its restructuring in its own territory. Here we should recognize the crucial role of the state centrality, which collaborates with the regional local authorities and creates a system of multi-level governance best adapted to managing cross-border cooperation (Danielewicz, 2020). In Barres's (2021) latest study on metropolitan governance in the Öresund Region, he summarizes the following three results: (i) Metropolitan governance in the Öresund Region is very ambiguous. There are several agents (i.e., metropolitan governments, metropolitan agencies, vertical coordination, voluntary cooperation) that act on different and inconsistent scales. Compared with soft policies in the social and environmental areas, they mainly focus on hard policies and development policies; (ii) Despite the favorable context, there are persistent barriers to cross-border governance; (iii) There is related democratic governance deficiencies in the participation and involvement of social actors (such as institutions, voluntary citizens) in the regional decision-making process.

3. METHODOLOGY

3.1 Research Philosophy

This study held an ontological position of social constructionism. From a constructionism's point of view, it is the social actor that accomplishes the social phenomena and their meanings (Bryman, 2012). In this situation, social phenomena not only come from social interactions but also are frequently changing. Social constructionism also necessitates the researcher to study a situation in detail in order to figure out how the reality is experienced (Saunders et al., 2009). Therefore, based on the ontological position of social constructionism, this research aims at increasing the understanding of the state of cross-border barriers and cooperation at the time of the COVID-19 pandemic and requires an investigation of cross-border travelers' experience and attitudes.

On the other hand, interpretivism, which contrasts with positivism, has been the epistemological orientation of the study. Interpretivism highlights the meaning created by humans, which makes humans different from natural reality and physical phenomena (Bryman, 2012). It thus requires researchers to gather the subjective meaning of social action in order to create new, richer understandings and interpretations of social worlds and contexts in many ways (Saunders et al., 2009) because only through the subjective interpretation can the reality be understood.

3.2 Research Approach and Research Strategy

Following an ontological orientation of social constructionism and an epistemological position of interpretivism, this study uses an overall inductive approach as it did not involve testing the existing theory and instead, it includes a generation of theory based on the observations and findings, which means the conclusions of the study are being supported by the observations (Ketokivi & Mantere, 2010). Refers to the inductive approach, this study particularly focuses on the context of the COVID-19 pandemic. Because of the specific context, this research is less relevant to the generalization of the results.

It is useful to distinguish the research strategy because it helps classify different social research methods, and plenty of issues related to social research can be covered (Bryman, 2012). Based

on the research philosophy and approach, this research adopts a qualitative strategy that emphasizes the interpretation of words instead of quantification in data collection and analysis processes. Specifically, both netnography and semi-structured interviews were used for answering the research question. Netnography refers to the ethnographic study of online communities, an interpretive research method that adapts the traditional, in-person participant observation techniques to the study of interactions and experiences displaying through digital communications and relies considerably on observation (Kozinets, 2002, 2010). It usually tends to concentrate on marketing and branding research, but it can also be associated with the social science discipline. In this study, netnography was used to investigate the experience and attitudes of cross-border travelers during the COVID-19 pandemic. Simultaneously, as a complement to netnography, semi-structured interviews, which allow the interviewer to seek both elaboration and clarification on the answers given (May, 2011), were conducted in order to gain more insights into travelers' cross-border experience and their attitudes at the time of this unprecedented pandemic. These two methods were combined together to answer the formulated research question --- How have corona-related regulations affected the cross-border mobility in the Öresund Region?

Certain quality criteria have been applied in evaluating qualitative research. Trustworthiness and authenticity are the major ones to assess the quality of qualitative research (Lincoln & Guba, 1985; Guba & Lincoln, 1994) in relation to validity, replication, and reliability for evaluating social research. Researchers should attempt to achieve credibility, transferability, dependability, and confirmability in qualitative research. Following these criteria, we adopted different methods to enact triangulation and ensure that data comes from multiple sources. Netnography and semi-structured interviews act as a supplement to each other, aiming to make the findings more believable. The two methods combined together emphasize participants' points of view, which helps establish the credibility of the research.

3.3 Research Design

Case study, which necessitates the elaborate and intensive analysis of a single case and is concerned with the complexity and specific essence of the case (Stake, 1995; Bryman, 2012),

is regarded as the appropriate research design for this study because it highlights the real-world context in which the case takes place. This is considered highly relevant as the thesis has a specific focus on the Öresund Region at the moment when the world has been severely hit by the highly contagious coronavirus. Nowadays, the case study design has been increasingly popular among researchers regardless of its limitations (Hyett et al., 2014; Thomas, 2011). The case study design offers flexibility in the research process (May, 2011) and is advantageous when needing to focus on a contemporary event or a phenomenon in a natural setting. Within the specific case study, the research tends to provide an in-depth examination of the case since the case itself is the object of particular interest in this situation (Bryman, 2012). The research design closely follows the research strategy. As a result, since a qualitative strategy has been employed, the case study design takes the inductive approach in this study.

This thesis concentrates on a single case of the Öresund Region because it assists in better understanding the phenomenon. One important thing to be taken into consideration is the context (Yin, 2003). Plus, single case studies are believed to be able to produce high-quality theory because single case studies are more likely to generate more ideas (Dyer & Wilkins, 1991). In this study, the Öresund Region has been chosen as the specific case of cross-border barriers and cooperation because this region has been a distinct example of cross-border regionalization. The case study ultimately helped to increase the understanding of how the barriers and cooperation in the cross-border region have been influenced by the COVID-19 pandemic, which would provide useful implications with real-world significance.

3.4 Data Collection

The data were collected by means of both netnography and semi-structured interviews in order to answer the research question. Both primary and secondary data were collected in this study depending on the exact method used. The two types of methods used in this research were introduced in the following contents. In this study, the research participants would be those who remained allowed to travel across the border (i.e. commuters, extended family ties) in the Öresund Region from December 2020 to February 2021. Specifically, netnography would be the main source of data for those who travel across the border by private cars. At the same time,

semi-structured interviews were conducted to collect data from those who travel by public transports as a supplement to netnography.

3.4.1. Netnography

Netnography is often considered a form of ethnography that is conducted primarily on the internet (Kozinets, 2002). It tends to focus on the examination of the communities which can mainly be seen online. In this sense, netnography can be done in online forums and social media platforms in which a great deal of communications and discussions occurred between users. Netnography is conducted in a context that is not essentially manipulated by the researcher (Kozinets, 2010). It also offers flexibility to a certain extent with less cost compared to other forms of qualitative research methods, which can be a major advantage due to the current pandemic crisis. Therefore, we believe the data collected by netnography can help answer the research question and further fulfil the research objective. In this study, we concentrated on the social media platform of Facebook. Two user's groups called "Broenlive" and "Øresundspendler i bil" featuring the commuters in the Öresund Region were chosen to analyze the commuters' experience and attitudes based on their cross-border travel. The online discussions including posts and comments from December 2020 to February 2021 in these groups were analyzed. Nonetheless, some of the discussions in these Facebook groups were originally written in local languages other than English. Hence, further translation into English language was needed.

We chose to analyze the commuter groups because commuters who cross the border on a regular basis are considered an important element in achieving the goal of cross-border cooperation (AEBR, 2008). Other than that, the timeline set here was correlated with the so-called "second wave" or "winter surge" of the outbreak of the coronavirus in both Denmark and Sweden when the infected case numbers increased dramatically compared to the other periods of time, forcing both Danish and Swedish authorities to introduce stricter rules impacting cross-border travelers. In this period of time, Sweden started to "close the border" to Denmark for the very first time because the UK coronavirus strain was found in Denmark, which is considered an important point.

3.4.2 Semi-structured Interviews

Interviews have been a frequently used method in qualitative research for they produce rich insights into people's opinions, experiences, values, aspirations, attitudes, and feelings (May, 2011). Out of the various types of interview, semi-structured interview was selected in this study because it allows the interviewer to explore with a higher degree of freedom based on the answers given. In this sense, it would be easier for the interviewer to obtain elaboration and clarification by means of semi-structured interview (May, 2011). Furthermore, semi-structured interview enables the participants to answer more on their own terms than the standardized process while maintaining a certain level of comparability, which is another reason why semi-structured was chosen in this study other than focused or unstructured interview to fulfil the research aim.

In order to better understand the impacts on cross-border travelers' mobility during the COVID-19 pandemic, a few semi-structured interviews were conducted as a supplement to the data obtained from netnography. From 25th March, 2021 to 25th April, 2021, a total number of 5 interviews were conducted. The interviewees were selected based on purposive sampling. They all have the eligibility to travel across the border in the Öresund region in spite of the strict entry policies of both Denmark and Sweden. In particular, the interviewees travel either to commute in the other side of the strait or for immediate family purpose. However, three of the interviewees were also selected based on convenience sampling, as they were approached from our network in Lund University. In the meantime, the other interviewees were approached from the Facebook groups featuring the Öresund commuters, in which the netnographic study was conducted.

Before the interviews started, all the interviewees were informed about the research objective. All of the 5 interviews lasted 30-45 minutes, and they were conducted in English. Each of the interviews were conducted digitally via either Zoom or audio phone call. The interviews were recorded for transcription, which was agreed by all the interviewees. An interview guide was used in this study. However, the interview guide only represented the main themes to be discussed with the interviewees, so the proposed questions in the guide were not strictly

followed and additional questions were asked as the contents were spontaneously adapted during each interview. Overall, the interviews were conducted on a very flexible basis. According to the theoretical framework, to investigate the impact of policies on cross-border mobility, the interview questions mainly involve interviewee's actual experience of traveling across the border in the Öresund Region before and during the COVID-19 pandemic. Moreover, interviewee's attitudes towards the changes in entry policies during the pandemic were also discussed. Each interview was transcribed right after it was conducted, as the transcription is "a relatively unproblematic translation of the spoken into the written word" (Bryman, 2012, P. 481). The transcriptions include as many details of the interviews as possible, and other sounds such as silence and pauses were also recorded. Though it was time-consuming to transcribe all the interviews, the transcriptions allow us as a researcher to get closer to the data and make it easier to identify the different themes mentioned by the interviewees.

3.5 Data Analysis

Qualitative data are not usually easy to analyze because they are often formed by a large corpus of unstructured textual material collected by such methods as interviews (Bryman, 2012). In this situation, various approaches for data analysis shall be used. For this thesis, coding had been done as a starting point (Bryman, 2012) for analyzing the data collected from both netnography and semi-structured interviews. The field notes from netnography and the transcripts of semi-structured interviews were decomposed and refined into data files which were then labeled and reorganized to identify the common themes based on the phenomena reflected by the participants. Furthermore, we also conducted thematic analysis in relation to coding. Central themes and subthemes deriving from were identified and categorized in this process. In particular when searching for themes, we paid attention to aspects including repetition, metaphors, similarities and differences, etc., in the texts of interview transcripts and the field notes of netnography, according to Ryan & Bernard's (2003) recommendations of the techniques in identifying themes. Thereafter, we connected the themes identified in the data with the research objectives and research question to verify their relevance to this study. We then made comparisons among the themes and sought interrelationships, which helped gain implications as the foundation of developing new concepts in this study.

3.6 Research Ethics

Ethics are fundamental in maintaining the integrity and legitimacy of social research, which also assists in protecting the participants and researchers (May, 2011). This study followed the general ethical principles in social research which entail that the researchers ought to guarantee the informed contents, the privacy of the participants, the genuineness of the research, and that no harm was done to the participants (Diener & Crandall, 1978). Moreover, we assured the anonymity as well as the confidentiality of the participants in the research. Specifically, for electronic communication, the information published online can be used for research when certain requirements were fulfilled (Pace & Livingston, 2005). In this study, for the data collected by means of netnography, we made sure that all the information was freely available, and that no password was required for access. Plus, the information was by no means sensitive, and there was no prohibition from the site for using the information posted as material.

As for the semi-structured interviews, all the interviewees were informed about the research aim prior to the interviews being conducted, so that they could have a general understanding of what the interviews were going to be in advance. All the interviewees were voluntarily participating in this study, as we ensured that there was no lack of informed consent. This was done since we always started conducting and recording the interviews after telling the interviewees about such terms. We totally respected the interviewees' privacy, thus all the information was kept confidential. All the interviews were conducted in an anonymous way to ensure that no harm would be made to the participants. No leading question was asked, so there was no deception involved in the interview processes. All of these can have implications for the research process, which, as a result, has an impact on the quality of the research (Bryman, 2012).

3.7 Methodological Limitations

Every study has its own limitations which often derive from how the researchers initially choose to design the study or the methods used to collect data (Price & Murnan, 2004). For this study, because of the nature of qualitative research, the generalizability may be a problem. This can be especially obvious considering the context and background of the study. On the other hand, in the data collection process, we had encountered signal issues occasionally in the semi-

structured interviews. Because all the interviews were conducted digitally due to the difficulties in reaching the interview participant in real life during the COVID-19 pandemic, the technical issue sometimes seemed to be inevitable. In the 4th interview, the conversation was interrupted several times as different issues occurred. By the time the interview had been conducted, the interviewee was sitting inside the train traveling from Copenhagen to Malmö. Thus, the signal lost when the train crossed the border because the telecom operator had been changed. Also, the interviewee encountered the border police twice and had to go through the border control, so the conversation in the interview was interfered. Even so, we still regard the interview as useful and supportive to the research because the reasons for the interruption were highly relevant. The interviewee's recent cross-border trip would make it more accessible to investigate their experience as well as attitudes, which, in turn, helps us to study their mobility in the COVID-19 pandemic.

4. ANALYSIS

This chapter of the thesis analyzes the data collected by means of netnography and semi-structured interviews. The findings show that the mobility has been reduced as the various entry rules extend the time spent in the journey and require extra preparation and cost for the travelers. The research participants experienced a certain degree of dissatisfaction and confusion towards the inconsistent entry policies released by the two countries because some of the policies deliver unclear and ambiguous information and fail to take many possible situations into considerations. Problems were also found in how such entry policies in both countries were implemented. In particular, the criteria and intensities that the authorities of the two countries applied in border checks appeared to be different. Furthermore, concerns were found in research participants' attitudes towards border closure. In other words, a few of them tended to be suspicious about governments' decisions of closing the border.

4.1 Unclear and Ambiguous Information

Results show that the participants found certain deficiencies in the release of both countries' entry requirements. Some of the entry policies deliver unclear and ambiguous messages to the cross-border travelers, which, in turn, causes confusion among them. In this sense, the cross-border travelers would have to encounter certain difficulties in obtaining the correct information. Such ambiguities that result in confusion can be seen from the vague definitions provided by the authorities, the contradictory messages from different authorities, and the inconsistent information given by the same authority (Magnusson, 2021).

4.1.1 Vague Definitions Provided by the Authorities

One significant example of the vague definition provided by the authorities is the wording used in the signages in the Swedish border at Lernacken for differentiating 'SWE Citizens' and the others in order to cope with congestion. The travelers have great difficulties in precisely understanding the road sign of 'SWE Citizens'. Many of the participants indicate that they cannot be sure whether they are eligible to use the lane because it is never certain about what exactly the "SWE Citizens" includes. There are quite a lot of debates encompassing this issue

in the Facebook group “Øresundspendler i bil”. Some believe that foreign citizens residing in Sweden may use the ‘SWE Citizens’ lane, while there are also different views:

“medborgare = statsborger. Du är inte medborgare för att du bor oSV, då är du resident. Har du medborgarskap är du citizen. Jo, så är det. Så är det. O där sätter vi punkt för den teoretiska diskussionen kring att citizen skulle kunna omfatta danska medborgare boende i Sve.” ---- (medborgare in Swedish= statsborger in Danish. You are not a citizen because you live in Sweden, you are a resident. If you have citizenship, you are a citizen. That's it. And there we put an end to the theoretical discussion that whether citizens could include Danish citizens living in Sweden.)

“statsborger på dansk betyder medborger på svensk. Citizen er altså statsborger... men jeg har dog haft held med at benytte mig af citizen banen som dansk statsborger...” ---- (statsborger in Danish means medborger in Swedish. Citizen is thus statsborger in Danish ... but I have been successful in using the citizen lane as a Danish citizen ...)

On the other hand, some users in such debate are quite sure about the distinction between the English terms of “citizen” and “citizenship”.

“borgare = invånare av en stad = inget att göra med medborgarskap att göra. Det är danskarna som tolkar detta fel då de tror att borgare är någon form av förkortning på medborgare. Det är två helt olika saker.” ---- (citizens = residents of a city = nothing to do with citizenship. It is the Danes who interpret this wrong as they believe that citizens are some kind of abbreviations on ‘medborgare’ [with citizenship]. They are two completely different things.)

“Citizen översätts till medborgare på svensk. Medborgare som i “svensk medborgare” syftar också på nationalitet, dvs. statsborgarskap.” ---- (Citizen is translated to ‘medborgare’ in Swedish. The word “Citizen” appears in the term “Swedish citizens” is therefore referring to nationality, i.e. citizenship.)

In addition, there are also other comments related to “citizens”. Some try to connect the term “citizens” with other concepts, yet it still remains vague and ambiguous in who can be eligible to use the “SWE Citizens” traffic lane:

“The definition of what they mean by ‘citizen’, and whether in this case it is equated with ‘resident’ is just another thing that makes it all more confusing.”

“The ‘citizen’ means the inhabitant (inhabitants of Sweden) - not with nationality. The police are interested in getting those who have Swedish social security numbers in that queue because they are quick to check.”



Figure. 4 The SWE Citizens Lane at Lernacken. Source: Johan Nilsson

To sum up, the absence of the detailed explanation regarding such English term “citizen” results in quite a few debates among the travelers since this word can be understood in different ways in other languages. To be exact, this term has different meanings in Danish and Swedish languages, causing extensive confusions among cross-border travelers in the Öresund Region.

4.1.2 Contradictory Messages from Different Authorities

Normally, given the entry requirements have been in place for quite a while, there should be a

clear guideline that explains such requirements in detail, so that it would be less possible to cause ambiguity. However, based on the information posted on the Facebook Groups in February 2021, the requirements for valid documents are still ambiguous and vague in general. According to the comments in the Facebook Groups, the documents inspected by the border police vary from ID documents, brobizz, ferry tickets, the COVID-19 test result, housing certificates, and employer certificates, etc. But when it comes to the questions like “Is this particular kind of document valid for entry?”, various answers can be found. For instance, in a post asking “Which one is the best to be accepted for entering Sweden? Swedish ID, Swedish passport, or anything else?”, the following comment indicates that Swedish driver’s license might not be accepted by the border police when driving a private car to cross the Öresund Bridge:

“Swedish passports are always the best. Swedish driver's license is not valid as it does not show your nationality.” [Post from Facebook Group Øresundspendler i bil]

Yet, such comment appears to be contradictory to one of our interviewee’s answer, as the interviewee indicates that the Swedish driver’s license is “always ok” to be a valid proof of identity when the interviewee took the Öresundståg to enter Sweden from Denmark without even showing the passport or causing any other problem:

“... [I]n Sweden, they will see my driver’s license which is in Swedish, so that they will understand I’m living in Sweden.” [Interview 4]

4.1.3 Ambivalent Information Given by the Same Authority

On top of those, the information and instruction in the entry requirements seem to be so unclear and ambiguous that they not only made the travelers feel confused, but also caused the border police to have different interpretations. That is to say, it is possible to see the border police that perform border control in the same entry point, which should be regarded as a unified authority, giving different information to the travelers. In this sense, it is getting more difficult for travelers to follow the entry rules. For instance, in the discussions about Swedish authority’s arrangement of splitting the traffic lanes into ‘SWE citizens’ and ‘Svensk pendlare’ in the Swedish border

on the Öresund Bridge since December, 2020, one shared the previous experience trying to use the lane of “SWE citizens”. This traveler had successfully used the “SWE citizens” lane a few times before, but then was suddenly told by the police to use another lane because of the lack of eligibility:

“I have also used the Swedish lane, with a Swedish driver's license and a Swedish car without problems even though I am a Danish citizen, but today we were shown to the side and got rejected by a police that we were never allowed to use the Swedish lane! Apparently, it's very individually depending on who stands there and how they handle it, unfortunately”. [Post from Facebook Group Øresundspendler i bil]

Another user in the same Facebook group also indicates that different border police give different explanations about who can use the lane of "SWE citizens", which makes him more confused and frustrated. This further shows that different information can be given by the same authority at different times:

“Have been in both lanes and been directed to the other on different days - that's what's the whole problem, maybe the police should work a little with internal communication. If the police don't even know which lane we can take, who does?”
[Post from Facebook Group Øresundspendler i bil]

There are also similar comments on other topics relating to the entry rules. The common theme is that the travelers are criticizing the entry rules of being unclear and indicating the interpretation and explanation from the border police varies individually, implying the same issue:

“...The question is only how the officers at the border interpret it, because it is, as I said, very unclearly written.” [Post from Facebook Group Broenlive]

“It depends a bit on the officer, I have seen a couple of Swedish officers who would not acknowledge the national ID as valid entry documentation...” [Post from

Facebook Group BroenLive]

“No, the problem is not the travelers, the problem is that Swedish authorities have unclearly formulated rules and that they hand over decision making to individual police officer s' arbitration. It goes against the principles of the rule of law and is purely unprofessional. Danish authorities manage this a little better anyway, there you can call the police and get clear answers. I just know that when I called the Danish police to ask about entry rules, I got a clear answer immediately. In Sweden you are not even allowed to call and ask.” [Post from Facebook Group Øresundspendler i bil]

4.2 Inconsistent Entry Requirements and Different Criteria in Enforcement

As have been stated in the previous contents, Denmark and Sweden have adopted very different strategies for containing the spread of Coronavirus. For example, nationwide lockdown has been put in place in Denmark and has lasted for quite a long time. In comparison, the Swedish government has never taken any forms of lockdown and many public spaces like shops, primary schools, and gyms remain open. Likewise, the entry requirements of the two countries have been dissimilar in many ways. As a result, some of the cross-border travelers in the Öresund Region find that such differences have caused certain difficulties in following the entry requirements.

4.2.1 Unreasonable Policy Formulations

It is understandable that the stricter entry restrictions are a measure to curb the spread of new and more contagious viruses from abroad. However, research participants criticize the asymmetric entry policies formulated by the two governments are unreasonable and do not actually take many possible situations into consideration, which causes considerable inconvenience. For example, Denmark and Sweden have different definitions of the term “recognizable purposes” for entry. There would not be a problem for a divorced parent with a foreign nationality to enter Denmark for visiting his or her children. However, this cannot be regarded as a recognizable purpose of entry from a Swedish perspective because there is no

exception for those who have family ties to a Swedish citizen regardless of age. In this sense, it is more difficult to achieve this type of family reunion which has never been a problem before. The asymmetric and illogical restrictions imposed by two different authorities became a major challenge for mixed Nordic families with different citizenship. In the Facebook group of “Øresundspendler i bil”, there are discussions towards this issue. Here comes a case of a divorced mother living in Malmö, whose son is a Danish citizen with no registered address in Sweden and currently living in Denmark with the father. The entry restrictions of Sweden do not allow the son to enter Sweden to spend time with this mother. The situation makes her feel unbearable:

“There are many Öresund families like us. We've never had a problem before. The Sound has been a region. That is no longer the case... A mother gives something else to her son than what the father gives. It is not the same for us to meet in a video call. It is not possible to give a hug. The uncertainty about how long it will last is unbearable.”

Another user in the same Facebook group, who is also a divorced mother living in Sweden, shares the experience of her son being rejected to enter Sweden just because he holds a Danish passport and has no registered address in Sweden, despite the family tie. The situation makes the mother feel extremely frustrated:

“Finally reached the checkpoint where we then waited another 45 min while the police tried to find out if my son could get over. Unfortunately, my son was not allowed to come with me. Had to then drive my son home to his father in DK. It was horrible!!”

On the other hand, referring to the participants’ experiences shown in the data, another point worthy of attention is that different sets of policies have led to a very different degree of convenience for people to take the COVID-19 test in the two countries. In specific, it is relatively easier to do the COVID-19 test on the Danish side with significantly lower cost than to do it on the Swedish side. Therefore, complaints about the accessibility in doing the COVID-

19 test on the Swedish side can be seen:

“Problem is that there are a lot of hassles if you want to do the test in Sweden. And usually only from Monday to Friday from 8 to 16. In Denmark it is open 24 hours in Kastrup.” [Post from Facebook Group BroenLive]

Moreover, both Denmark and Sweden have different entry requirements for individual cross-border travelers depending on their nationality or residency. In other word, non-Danish citizens (residents) need to present different documents from Danish citizens (residents) to be able to enter Denmark. Same thing happens in Sweden as well. Many participants have questioned this, as they believe that nationality does not necessarily matter in this regard:

“It's a shame that the rules are not the same for everyone. My husband and I work together at our own small company in Kastrup. He is Swedish and I am Danish. We're almost always together, driving in the same car, and just seeing the same few people, but he needs to be tested every 3 days. I don't have to. It's strange.” [Post from Facebook Group Øresundspendler i bil]

“Hmmm... it's a little difficult, right? They have introduced some crazy rules for the commuters in Denmark. Is it Sweden's fault? But some forms of coordination across the Sound is desirable. Furthermore, I cannot understand that Danish nationals, like myself, are exempted for a test when a Swede has to do it to enter. Where is the logic of that? Virus does not know nationality.” [Post from Facebook Group Øresundspendler i bil]

“Umm, but, like the exemptions make no sense. (...) I mean if you are a Swedish resident, you're exempted from that test result. (...) If someone has Corona and he has Swedish residence, he can enter. That makes no sense.” [Interview 2]

4.2.2 Different Intensities of Policy Enforcement

Furthermore, there have been problems in the actual implementation of the entry requirements in both Denmark and Sweden. Different kinds of issues were experienced by cross-border

travelers in their interactions with border police. The different entry requirements of the two countries force the cross-border travelers to do specific preparation separately before entering each side, but what is even more bothering for them is the different criteria applied in the actual enforcement of the pandemic-related entry policies. That is, the two countries have exhibited significant differences in the intensity of border controls. For instance, according to the research participants, the Swedish police is always strict in terms of the border control, whereas the Danish police has shown a relatively looser control in the border check. The comparison has been obvious between the border police from the Danish side and from the Swedish side, which can be seen from, for example, the difference in the frequency of cross-border travelers being checked in both sides of the Öresund Strait. In a way, such differences constitute the uncertainty that the cross-border travelers have to solve in the trips:

“I was very surprised because when I entered Sweden, the police were very, very serious. They checked, everybody on the train, you know, (.....). But then on the way back home, the Danish police, not so serious about this. They just, like, (.....), but then they didn't check me in the end.” [Interview 1]

“For Sweden, they check you all the time, and they look at, hmm, if you are Swedish citizen, (.....). I can say, 100 trains, in every train, you get the control. (.....). But you don't see the control every time. Like what I'm doing, I go to Denmark everyday for a month, but they only control me for two times, in 30 days, only two times. (.....).” [Interview 4]

In some capacity, the conspicuous differences in the intensity have also made people suspect the rationality of the entry policies themselves as well as police's implementation. In particular, the Danish police's loose control was criticized as “too relaxed”, so that people might have the chance to “escape” from the miscellaneous regulations:

“Yeah, and then when I arrived Denmark, they claim that I need to go have a test within 24 hours after, after arriving in Denmark. And then after that I need to self-quarantine for 10 days. (.....), but then they didn't check me in the end. So, and I

was like, huh, then how would you guys know that I would go to do a 24 hour, you know, like go do a test within 24 hour; and how do you know that I'm going to self-quarantine for 10 days, so I was like, pretty confused. And then in the end when I got home, I didn't want to admit this but then I skipped both, you know, I skipped the test and I skipped the 10-day quarantine because I was just very confused.”

[Interview 1]

“I think, the rules maybe the same in Denmark, but they are not strict. So, somebody can risk it, maybe, like, how to explain, it's like, hmm, lucky? If they are not lucky, the police will put them back on the train.” [Interview 4]

On the other hand, the control on the Swedish side was regarded as “too strict”. Except for the border check, cross-border travelers often need to experience other forms of control regarding various issues such as drug and gun crime. As a matter of fact, the numerous controls potentially performed by the Swedish police for different purposes have increased the uncertainty and obstacles the travelers might have to experience in their journeys as well. Some travelers believe that such processes are redundant, so that they might sometimes feel reluctant and annoyed. In some extreme cases, the rigid control performed by Swedish police was even considered “a display of power”:

*“They stressed me about where I am going to live. I was like, what the F**k? You know? (Laugh...) She asked me where do you live. I just... She asked me the same thing again, so what did she expect me to answer? You know. (...). When somebody gives power, people use it. You feel little, like, you're like stronger you know, you're not like killing me but you use it, you know.”* [Interview 4]

The intensity and criteria of the entry policies enforcement in both countries appear to be awfully odd when relating to the respective measures adopted by the two countries for containing the spread of the Coronavirus. As has been indicated, Denmark has been rigorous towards curbing the virus inside the country, while Sweden has applied measures in an almost opposite direction. Nevertheless, according to the data collected, the Swedish authority has been

strict in controlling the incoming travelers, whereas its Danish counterpart appears to be comparatively relaxed in terms of this, which, again, on the basis of an increase in the uncertainty and obstacles to be experienced in the trips, causes the cross-border travelers to question the rationality of governments' strategies during the COVID-19 pandemic.

“Like, umm, I believe that Sweden doesn't have any lockdown, ok? Everybody was like, you don't have to wear a mask. Everything is open. You can go and meet everybody. (...). Like, they are not trying to regulate the inside, but they are trying to regulate the outside. They are making it hard for people to come and go for certain personal reasons, but it's so dangerous to stay, you know what I mean?”

[Interview 2]

Overall, according to the data collected, in terms of the actual implementation of the entry policies, the criteria applied by the two countries appear to be totally different compared to their general strategies in coping with the COVID-19 pandemic. To be precise, the actual enforcements of the entry requirements of the two countries function in a completely opposite direction to the respective ways Denmark and Sweden try to curb the spread of the coronavirus inside the country.

4.3 Suspicious Attitudes about Border Closure

With the inconvenience caused by the various and inconsistent entry policies as well as the different intensities in the enforcement, the suspicion in the Danish and Swedish authorities' decisions of closing the border to each other has arisen. The informants show an overall negative attitude towards the situation, and they do believe that this cannot be the solution in the long run. Even if the cross-border travelers remain allowed to travel in the COVID-19 pandemic, closing the border has sacrificed their benefits to a certain extent. Therefore, some indicate that cooperation between the two countries in formulating more reasonable entry policies in the pandemic crisis is needed in this regard. One interviewee suggests that the right of freely move in the region should be retained:

“The region has been unified as one community connecting the two countries. I

think both sides have spent a long-time to cooperate with each other. But, when we are not allowed to freely move in this region, various complex challenges will follow". [Interview 3]

Another interviewee appears to be impatient towards border closure and indicates that continuously keeping the border closed for longer time can be mentally unacceptable. This is unrealistic in the future. As the research participant indicates:

"I think, again, I don't know the reason, but I don't agree with, hmm, closing the border. But I have to follow the rules. (.....). We cannot do these the third year, you know, (.....). People follow the rules, and the governments need to understand the people." [Interview 4]

Regarding the difficult situation during the pandemic and being convinced that some of the different and inconsistent entry requirements of Denmark and Sweden have been unreasonable, further coordination is expected:

"Maybe, Denmark and Sweden, they could coordinate their efforts, a bit better so that it's more consistent on both sides, so maybe they could even, I don't know, like, make the regulations, the same, two ways. So right now my problem is, when I go to Sweden, I need to remember a set of rules. And then when I come back to Denmark I need to do another set of rules, right. So it's very, like, it's just not easy for people to do that." [Interview 1]

5. DISCUSSION

5.1 Reinforced Cross-border Barriers in the Öresund Region amid COVID-19

Cross-border barriers, which are mainly attributed to the differences in legal and administrative systems on both sides of the border (i.e., national regulations, taxation, and social security inconsistency), language and culture disparities (i.e., non-alignment, language differences), and challenging physical accessibility, have long been a problematic issue that border regions strived to overcome and optimize because the barriers might directly and indirectly affect cross-border mobility and hinder the processes of mutual interactions and integrations between the different sides of the regions. (Buch et al., 2009; Hansen, 2000). Through the analysis in the previous chapter, in relation to the two countries' overall attitudes towards the pandemic, the barriers between the two sides in the Öresund Region have been intensified during the pandemic.

The legal and administrative barriers in the Öresund Region are mainly influenced by the unclear information delivered from the two countries' entry rules, and the inconsistencies in entry rules and enforcements between Denmark and Sweden during the COVID-19 pandemic. The major issue bringing about this circumstance is the Danish and Swedish governments' different overall attitudes and their corresponding strategies thereby in response to the corona crisis. Denmark first imposed a "suppression strategy" in the spring of 2020, including strict lockdown and restrictive measures on the entire population, and temporary closure of borders to curb the spread of the virus. Later, as the infection rate stabilized, the major aim of such strategy was transformed into a "mitigation" for alleviating the adverse effects of the COVID-19 by gradually easing restrictions on society. As coronavirus cases continued to spiral at the beginning of the second wave during the winter of 2020, the Danish government had to re-implement its "suppression strategy", and the measures adopted were stricter than those in the first wave.

In contrast, Sweden has adopted a more controversial strategy from a mild approach at first to a tougher one later. The significant contrast derives from the difference in the two countries' constitution laws. The most vital reason why the Swedish government did not impose any tough measures in the country is that people's private life is protected by the constitution. In this sense,

any forms of lockdown will be regarded as a breach of the country's constitutional law (Jonung, 2020). Thus, the original strategy of the Swedish government was utterly opposed to that of neighboring Nordic countries, which featured a laissez-faire and lenient approach aiming to continue as usual as possible to keep the economy afloat and achieve herd immunity (Marin, 2020). Simultaneously, the country has tried to keep regional borders open. However, faced with a more substantial second wave as cases multiplied in line with other European countries during the winter of 2020, the Swedish government has finally had to tighten its national pandemic measures after months of being one of few countries with no lockdown. Nevertheless, the measures imposed were still comparatively more relaxed than its neighboring countries.

The significant difference in the overall strategies the two countries adopted in countering the COVID-19 pandemic gives rise to the inconsistency in the respective policies. This, coupling with the lack of clear definition in specific terms in the strict entry rules introduced by both Denmark and Sweden, making it confusing and difficult for people to follow. On the other side, as the official explanations of such policies fail to take many possible scenarios into account, increasing difficulties have been caused from a legal system's point of view.

Drawing on the research results from the previous chapter, the criteria that Swedish border police adopted in the border control at the Öresund Bridge has been changing from time to time. As indicated before, individual police officer may have different interpretations and judgments on the same scenario. Sometimes, due to the incorrect grounds or various judgments, travelers will be led aside for more in-depth inspections or even banned from entering the country and persuaded to return, which significantly impacts the mobility of cross-border travelers even commuters who used to have been crossing the Öresund Bridge smoothly.

In addition, referring to the analysis in the previous section, the intensities in entry policy enforcement of Denmark and Sweden appeared to be different. For example, the Danish border police usually perform a random check in Copenhagen Airport Station that the border police may not necessarily check every traveler entering the Danish territory by rail across the Öresund Region. In contrast, the Swedish police try not to miss anyone on the train as they perform identity checks on every passenger who has already been on the train in Hylie Station to verify

passengers' eligibility to enter the Swedish territory. Therefore, despite the innate difference in terms of the entry policies formulated by Denmark and Sweden, the criteria and intensities of the actual enforcement (i.e. border control) are inconsistent between the two countries. The above jointly demonstrates that despite being exempt from the entry bans of the two countries, those who remained eligible to travel across the border in the Öresund Region (e.g., commuters, extended family ties) during the pandemic have encountered obstacles caused by legal and administrative barriers.

Apart from the legal and administrative aspect, the cultural (language) barriers have also been intensified. The findings reported in the previous chapter mentioning the debate among Facebook users in understanding the "SWE Citizens" signage have embodied this issue. Although the Danish and Swedish languages are similar in many ways, the cultural differences between the two countries are relatively minor, and the English level of the citizens of the two countries is good; in the Öresund Region, the language differences still lead to a certain degree of cultural barriers. When commuters and travelers from both directions drive close to the border control point on the Öresund bridge, the road signs indicating the traffic diversion to reduce traffic pressure become an issue because they were written in English. Thus, problem emerges when individual travelers tried to interpret and comprehend the meaning based on their own languages. In the "SWE Citizens" lane case, the problem itself is not only that the Swedish and Danish translation of the English word 'citizen' is different, but also because of socio-cultural differences, most people confuse the concepts of "citizen", "citizenship" and "resident". This has led to the misunderstanding of road signs, tensions, and even mistrust between cross-border travelers and border controllers.

Unlike the traditional forms of difficult physical access barriers, which usually feature the lack of infrastructure development and the lack of integrated public transport systems (European Commission, 2016), the access barriers in this study are more attributable to the closure of borders and strict entry restrictions set by governments that have directly impeded mobility of cross-border commuters and have damaged cross-border exchange and interactions in trade and social relations. The Öresund Region has been particularly affected due to the sudden closure of borders and the imposition of various other restrictions by two different governments. The

issues showed in the last chapter including the conflicting information released by government and authorities, the unclear corona-related entry rules, the inadequate communication between authority staff, together with the different sets of rules applied in two countries, constitute the difficulties the Öresund cross-border travelers report that affect their physical mobility during the pandemic. In this sense, in terms of the physical access aspect, the cross-border barriers are reinforced as well during the pandemic.

Overall, we believe that the entry restrictions and measures adopted by Denmark and Sweden to limit the spread of the virus have intensified the cross-border barriers that both countries have worked hard to eliminate before. Just as Anneli Hulthén, Governor of Skåne, says, "Some issues are new when the countries have chosen different strategies around the Corona crisis. Other issues are old but are becoming more apparent now" (Herin & Hrin, 2020). The sudden interruption of mobility of people and goods has hit people's ordinary daily life which used to be free and borderless in the region. Although these exacerbated obstacles are small in scale, they still negatively impact the lives of people residing in the Öresund Region and bring the new challenge to them.

5.2 Border Closures and Uncertainty

From the cross-border approach perspective (Schmitt-Egner, 2001; Terlouw, 2012), the COVID-19 pandemic and the resulting re-bordering measures demonstrate that the border remains strong as an artificial barrier which creates social distance by cutting off people's daily life of family, friends, jobs, and social relations on the other side of the border. The notion of border as an artificial barrier being discussed here is distinct from the cross-border barriers previously mentioned, yet they are somewhat related to each other. Such a notion is also consistent with O'Dowd's (2003) view on borders, which specifies that borders are the product of the needs of order, control, and protection in human life and reflects a competing desire for the similarities and differences between "us" and "them". Moreover, drawing on Jenkins' (2015) boundaries concept, it is believed that the closing borders also spiritually separate "us" by "others".

Previously, the potential threat posed by "others" (i.e., refugees, terrorists) from outside Europe

served as a reason for limiting freedom of crossing the borders. Systematic physical barriers of border control between the Nordic countries were abolished in 1954. Since then, the Nordic populations have enjoyed the benefits of free movement, flexible labor mobility, and increased integration across Nordic states (Giacometti & Wøien-Meijer, 2020). It was not until November 2015 that Sweden began to reintroduce border controls at the Sound against Denmark to counteract the influx of refugees during the migration crisis, which showed a first sign of unbalance and weakened Nordic cooperation. Subsequently, from November 2019, the Danish government introduced random border checks on entry into Denmark to combat international crime.

Now, the potential threat could be spread by their neighbors from the other side of a border (Opilowska, 2020) - anyone crossing the border was considered a risk, a source of infection that brings risk for people who lives, work in border regions. This can be seen in both sides' decision of closing the border to each other, indicating that neither of them regards the other side as a part of "us". The only difference here was the time. Denmark first closed the border to Sweden since March 2020, yet it was not until December 2020 that Sweden closed its border to Denmark: all arrivals from Denmark and the UK will be denied entry. This was the first time during the pandemic that Sweden has closed the border on one of its neighbors.

Closing the border forges a physical barrier that impedes accessibility (Matthiessen, 2004). In this sense, COVID-19 has established a new dividing line between Denmark and Sweden. There has always been a strong relationship between Denmark and Sweden, and the Öresund Region is such a notable microcosm of Scandinavian life that Danes and Swedes have been living in a 'borderless world' (Ohme, 2008) with solid ties both at the personal and social level. However, border region residents, especially those frequently commuting across the border, report that the closing of borders and the subsequent introduction of strict entry restrictions between Denmark and Sweden have hit their lives more difficult to bear than ever (Nordiskt Samarbete, 2021). This is corresponded with our findings in the previous chapter indicating that the cross-border travelers have shown an overall negative and suspicious attitude towards border closure in the current situation. The imposition of border controls and temporary border closures to prevent the spread of the coronavirus have brought them increasing concern and anxiety, with

one of their most ongoing concerns is when the border will be reopened. In this regard, the cross-border travelers urge for more cooperation between the two sides in formulating and enforcing policies that take more possible situations into consideration, in order to get through this pandemic crisis.

The corona crisis has put cross-border cooperation to the test. The whole idea of a cohesive region around the Öresund Strait is being questioned. Uncertainty about the effectiveness of closing the borders must be weighed against the costs they entail. Closing borders is definitely not a viable way forward. The Öresund Region has been an area based on bilateral cooperation and freedom of movement, and both sides have spent a long-time removing the cross-border barriers. But, when this freedom of movement is suddenly stopped, even various complex challenges will follow. Detailed cooperation will thus be desired in ensuring cross-border mobility in this context.

5.3 The Status of Öresund Region Governance amid in the COVID-19

Multi-level governance emphasizes the power-sharing and decentralization between levels of government rather than the accumulation of power (Marks, 1993; Jessop, 1999). Based on the findings stated in the previous chapter, from an intra-national perspective, we argue that the two countries which comprise the Öresund Region both exhibit the tendency of recentralizing the power from a municipality and local to a state level during the pandemic, which builds a contrast with the multi-level governance structure that usually exists in cross-border areas. On the other hand, in terms of cross-border cooperation, from an inter-national point of view, the two countries tend to adopt a unilateral and inward-looking decision-making strategy in response to the COVID-19 pandemic. This is regarded as impairing the corporation's role in mitigating the impact of cross-border barriers and transforming the border from a line of separation to communication and interaction between neighboring countries, which, in turn, poses a challenge to the effective implementation of cross-border cooperation on a national level.

5.3.1 Re-centralization of the State Power

With the outbreak of the coronavirus, the closure of the borders shows how the idea of a borderless Europe has suddenly been challenged by national security concerns, highlighting the

fact that borders are still centrally governed by nation-states. Meanwhile, emergency and contingency measures to prevent the spread of the coronavirus were also developed and implemented at the national level (Giacometti & Wøien-Meijer, 2021). Most of the measures and regulations are uniformly formulated and implemented based on the general national-wide situation. Few relevant and practical rules specifically consider border areas and meet the needs of these areas at the national level.

In relation to the Öresund Region, democracy at the regional level, particularly at the local level, has been very prevailing and strong, giving local municipalities a high degree of autonomy and power, which corresponds to the most significant feature of multi-level governance in the cross-border context. At the same time, a high degree of decentralization of power from both governments facilitates direct ties between municipal authorities in border regions, working together to eliminate border barriers. However, the pandemic broke this mature multi-level governance structure. By issuing and enacting one-size-fits-all policies in response to the pandemic, the national government weakened or deprived the local municipality of the legitimate authority to independently decide on local strategic pandemic measures to prevent the spread of the virus and neglected the specific needs of the border areas.

The data collected in this study have proven that the specific needs of the Öresund Region were neglected. In specific, the research participants criticized the respective entry rules formulated by the two countries were unreasonable and failed to take many possible scenarios into consideration, so that the demand of some of those who actually have the need to travel across the border in the Öresund Region on a frequent basis might have been ignored. The case of divorced family being separated by Sweden's entry restrictions mentioned in the previous chapter can be a good example in this context. Similar stories also happened in Denmark as the entry rules as well as the changes were seen as "a concrete example of a sudden Danish government decision, which has not cooperated with the regional level and thus creates unnecessary problems" (Region Skåne, 2021).

Other than that, when it comes to the intensities of the actual policy enforcements, doubts towards such decision-making at a national, instead of local level, have also emerged. The

findings in the previous chapter show that the two countries have exhibited significant differences in the intensity of border controls. The research participants indicate that the Swedish police is always strict in terms of the border control, whereas the Danish police has shown a relatively looser control in the border check. This appears to be extremely odd when relating to the two countries' respective strategies and measures for containing the spread of the Coronavirus. In Sweden's case, what's the use of being rigorous in terms of border control when the country has adopted an overall lenient approach in response to the pandemic? As for Denmark, why being strict inside the country if they choose to be relaxed towards the possible index cases from outside the Danish territory? Thus, both the formulations of entry rules and the actual enforcement of such have shown that the Öresund Region's needs as a border region was neglected under a national and centralized decision-making scheme.

The outbreak of the COVID-19 pandemic has also challenged the decision-making ability of the governments with limited information and confronting many uncertainties during the crises, particularly in terms of the timing of policy measures, the autonomy of decision-making, the degree of decision centralization, and the balance between change and stability (Janssen & Van der Voort, 2020). The essence of governance in times of crises "requires a high tolerance for paradoxes" - a governance that is agile and adaptive. In detail, "it requires both centralized and decentralized mechanisms, innovation, and bureaucracy, and both science and politics" (Janssen & Van der Voort, p. 6, 2020). However, local municipalities are not only not sufficiently involved in the policy-making process, but they are only notified of policy changes and being the ones to simply follow the decisions, which was opposed to the cross-border multi-level governance model in which "national-, regional- and local-level governments should be integrated into the overall policy network of the region" (Marks, 1993, P. 392), with no one being superior to the other (Stephenson, 2013).

The government tightens its grip by concentrating decision-making at the national level, whereas the local and municipalities' autonomy and power have been weakened. In other words, the pandemic has contributed to unilateral decision-making within the state, resulting in a re-centralization and accumulation of authority. Thus, for municipalities and public authorities in border regions, the current entry rules decided predominantly at a national level clearly

demonstrate that the conventional multi-level governance structure in cross-border regions has been changed. The multi-level governance structure might no longer be applicable as the crisis keeps going on. When Danish and Swedish governments impose strict entry restrictions, local authorities are obliged to obey and organize the enforcement of these rules, despite the possibility of such entry rules being less applicable in the border areas. This prevents the local from taking any substantial measures to offset the adverse effects of the unified regulations. In this situation, we have to spur questions about whether the state has the ability to draw up timely and appropriate policies for unique border areas.

5.3.2 Unilateral and Inward-looking National Decision-making

As the unilateralism and country-focused responses to the pandemic started to become the primary strategy of virtually all European governments, multi-level governance structures in the cross-border areas no longer play a major role. In this circumstance, apart from exhibiting the tendency of recentralized power from an intra-national perspective, both Denmark and Sweden tend to follow a unilateral and inward-looking strategy in decision-making internationally. These countries no longer have the ability to exercise state power through intertwined decision-making activities at a cross-border scale and rely on and influence each other. The pandemic asks the governments to redefine the function of the border as a health and safety mechanism of the utmost importance. Thus, the decision to close borders is an immediate response to the pandemic and not only reminds us of the role of borders. On the one hand, it serves as a physical barrier to prevent the neighbor country from spreading the virus. On the other hand, it also constitutes a psychological barrier in cooperation, that is, applying ‘us and them’ logic (Van Houtum & Van der Velde, 2004).

In essence, cross-border cooperation is a particular form of collaboration between contiguous regional authorities (instead of national ones) across the national borders (Oliveras et al., 2010). In a European context, its purpose is to develop joint cross-border initiatives (Noferini et al., 2020) and multi-level governance applicable to it generally without direct EU or national involvement and intervention. However, unilateral decision-making to control the spread of the virus on a country-by-country basis has a pronounced impact on cross-border cooperation. As

mentioned in the previous contents, the cross-border regions are re-separated by the border, and each country develops its own pandemic strategies and responses based on its own infection situation within the state, government strategies, and other relevant political factors (i.e., constitutions), without communicating or coordinating in advance with the neighboring government about their new changing rules. The national governments of Denmark and Sweden seem to be making no effort to propose collective forms of communication or action. Instead, governments are increasingly inward-looking in their policies due to a lack of willingness to collaborate on joint activities in the fight against the pandemic, which compromised the close relationship and dependence with each other.

The lack of willingness to collaborate in coping with the pandemic between countries can be seen from the data in the last chapter. The different entry rules formulated by Denmark and Sweden primarily failed to take a number of potential situations into account, then nationality can even become an important indicator for the travelers to be exempted from presenting certain documentation (i.e. negative COVID-19 test result) to be eligible to enter the countries. As many participants indicated, it never made any sense to allow such exemption because the virus does not judge one's nationality. Such unreasonable actions and exemptions done by Denmark and Sweden imply a unilateral and inward-looking decision-making. They also entail an increasing importance of national identity in the pandemic crisis.

The governments' unilateral, inward-looking policy to the crisis and their little understanding of border dynamics during the pandemic have received significant criticism. The root of this problem will be that the asymmetries between different national administrative and legal structures, which represent the most frequent and significant obstacle to implementing effective common cross-border strategies (Metroborder, 2010). We argue that because of the outbreak of the Coronavirus, there is a paradox between the need for the government to adopt agile and adaptive crisis-centralized decision-making and a decentralized multi-level governance mechanism. This makes it very difficult for the state government to give particular consideration to the situation in the border areas, which are usually the responsibility of the regional or local municipalities.

Therefore, multi-level governance, which used to be of significance in the cross-border cooperation, lost its vital role in eliminating barriers because of the existence of various administrative systems in different countries. The pandemic shows us that national governments are still the most influential decision-makers dominating and exercising their impact as gatekeepers of external actions even in the European Union (MOT, 2017). The lack of cooperation and communication during the pandemic illustrates that Denmark and Sweden, as part of the Nordic countries, seem willing to abandon the reciprocal nature and interconnectedness of border areas. The absence of a common response to the pandemic has caused a discordant resonance between the border municipality and its own government and has also exacerbated the destabilization and current vulnerabilities inter-nationally. In this situation, the two countries have resumed the state-centric path, which violates the cooperative Nordic alliance. Cross-border governance and cross-border cooperation become, if not outright impossible, then essentially challenging to implement in the current circumstance.

6. CONCLUSIONS

In this study, we have seen a lot of entry rules and additional administrative procedures that are constantly changing in response to the spread of the Coronavirus causing increasing incomprehension, distress and practical obstacles to cross-border travelers in the Öresund Region. By exploring how the entry rules formulated in response to the COVID-19 pandemic affect the cross-border mobility in the Öresund Region, we examined the conditions of cross-border cooperation in the current situation. Based on the previous discussions, we have come up with the following conclusions to a broader context.

6.1 Free Movement to a Halt

An open cross-border region benefits all parties – citizens should be able freely commute, study, work and conduct cultural, business activities on both sides of the border without the possibility of being hindered by unclear and asymmetric laws and regulations. To some extent, removing border barriers means creating a more open cross-border region. However, the results of study indicate that the COVID-19 pandemic has brought the two countries back to the age of borders and created new border barriers, which can be seen from the strict entry restrictions that are manned by border check upon entry. In short, freedom of movement, the cornerstone of the European way of life and the powerful driver of European integration, has disappeared (Grüll, 2021).

Mobility, or, free movement is a powerful and fundamentally democratically anchored principle in the Nordic region and the EU that must be given priority (Scholten & Ostajen, 2018). The goal of the European Commission is to keep the borders from becoming barriers to cross-border cooperation and mobility (Medeiros, 2018). But the COVID-19 pandemic has shown us in abundance how fragile cross-border cooperation are (Giacometti & Wøien-Meijer, 2021). Due to the direct and tangible effects of closed borders and various national restrictions in the border areas, the Öresund Region has suffered a lot below the exacerbated existing border barriers, which embodies the weak state of cross-border cooperation in the Nordic countries.

Other sources of statistics and news can also show the interrupted connection between the two sides of the Öresund Region. The Öresund Region was formed to realize the vision of establishing an economic power center in the Greater Copenhagen area. Its most prominent feature is the free movement of commuters, trade, and joint initiatives across borders. Since the Öresund Bridge was opened connecting the two countries by land, anyone could enjoy the value of free movement in this Region. However, the Öresunds Bridge has now been in the process of breaking down both physically and mentally due to the border closures. For example, we can clearly see from the car traffic over the Öresund Bridge - it has decreased sharply by 40 percent compared with the year before in 2020 (Dagens industri, 2021) and is occasionally characterized by kilometer-long queues at the passport controls at Lernacken and Pepparholm. Commuters find it more troublesome to cross the border because their mobility has been curtailed due to asymmetric and clumsy corona restrictions by two different governments, resulting in enduring more waste of time and queuing than is justified. Although commuters are not the primary control objects, such time-consuming controls indeed negatively impact commuters in the Öresund Region.

The geographical mobility of labour is regarded as a sort of employment insurance against possible labor-market imbalances (Mundell, 1961). However, in this study, we found that some people with jobs on the other side of the border have become increasingly insecure about their livelihood as a result of the divergent strategies and measures adopted by the two governments in response to the pandemic. Hence, we believe that such free movement of labor mobility has been restrained. The restrictions on mobility introduced have often had unclear directives for both travelers and the police. Moreover, conflicting information provided by the authorities in the two countries, and the imbalances and asymmetries between the Danish and Swedish border controllers' law enforcement also results in additional hassles for cross-border commuters.

Suddenly, free movement is threatened - anyone crossing the border was considered a risk, a source of infection that creates new obstacles for anyone who lives, works, and has social ties in border regions. It is not the virus that restricts mobility; it is the stricter border restrictions imposed by Denmark first and Sweden following by and the shutdown of each other's borders that have created new barriers after the pandemic. It can also be seen in a recent official letter

on demanding the countries to explain the extensive entry rules issued by the EU Commission, ‘the entry rules that the government has introduced in connection with the corona crisis are too strict, and they risk straining legs for free movement in the EU.’ (Klarskov, 2021).

Understandably, the state makes national security a priority at the expense of sacrificing the benefits of a few people such as commuters, traders, and the couple or families living on both sides of the border. In order to ensure the safety of the people, maintain the normal functioning of society, and keep the economy afloat, national security takes precedence over freedom of movement. Such loss of freedoms for national security purposes is most acutely experienced in the border regions as an inevitable consequence. Nevertheless, closing the border is definitely not a feasible, sustainable, and optimal solution for the Nordic region and the European world.

6.2 A Low Point in Nordic Co-operation

The concept of cross-border cooperation is derived from the idea of European economic integration through mobility at the regional level (Wiesbock et al., 2016). The border areas of the Nordic countries have undergone a long process of integration. With the establishment of the Nordic Passport Union in the 1950s, the freedom of movement of cross-border personnel has always been the cornerstone of cross-border cooperation. The Öresund Region play a representative role as an institutional entrepreneur in international politics (Perkmann, 2003), where it develops a model of multi-level governance for regional actors that challenge the traditional monopoly and centrality of states in foreign affairs and international politics. Nordic co-operation is based on the belief that closing borders is harmful. However, free mobility across the Öresund Region suddenly came to a halt revealing a colossal turnaround in Nordic relations. Countries treat neighbors as the sources of infection, instead of collaborating with their neighbors to work on a common solution to fight the epidemic. The border closures and the variety of restrictions adopted to curb COVID-19 infection rates, the top-down national measures that undermine the municipalities in local matters along borders, the evident lack of coordination between the Nordic countries, the unilateral decision-making, and the inward-looking policies during the pandemic have all challenged the existing cooperation and its long-term goal of becoming the most integrated region in the world.

At the moment, this was not only already a low point for cooperation between Denmark and Sweden after the refugee crisis in 2015. Such a low point of cooperation has also been noticed by the others in the Nordic region. Bertel Haarder, the president of the Nordic Council, describes the past year's corona-related border closure as "a low point in Nordic cooperation" (Klarskov, 2021). "It simply came to our notice. We got a passport union, we got a common Nordic labor market, and we have decided that we will recognize each other's education. Then suddenly the trust on which it is all built is broken," says Bertel Haarder. This is hard to believe when relating to the vision statement in the Nordic Council of Ministers signed by the prime ministers Mette Frederiksen, Stefan Löfven, Erna Solberg from the Norwegian Conservatives, and the Finnish Social Democrat Antti Rinne in 2019. They stated that they would work together to make the Nordic region by 2030 the most sustainable and integrated region globally. Regrettably, every single nation considers only its own situation over and over again, treating its neighbors as the source of infection, while ignoring the border communities they all share. In this way, given the inability and unwillingness of the Nordic countries to collaborate and find a common solution to a collective (corona) problem, the integration process between these countries does not help. It seems that they all go against their long-term goal and the 2030 vision seems to increasingly become a utopia.

6.3 Confusion, Uncertainty and Mistrust

The pandemic has raised a new level of uncertainty in all local, cross-border, regional, and global affairs in the Öresund Region. It has also led many to question whether citizens can continue to enjoy the same freedom of movement as before (Calzada, 2020). Trust and cooperation along the border now have been called into question as a result of the confusion caused by new cross-border barriers and the uncertainty caused by border closures and inconsistent policies between the two countries. For Danish and Swedish citizens, today it is very difficult and uncertain to have a part of their lives on the other side of the Öresund Strait.

The countries have chosen different paths to tackle the pandemic and those who live and work in the border regions have been forced to comply with different restrictions. The pandemic has made the border that was previously perceived as something abstract become a highly concrete

dividing line. The unprecedented low in cross-border cooperation has led to the fact that the confidence in the borderless Nordic region has been eroded. The border closures have undermined the passport union and the common labor market to the great detriment of the trust that is the precondition for the citizens living along the borders. There is a danger that Nordic citizens will no longer trust that it will be as easy as before to live, to commute, to get an education, to work, or to buy a house on the other side of a Nordic border and they express concern about a growing 'us' and 'others' mentality (Haarder & Sonesson, 2021). In other words, the trust built around free movement is now under threat, which may affect the border regions in both Nordic and European society in post-pandemic terms in general.

The border closures and uncertainty have brought people's lives in Öresund Region to chaos. From our analysis, people's frustration, confusion, and uncertainty were not merely directed towards their own government but also at the neighboring countries' unilateral and inward-focused policies and the lack of communication between governments. It naturally creates irritation among people who have been used to moving freely between the countries and gives rise to tensions between the Nordic neighbors. In this case, the Nordic governments and authorities should at least inform each other before deciding on any measures to restrict cross-border mobility so that the neighboring country is able to quickly respond to the new situation, thereby reducing or even avoiding the possible negative impact on the people living and working in the border areas.

The coronavirus does not know borders, and by nature, it is a transboundary issue that requires global action. Seeing those coming from across the borders as a particular threat is an expression of narrow-minded national thinking (Klarskov, 2021). It is not only a simple border check procedure requiring travelers to present various documents that costs extra ten minutes on the way. It is also a sad development spiritually lies in the cross-border cooperation context, altering people's faith in the idea of the Öresund Region as a whole and cohesive urban area.

6.4 Concluding Remarks

Finally, by conducting netnography study and semi-structured interviews, we found that the pandemic-related entry policies have resulted in a reduced mobility among the cross-border travelers in the Öresund Region in many ways. The entry policies promulgated by Denmark and Sweden not only require cross-border travelers to meet various conditions, reduce the number of people crossing the border and increase the travel costs for them to perform the journey, but also have certain deficiencies in the formulation of policies themselves. Specifically, the entry rules deliver unclear and ambiguous information. This can be seen from the vague definitions in the specified entry rules, the contradictory messages from different authorities, and the contrary information given by the same authority. On the other hand, the inconsistency in the entry policies between the two countries have also largely contributed to the weakened cross-border mobility. The original differences in policy formulation made them seem unreasonable in many cases, which resulted in the criticism stating that a few possible scenarios have been neglected while some indicators that may be less significant in the current situation were attached to great importance (i.e. nationality). Other than that, the inconsistency in the actual policy enforcements made the participants hard to follow and question the rationality of the enforcement criteria. Furthermore, the results have also shown that the cross-border travelers tend to be suspicious towards border closure, and they do expect a certain degree of communication and collaboration between Danish and Swedish authorities to optimize the current circumstance.

Based on the findings, we further argue that the cross-border barriers in the Öresund Region have been somewhat elevated from legal and administrative, cultural, and physical access points of view because the deficient and conflicting entry policies formulated by the two countries literally create more obstacles for the travelers to overcome in order to cross the border. In terms of the mental aspect, the artificial barrier that separates “us” and “them” (Schmitt-Egner, 2001; O’Dowd, 2003; Terlouw, 2012; Jenkins, 2015) has been reinforced referring to the research participants’ overall doubtful attitudes in the closed status of the borders.

Simultaneously, regarding the inconsistencies in policy formulation and intensity of actual

enforcement, we reviewed the governance status of the Öresund Region during the COVID-19 pandemic. From an intra-national point of view, both Denmark and Sweden have exhibited a tendency of recentralizing the state power, as local and regional authorities were no longer included in the decision-making processes. Then, as for the inter-national aspect, both countries have chosen to follow a unilateral way of decision-making, prioritizing the benefits of their own while somewhat ignoring the ongoing cooperation processes between states. These jointly indicate that the multi-level governance structures which emphasize the power-sharing and decentralization between levels of government rather than the accumulation of power (Marks, 1993; Jessop, 1999) and have been widely adopted in cross-border regions became no longer applicable at the times of such a pandemic crisis.

In the current situation, free movement crossing the border becomes not allowed anymore in the Öresund Region. Separation and disengagement have replaced the previously prevailing notion of integration to become the main theme in this area. The process of cooperation between the two sides of the border has come to a halt as uncertainty and mistrust seem to be filling in the air during the pandemic. To improve the circumstance, mutual understanding and continuous good communication between the governments and public authorities in the two countries are needed. As the practical part of the implications gained from this study, a problem-solving Danish-Swedish common task force that coordinates the two countries' efforts in countering the COVID-19 pandemic will be crucial in formulating unified and more reasonable policies, thus retain and enhance the conditions of further cross-border cooperation that benefits both sides at the times of the pandemic crisis.

As shown previously, the results of this research imply that the multi-level governance structures which have been extensively accepted in the border areas become less suitable in the current context. Thus, future research can focus on the exploration of new governance models relevant to the current crisis context, for ensuring a smooth progress of cross-border cooperation and, in turn, retaining the benefits of people living on both sides of the border, which will be especially advantageous when the current pandemic crisis is still ongoing. How to maintain and rebuild the trust and faith in achieving more in-depth cooperation with the other side of the border, for both the pandemic and post-pandemic eras, are then worth probing in this regard.

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APPENDIX

Semi-structured Interview Guide

The interview focuses on the journeys performed by the cross-border travelers by public transport during the COVID-19 pandemic, in order to better understand how the traveler's cross-border trips have been different during the pandemic. Apart from the general query for the journeys, the interview questions involve the experience when traveling through the border, based on the changes in entry policies of both countries.

The interview should take approximately 30-45 minutes depending on how much information the participants would like to give. The following are the questions to be asked. However, this interview guide only includes the main themes to be discussed with the participants. Thus, the questions might not be strictly followed, and the situations would differ according to participants' responses.

- *General Conditions Regarding Daily Journeys*

Can you tell us about your usual journeys across the border between Denmark and Sweden?

Prompts:

1. Where do you live?
2. What is your purpose for traveling across the border (to Denmark/Sweden)?
3. How do you usually get there? (Mode of Transport)
4. How often do you travel to Denmark/Sweden?

- *Changes in the Cross-border Experience during Pandemic*

Can you share your experience about your journey before COVID-19 pandemic? Do you see any difference now?

Prompts:

1. How long does the journey usually take? (Before/During COVID-19)
2. Do you feel that the journey takes longer/shorter during the pandemic? In your opinion, what caused the longer or shorter trip?

3. Would you share your experience when going through the border check? Do you think there is any change in the border control when you travel during corona time?
4. Do you need to prepare anything special before the journey?
5. Have you ever experienced any difficulty in the preparation (e.g. COVID-19 test) before departure?

- *Opinion and Attitude*

Prompts:

1. From which source do you get the updated information regarding policy change? Do you think that you are well informed when new policies are released? What's your attitude towards these changes? (i.e. Do you think they are comprehensible and clear for you to follow, or they are ambiguous and hard to react?)
2. What is your opinion about the changes in policies (e.g. Entry ban, requirements for COVID-19 test, etc.)?
3. Do you think there is any difference between the border controller in Denmark and Sweden? And why?
4. What do you think about both Danish and Swedish authorities' actions of closing the border?