



SCHOOL OF
ECONOMICS AND
MANAGEMENT

The Diplomacy of Trade:

An Empirical Investigation of State Visits as a Tool for Export Promotion and
the Specific Role of the Head of State

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Abstract

This paper evaluates the impact of state visits on export flows and the specific role of the head of state based on the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. We construct a complete and comprehensive dataset containing all outgoing state visits from the Nordic countries between 1973 and 2022. Our main empirical strategy is to apply a difference-in-differences (DiD) approach using a novel robust estimation method by Callaway and Sant'Anna (2021) to estimate the effect of state visits on export flows and the role that the head of state plays during state visits. We also employ a traditional two-way fixed effects (TWFE) DiD approach to compare the results. Furthermore, we employ a series of placebo tests and robustness checks to validate our results. Our analysis reveals that outgoing state visits made by the Nordic countries have a significant impact on export flows with an average post-treatment effect of 276.8 million USD. The role of the head of state is less pronounced, although our results indicate that state visits conducted by monarchs drive the results more than state visits performed by presidents.

Keywords: State Visits, Export Promotion, Head of State, Monarchy, Republic, Difference-in-Differences.

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1. Introduction

A state visit, which entails the formal visit of one country's head of state to another country's head of state, represents the highest level of diplomatic relations between nations. These visits encompass a broad range of objectives spanning political, cultural, and environmental discussions, and even considerations of human rights. Their main purpose, however, is to foster bilateral trade and enhance economic relations.

In today's globalized world, trade is considered to be one of the most important instruments for economic development. Well-functioning bilateral relations and agreements are vital for trade to prosper and prevail. A state visit can contribute to stimulating these bilateral relations as well as creating ties with new countries, making such visits an integral part of trade promotion. For instance, a state visit is described by the Swedish Royal Court (2023) as follows: *“The programmes for state visits usually last for two or three days, and follow the country's traditions and ceremonial patterns. Most state visits begin with ceremonies and other official elements on the first day. [...] Day two usually includes a number of trade and culture promotion events [...] It is also customary for the visiting country to host a reciprocal dinner or a similar event in the evening.”*

The costs of a state visit can be high due to its formal and ceremonial standards, and the required preparation ahead of a visit (Nitsch, 2007). This makes it policy-relevant to assess whether state visits meet their goal of stimulating trade and economic relations. Therefore, this study attempts to analyze whether state visits can stimulate exports for a country. The first out of two research questions is: *Do state visits boost bilateral trade?*

Specifically, the analysis will focus on the outgoing state visits and exports from the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. These countries are chosen as they have similar characteristics and are geographically close to each other. Furthermore, including three monarchies and two republics will provide more variety in the data.

We further enhance this analysis to assess the specific role of the head of state. Formally, a head of state is the highest-ranking representative of a sovereign country. The head of state may have various titles, such as monarch or president, depending on the form of government and separation of power. The head of state of a republic may serve as the head of government, whereas a monarchy's head of state is often a ceremonial figurehead without

political power. Theoretical frameworks suggest that state visits by royal heads of state may have a particularly favorable effect on bilateral trade (Ansink, 2013). Monarchs are in office longer, giving them the advantage of experience. On the other hand, presidents depend on the support of the people to be re-elected, which puts pressure on them to be successful while in office. Our second research question is therefore: *Does the state visit effect differ depending on whether the visiting head of state is elected (a president) or non-elected (a monarch)?*

Not much research has been done on this subject because the data on state visits is not readily available. Therefore, we have collected the data manually from each Nordic Royal Court and Government office to assemble a complete dataset of state visits conducted by the Nordic heads of state between 1973 and 2022. We then use this data to assess whether there is an effect of state visits on exports and whether the state visit effect differs depending on whether the visiting head of state is a president or a monarch by using a new estimation method by Callaway and Sant'Anna (2021) based on Difference-in-Differences (DiD). To provide the reader with more variation, we will compare these results to a more basic DiD approach with two-way fixed effects (TWFE) and Poisson-Pseudo Maximum Likelihood (PPML) estimation. To our knowledge, this is the first study to estimate the effect that state visits have on export flows using the robust estimator based on Callaway and Sant'Anna (2021). Previous studies investigating state visits' relationship with trade have either applied a gravity model (Head and Ries, 2010; Lee and Yeo, 2009; Nitsch, 2007) or a DiD (Nitsch, 2007). As far as we know, there have not been any previous studies investigating the role of the head of state during a state visit, and whether there is a difference between having an elected head of state or a non-elected head of state.

By shedding light on this important topic, this essay aims to provide valuable insights into the potential benefits and limitations of state visits as a tool for promoting exports and to contribute to ongoing discussions around the role of monarchs in modern diplomatic and economic relations. The existing body of literature has yielded divergent findings regarding the impact of visits by heads of states on bilateral trade. Nitsch (2007) discovered that the efficacy of state visits varies based on the specific trade sector targeted and the pre-existing trade dynamics between the nations in question. In a separate study, Lee and Yeo (2009) determined that presidential diplomacy can assume a significant function in stimulating international trade, particularly for developing nations and commodities characterized by elevated technological intricacy. We contribute to this area of research in several ways. Firstly, we create a rich new dataset of state visits from the Nordic countries. Secondly, we

estimate the effect of state visits on export flows using a new, improved methodology. Third, we explore a previously unanswered research question, namely whether the elected or non-elected status of the head of state matters for the state visit effect.

Briefly, our results suggest that state visits made by Nordic countries have a significant impact on export flows. The role of the head of state is less pronounced, although our results indicate that state visits conducted by monarchs drive the results more than state visits performed by presidents.

The rest of the thesis is organized as follows. The next section will provide the reader with background information about state visits and the role of the head of state during state visits. A deeper explanation of the data collected on state visits will be provided in section 3. Section 4 describes previous research on export promotion activities and state visits. Next, section 5 discusses the empirical strategy Differences-in-Differences as well as some potential limitations. Chapter 6 presents the results and various robustness tests. Finally, chapter 7 concludes with a discussion and areas for future research.

2. State Visits

This chapter will provide the reader with some background information regarding state visits as export promotion as well as a discussion about state visits in relation to export promotion agencies. Furthermore, a discussion about the role of the head of state and whether monarchs and presidents are equally good at promoting trade is also presented.

2.1 State Visits: Promoting Bilateral Trade and Economic Relations

A state visit is a formal visit by the head of state of one country to the head of state of another country. They embody the highest level of diplomatic relations between countries. The explicit aim of a state visit is to stimulate bilateral trade and promote economic relations, but the visits also serve other objectives which may vary from political, cultural, and environmental conversations to human rights (Nitsch, 2007). Economic relations are often a central focus during such visits, with discussions ranging from global economic issues, closer economic collaboration, and joint investment projects to trade disputes. Business delegations and government ministers often accompany the heads of state on these visits, further reinforcing the emphasis on economic issues. State visits offer a valuable opportunity to inaugurate contact offices and business representations, sign treaties and contracts, and

officially launch significant bilateral projects, thereby deepening economic ties between the nations involved (Nitsch, 2007). Several studies have been conducted to examine the impact of state visits and presidential diplomacy on international trade, this is further analyzed in 4.2.

State visits are time-consuming and expensive, which is one of the reasons why they occur relatively rarely. They are often planned one year to a couple of months ahead of the visit, and they are characterized by a highly formal and ceremonial protocol (Nitsch, 2007; Svenska Dagbladet, 2009). It is not unusual that the costs are shared between the host country and the visiting delegation, in 2009 an outgoing state visit from the Swedish monarch could cost up to 1.3 million SEK, costs that were covered by the Ministry of Foreign Affairs¹ (Svenska Dagbladet, 2009).

Only the head of state can conduct a state visit. There are other types of visits, such as working visits, that are less formal and can occur among other delegations than the head of state (Swedish Royal Court, 2023). Thus, an outgoing visit from a monarchy is only classified as a state visit if it is the head of state (the monarch) that travels. The same goes for republics, it is only the head of state of the republic (the president) that can conduct a state visit. Additionally, certain ceremonies and formal occasions are protocol for state visits (Nitsch, 2007).

To summarize, state visits are typically regarded as being an important instrument for strengthening bilateral relations and facilitating trade and investment between countries. However, hosting a state visit is expensive which makes it policy-relevant to assess empirically whether they actually do have an effect on exports.

2.2 State Visits vs. Export Promotion Agencies and Activities: Objectives and Functions

State visits and export promotion activities have similar purposes as they both aim to stimulate bilateral trade. Organizations that work with export promotion activities are called export promotion agencies (EPAs). EPAs are government or quasi-government organizations that provide support and assistance to businesses looking to expand their sales in international markets. It could for example be embassies, consulates, or other organizations.

The primary objective of EPAs is to help companies increase exports and improve their competitiveness in foreign markets, through export promotion activities. Export promotion

¹ When Sweden hosts a state visit, the costs are covered by the budget allocation for the Royal Court Administration.

activities are a widely employed strategy by countries seeking to enhance their firms' competitiveness in the international market. Such measures serve to strengthen the performance of exporters, increase the number of firms engaged in export activities, broaden the range of bilateral trade partners, and diversify exports across different goods and markets (Segura-Cayuela and Vilarrubia, 2008). In this context, state visits represent a crucial aspect of export promotion. Export promotion activities are typically grounded in the notion of market failures, whereby official export promotion activities would be unnecessary in a world without friction. In such a world, firms would be able to export to any profitable destination with ease. However, the presence of market failures, particularly the imperfect information surrounding opportunities and profitability, limits the export activities of domestic firms. Thus, the rationale for EPAs and official export promotion activities is that they help overcome these market failures and stimulate greater levels of trade (Segura-Cayuela and Vilarrubia, 2008).

The main difference between state visits and EPAs is that state visits aim to establish relations between countries whereas EPAs aim to assist firms in unexplored markets abroad. However, they are similar to one another in the sense that they help promote exports and trade in general. It is therefore reasonable to assume that state visits can have similar effects on exports as EPAs have. Studies suggest that foreign services, including EPAs and bundled services, can have a positive impact on the export performance of firms (Ferguson and Forslid, 2019; Munch and Schaur, 2018; Rose, 2007; Volpe Martincus and Carballo, 2010a; Volpe Martincus and Carballo, 2010b). However, the effectiveness of EPAs should be considered in the context of specific business environments and needs.

2.3 The Role of the Head of State: Are Elected and Unelected Heads of State Equally Good at Promoting Trade Through State Visits?

It is sometimes claimed that being a monarchy is good for business because it boosts exports. This in turn is used as an argument in favor of monarchy. An interesting research question is therefore to test whether there is empirical support for this particular argument in favor of monarchy.

In the case of the three Scandinavian monarchies: Denmark, Norway, and Sweden, the monarchs are the head of state of their country, but they leave the political and legislative

power to the government.² Balmer, Greyser, and Urde (2005) resemble the Swedish Royal Court as a corporate brand due to its longevity, popularity, and the financial value it may bring to Swedish tourism and businesses. Indeed, one can resemble the Crown as a symbol of Sweden with being a trademark for the country. The monarch has an “image” to maintain towards the public to sustain the approval of the Royal Court (Balmer et al., 2005). Indeed, a monarch often retains power throughout his or her entire lifetime and holds a more symbolic weight. This gives the monarch a sense of stability in that he or she cannot be voted out of office if expectations are not fulfilled. Thus, the reign of a monarch is somewhat of a learning-by-doing process in that mistakes can happen and the monarch has many years to establish relationships and learn how to successfully promote trade during state visits.

A president does not act as a symbol for their country in the same way a monarch does. A president is elected which means that he or she may have a lot of support from the people. It is also likely that the president is a charismatic, intelligent person with a lot of the skills required to do a good job while in office. However, a president is replaceable. If the president does not perform well, he or she will not receive renewed trust and will be voted out of office. Additionally, a president may have a political affiliation which could be advantageous for trade when visiting a foreign country. However, it could also be a disadvantage if the visited country does not share the same political views. In this regard, a monarch could be of more weight as it is a constant role where political affiliation is not a factor. Furthermore, it is likely that discussions and topics during state visits can look different depending on whether the visiting head of state has any political power or if the head of state is merely a “trademark” of its country.

There is a persistent discussion about the relevance of constitutional monarchies in modern society, given their lack of actual power. The Norwegian monarchy is often regarded as more legitimate because a referendum was held in 1905, giving the people the chance to decide whether to keep the monarchy or not (Nilsson, 2010). No referendum was ever held in Sweden, but according to the yearly report from the SOM-institute the support for the Swedish monarchy is stable, and the support to become a republic is the lowest in 20 years,

² In Sweden, the monarch must officially approve a new government, and he is also the chairman of the Advisory Council on Foreign Affairs. In Denmark, the Queen is tasked with appointing the party that has won the election to form a government. She also formally appoints and dismisses the government. The Norwegian King's duties include appointing the Prime Minister and Cabinet Ministers, promulgating laws, and serving as the supreme commander of the military.

with only 11 percent of the respondents in favor of becoming a republic (Andersson, 2023).³ Hazell and Morris (2020) argue that monarchies have a unique ability to focus on and value aspects of people's lives that governments tend to overlook. This suggests that there is still an important role for monarchies in advanced democracies.

Theoretical frameworks suggest a reason why state visits by royal heads of state may have a particularly favorable effect on bilateral trade. Due to the celebrity effect, royal visits generate more public and media attention than visits by non-royal heads of state, which can enable small open economies with a royal head of state to gain a more significant influence on the global stage (Ansink, 2013).

3. Presenting a New Dataset on Nordic State Visits

This section will provide the reader with a detailed description of the process of collecting data on outgoing state visits. A deeper analysis of the state visits performed by the five Nordic countries between 1973-2022 is also included.

3.1 Data collection process

An important reason for the relative lack of research on the effects of state visits is that there is no readily available dataset on state visits. Instead, the data has to be manually collected directly from each country's responsible government agency. This is a labor-intensive and time-consuming process. For this thesis, we have therefore painstakingly collected data for outgoing state visits from all Nordic countries for the period 1973-2022. In this section, we will present this very rich new dataset. To make sure that future research can build on our work, we also replicate the entire dataset in the appendix in Tables A1 and A2.

This study focuses on investigating the relationship between state visits and exports in the Nordic region comprising Denmark, Finland, Iceland, Norway, and Sweden.⁴ These countries are selected for several reasons. Firstly, they are geographically close to each other and have had close relations with one another for many years. The countries also exhibit similar

³ In 2003, 15 percent were in favor of abolishing the monarchy, while 68 percent wanted to retain it, and 17 percent had no opinion. This is in contrast to 2015 when 22 percent were in favor of abolishing the monarchy, 56 percent were in favor of keeping it, and 22 percent had no opinion (Nilsson, 2010).

⁴ This paper has been limited to not including incoming state visits with the aim of isolating the effect of outgoing state visits on export. The limitation is based on multiple factors, one of them being that the main focus of the report is to evaluate outgoing visits, other factors include amongst others, a restrained research time period.

characteristics in that they are small, open democracies with many trade opportunities. Furthermore, the countries share historical ties and have cultural similarities. Through a mixture of three monarchies and two republics, we also provide more diversity in the data. The time period 1973-2022 was chosen due to data availability. 1973 is the year that the King of Sweden H.M. Carl XVI Gustaf ascended the throne and to our knowledge, there are no state visits documented and available before that date for a Swedish head of state.

Data on state visits performed by monarchs from Denmark, Norway, and Sweden have been collected from the website of each Royal court, respectively. The destination of all state visits was documented and publicly available. We thereafter constructed a dataset based on these state visits where the state visit variable functions as a dummy variable.

For the republics of Finland and Iceland, the data on state visits were neither well-documented nor publicly available. Through correspondence with the Finnish and Icelandic government offices, we managed to retrieve data on state visits from all presidents of Finland and Iceland that held office between 1973 and 2022. Some of the documents had to be translated into English. In addition, it was necessary for us to differentiate state visits from other forms of travel due to the inclusion of various types of trips undertaken by heads of state in the documents we received. The data on the Finnish and Icelandic outgoing state visits were combined with the data from the monarchies to construct a complete dataset of all the outgoing state visits from the Nordic countries' heads of state between 1973 and 2022. To our knowledge, no comprehensive information is available on state visits made by the Nordic heads of state. Thus, the dataset we present here makes a noteworthy contribution to the research literature in and of itself.

3.2 Trends in the data

3.2.1 Frequency of state visits

Between 1973 and 2022, the five Nordic countries Denmark, Finland, Iceland, Norway, and Sweden collectively conducted 382 state visits. Finland conducted the highest number of visits during this period, averaging 2.7 visits per year, followed by Sweden with an average of 1.7 visits per year.

Most of the state visits conducted by the Nordic countries are directed toward other European nations, see Tables 1 and 2. According to the data, democracies are predominantly visited, with few exceptions for dictatorships, see Tables A1 and A2. A majority of the state visits

occur in countries where close cooperation and diplomatic relations already are present. This is likely to be explained by the fact that it is usually easier to grow a relationship further if diplomatic ties are already in place. During the period spanning from 1973 to 2022, the Queen of Denmark embarked on 53 state visits to foreign countries, whilst King Olav V and King Harald V of Norway undertook 60 such visits and the King of Sweden made state visits to 82 nations. Consequently, the Nordic monarchies' collective outgoing state visits numbered 195 across the aforementioned timeframe. Notably, the head of state customarily carries out a state visit almost every year, and in many instances, multiple visits in a given year. This frequency highlights the significance of state visits as a recurring activity for the head of state in the Nordic monarchies. During the same time period, Finland conducted 133 state visits and Iceland conducted 54. The graphs below shows that the number of state visits made by the republics between 1973 and 2022 is more volatile than those undertaken by the monarchies.

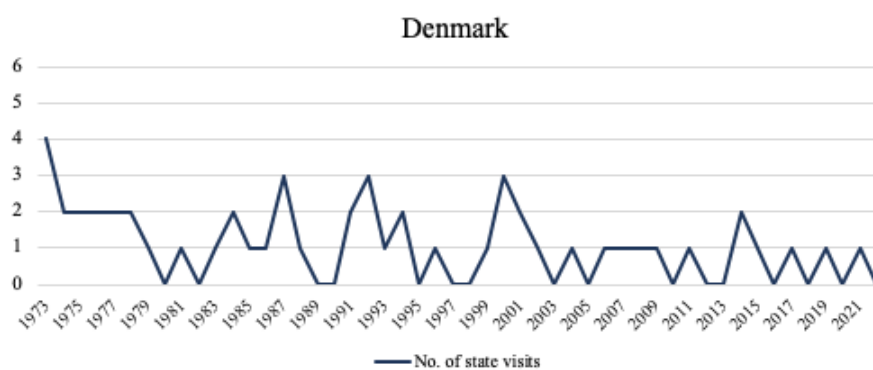


Figure 1: Outgoing state visits made by Queen Margrethe II of Denmark (1973-2022).

Outgoing state visits made by Queen Margrethe II of Denmark are depicted in Figure 1. The Queen of Denmark makes an average of slightly more than one outgoing state visit per year. Often, she conducts state visits every other year as we can see in the graph. At most, she conducts three state visits in a year.

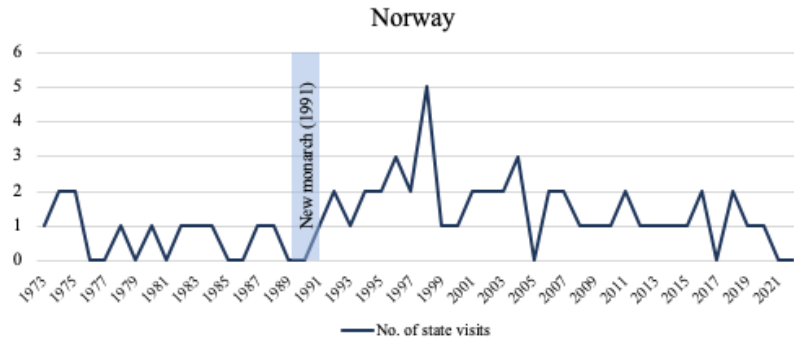


Figure 2: Outgoing state visits made by Olav V of Norway (1973-1990), and King Harald V of Norway (1991-2022).

In Figure 2, an upward trend is observed subsequent to the accession of Harald V to the throne in 1991. This shows that a new head of state needs to establish new relationships and therefore travels a lot. The countries visited directly after his accession to the throne in 1991 are Denmark, Finland, Iceland, and Sweden, suggesting that countries that are geographically or culturally close are prioritized. This is documented in Table A1 in the appendix. Contrary to Queen Margrethe II of Denmark, King Harald V of Norway conducts state visits every year except for three.

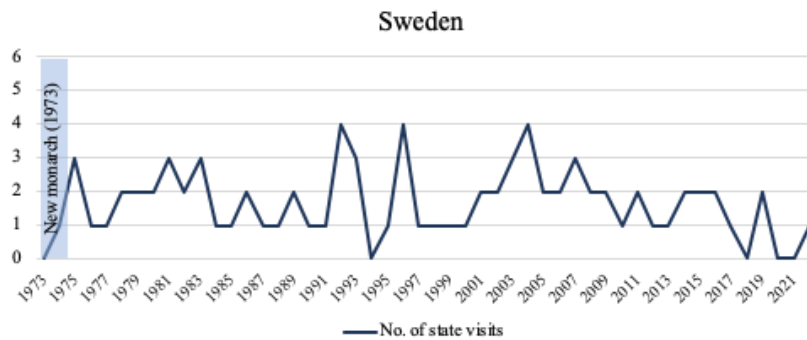


Figure 3: Outgoing state visits made by King Carl XVI Gustaf of Sweden (1973-2022).

The outgoing state visits of King Carl XVI Gustaf of Sweden are documented in Figure 3. Carl XVI Gustaf adheres to, on average, two outgoing state visits per year. The years 1994-1995 stand out with a low number of outgoing state visits. Sweden had six incoming state visits during that period (Swedish Royal Court, 2023), which could potentially serve as an explanation. Like King Harald V of Norway, King Carl XVI Gustaf of Sweden conducts outgoing state visits almost every year.



Figure 4: Outgoing state visits made by the presidents of Finland (1973-2022).

The outgoing state visits made by the presidents of Finland are depicted in Figure 4. Finland is the Nordic country that conducts the highest number of outgoing state visits, with an average of 2.66 state visits per year. It is also the most volatile country in terms of the number of state visits, and a clear trend can be observed that when a new president is appointed, the number of state visits increases in the subsequent year. Most of the time, a new president visits neighboring countries first, which we can see in Table A2.



Figure 5: Outgoing state visits made by the presidents of Iceland (1973-2022).

Figure 5 documents the outgoing state visits by the presidents of Iceland. Iceland conducts slightly more than one state visit on average per year, and it is evident that the peaks occur shortly after the appointment of a new president.

3.2.2 Destinations

What appears to be a common trend among the two republics (Finland and Iceland) is that when a new president takes office, state visits are made to neighboring countries, see Figures 4 and 5 and Tables A1 and A2 in Appendix. When a new government is appointed in the monarchies, this trend is not observed, see Figures 1-3. However, it can be observed that

when a new monarch is appointed (in Norway in 1991 and in Sweden in 1973), state visits to neighboring countries occur in the same or in the following year. It seems logical that state visits are made to neighboring countries when countries change their head of state, as it may be important for the new head of state to establish and maintain contact with the “closest” countries.

Tables 1 and 2 shows where the five Nordic countries have made their state visits to different regions from 1973 to 2022. Table 1 provides the total number of state visits to each region while Table 2 provides the percentage of visits to different countries within each region. It is clear due to the data that all Nordic countries have a high proportion of their state visits to other European countries. The percentages range from 64.15% to 79.63%. This indicates a strong focus on intra-European relations and a higher emphasis on European visits compared to other regions. Another observation is that during the first period (1973-1990) only a few visits were made to Asia, see Table A3 in Appendix. During the 90’s, state visits to Asia started to occur more frequently and as seen in Tables 1 and 2 where it is evident that Asia is the second most visited region. Based on the observations in Tables 1 and 2, it seems to be the case that Nordic countries primarily focus on Europe in terms of their state visits, with a relatively higher level of engagement in the region. There are some visits to the other regions outlined but with a generally lower frequency.

Table 1. State Visits to different regions (1973-2022) Source: Own calculations

Region	Denmark	Norway	Sweden	Finland	Iceland
Europe	34	43	55	93	43
Asia	7	6	13	15	6
Africa	4	2	4	6	0
Oceania	2	1	3	2	0
South America	2	4	3	3	0
Middle East	2	1	2	6	1
North America	2	3	2	8	4
Total	53	60	82	133	54

Table 2. State Visits to different regions (1973-2022) Source: Own calculations

Region	Denmark	Norway	Sweden	Finland	Iceland
Europe	64.15%	71.67%	67.07%	69.92%	79.63%
Asia	13.21%	10.00%	15.85%	11.28%	11.11%
Africa	7.55%	3.33%	4.88%	4.51%	0.00%
Oceania	3.77%	1.67%	3.66%	1.50%	0.00%
South America	3.77%	6.67%	3.66%	2.26%	0.00%
Middle East	3.77%	1.67%	2.44%	4.51%	1.85%
North America	3.77%	5.00%	2.44%	6.02%	7.41%

A state visit can follow after a certain political event. For example, the head of state of Denmark, Finland, Norway, and Sweden all visited the former Soviet states Estonia, Latvia, and Lithuania in the years after the dissolution of the Soviet Union. They also visited the Czech Republic, Slovak Republic, and the Republic of Slovenia after the dissolution of Czechoslovakia. Furthermore, the three monarchs also visited South Africa in the 1990s after the abolishment of apartheid and the first general election in which citizens of all races were allowed to participate. The data on state visits do not necessarily show any trend that monarchies tend to visit other monarchies more often than monarchies tend to visit other republics and vice versa. What should be noted however is that the number of republics highly exceeds the number of monarchies globally.

To recapitulate, we have constructed a new dataset for analysis, which reveals that a potential pattern exists in which state visits to neighboring countries are more frequent when a new president takes office in the republics, but not when a new government is appointed in the monarchies.

4. Previous research

State visits fall under a body of research that explores export promotion activities and bilateral relations. While different strategies have been implemented to identify the effects, DiD have recently emerged as an increasingly popular empirical strategy and the method is continuously evolving. DiD has been used in previous research to examine the effect of diplomatic relations and state visits on bilateral exports. Researchers have utilized this design to investigate various areas, including the impact of regional and free trade agreements, the effect of tariffs and quotas, as well as historical and cultural ties (Ferguson, and Forslid, 2019; Görg, Henry, and Strobl, 2008). Similarly, one study have used DiD to examine the effect of state visits on bilateral exports (Nitsch, 2007). However, none of the previous studies have implemented the estimation method by Callaway and Sant'Anna (2021). Neither have any previous study explored the specific role of the head of state and the effect they have on state visits.

In the next section, we discuss previous research on export promotion agencies since they function to pursue similar objectives as state visits. Section 4.2 describes previous research on state visits explicitly. Finally, section 4.3 concludes with a discussion about previous political science studies investigating state visits. This will give us a wider understanding of the purpose of state visits as well as their anticipated effects.

4.1 Export promotion agencies and foreign services

Representation in foreign countries through consulates and embassies aim to reduce firms' fixed costs of entering a new market. Ferguson and Forslid (2019) investigate the effects that foreign services as a trade promotion tool have on trade, and their focus lies on the opening of Swedish and Norwegian embassies. They use firm-level data and a DiD approach where firms from Norway are used as a control group for Swedish firms with the explanation that if an emerging market becomes interesting for Swedish exporters it would likewise be interesting for Norwegian exporters due to their similarities. The authors find that both large and medium-sized firms respond well to the opening of embassies. Similarly, Munch and Schaur (2018) examine Denmark's export promotion activities and the effect that they have on exports and firm performance. They found positive effects on the small exporters from export promotion activities. However, results should be interpreted with caution as countries

often open embassies in foreign countries where there is a large potential for trade. Furthermore, firm performance is not necessarily the same as export performance.

Rose (2007) also discusses the importance of foreign services in promoting exports as he investigates whether the presence of foreign agencies is systematically linked to a country's exports. In the investigation, Rose (2007) compares two countries that geographically are the same distance from the US: Brazil and Belgium. Even though Belgium's economy is twice as large as Brazil's, both countries exported equally many goods to the US. An important difference is that Brazil has seven consulates in the US whereas Belgium has only four consulates. Using the gravity model of trade, Rose (2007) finds that bilateral exports increase for each additional consulate or embassy abroad, such that EPA services are indeed important to promote trade. This is further highlighted in the article by Lederman, Olarreaga, and Payton (2010), where they discuss the importance of EPA services as they overcome trade barriers and solve problems of asymmetric information.

A study by Volpe Martincus and Carballo (2010a) investigates the distributional impacts of export promotion programs (EPPs) in developing countries using firm-level data from Argentina, Chile, and Uruguay. The authors use a matching approach to estimate the impact of EPPs on the export performance of treated firms relative to a control group of non-treated firms. Overall, the study suggests that EPPs can have a positive impact on the export performance of firms in developing countries, particularly larger and more productive firms operating in dynamic sectors. The study highlights the importance of considering the distributional impacts of EPPs and the role of the business environment in determining their effectiveness.

Volpe Martincus and Carballo (2010b) investigate the effectiveness of different types of export promotion programs (EPPs) in developing countries using firm-level data from Argentina, Chile, and Uruguay. The study focuses on the impact of bundled services, which provide firms with a package of different types of support (e.g., market research, trade fairs, and financial assistance). Overall, the study suggests that bundled services are an effective approach to promoting exports in developing countries, particularly for smaller and less experienced firms. The study highlights the importance of considering the specific needs of firms and the role of the business environment in determining the effectiveness of EPPs.

The reviewed studies of this section suggest that the presence of foreign services abroad have a pronounced impact on trade. This is suggested for both the bilateral level and the firm level.

4.2 State visits

To our knowledge, the initial investigation into the impact of state visits on trade flows was conducted by Nitsch (2007). Nitsch's (2007) study explores the empirical relationship between foreign visits by politicians and bilateral trade flows. Specifically, foreign visits by the heads of state of the United States, France, and Germany are examined using the gravity model of bilateral trade. In order to consider the potential influence of reverse causality, where politicians may exclusively visit countries that are already experiencing a rise in exports, Nitsch (2007) utilizes a DiD analysis. To support the findings that indicate a positive correlation between various types of visits and exports, the author uses countries that have not been visited as a control group. However, the effectiveness of state visits varies depending on the type of trade being promoted and the existing trade relations between the countries involved. Nitsch's (2007) investigation is perhaps the analysis that is the most similar to this study. However, the studies differ in many important ways. Perhaps most significantly, different countries' heads of state are examined during different time periods. Furthermore, we adopt a novel approach with a new estimation method by Callaway and Sant'Anna (2021) due to the recent developments in DiD literature that suggest that using TWFE with staggered DiD can generate biased estimators. Lastly, Nitsch (2007) includes all types of foreign visits in his study including working visits, something that is excluded from this study as only state visits are employed.

Lee and Yeo (2009) examine the impact of presidential diplomacy on international trade in Korea. The authors use a gravity model to estimate the effect of presidential visits on bilateral trade flows between Korea and its trading partners. Their analysis is based on a panel data set consisting of annual trade statistics of 54 countries that received official visits from Korean presidents over a 27-year period, from 1981 to 2007. The results indicate a positive association between official visits by Korean presidents and both exports and imports of Korea. Lee and Yeo (2009) find that presidential diplomacy can play an important role in promoting international trade, particularly for developing countries and products with higher levels of technological complexity. Furthermore, the study highlights the importance of building relationships and trust between leaders in promoting trade and the importance of targeting countries with relatively low levels of trade prior to the visit. However, the impact of official visits on exports is larger than that of imports. Hence, while official visits by Korean presidents can improve bilateral economic relations, they tend to promote exports more than imports.

Similarly to Lee and Yeo (2009), Head and Ries (2010) investigate the impact of regular trade missions on bilateral trade using a gravity model and data on Canadian trade missions between 1993 and 2003. Their analysis reveal that trade missions are associated with high levels of Canadian trade in specifications that do not control for unobserved bilateral influences. However, when they introduce a lagged dependent variable and country-pair fixed effects the estimates greatly diminishes. While the lagged dependent variable specification suggests that trade missions expand exports by about 14%, the authors argue that the approximately zero effects found in the country-pair fixed effects specification were more trustworthy. Trade missions can, according to Head and Ries (2010) results, be an effective tool for promoting international trade, particularly for smaller and more distant trading partners.

Although the reviewed studies suggest that state visits and presidential diplomacy can facilitate international trade, they lack a nuanced understanding of the role of diplomatic engagement in promoting bilateral trade. To begin with, Nitsch (2007) conducted an initial investigation into the impact of foreign visits by politicians on trade flows, focusing on visits by the heads of state from the United States, France, and Germany. However, our study goes beyond this by examining the state visits made by the five Nordic countries. This allows us to provide unique insights into the potential impact of state visits within a specific regional context. Moreover, while Nitsch (2007) explored the effects of foreign visits without distinguishing between different categories of officials, our study takes into account whether the visiting head of state is elected or non-elected. This distinction is essential as it may influence the effectiveness of state visits in promoting economic relations between nations. Furthermore, our research methodology builds upon the approaches employed by previous studies. We utilize both a DiD approach, similar to Nitsch (2007), and an alternative estimation method introduced by Callaway and Sant'Anna (2021) to explore the relationship between bilateral trade and export flows. Notably, this investigation marks the first application of this methodology to examine this specific question in our knowledge. However, we focus exclusively on state visits to provide a more precise understanding of the impact of diplomatic engagements at the highest levels. Additionally, our study benefits from the advancements in empirical strategies, particularly the DiD analysis.

The potential benefits and limitations of state visits in promoting economic relations between nations have been the subject of several studies. However, it is important to note that the efficacy of state visits could be constrained by a range of factors, including the nature of trade

under discussion and the preexisting trade links between the countries involved. Additionally, previous studies have not examined the possible difference between state visits made by monarchies or republics. Through our comprehensive analysis of state visits by the five Nordic countries and the distinction between elected and non-elected heads of state, we aim to provide novel insights that will contribute to the existing body of knowledge on this topic.

4.3 State visits in political science

State visits are not only interesting from the perspective of export promotion, but they are also an important topic in political science as it is considered to build and maintain relationships and affect the opinions of the public. Although a slightly smaller body of literature, there are some interesting and important conclusions that are worth discussing.

Goldstein (2008) examines the mechanics of a state visit and its purpose in modern diplomacy, as well as the different protocols of state visits, possible misunderstandings, and their unintended consequences. He describes state visits as being relationship-enhancing, alliance-building, and a tool for facilitating trade. Moreover, Goldstein (2008) states that state visits can be effective in influencing public opinion. State visits are in their nature very formal and ceremonial in the sense that they can bring more confidence to leaders and bilateral relationships. Furthermore, Goldstein (2008) argues that political discussions that may arise during a state visit are often a bonus and are therefore without the pressure of expectations. However, Malis and Smith (2021) argue that there may be a political motive behind many state visits, such that a state visit can increase a political leader's stability in office. Malis and Smith (2021) link state visits to leader survival, as they propose that a foreign head of state visits another country to obtain some kind of policy change and that the visit is only worth it if the head of state believes that the foreign leader will remain in power. Thus, the visit signals a belief in the foreign leader's stability in office, and Malis and Smith (2021) find that a visit from the president of the United States largely reduces the risk of a leader's removal from office.

A study by Goldsmith, Horiuchi, and Matush (2021) brings further nuance to the conclusions of Malis and Smith (2021). In the study, respondents are interviewed right before or just after a state visit and the results show that visiting heads of state can increase public approval of the leadership of the visiting country. The effects are especially substantial when the media reports about the ongoing visit. These findings confirm the underlying assumption that

diplomacy can change public opinion. From a trade perspective, a state visit that changes public opinion can open up possibilities for new export markets.

To conclude, state visits play a crucial role in diplomacy as they enhance relationships between countries, facilitate trade, and can influence public opinion. Goldstein (2008) argues that state visits are ceremonial and can lead to political discussions, while Malis and Smith (2021) propose that state visits have a political motive behind them, as they increase a leader's stability in office. Goldsmith, et al., (2021) confirms that state visits can change public opinion and increase approval of the visiting country's leadership, which can have positive effects on trade.

5. Empirical strategy

The empirical analysis will contribute to answering the question of whether economic diplomacy in the form of state visits leads to increased export flows. We also ask whether the trade effects of state visits are different depending on whether the visiting head of state is elected (a president), or non-elected (a monarch). To detect the change in export flows that are due to a state visit, we adopt a novel DiD estimation method by Callaway and Sant'Anna (2021). This method does not include running a regression, so we will not be presenting a model specification for that specific section. The approach is used as our main specification since recent developments in the DiD literature have shown that TWFE estimators run the risk of being biased. Nevertheless, we will present the canonical DiD as well as the DiD approach with TWFE using Pseudo-Poisson Maximum Likelihood (PPML) estimation. The TWFE approach is common to use with DiD when there is differential timing, as you include both time-fixed effects and individual-fixed effects (Cunningham, 2021). Our control group consists of country pairs that did not experience a state visit during our selected period of time. Our treatment group consists of country pairs that experienced a state visit during this time period. The entire sample is documented in Table A5 in the appendix.

This chapter begins with a general discussion of the canonical DiD and the parallel trends assumption. It then proceeds with an extension of the canonical approach, the TWFE DiD. We also present a model specification for the TWFE estimation as well as some potential problems with this approach. Next, a description of our main estimation is presented using an estimation method by Callaway and Sant'Anna (2021).

5.1 The Canonical Difference-in-Differences and The Parallel Trends Assumption

Estimating the effect of policy changes at specific points in time is popular among many fields of research. DiD is one of the most common approaches for such estimations (Bertrand, Duflo, and Mullainathan, 2004; Goodman-Bacon, 2021). In DiD, a treated unit subject to a policy change is chosen to be compared to untreated control units that are not exposed to the change. The variation within the treated and untreated groups is isolated and affected by time, allowing for a comparison between these two. In other words, the comparison reflects how much more the treated group changed than the untreated group. The change in the untreated control group reflects how much change we could expect to see in the treated group if no treatment had occurred. Thus, any additional change represents the effect of the treatment (Huntington-Klein, 2022).

For this to work, the assumption of parallel trends needs to be satisfied. It is a rather strong assumption, stating that in the absence of treatment, the treated unit and the control unit would follow the same trend pattern (Abadie, 2005). Thus, there would be no change in the difference between the treated group and the untreated group if the parallel trends assumption holds. It is further important to notice that the parallel trends assumption is inherently unobservable, as it reflects a situation in which the treatment never occurred (Huntington-Klein, 2022). The assumption can be explained in the following way:

Effect of treatment + Other treated group changes - Other untreated group changes

For the parallel trends assumption to hold and to identify the effect of the treatment, it has to be that the *Other treated group changes* and the *Other untreated group changes* exactly cancel out. Thus, it is important to ensure that the untreated group is not affected in any way by the treatment. Furthermore, the treated group and the untreated group must have similar characteristics. And lastly, the groups must display similar trend patterns of the dependent variable before the treatment (Huntington-Klein, 2022).

For clarification purposes, we will introduce the canonical DiD method, although it is not possible to adopt this version in our study. This is because we have treatments occurring at different points in time. The canonical DiD specification has a 2 x 2 setup with one treated group *TREAT* and one untreated group *CONTROL*. Both groups have one pre-treatment period and one post-treatment period, but it is important to remember that the untreated group never receives any treatment. The average treatment effect is then:

$$\hat{\delta}_{ku}^{2x2} = (\overline{y}_{TREAT}^{post} - \overline{y}_{TREAT}^{pre}) - (\overline{y}_{CONTROL}^{post} - \overline{y}_{CONTROL}^{pre}) \quad (1)$$

This is also an estimated coefficient that can be interacted with dummy variables, one for the treatment group ($TREAT_i$) and one for the post-treatment period ($POST_t$). It can be set up in the following regression:

$$y_{it} = \beta_0 + \beta_1 TREAT + \beta_2 POST + \beta_3 TREAT * POST + \varepsilon_{it} \quad (2)$$

The third term is the interaction term, indicating that we have both a treated unit and that we are in the post-treatment period. β_3 is then the DiD estimate which describes the effect of the treatment in the post-treatment period compared to the pre-treatment period. When we extend the model to include TWFE in the next section, the dummy variables for the treatment group and the post-treatment period will be replaced by country-pair and year-fixed effects.

5.2 Two-way Fixed Effects Specification

5.2.1 General Two-way Fixed Effects Estimation

There are several extensions of the DiD approach. One is the DiD approach with staggered adoption, which allows for several treatments across units (Goodman-Bacon, 2021). Since state visits performed by the Nordic countries' heads of state occur at several different points in time, the adoption of staggered DiD is suitable for the analysis.

The staggered DiD has some favorable properties over the canonical DiD with only one treatment period. A common concern with the canonical DiD is that factors besides the treatment can drive contemporaneous trends, confounding the treatment effect and violating the parallel trends assumption. The staggered approach is more robust in such circumstances, as multiple treatment periods can be seen as alleviating concerns that treatment effects are driven by contemporaneous trends (Baker, Larcker, and Wang, 2022). The staggered DiD regression which includes TWFE can be described as follows:

$$Y_{ijt} = \beta_0 + \beta_1 TREAT * POST + \alpha_{ij} + \alpha_t + \varepsilon_{it} \quad (3)$$

The dependent variable is Y_{ijt} , $TREAT * POST$ is a dummy for our difference-in-differences estimator which we still have from the canonical DiD, α_{ij} is the set of country pair fixed effects, and α_t is the set of time fixed effects. Control variables that do not change over time

but vary across groups are not necessary as the fixed effects already control for them (Huntington-Klein, 2022). The inclusion of TWFE in the regression also allows for several treated groups and untreated groups, as opposed to only one treated group and one untreated group (Huntington-Klein, 2022). This is done by estimating the treatment effect by comparing the change in exports between country pairs that experienced a state visit in that year to country pairs that did not experience a state visit that year. For example, if the Finnish president visits Nigeria but not Mali, the country pair FIN-NIG is in the group receiving treatment, while FIN-MAL serves as the control group.

5.2.2 Our Specific Two-way Fixed Effects Estimation

In this section, we present the specific application for the TWFE estimation. Our control group consists of country pairs that did not experience a state visit during our selected period of time. Our treatment group consists of country pairs that experienced a state visit during this time period.

Endogeneity is often an issue to be aware of in trade policy. Including country pair fixed effects in a panel data regression is helpful for solving this problem (Yotov, Piermartini, Monteiro, and Larch, 2016). However, in our case, endogeneity might prevail if countries perform state visits to countries that they already trade a lot with, for example, countries that are members of the European Union (EU). To handle this possible reverse causality, we have excluded all EU member states from the sample, leaving us with non-EU countries and countries in the rest of the world in the sample.

The case of missing values is often a potential problem in circumstances where trade is empirically analyzed. It is complicated to determine whether a zero is an actual zero or if the observation is a missing value. A solution to this issue would be to estimate the model with Poisson-Pseudo Maximum Likelihood (PPML). With PPML, estimation is performed in exponential form rather than logarithmic, meaning that no zeroes are lost in estimation (Yotov et al., 2016).

The staggered DiD PPML regression which includes TWFE can be described as follows:

$$Exports_{ijt} = \beta_0 + \beta_1 StateVisit_{ijt} + \alpha_{ij} + \alpha_t + \epsilon_{it} \quad (4)$$

The dependent variable is $Exports_{ijt}$, denoting the exports from Nordic country i to country j at time t . $StateVisit_{ijt}$ is a dummy for whether a Nordic country i makes a state visit to country j at time t . When a country receives a state visit, this unit is treated for the rest of the time period. α_{ij} is the set of country pair fixed effects and α_t is the set of time fixed effects.

As a second stage of the analysis, the trade effects from the state visits are examined to determine whether the effects are different depending on whether the visiting head of state was elected (a president), or non-elected (a monarch). To achieve this, the dummy variable $StateVisit_{ijt}$ is interacted with a monarchy dummy variable $Monarchy_i$, which takes a value of one if the visiting head of state is a monarch and zero otherwise. We also include another interaction variable for republics, where $StateVisit_{ijt}$ is interacted with a republic dummy variable $Republic_i$, which takes a value of one if the visiting head of state is a president and zero otherwise. The coefficient for the interaction term can determine whether the effect of state visits on export flows differs significantly between the two regime types. The regression of our second-stage analysis is described as follows:

$$Exports_{ijt} = \beta_0 + \beta_1 StateVisit_{ijt} * Monarchy_i + \beta_2 StateVisit_{ijt} * Republic_i + \alpha_{ij} + \alpha_t + \epsilon_{it} \quad (5)$$

5.2.3 Potential problems with the TWFE Estimator

Most studies that employ DiD have more than just one pre-treatment and one post-treatment period and the outcome variables are often serially correlated. This can lead to downwardly biased standard errors if the standard errors underestimate the estimators' standard deviation which may lead to an over-rejection of the null hypothesis (Bertrand et al., 2004). A solution to this problem is to cluster the standard errors at the group level.

There are some potential problems with combining the TWFE approach with staggered treatment timing. TWFE estimators have been considered equivalent to the standard DiD estimators, but recently it has been shown that the estimators differ in a very important manner (de Chaisemartin, and D'Haultfœuille, 2021; Goodman-Bacon, 2021). The DiD estimator relies on the parallel trend's assumption, which implies that without treatment the

control unit and the treated unit would exhibit the same outcome evolution. The assumption further signifies that the DiD estimator is unbiased for the average treatment effect, which is the outcome variable of interest in the analysis. On the other hand, the TWFE estimator requires an additional assumption for unbiasedness to hold: the treatment effect should be constant between groups and across time (de Chaisemartin, and D’Haultfœuille, 2021).

Recently, it was shown that the TWFE estimator is a weighted average of all possible standard DiD estimators with weights based on the variance in treatment and the size of control groups (Goodman-Bacon, 2021). As already-treated units can act as controls in the set-up of staggered treatment timing, changes in their treatment effects over time will get subtracted from the DiD estimate. If the treatment effects do not vary over time, the TWFE approach provides a variance-weighted average of cross-group treatment effects where all weights are positive. The bias thus arises when the treatment effects vary over time and negative weights arise. Although this may not imply a failure of the model itself, it signals a caution against the use of TWFE and a single coefficient to summarize time-varying effects (Goodman-Bacon, 2021). Goodman-Bacon, Goldring, and Nichols (2019) have developed a diagnostic test that can be performed in Stata to determine the robustness of the estimate. This requires a balanced panel.

5.3 Main Specification: Robust Estimator

Apart from the diagnostic test that Goodman-Bacon et al., (2019) developed, there are several alternative estimators to employ to solve this issue. In this section, we discuss an alternative estimator by Callaway and Sant’Anna (2021) which we will use as our main specification. It is important to note that the literature on DiD and alternative estimators is developing fast, and new techniques are continuously presented.

Callaway and Sant’Anna (2021) suggest a modification to the traditional DiD estimator which allows for multiple time periods, accommodating more complex data structures and a more flexible analysis of treatment effects over time. By doing so, they address the challenge of having multiple treatment periods. Instead of treating all periods as one, each treatment period is considered separately, estimating “group-time treatment effects” that capture the average treatment effects on the group treated in a particular time period. This approach results in multiple effect estimates, each corresponding to a different time period when the treatment was introduced to a unit (Huntington-Klein, 2022).

To handle the treated groups separately based on their treatment timing, each treatment group is compared with the untreated group. Callaway and Sant'Anna (2021) employ a propensity score matching to improve the estimate. This matching process ensures that each group-time treatment effect is based on comparing the post-treatment outcomes of the groups treated in that period with the not-yet-treated groups that are most similar to those treated groups (Huntington-Klein, 2022). Once all the group-time treatment effects are obtained, they can be summarized to answer various types of questions. One option is to average them together, yielding a single average treatment effect on the treated groups. In summary, their approach provides flexibility in analyzing and summarizing treatment effects across different time periods.

We first need to make sure that no unit is treated in the first time period, and that once a unit becomes treated, that unit will remain treated in the following period. This is what identifies the staggered treatment adoption. The group-time treatment effect (ATT) is defined as

$$ATT(g, t) = E \left[\left(\frac{G_g}{E[G_g]} - \frac{\frac{p_g(X)C}{1-p_g(X)}}{E\left[\frac{p_g(X)C}{1-p_g(X)}\right]} \right) (Y_t - Y_{g-1}) \right] \quad (6)$$

Where the propensity scores are defined by the weights p , and G is a variable equal to 1 if a unit starts to receive treatment in period g . For the control group, we add the variable C which is equal to 1 if the unit belongs there. Also note the absence of a time index for this variable, as it belongs to the never-treated group so time does not matter. Next, the calculation of weights is a somewhat complex procedure: gather observations from both the control group and group g , excluding the other groups that are treated in other time periods. Higher weights are assigned to the observations from the control group that shares similar characteristics with observations from group g , whereas lower weights are assigned to control group observations that have characteristics rarely found in group g . This reweighting procedure assures that covariates from group g and the control group are balanced (Cunningham, 2021).

We will receive a lot of treatment effect parameters from this approach. To interpret them in a more comprehensive way, Callaway and Sant'Anna (2021) suggest taking all the group-time treatment effects and collapsing them into averages. All of this is done without running a regression.

5.4 Data

As explained in section 3, the information about state visits performed by the heads of state of Denmark, Norway, and Sweden between 1973-2022 is available on the official web pages of each Royal Court.⁵ The state visits undertaken by Finnish and Icelandic presidents were requested and retrieved from the countries' governmental offices. Only state visits and official visits conducted by the head of state are included in the analysis. Working visits are excluded due to their lack of formal and ceremonial nature. Full lists of state visits between 1973 and 2022 are available in the appendix in Tables A1, A2, and A3 in Appendix.

Data on export flows from the Nordic countries are retrieved from the International Monetary Fund (IMF) Direction of Trade Statistics Database. Export flows are expressed in million current USD.

The dataset we created on state visits spans from 1973 to 2022. Due to data availability on trade flows, we can only estimate the time period 1990-2020. We also narrow the time period further down to 1995-2020 such that Denmark, Sweden, and Finland are all members of the EU. All countries are members of the EU except for Iceland and Norway. However, Norway and Iceland are members of the European Economic Area (EEA), which allows them to maintain trade agreements with other countries that are similar to agreements of the EU. To control for any possible endogeneity, all EU countries importing from the Nordic countries are excluded from the dataset.

Due to the limited time period of 1995-2020, we decided to exclude country pairs that had experienced a state visit in the years close to the start of our estimation period, as it is reasonable to believe that the effect on exports from a state visit could last for a couple of years. For example, if Denmark visited India in 1993 we decided to exclude the country pair DEN-IND as we expect the trade effects from the state visit to last for a couple of years.

⁵ Royal House of Denmark, Royal House of Norway, and the Swedish Royal Court.

6. Results

This section presents the regression results. Recent progress in the literature on DiD suggests that the TWFE approach with staggered treatment may not be robust. Therefore, our main results are based on the alternative estimation method by Callaway and Sant’Anna (2021)⁶. We thereafter compare the results of this estimator to results from a DiD TWFE approach with PPML estimation to see if the results point in the same direction. We apply this estimation to the sample spanning from 1995 to 2020. This sample does not contain any EU member states. Lastly, several robustness checks and placebo tests are explored to validate our specification.

6.1 Event Study

Figure 6 illustrates the average treatment effect observed between 1995-2020 relative to the period of the first treatment, across all cohorts. Due to the presence of multiple treatments applied to various groups at different points in time, a conventional event study methodology is not applicable. Consequently, we employ an event study approach proposed by Callaway and Sant’Anna (2021) that relies on the estimation of average treatment effects. The findings reveal that prior to the treatment, the effect is negligible, characterized by a relatively narrow confidence interval. However, following the treatment, a larger effect is observed, accompanied by increased variance. These results provide support for the hypothesis that state visits have an impact on exports.

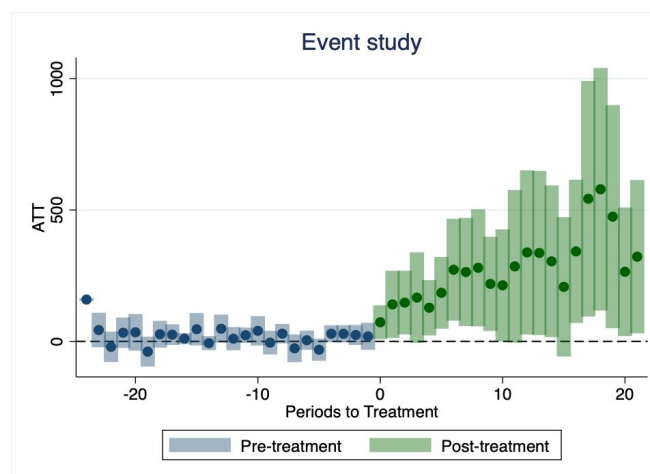


Figure 6. Event study on average treatment effect 1995-2020

⁶ csdid package in STATA

6.2 The Effect of State Visits on Export Flows

6.2.1 Results from main specification

The results from the robust estimation based on Callaway and Sant'Anna (2021) are shown in Figure 7. The figure is an average based on all country pairs experiencing state visits, and it presents the effect that outgoing state visits from the Nordic countries have on export flows to the visited countries. It displays the treatment effect from a state visit, where the effect is an average based on the effect of all collective state visits during this time period. We also see how this average effect behaves ten years before, and ten years after treatment.

We can see that the average effect is close to zero in the years before a state visit. As explained earlier, state visits are often planned a year ahead of the actual visit and the visit itself is ceremonial and very formal. Thus, it might be reasonable to believe that there are anticipation effects due to expectations from an upcoming state visit that will increase exports. If we had seen larger effects the year or a couple of years before a state visit, we could assume that there was some kind of anticipation effect prevalent. However, we see in Figure 7 that the average effect takes off in the same year the state visits take place, and the effect is still small the year before a state visit. This is an indication that there are no anticipation effects from a state visit which suggests that the actual state visit and the actions taken during that visit affect trade, not the expectations leading up to the visit. The small average effect before a treatment is also an indication of parallel trends, in the sense that nothing seems to change before a treatment. Then the treatment happens, and we see a large change in the average effect.

Furthermore, the results we see in Figure 7 before a state visit occurs are also reassuring for any possible endogeneity issues. There is always a risk that there is endogeneity when estimating trade due to reverse causality, such that a country may be more likely to visit a country that is already a significant trade partner. However, that we do not see anything affecting the results before the treatment occurs suggests that there is no other change that affects our results before the time of the treatment.

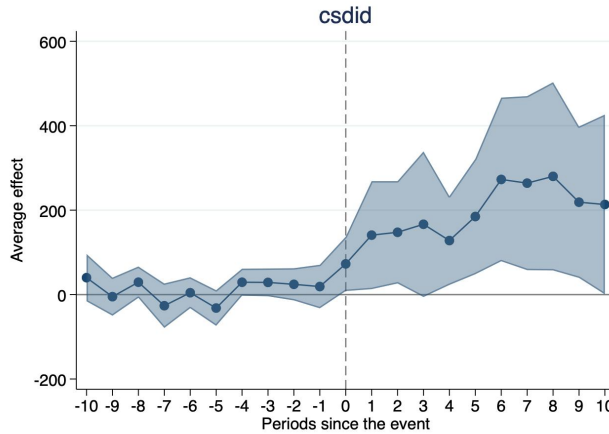


Figure 7. Estimation results from using the robust estimator by Callaway and Sant'Anna, 1995-2020.

Next, we can look at the average treatment effect before and after treatment. These results are displayed in Table 3 and expressed in million USD. The average pre-treatment effect is 21,1 and the average post-treatment effect is 276,8 which implies an increase in the effect after treatment. These results are statistically significant and tell us that the average effect before a state visit is very small compared to the average effect after a state visit.

There is a drop in the average post-treatment effect four years after the state visit, and then the effect increases again. This is unusual, given the steady increase in effect in the first three years after the visit and the sharp increase five and six years after.

Table 3. Average treatment effects before and after treatment using csdid.

	Event
Average pre-treatment effect	21.098*** (5.519)
Average post-treatment effect	276.829** (94.95353)

Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

Thus, the results from our main specification by Callaway and Sant'Anna (2021) suggest that state visits have a significant and positive effect on export flows.

6.2.2 Results from two-way fixed effects specification

To be able to compare with the previous literature we also estimate a DiD regression with TWFE and PPML estimation. These results are presented in Table 4. It displays the effect that outgoing state visits from the Nordic countries have on export flows to the visited countries. PPML is preferred over a linear regression because we want to include as many observations as possible to reflect the variation in the data and keep zero trade flows. Each column presents results from different time periods to capture how the effect changes over time. The variable of interest *StateVisit* is lagged one period because we see from the Callaway and Sant'Anna (2021) estimation that the effect takes off a year after a state visit. It is important to remember that these results are to be interpreted with caution, as recent evidence suggests that TWFE estimators with staggered treatment may be biased.

Firstly, we note that the TWFE approach reports positive and significant estimates for all time periods. For the entire time period 1995-2020, the effect of state visits on exports is 8.17%. The effect increases each period, with 15% for the sample 2000-2020 and 28.4% for 2005-2020. This suggests that state visits have a larger effect on exports in 2010 than in 1997 for example. Thus, the results obtained from the DiD TWFE estimation indicate that state visits are becoming increasingly important to trade and that the way visits are executed have changed over the years. Perhaps more money is invested in state visits, or the agendas have changed. Another reason could be decreasing barriers to trade. As trade barriers are being removed across countries, it may be that state visits can have a greater effect on the process of facilitating trade as there are no external barriers that hinder it. When barriers to trade are removed between countries, more opportunities to negotiate trade open up during state visits.

Changing the size of the sample is also a kind of robustness analysis to see whether the results point in the same direction when the sample size changes. And since our results get more significant and show a larger effect, it is safe to say that they all point in the same direction - namely that state visits increase export flows.

Table 4. Difference-in-Differences with PPML and two-way fixed effects.

	(1) PPML 1995-2020	(2) PPML 2000-2020	(3) PPML 2005-2020
$StateVisit_{t+1}$	0.0785* (0.0457)	0.1446** (0.0556)	0.2569*** (0.0625)
<i>Constant</i>	7.8199*** (0.0159)	7.926*** (0.0164)	7.9800*** (0.0159)
Year FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes
R^2	0.9725	0.9760	0.9775
Observations	20 566	16 191	12 000
Percentage change	8.17%	15.05%	28.40%

DiD regression PPML TWFE. Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

We previously displayed positive average effects from state visits in Figure 7 from our main estimation. Thus, it seems as if the TWFE approach presents coefficients that are consistent with our main results and that both results point us in the same direction. State visits have a positive effect on export flows with both estimation methods.

6.3 The Role of the Head of State during State Visits

6.3.1 Results from main specification

Next, we move on to the second stage of our analysis, where we investigate the role of the head of state during state visits. We want to test whether there is an effect depending on whether the head of state was elected (president) or non-elected (monarch). We first present the results from the Callaway and Sant'Anna estimation. To perform this analysis, we created two interaction variables: one that indicated each time a state visit from a monarchy occurred, and one that indicated each time a state visit from a republic occurred. These results are displayed in Figures 8 and 9.

Figure 8 presents the results of the average effect on exports based on all country pairs experiencing a state visit from a monarchy. We also see how this average effect behaves ten years before, and ten years after treatment. The average pre-treatment effect is small, suggesting that there are no anticipation effects before a state visit occurs. Neither does reverse causality seem to be an issue, or that there is another event happening before the

treatment that affects our main variables. If we instead look at Figure 9, where the average effect on exports based on all country pairs experiencing a state visit from a republic is presented, we see that the period before the treatment is also moving around zero effect with a small confidence interval, suggesting that there is not much going on before a state visit occurs.

If we instead look at the post-treatment effects in Figures 8 and 9, the effects start to diverge. For the monarchy estimation in Figure 8, the average treatment effect increases rapidly after a state visit. The effect is the largest the year of the state visit and the year after, then the effect dampens before it starts to increase again. Thus, a state visit from a monarchy seems to have an effect on exports to the visited country. For the republic estimation in Figure 9, the average treatment effect is not as large the year of the state visit. The effect has a slower increasing trajectory. This is an indication of that the immediate effect on exports of a state visit from a monarch is larger than the effect of a state visit from a president.

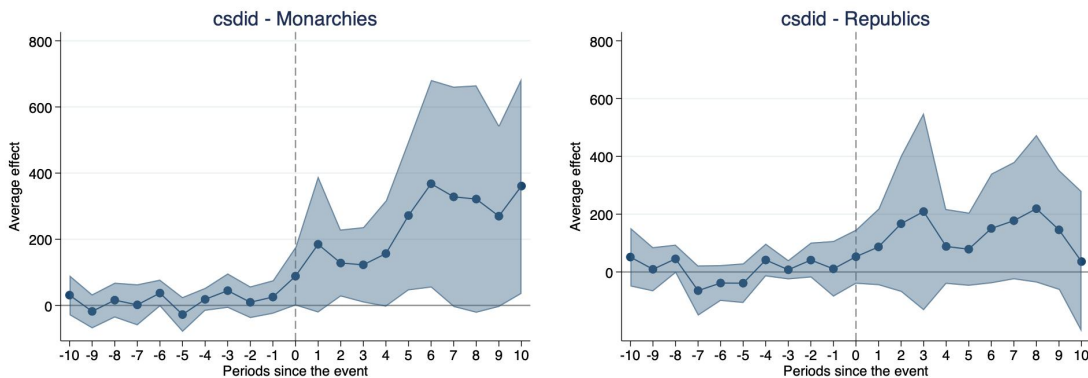


Figure 8-9. Estimation results from using the robust estimator by Callaway and Sant'Anna. 1995-2020. Monarchies and Republics.

Thus, the figures gives us an indication that monarchies display larger average effects on export flows to countries that receive a state visit. We further investigate this interpretation in Tables 5 and 6.

In Table 5, we can see the average effects before and after treatment for the monarchies. What is most significant is that compared to Table 3, where we did not make a distinction between monarchies and republics, the average post-treatment effect is larger when we examine the effect of state visits from monarchies. This is an indication that state visits performed by monarchs may have larger effects on exports. The average pre-treatment effect

is 23 million USD, and the average post-treatment effect is 387 million USD. These effects are significant at the 1% and 5% level.

We explore this further by examining Table 6 for the Republican estimation. For the republics, the average post-treatment effect is smaller than for both the monarchy sample and the entire sample. This is an indication that state visits performed by presidents may have smaller effects on exports compared to state visits performed by monarchs. We also saw more significant results when the monarchies performed state visits. The average pre-treatment effect is 6 million USD for republican state visits, and the post treatment effect is 128 million USD. Interpreting these results, it may be that a state visit by a monarch has a significantly positive effect, whereas a visit by a president does not provide us with the same significance.

Table 5. Average treatment effects before and after treatment using csdid. Monarchies.

	Event
Average pre-treatment effect	23.1315*** (6.7836)
Average post-treatment effect	387.6944** (144.1563)

Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

Table 6. Average treatment effects before and after treatment using csdid. Republics.

	Event
Average pre-treatment effect	6.6209 (11.977)
Average post-treatment effect	128.3673* (75.517)

Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

From these estimation results, we see indications of that when the visiting head of state is a monarch, the effect on exports is more immediate and larger. The effect is also larger than the estimation with the whole sample, suggesting that monarchies drive our results more than republics. The effects of a state visit from a president is not as large nor as significant.

6.3.2 Results from two-way fixed effects specification

We also test the role of the head of state with the PPML TWFE approach. We run a DiD regression with the two interaction variables and the results are presented in Table 7. The coefficient for the interaction variable *StateVisitxMonarchy* is positive and significant,

whereas the coefficient for *StateVisitxRepublic* is insignificant. This suggests that state visits performed by a monarch have a positive effect of 12% on exports. We recognize these results from the Callaway and Sant’Anna estimation, where we also found a positive and significant effect for monarchies and for republics. Thus, here as well the results point in the same direction although we interpret the TWFE results with caution.

Table 7. Difference-in-Differences with PPML and two-way fixed effects.

	PPML 1995-2020
StateVisit x Monarchy	0.1162** (0.0592)
StateVisit x Republic	0.0131 (0.0555)
Constant	7.8194*** (0.0159)
Year FE	Yes
Country-pair FE	Yes
R^2	0.9725
Observations	20 566

DiD regression PPML TWFE. Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively. Sample without EU countries.

Thus, we see a larger and more significant effect on trade from state visits performed by monarchs. However, when testing⁷ for the difference between the two coefficients in Table 7, there is no significant difference between the two. We can therefore not consistently conclude that the monarchies are better at state visits based on our TWFE results. But we can say that there are indications that state visits from the Nordic monarchies drive our results more than state visits from the Nordic republics.

6.4 Robustness Tests

In order to enhance the accuracy of the findings, we will carry out multiple robustness checks, including placebo tests. We first discuss a placebo test of our main estimations based on Callaway and Sant’Anna (2021) to validate the robustness of our specification. Then we move on to a robustness check of our TWFE estimators which we already know should be interpreted with caution.

⁷ Command test in STATA

6.4.1 Placebo Test

In this section, we perform a placebo test of our main estimations based on Callaway and Sant’Anna (2021). This practice is recommended when using DiD, as suggested by Huntington-Klein (2022) and Bertrand et al., (2004). To perform a placebo test, we will create a placebo treatment variable for a year where no actual treatment occurred, as outlined by Huntington-Klein (2022). The success of the placebo test hinges on the fact that the placebo treatment variable is not linked to any genuine treatment. Therefore, we expect the model to generate an insignificant treatment coefficient, indicating that the observed effect is merely a result of random variation, rather than a true causal relationship. To perform the placebo test, we use only the control group and randomly assign fake treatments to country pairs. Thus, in this estimation, the country pairs that are assigned a state visit they never actually experienced a state visit.

Figure 10 and Table 8 report the results from the placebo estimation. As expected, the estimations show no statistical significance, which is reassuring for the robustness of our specification.

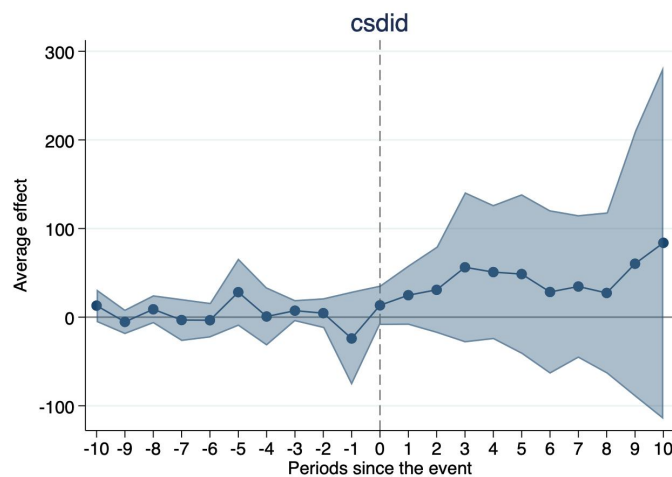


Figure 10. Placebo estimation results from using the robust estimator by Callaway and Sant’Anna. 1995-2020.

Table 8. Average treatment effects before and after treatment using csdid. Placebo estimation.

	Event
Average pre-treatment effect	-2.162 (2.559)
Average post-treatment effect	11.794 (33.635)

Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

Next, we perform an estimation with only Asian destinations. Parallel trends often works best when the control group consists of countries that are similar to the treated groups. We therefore test whether the analysis holds or if the results are better if we only include countries from one continent. The results are presented in Figure 11 and Table 9. The results are very similar to our main estimation results, and the pre-treatment effect is small compared to the post-treatment effect. We therefore conclude that the fact that we use countries from all over the world in our sample does not change the outcome of our results significantly.

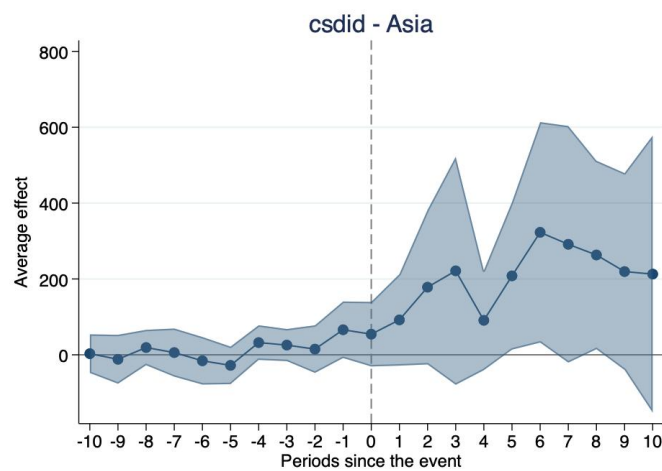


Figure 11. Placebo estimation results with Asian countries using the robust estimator by Callaway and Sant'Anna, 1995-2020.

Table 9. Average treatment effects before and after treatment using csdid. Placebo estimation Asian countries.

	Event
Average pre-treatment effect	23.814*** (5.570)
Average post-treatment effect	249.488** (127.817)

Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively.

6.4.2 Robustness of TWFE Estimations

In this section, we will perform a robustness check on our approach with PPML estimation using TWFE. As a test, we further examine the effect of state visits on export flows in the years following a state visit. We have already introduced the effect on export flows starting in

the year after a state visit in Table 4. In contrast, we also examine the effects of two years, three years, four years, and five years following a state visit. These results are displayed in Table A4. We can see that there is no significant effect in either of columns 1-4, suggesting that there is no long-term effect from state visits on exports starting two or more years after the state visit. The effect is only significant the year after the state visit.

7. Concluding Discussion

The aim of this study was to examine the effect of outgoing state visits on export flows from the Nordic countries, as well as to explore what role of the head of state plays during state visits. By employing robust estimation methods and conducting various analyses, we obtained valuable insights into the relationship between state visits and their effect on export. Our analysis revealed that state visits made by Nordic countries have a significant impact on export flows with an average pre-treatment effect of 21,1 and an average post-treatment effect of 276,8 million USD. The role of the head of state is less significant, although our results indicate that state visits conducted by monarchs drive the positive results more than state visits performed by presidents.

The results obtained through the robust estimation method proposed by Callaway and Sant'Anna (2021) consistently indicate a positive average treatment effect of state visits. That the average effect continues to increase after a state visit is an indication of how state visits can facilitate trade between two countries for years after the visit has taken place. This is in line with the results of Lee and Yeo (2009) and Nitsch (2007) who found that official and state visits in the case of South Korea, France, Germany and the US all contributes to bilateral trade to a certain extent. Our results also aligns with Goldstein's (2008) portrayal of state visits strengthening relationships, fostering alliances, and facilitating trade.

In exploring the role of the head of state during state visits, we found interesting differences between visits conducted by monarchs and visits conducted by presidents. State visits performed by monarchs exhibited a significant and large effect on exports. This finding suggests that the presence of a monarch during a state visit may carry additional symbolic or political weight. On the one hand, monarchs often represent a historical continuity and tradition, embodying the identity and unity of a nation. On the other hand presidents are typically elected officials and their authority is derived from the democratic process, which may be seen as a symbol of popular sovereignty. Given the country-specific data in our

paper, the observed trend indicates a rise in overall exports. However, conducting an analysis at the firm or industry level would be valuable in discerning potential variations and gaining further insights.

The robustness tests conducted further validated our findings. The PPML TWFE estimations for the years following a state visit did not yield significant effects, highlighting the importance of interpreting these estimators with caution. In contrast, the placebo test performed on our main estimations confirmed the robustness of our specification, as the treatment coefficients for the placebo treatment variable were insignificant.

Overall, our study provides important insights into the relationship between state visits and export flows from the Nordic countries. The results consistently indicate that state visits have a positive and significant effect on exports, emphasizing the importance of diplomatic efforts and relationships in fostering economic cooperation. Our findings also highlight the potential influence of the head of state during state visits, with visits by monarchs demonstrating an impact on export flows. These findings contribute to the existing literature on international trade and diplomacy and have practical implications for policymakers seeking to strengthen economic ties through state visits. We also contribute to this area by the fact that we have created a comprehensive and extensive new dataset comprising state visits from the Nordic countries. In order to facilitate future research, we have replicated it in Appendix (Tables A1 and A2) to make sure that future research can build on our work.

However, it is important to acknowledge some limitations of our study. First, our analysis focused exclusively on the five Nordic countries and should therefore be generalized with caution. Additionally, this study focused only on outgoing state visits which could induce a potential of bias. Future research could address these limitations by expanding the analysis to include a broader sample of countries and also include incoming state visits.

In conclusion, this study provides robust evidence that state visits plays a significant role in driving export flows, highlighting the importance of diplomatic efforts in promoting economic cooperation. The results underscore the potential impact of state visits on trade and bilateral relation between countries and call for continued attention to the role of the head of state during such visits. Further research is needed to deepen our understanding of the mechanisms underlying these effects and to explore additional factors that may influence the outcome of state visits.

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Appendix

Table A1. The destination of state visits from the Nordic monarchies' heads of state. 1973-2022.

	Denmark	Norway	Sweden
1973	Sweden, Norway, Iceland, Finland	Germany	
1974	United Kingdom, Germany	Iceland, Denmark	Norway
1975	Soviet Union, Netherlands	United States, Sweden	Denmark, Iceland, United Kingdom
1976	Belgium, Luxembourg		Netherlands
1977	Yugoslavia, Italy		Belgium
1978	Ireland, France	Portugal	Soviet Union, Yugoslavia
1979	Austria		Germany, Austria
1980		Finland	Japan, France
1981	Japan		Tanzania, United Arab Emirates, China
1982		Austria	Mexico, Australia
1983	Spain	Japan	Spain, Finland, Luxembourg
1984	United Arab Emirates, Portugal	Spain	Brazil
1985	Sweden		Switzerland
1986	Egypt		Portugal, Egypt
1987	Australia, New Zealand, Hungary	Canada	Iceland
1988	Morocco	United Kingdom	Canada
1989			New Zealand, Jordan
1990			Italy
1991	Canada, United States	Denmark	Hungary
1992	Estonia, Latvia, Lithuania	Iceland, Sweden	Estonia, Latvia, Lithuania, Ireland
1993	Poland	Finland	Germany, Norway, Poland
1994	Slovak Republic, Czech Republic	Germany, United Kingdom	
1995		Spain, United States	Czech Republic
1996	South Africa	Austria, Luxembourg, Netherlands	Chile, China, Finland, Malaysia
1997		Czech Republic, China	South Africa
1998		Estonia, Latvia, Lithuania, Russian Federation, South Africa	Mozambique
1999	Brazil	Romania	Greece
2000	United Kingdom, Bulgaria, Romania	France	Bulgaria
2001	Slovenia, Thailand	Italy, Japan	Belgium, Russian Federation
2002	Belgium	Canada, Hungary	Mexico, Slovak Republic
2003		Belgium, Brazil	Finland, Romania, Thailand
2004	Japan	Greece, Singapore, Vietnam	Brunei Darussalam, Iceland, Romania, Vietnam

2005			Australia, Thailand
2006	Greece	Ireland, Switzerland	Canada, Türkiye
2007	Republic of Korea	Germany, Finland	Austria, Denmark, Japan
2008	Tanzania	Portugal	Portugal, Ukraine
2009	Vietnam	South Africa	Italy, Netherlands
2010		Slovak Republic	Brazil
2011	Russian Federation	Slovenia, Croatia	Botswana, Poland
2012		Poland	Republic of Korea
2013		Türkiye	Croatia
2014	China, Croatia	Myanmar	France, Latvia
2015	Indonesia	Australia	Finland, Lithuania
2016		Finland, Italy	Bhutan, Germany
2017	Ghana		Indonesia
2018		China, Argentina	
2019	Argentina	Chile	India, Ireland
2020		Jordan	
2021	Germany		
2022			Jordan

Table A2. The destination of state visits from the Nordic republics' heads of state. 1973-2022.

	Finland	Iceland
1973	Switzerland, Iceland	
1974	Austria, Mexico, Soviet Union	
1975	Iceland, Soviet Union, Sweden, Yugoslavia	Canada
1976	Brazil, Soviet Union, Sweden, United States	
1977	Denmark, Iceland	
1978	Spain	
1979	Germany	Belgium
1980		
1981		Denmark, Norway, Finland, Sweden
1982	Iceland, Sweden	United Kingdom, Greenland
1983	Denmark, France, Norway, Soviet Union, United States	France, Portugal
1984	Great Britain	Finland
1985	Austria, Bulgaria, Romania	Netherlands
1986	Switzerland, Japan, Yugoslavia	
1987	Czechoslovakia, India, Soviet Union	Faroe Islands, Italy
1988	China, Hungary	Germany
1989	Germany, Poland	Canada
1990	Canada, Netherlands, Portugal	Luxembourg
1991	Russian Federation, United States	Ireland
1992	Norway, Uzbekistan, Luxemburg, Kazakstan, Belgium	
1993		Norway
1994	Denmark, Estonia, Germany, Norway, Russian Federation, Sweden	Slovak Republic
1995	Hungary, Iceland, Latvia, Namibia, United Kingdom	China
1996	China, Czech Republic, India, Ireland, Kuwait, Lithuania	Denmark
1997	Italy, Poland, South Africa	Finland, Norway, Sweden
1998		Estonia, Italy, Latvia, Lithuania, Sweden, Vatican City
1999	Mexico, Netherlands, Spain	Poland
2000	Estonia, Iceland, Norway, Sweden	Canada, India
2001	Denmark, Latvia, Poland	Greece
2002	China, Hungary, Republic of Korea, Lithuania	Russia
2003	Bulgaria, Chile, Tanzania	Hungary, Slovenia
2004	Belgium, Nicaragua	
2005	Russian Federation, Slovenia	China

2006		
2007	Australia, Germany, Ireland, New Zealand	Romania
2008	Indonesia, Luxembourg, Singapore, Vietnam	Mexico, Qatar
2009	Liberia, Senegal	
2010	Israel, Italy, Jordan, Latvia, Russian Federation	India
2011		
2012	Sweden, Germany, Estonia, Norway, Russia	Czech Republic
2013	Schweiz, China, Denmark, Iceland, Kazakstan, Latvia	Germany
2014	Canada, Lebanon, Ukraine	
2015	United Arab Emirates, Indonesia, Kazakhstan, Mexico	Singapore, Vietnam
2016	Austria, Iran, United States	
2017	Germany, Croatia	
2018		Estonia, Finland, Latvia, Sweden, Lithuania
2019	China, Ethiopia, Slovenia, Ukraine, United States	Greenland
2020		Poland
2021		
2022	Sweden	Slovak Republic

Table A3. The number of state visits undertaken by the Nordic heads of state each year. 1973-2022.

	<i>Denmark (Monarchy)</i>	<i>Norway (Monarchy)</i>	<i>Sweden (Monarchy)</i>	<i>Iceland (Republic)</i>	<i>Finland (Republic)</i>	<i>Total</i>
1973	4	1	0	0	2	7
1974	2	2	1	0	3	8
1975	2	2	3	1	4	12
1976	2	0	1	0	4	7
1977	2	0	1	0	2	5
1978	2	1	2	0	1	6
1979	1	0	2	1	1	5
1980	0	1	2	0	0	3
1981	1	0	3	4	0	8
1982	0	1	2	2	2	7
1983	1	1	3	2	5	12
1984	2	1	1	1	1	6
1985	1	0	1	1	3	6
1986	1	1	2	0	3	7
1987	3	1	1	2	3	10
1988	1	1	1	1	2	6
1989	0	0	2	1	2	5
1990	0	0	1	1	3	5
1991	2	1	1	1	2	7
1992	3	2	4	0	5	14
1993	1	1	3	1	0	6
1994	2	2	0	1	6	11
1995	0	2	1	1	5	9
1996	1	3	4	1	6	15
1997	0	2	1	3	3	9
1998	0	5	1	6	0	12
1999	1	1	1	1	3	7
2000	3	1	1	2	4	11
2001	2	2	2	1	3	10
2002	1	2	2	1	4	10
2003	0	2	3	2	3	10
2004	1	3	4	0	2	10
2005	0	0	2	1	2	5
2006	1	2	2	0	0	5
2007	1	2	3	1	4	11
2008	1	1	2	2	4	10
2009	1	1	2	0	2	6
2010	0	1	1	1	5	8
2011	1	2	2	0	0	5
2012	0	1	1	1	5	8
2013	0	1	1	1	6	9
2014	2	1	2	0	3	8
2015	1	1	2	2	4	10
2016	0	2	2	2	3	9
2017	1	0	1	0	2	4
2018	0	2	0	5	0	7
2019	1	1	2	1	5	10
2020	0	1	0	1	0	2
2021	1	0	0	0	0	1
2022	0	0	1	1	1	3

Table A4. Difference-in-Differences with PPML and two-way fixed effects. The effect on exports in the years following a state visit.

	(1) PPML 1995-2020	(2) PPML 1995-2020	(3) PPML 1995-2020	(4) PPML 1995-2020
$StateVisit_{t+2}$	0.0454 (0.04095)			
$StateVisit_{t+3}$		0.0176 (0.0411)		
$StateVisit_{t+4}$			-0.0056 (0.0411)	
$StateVisit_{t+5}$				-0.0079 (0.0402)
<i>Constant</i>	7.8308*** (0.0144)	7.8381*** (0.0142)	7.8435*** (0.0139)	7.8439*** (0.0133)
Year FE	Yes	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes	Yes
R^2	0.9724	0.9724	0.9724	0.9724
Observations	20 566	20 566	20 566	20 566

DiD regression PPML TWFE. Robust standard errors are in parentheses. ***, **, and * denote significance at the 1, 5, and 10% levels, respectively. Sample without EU countries.

Table A5. Sample of the control group for all country pairs.

Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
Denmark	Aruba	Finland	Aruba	Iceland	Aruba	Norway	Aruba	Sweden	Aruba
Denmark	Albania	Finland	Albania	Iceland	Albania	Norway	Albania	Sweden	Albania
Denmark	Netherlands Antilles	Finland	Netherlands Antilles	Iceland	Netherlands Antilles	Norway	Netherlands Antilles	Sweden	Netherlands Antilles
Denmark	United Arab Emirates	Finland	United Arab Emirates	Iceland	United Arab Emirates	Norway	United Arab Emirates	Sweden	United Arab Emirates
Denmark	Argentina	Finland	Argentina	Iceland	Argentina	Norway	Argentina	Sweden	Argentina
Denmark	Armenia	Finland	Armenia	Iceland	Armenia	Norway	Armenia	Sweden	Armenia
Denmark	American Samoa	Finland	American Samoa	Iceland	American Samoa	Norway	American Samoa	Sweden	American Samoa
Denmark	Australia	Finland	Australia	Iceland	Australia	Norway	Australia	Sweden	Australia
Denmark	Azerbaijan	Finland	Azerbaijan	Iceland	Azerbaijan	Norway	Azerbaijan	Sweden	Azerbaijan
Denmark	Burundi	Finland	Burundi	Iceland	Burundi	Norway	Burundi	Sweden	Burundi
Denmark	Benin	Finland	Benin	Iceland	Benin	Norway	Benin	Sweden	Benin
Denmark	Burkina Faso	Finland	Burkina Faso	Iceland	Burkina Faso	Norway	Burkina Faso	Sweden	Burkina Faso
Denmark	Bangladesh	Finland	Bangladesh	Iceland	Bangladesh	Norway	Bangladesh	Sweden	Bangladesh
Denmark	Bahrain	Finland	Bahrain	Iceland	Bahrain	Norway	Bahrain	Sweden	Bahrain
Denmark	Bahamas	Finland	Bahamas	Iceland	Bahamas	Norway	Bahamas	Sweden	Bahamas
Denmark	Bosnia and Hercegovina	Finland	Bosnia and Hercegovina	Iceland	Bosnia and Hercegovina	Norway	Bosnia and Hercegovina	Sweden	Bosnia and Hercegovina
Denmark	Belize	Finland	Belize	Iceland	Belize	Norway	Belize	Sweden	Belize
Denmark	Bermuda	Finland	Bermuda	Iceland	Bermuda	Norway	Bermuda	Sweden	Bermuda
Denmark	Bolivia	Finland	Bolivia	Iceland	Bolivia	Norway	Bolivia	Sweden	Bolivia
Denmark	Brazil	Finland	Brazil	Iceland	Brazil	Norway	Brazil	Sweden	Brazil
Denmark	Barbados	Finland	Barbados	Iceland	Barbados	Norway	Barbados	Sweden	Barbados
Denmark	Brunei Darussalam	Finland	Brunei Darussalam	Iceland	Brunei Darussalam	Norway	Brunei Darussalam	Sweden	Brunei Darussalam
Denmark	Bhutan	Finland	Bhutan	Iceland	Bhutan	Norway	Bhutan	Sweden	Bhutan
Denmark	Botswana	Finland	Botswana	Iceland	Botswana	Norway	Botswana	Sweden	Botswana
Denmark	Central African Republic	Finland	Central African Republic	Iceland	Central African Republic	Norway	Central African Republic	Sweden	Central African Republic
Denmark	Switzerland	Finland	Chile	Iceland	Canada	Norway	Canada	Sweden	Canada
Denmark	Chile	Finland	China	Iceland	Switzerland	Norway	Switzerland	Sweden	Switzerland
Denmark	China	Finland	Côte d'Ivoire	Iceland	Chile	Norway	Chile	Sweden	Chile
Denmark	Côte d'Ivoire	Finland	Cameroon	Iceland	China	Norway	China	Sweden	China
Denmark	Cameroon	Finland	Dem. Rep. of the Congo	Iceland	Côte d'Ivoire	Norway	Côte d'Ivoire	Sweden	Côte d'Ivoire
Denmark	Dem. Rep. of the Congo	Finland	Colombia	Iceland	Cameroon	Norway	Cameroon	Sweden	Cameroon
Denmark	Colombia	Finland	the Comores	Iceland	Dem. Rep. of the Congo	Norway	Dem. Rep. of the Congo	Sweden	Dem. Rep. of the Congo
Denmark	the Comores	Finland	Cabo Verde	Iceland	Colombia	Norway	Colombia	Sweden	Colombia
Denmark	Cabo Verde	Finland	Costa Rica	Iceland	the Comores	Norway	the Comores	Sweden	the Comores
Denmark	Costa Rica	Finland	Czechoslovakia	Iceland	Cabo Verde	Norway	Cabo Verde	Sweden	Cabo Verde
Denmark	Czechoslovakia	Finland	Curacao	Iceland	Costa Rica	Norway	Costa Rica	Sweden	Costa Rica
Denmark	Curacao	Finland	Djibouti	Iceland	Czechoslovakia	Norway	Czechoslovakia	Sweden	Czechoslovakia
Denmark	Djibouti	Finland	Dominica	Iceland	Curacao	Norway	Curacao	Sweden	Curacao
Denmark	Dominica	Finland	Dominican Republic	Iceland	Djibouti	Norway	Djibouti	Sweden	Djibouti
Denmark	Dominican Republic	Finland	Ecuador	Iceland	Dominica	Norway	Dominica	Sweden	Dominica
Denmark	Ecuador	Finland	Egypt	Iceland	Dominican Republic	Norway	Dominican Republic	Sweden	Dominican Republic
Denmark	Eritrea	Finland	Eritrea	Iceland	Ecuador	Norway	Ecuador	Sweden	Ecuador
Denmark	Ethiopia	Finland	Ethiopia	Iceland	Egypt	Norway	Egypt	Sweden	Eritrea
Denmark	Fiji	Finland	Fiji	Iceland	Eritrea	Norway	Eritrea	Sweden	Ethiopia
Denmark	Falkland Islands	Finland	Falkland Islands	Iceland	Ethiopia	Norway	Ethiopia	Sweden	Fiji
Denmark	Faroe Islands	Finland	Faroe Islands	Iceland	Fiji	Norway	Fiji	Sweden	Falkland Islands
Denmark	Gabon	Finland	Gabon	Iceland	Falkland Islands	Norway	Falkland Islands	Sweden	Faroe Islands
Denmark	United Kingdom	Finland	United Kingdom	Iceland	Faroe Islands	Norway	Faroe Islands	Sweden	Gabon
Denmark	Georgia	Finland	Georgia	Iceland	Gabon	Norway	Gabon	Sweden	United Kingdom
Denmark	Ghana	Finland	Ghana	Iceland	United Kingdom	Norway	United Kingdom	Sweden	Georgia
Denmark	Gibraltar	Finland	Gibraltar	Iceland	Georgia	Norway	Georgia	Sweden	Ghana
Denmark	Guinea	Finland	Guinea	Iceland	Ghana	Norway	Ghana	Sweden	Gibraltar
Denmark	the Gambia	Finland	the Gambia	Iceland	Gibraltar	Norway	Gibraltar	Sweden	Guinea
Denmark	Guinea-Bissau	Finland	Guinea-Bissau	Iceland	Guinea	Norway	Guinea	Sweden	the Gambia
Denmark	Equatorial Guinea	Finland	Equatorial Guinea	Iceland	the Gambia	Norway	the Gambia	Sweden	Guinea-Bissau
Denmark	Grenada	Finland	Grenada	Iceland	Guinea-Bissau	Norway	Guinea-Bissau	Sweden	Equatorial Guinea

Denmark	Greenland	Finland	Greenland	Iceland	Equatorial Guinea	Norway	Equatorial Guinea	Sweden	Grenada
Denmark	Guatemala	Finland	Guatemala	Iceland	Grenada	Norway	Grenada	Sweden	Greenland
Denmark	Guam	Finland	Guam	Iceland	Greenland	Norway	Greenland	Sweden	Guatemala
Denmark	Guyana	Finland	Guyana	Iceland	Guatemala	Norway	Guatemala	Sweden	Guam
Denmark	Hong Kong	Finland	Hong Kong	Iceland	Guam	Norway	Guam	Sweden	Guyana
Denmark	Honduras	Finland	Honduras	Iceland	Guyana	Norway	Guyana	Sweden	Hong Kong
Denmark	Haiti	Finland	Haiti	Iceland	Hong Kong	Norway	Hong Kong	Sweden	Honduras
Denmark	Indonesia	Finland	Indonesia	Iceland	Honduras	Norway	Honduras	Sweden	Haiti
Denmark	India	Finland	India	Iceland	Haiti	Norway	Haiti	Sweden	Indonesia
Denmark	Iran	Finland	Iran	Iceland	Indonesia	Norway	Indonesia	Sweden	India
Denmark	Iraq	Finland	Iraq	Iceland	India	Norway	India	Sweden	Iran
Denmark	Iceland	Finland	Iceland	Iceland	Iran	Norway	Iran	Sweden	Iraq
Denmark	Israel	Finland	Israel	Iceland	Iraq	Norway	Iraq	Sweden	Iceland
Denmark	Jamaica	Finland	Jamaica	Iceland	Israel	Norway	Israel	Sweden	Israel
Denmark	Jordan	Finland	Jordan	Iceland	Jamaica	Norway	Jamaica	Sweden	Jamaica
Denmark	Japan	Finland	Japan	Iceland	Jordan	Norway	Jordan	Sweden	Japan
Denmark	Kazakhstan	Finland	Kazakhstan	Iceland	Japan	Norway	Japan	Sweden	Kazakhstan
Denmark	Kenya	Finland	Kenya	Iceland	Kazakhstan	Norway	Kazakhstan	Sweden	Kenya
Denmark	Kyrgyzstan	Finland	Kyrgyzstan	Iceland	Kenya	Norway	Kenya	Sweden	Kyrgyzstan
Denmark	Cambodia	Finland	Cambodia	Iceland	Kyrgyzstan	Norway	Kyrgyzstan	Sweden	Cambodia
Denmark	Kiribati	Finland	Kiribati	Iceland	Cambodia	Norway	Cambodia	Sweden	Kiribati
Denmark	Saint Kitts and Nevis	Finland	Saint Kitts and Nevis	Iceland	Kiribati	Norway	Kiribati	Sweden	Saint Kitts and Nevis
Denmark	Republic of Korea	Finland	Republic of Korea	Iceland	Saint Kitts and Nevis	Norway	Saint Kitts and Nevis	Sweden	Republic of Korea
Denmark	Kuwait	Finland	Kuwait	Iceland	Republic of Korea	Norway	Republic of Korea	Sweden	Kuwait
Denmark	Laos	Finland	Laos	Iceland	Kuwait	Norway	Kuwait	Sweden	Laos
Denmark	Libanon	Finland	Libanon	Iceland	Laos	Norway	Laos	Sweden	Libanon
Denmark	Liberia	Finland	Liberia	Iceland	Libanon	Norway	Libanon	Sweden	Liberia
Denmark	Libya	Finland	Libya	Iceland	Liberia	Norway	Liberia	Sweden	Libya
Denmark	Saint Lucia	Finland	Saint Lucia	Iceland	Libya	Norway	Libya	Sweden	Sri Lanka
Denmark	Sri Lanka	Finland	Sri Lanka	Iceland	Saint Lucia	Norway	Saint Lucia	Sweden	Saint Lucia
Denmark	Macao	Finland	Macao	Iceland	Sri Lanka	Norway	Sri Lanka	Sweden	Macao
Denmark	Madagascar	Finland	Morocco	Iceland	Macao	Norway	Macao	Sweden	Morocco
Denmark	Maldives	Finland	Madagascar	Iceland	Morocco	Norway	Morocco	Sweden	Madagascar
Denmark	Mexico	Finland	Maldives	Iceland	Madagascar	Norway	Madagascar	Sweden	Maldives
Denmark	Marshall Islands	Finland	Mexico	Iceland	Maldives	Norway	Maldives	Sweden	Mexico
Denmark	Mali	Finland	Marshall Islands	Iceland	Mexico	Norway	Mexico	Sweden	Marshall Islands
Denmark	Myanmar	Finland	Mali	Iceland	Marshall Islands	Norway	Marshall Islands	Sweden	Mali
Denmark	Montenegro	Finland	Myanmar	Iceland	Mali	Norway	Mali	Sweden	Myanmar
Denmark	Mongolia	Finland	Montenegro	Iceland	Myanmar	Norway	Myanmar	Sweden	Montenegro
Denmark	Mozambique	Finland	Mongolia	Iceland	Montenegro	Norway	Montenegro	Sweden	Mongolia
Denmark	Maruitania	Finland	Mozambique	Iceland	Mongolia	Norway	Mongolia	Sweden	Mozambique
Denmark	Montserrat	Finland	Maruitania	Iceland	Mozambique	Norway	Mozambique	Sweden	Maruitania
Denmark	Mauritius	Finland	Montserrat	Iceland	Maruitania	Norway	Maruitania	Sweden	Montserrat
Denmark	Malawi	Finland	Mauritius	Iceland	Montserrat	Norway	Montserrat	Sweden	Mauritius
Denmark	Malaysia	Finland	Malawi	Iceland	Mauritius	Norway	Mauritius	Sweden	Malawi
Denmark	Namibia	Finland	Malaysia	Iceland	Malawi	Norway	Malawi	Sweden	Malaysia
Denmark	New Caledonia	Finland	Namibia	Iceland	Malaysia	Norway	Malaysia	Sweden	Namibia
Denmark	the Niger	Finland	New Caledonia	Iceland	Namibia	Norway	Namibia	Sweden	New Caledonia
Denmark	Nigeria	Finland	the Niger	Iceland	New Caledonia	Norway	New Caledonia	Sweden	the Niger
Denmark	Nicaragua	Finland	Nigeria	Iceland	the Niger	Norway	the Niger	Sweden	Nigeria
Denmark	North Macedonia	Finland	Nicaragua	Iceland	Nigeria	Norway	Nigeria	Sweden	Nicaragua
Denmark	Norway	Finland	North Macedonia	Iceland	Nicaragua	Norway	Nicaragua	Sweden	North Macedonia
Denmark	Nepal	Finland	Norway	Iceland	North Macedonia	Norway	North Macedonia	Sweden	Nepal
Denmark	Nauru	Finland	Nepal	Iceland	Norway	Norway	Nepal	Sweden	Nauru
Denmark	Oman	Finland	Nauru	Iceland	Nepal	Norway	Nauru	Sweden	Oman
Denmark	Pakistan	Finland	New Zealand	Iceland	Nauru	Norway	New Zealand	Sweden	Pakistan
Denmark	Panama	Finland	Oman	Iceland	New Zealand	Norway	Oman	Sweden	Panama
Denmark	Peru	Finland	Pakistan	Iceland	Oman	Norway	Pakistan	Sweden	Peru
Denmark	the Philippines	Finland	Panama	Iceland	Pakistan	Norway	Panama	Sweden	the Philippines
Denmark	Papua New Guinea	Finland	Peru	Iceland	Panama	Norway	Peru	Sweden	Papua New Guinea
Denmark	Paraguay	Finland	the Philippines	Iceland	Peru	Norway	the Philippines	Sweden	Paraguay

Denmark	French Polynesia	Finland	Papua New Guinea	Iceland	the Philippines	Norway	Papua New Guinea	Sweden	French Polynesia
Denmark	Qatar	Finland	Paraguay	Iceland	Papua New Guinea	Norway	Paraguay	Sweden	Qatar
Denmark	Russian Federation	Finland	French Polynesia	Iceland	Paraguay	Norway	French Polynesia	Sweden	Russian Federation
Denmark	Saudi Arabia	Finland	Qatar	Iceland	French Polynesia	Norway	Qatar	Sweden	Saudi Arabia
Denmark	Sudan	Finland	Russian Federation	Iceland	Qatar	Norway	Russian Federation	Sweden	Sudan
Denmark	Senegal	Finland	Saudi Arabia	Iceland	Russian Federation	Norway	Saudi Arabia	Sweden	Senegal
Denmark	Singapore	Finland	Sudan	Iceland	Saudi Arabia	Norway	Sudan	Sweden	Singapore
Denmark	Sierra Leone	Finland	Senegal	Iceland	Sudan	Norway	Senegal	Sweden	Sierra Leone
Denmark	El Salvador	Finland	Singapore	Iceland	Senegal	Norway	Singapore	Sweden	El Salvador
Denmark	San Marino	Finland	Sierra Leone	Iceland	Singapore	Norway	Sierra Leone	Sweden	San Marino
Denmark	Somalia	Finland	El Salvador	Iceland	Sierra Leone	Norway	El Salvador	Sweden	Somalia
Denmark	Serbia	Finland	San Marino	Iceland	El Salvador	Norway	San Marino	Sweden	Serbia
Denmark	Sao Tome and Principe	Finland	Somalia	Iceland	San Marino	Norway	Somalia	Sweden	Sao Tome and Principe
Denmark	Suriname	Finland	Serbia	Iceland	Somalia	Norway	Serbia	Sweden	Suriname
Denmark	Eswatini	Finland	Sao Tome and Principe	Iceland	Serbia	Norway	Sao Tome and Principe	Sweden	Eswatini
Denmark	Seychelles	Finland	Suriname	Iceland	Sao Tome and Principe	Norway	Suriname	Sweden	Seychelles
Denmark	Syria	Finland	Eswatini	Iceland	Suriname	Norway	Eswatini	Sweden	Syria
Denmark	Chad	Finland	Seychelles	Iceland	Eswatini	Norway	Seychelles	Sweden	Chad
Denmark	Togo	Finland	Syria	Iceland	Seychelles	Norway	Syria	Sweden	Togo
Denmark	Thailand	Finland	Chad	Iceland	Syria	Norway	Chad	Sweden	Thailand
Denmark	Tajikistan	Finland	Togo	Iceland	Chad	Norway	Togo	Sweden	Tajikistan
Denmark	Timor-Leste	Finland	Thailand	Iceland	Togo	Norway	Thailand	Sweden	Timor-Leste
Denmark	Tonga	Finland	Tajikistan	Iceland	Thailand	Norway	Tajikistan	Sweden	Tonga
Denmark	Trinidad and Tobago	Finland	Timor-Leste	Iceland	Tajikistan	Norway	Timor-Leste	Sweden	Trinidad and Tobago
Denmark	Tunisia	Finland	Tonga	Iceland	Timor-Leste	Norway	Tonga	Sweden	Tunisia
Denmark	Türkiye	Finland	Trinidad and Tobago	Iceland	Tonga	Norway	Trinidad and Tobago	Sweden	Türkiye
Denmark	Tuvalu	Finland	Tunisia	Iceland	Trinidad and Tobago	Norway	Tunisia	Sweden	Tuvalu
Denmark	Taiwan	Finland	Türkiye	Iceland	Tunisia	Norway	Türkiye	Sweden	Taiwan
Denmark	Tanzania	Finland	Tuvalu	Iceland	Türkiye	Norway	Tuvalu	Sweden	Uganda
Denmark	Uganda	Finland	Taiwan	Iceland	Tuvalu	Norway	Taiwan	Sweden	Ukraine
Denmark	Ukraine	Finland	Tanzania	Iceland	Taiwan	Norway	Tanzania	Sweden	Uruguay
Denmark	Uruguay	Finland	Uganda	Iceland	Tanzania	Norway	Uganda	Sweden	United States
Denmark	Uzbekistan	Finland	Ukraine	Iceland	Uganda	Norway	Ukraine	Sweden	Uzbekistan
Denmark	Vatican City	Finland	Uruguay	Iceland	Ukraine	Norway	Uruguay	Sweden	Vatican City
Denmark	Venezuela	Finland	United States	Iceland	Uruguay	Norway	United States	Sweden	Venezuela
Denmark	Vietnam	Finland	Vatican City	Iceland	United States	Norway	Uzbekistan	Sweden	Vietnam
Denmark	Vanuatu	Finland	Venezuela	Iceland	Uzbekistan	Norway	Vatican City	Sweden	Vanuatu
Denmark	Samoa	Finland	Vietnam	Iceland	Vatican City	Norway	Venezuela	Sweden	Samoa
Denmark	Yemen	Finland	Vanuatu	Iceland	Venezuela	Norway	Vietnam	Sweden	Yemen
Denmark	Yugoslavia	Finland	Samoa	Iceland	Vietnam	Norway	Vanuatu	Sweden	Yugoslavia
Denmark	South Africa	Finland	Yemen	Iceland	Vanuatu	Norway	Samoa	Sweden	South Africa
Denmark	Zambia	Finland	Yugoslavia	Iceland	Samoa	Norway	Yemen	Sweden	Zambia
Denmark	Zimbabwe	Finland	South Africa	Iceland	Yemen	Norway	Yugoslavia	Sweden	Zimbabwe
		Finland	Zambia	Iceland	Yugoslavia	Norway	South Africa		
			Zimbabwe	Iceland	South Africa	Norway	Zambia		
				Iceland	Zambia	Norway	Zimbabwe		
				Iceland	Zimbabwe				