MASTER'S THESIS

Course code: ORG5009 Name: Liu Yi

China and Norway: Cooperation in Business related Areas

Date: November 30, 2022 Total number of pages: 89



Preface

During the whole research process, I would like to thank Professor Frode Mellemvik as the instructor, he has

provided me great suggestions on the topic and academic research. I also want to thank Anders Christoffer

Edstrøm as my co-instructor, he organized several meetings in the last year, and he also has given me many

valuable opinions. I am so touched by their kindness and academic spirits. Finally, I would like to thank

Elena Dybtsyna and other teachers at Nord University.

In 2021, I began my studies at Nord University Business School in Norway. I gained an understanding of the

meaning of circular economy, the future of renewable energy, and innovative technology in society and

traditional industries. The theories and insights from the courses demonstrate Norway's leadership in these

fields, and I see great potential for future cooperation between Norway and China in these areas. This

motivates me to return to the area-- the Arctic and my home country.

I would like to express my sincere gratitude for the inspiration and intellectual guidance through the time of

scientific struggle for perfection to my direct supervisor Frode Mellemvik and co-supervisor Anders

Christoffer Edstrøm for this long time.

29th of November 30, 2022

Yi Liu

Liuli

i

Abstract

Several studies have confirmed that China has more willingness to build a stronger relation and cooperate

with Norway in several field. With a history relation between China and Norway in the last decades, It has

undergone a remarkable transformation. However, there is a research gap of explaining the logic of

interaction between the two nations from Chinese perspective. Some experts assert that the pursuit of national

interests is the driving force behind the nation's international actions. This study's objective is to investigate

the model of bilateral cooperation in business-related sectors. The following research question was addressed

in this regard: What factors affect the relationship and level of cooperation between China and Norway in

business-related sectors, and how do they work?

This thesis uses national interest theory as theoretical framework and the authors employ induction and

deduction approaches and rely on the following methods: semi-systematic literature review, case analysis

and qualitative and quantitative analysis. The cases of bilateral collaboration in business and business-related

sectors illustrate the interaction between the two nations and provide an overview of Sino-Norwegian

relations and cooperation.

In conclusion, the key findings of this research identify that national interest theory could explain Chinese

action and motivations in bilateral cooperation from Chinese perspective. Political interests (national

sovereignty); Security interests (energy security); Economic benefits (technological development,

technological competition and market expansion) are the main factors of the foundation and important driving

forces in China Norway cooperation. It can conclude that non-economic factors connected to politics, security,

and culture play an important role. The optimistic trend is that China is prepared to increase its business-

related cooperation with Norway.

Key words: Sino-Norway relation, business-related sectors, bilateral cooperation, national interest, national

interest theory

ii

List of Figures

- Table 1: The content of national interest based on the concept and definition. (Men, 2008; Gao, 2021)
- Table 2: Trade statistics between China and Norway from 2011to 2020 (Unit: USD 1 billion) (General

Administration of Customs of China, 2016-2021)

- Figure 1: China imports from Norway from 2012 to 2021. (Trading Economics ,2022)
- Table 3.1 &3.2: China imports from Norway 2017 &2020 (China and Norway Trade ,2022)
- Table 4: The items of China import from Norway in 2020 (Trading Economics, Norway exports to China, top 10 items in 2020)
- Table 5.1& 5.2: China exports to Norway 2017 &2020 (OEC,2022)
- Table 6: Major Chinese-funded institutions in Norway (The guide 2021:32-33)
- Figure 2: The number of investment cases (China invests Norway)
- Table 7: Bilateral sister cities list (Zhejiang Provincial People's Government Foreign Affairs Office, 2020).
- Table 8: Higher education cooperation (Nordic Chinses Communication, 2019)
- Table 9: CNMUCA List (Ocean University of China, 2021)
- Figure 3: The number of publications related to Norway in CNKI (CNKI,2022)
- Figure 4: The number of publications related China and Norway in CNKI (CNKI,2022)
- Figure 5: The number of publications related trade of China and Norway in CNKI (CNKI,2022)
- Table 10: Top themes in publication related China and Norway in CNKI (CNKI,2022)
- Table 11: The number of articles in People's Daily (People's Daily ,2022)
- Table 12: The level of Chinese national interests in bilateral cooperation

List of Abbreviations

AIIB	Asian Infrastructure Investment Bank
CNKI	China National Knowledge Infrastructure
CNMUCA	China-Norway Marine University Consortium Alliance
CPC	Communist Party of China
CPSA	Canadian Political Science Association (CPSA)
Ekornes	Ekornes ASA
ECNU	East China Normal University
Kunlun	Kunlun Wanwei Technology Co., Ltd
NEV	New Energy Vehicle
NMBU	Norwegian University of Life Sciences
NESH	The National Committee for Research Ethics in the Social Sciences and the
	Humanities
The Guide	The Guide for Countries (Regions) of Foreign Investment Cooperation - Norway
UIT	University of Tromsø
UN	United Nation

Content

Preface	i
Abstract	ii
List of Figures	iii
List of Abbreviations	iv
Chapter 1 Introduction	1
1.1 Problem Statement	1
1.2 Introduction of Sino-Norway History	2
1.2.1 Before 2010	3
1.2.2 Between 2010 and 2016	4
1.2.3 After 2016	5
1.3 Motivation and Significance	5
1.4 Structure of the Thesis	6
Chapter 2 Theoretical Framework	7
2.1 National Interest Theories	7
2.2 Research on China's National Interest	10
2.3 Operationalization of Chinese National Interest	12
2.3.1 The Content of Chinese National Interest	12
2.3.2 The Framework of Chinese National Interest	15
Chapter 3 Methodology	17
3.1 Research Method and Research Design	17
Research Method 1: Case Study	17
Research Method 2: Qualitative and Quantitative Analysis Method	18
Research Design	18

3.2 Data Collection	19
3.3 Data Analysis	20
3.4 Validity and Reliability	20
3.5 Ethical Considerations and limitation	21
Chapter 4 Empirical Study	22
4.1 Identifying China-Norway Cooperation in Trade	22
4.1.1 China Imports from Norway	24
4.1.2 China Exports to Norway	27
4.2 Identifying China-Norway Cooperation in Investment	30
4.3 Identifying Cases on China-Norway Business Cooperation	32
4.3.1 Arctic Cooperation	33
4.3.2 Free Trade Agreement and Free Trade Zone Negotiation	34
4.3.3 Main items in business	36
4.4 Identifying China-Norway cooperation in business-related area	38
4.4.1 Local Level Cooperation	38
4.4.2 Higher Education and Institutions Cooperation	43
4. 5 Chinese Publication and Research on Norway	49
4.5.1 Trends in Chinese Publication and Research on Norway	50
4.5.2 Trends in Chinese Publication and Research on Norway and China	51
4.5.3 Hotspots and Characteristics of Norwegian Studies in Official Media	52
Chapter 5 Chinese National Interest in Bilateral Cooperation	55
5.1 Identify Chinese National Interests in Bilateral Cooperation and their function	55
5 1 1 Tuo Ja	55

5.1.2 Investment	57
5.1.3 Arctic Cooperation	
5.1.4 Free Trade Agreement and Free Trade Zone Negotiation	58
5.1.5 Local Level Cooperation	59
5.1.6 Higher Education and Institutions Cooperation	60
5.2 Findings in China's dynamically changing national interests	61
Chapter 6 Conclusion	66
6.1 Review of bilateral cooperation	66
6.2 Recommendation for Further Research	67
Reference	68
Appendix	81

Chapter 1 Introduction

1.1 Problem Statement

Over the past seventy years, China and Norway have collaborated in numerous fields, including politics, economics, culture, science and technology, and education (Sverdrup-Thogeson, 2018; Central People's Government of the People's Republic of China, 2021; Yi,2021). In recent years, a number of high-ranking Chinese officials have emphasized the significance of bilateral cooperation and expressed a desire to advance China-Norway collaboration and relations. Premier Li Keqiang of China stated in 2022 that Norway is China's most important Nordic partner (Li, 2022). During a meeting with the Norwegian Foreign Minister in 2021, Ambassador Yi (Chinese Ambassador to Norway) declared that the relationship between China and Norway is advancing gradually and emphasized the importance and willingness of the two nations to promote bilateral free trade agreements (Yi, 2021).

Wang Yi, Chinese State Councilor and Minister of Foreign Affairs, announced in 2020 that China and Norway have enormous potential for cooperation. He stated: 'China is willing to work with the Norwegian side to conclude the bilateral free trade agreement negotiations as soon as possible, to negotiate and sign the blue partnership document, and to provide a fair, just, open, and nondiscriminatory business environment for enterprises on both sides' (Xinhua, 2020). On October 17, 2018, Chinese President Xi Jinping welcomed Norwegian King Harald V to China for a state visit, noting that China-Norway relations had made significant progress since their 2016 normalization. Moreover, he sought to advance the long-term, healthy, and stable growth of China-Norway relations (People's Daily, 2018). The economies of China and Norway are highly complementary, and the two nations have a solid basis for working together. Nevertheless, the current scale and level of trade, investment, and cooperation between the two nations are insufficient (Zhou, 2021). China is therefore keen to cooperate on a bilateral basis, though the path to establishing a solid relationship remains uncertain. The bilateral relationship has potential growth but is still an immature diplomatic relationship. During the period from 2020 to 2022, bilateral trade increased rapidly and grew in a few specific areas (OEC,2022). In recent years, China imported a substantial amount of crude oil from Norway. Since 2017, China and Norway have increased their business cooperation in the energy and renewable energy sectors (Zhang, 2021; Zhao, 2019), which prompts the question of what factors are driving this growth. This thesis seeks to describe and analyze the relationship and cooperation between China and Norway,

focusing on the factors that promote bilateral economic and trade partnerships and business-related

collaboration. Below is a synopsis of the histories of China and Norway to provide context for understanding their cooperation and relationship. One research question has been created for the purposes of this thesis:

What factors affect the relationship and level of cooperation between China and Norway in the business-related sector? And how do they work?

1.2 Introduction of Sino-Norway History

The history of China-Norway relations has been a lengthy, dynamic process (Kolstad, 2016). Over time, the international political climate, as well as the domestic issues and economies of the two countries, have all played a significant role in bilateral relations and cooperation. China's economic power and global standing have increased, and cooperation between China and Norway has expanded in a number of areas, including the Arctic (Kolstad, 2016). Meanwhile, bilateral interactions have improved on the international stage.

Since China and Norway established diplomatic relations on October 5, 1954 (Bekkevold, 2021; Central People's Government of the People's Republic of China, 2021), political, economic, and diplomatic tensions have impacted bilateral relations and cooperation. The two nations exchanged commercial commissioners in 1956, and in 1958 they formally agreed to a bilateral trade and payment arrangement. China and Norway established the China-Norway Mixed Trade Committee in 1974 to advance the growth of their bilateral economic and trade ties. In 1981, the committee changed its name to the China-Norway Economic, Industrial, and Technical Cooperation Committee (Central People's Government of the People's Republic of China, 2021). Although China's economy was still in its infancy, it was eager to work with European nations. It is necessary to look at Chinese foreign policy from the 1950s to the 1970s as well as the global landscape in order to comprehend the estrangement in Sino-Norway relations between those years. China's foreign policy in the 1950s, according to Sun and Wang (2019), was primarily unilateral: after the fall of the Soviet Union, China ceased cooperation with the Western parties, including the United States and many Western European nations. In the 1960s, China's foreign and foreign policy emphasis shifted from being "one-sided" to simultaneously opposing the aggressive, hegemonic, and expansionist policies of the two superpowers. Although its economy was still nascent China was eager to work with nations in Europe. Due to their differing foreign policies, the two nations didn't interact much in the late 1950s and early 1960s.

However, China started looking for a diplomatic breakthrough in the 1970s in order to re-establish relations with Western nations. Particularly in 1971, the United Nations (UN) formally acknowledged China's membership as a permanent member of the UN Security Council. China encouraged dialogue with the West after the two countries established diplomatic ties in 1979, establishing diplomatic ties with Western nations one after the other and bolstering cooperation (Wu, 2012). As a result, cooperation between China and Norway developed in the 1970s. Vice Premier Geng Biao traveled to Norway for the first time as a representative of China in 1979. The relationship between China and Norway and the United States is similar in some respects. King Harald V and President Jiang Zemin exchanged visits in 1996 and 1997. The two leaders declared they would "work together to establish a constructive strategic partnership between China and the United States", while at the same time President Jiang Zemin paid a state visit to the United States in 1997. In June 1998, President Clinton made a follow-up trip. Moreover, China's relations with the rest of the world have significantly improved. At the beginning of the new millennium, political relations between the two nations grew steadily (Sverdrup-Thygeson, 2018). There are three stages of bilateral relations: Before 2010, between 2010 and 2016, and after 2016.

1.2.1 Before 2010

China and Norway had government-level cooperation in a variety of fields prior to 2010. According to the China-Norway website, in March 2007, the two parties signed agreements, including a memorandum of understanding, and recognizing China's full market economy status. In September 2008, negotiations for a free trade zone commenced. In addition to political and economic cooperation, culture, technology, and education collaboration were developed between the two countries prior to 2010. In 2003, China and Norway signed a Memorandum on Sports Cooperation, according to the Chinese Ministry of Foreign Affairs. In 2004, the two nations signed an agreement for cultural and educational cooperation. In 2007, Beijing Foreign Studies University established a major in the Norwegian language, and Bergen became the first Confucius Institute in Norway. In 2009, the two nations renewed their intergovernmental agreements regarding cultural cooperation and sports collaboration. In 2004, the first "Chinese Culture Festival" was held in Norway, followed by the second in 2007 and the third in 2010. 2004 saw the construction of the 'Yellow River Station,' China's first Arctic research station, on Norway's Spitsbergen Islands (also known as the 'Svalbard Islands').

In 2008, China and Norway signed the Framework Agreement on Climate Change Cooperation and Dialogue (Central People's Government of the People's Republic of China, 2021).

However, between 2010 and 2016, the majority of bilateral cooperation and activities ceased.

1.2.2 Between 2010 and 2016

Between 2010 and 2016, economic exchanges, political cooperation, cultural activities, and scientific and technological collaboration at the level of governments had been severely impacted.

In 2010, bilateral negotiations were suspended due to the Nobel Peace Prize incident. In 2010, Norway presented Liu Xiaobo with the Nobel Peace Prize (Central People's Government of the People's Republic of China, 2021). Xinhua reported that Liu Xiaobo had long incited the overthrow of China's state power and its social system by writing and publishing incendiary articles on the Internet, as well as organizing and convincing others to sign in support. In 2009, he was sentenced to prison for violating Article 105 of the People's Republic of China's Criminal Law. Foreign interference in Chinese domestic affairs has been countered with zero tolerance by the Chinese government. Following this, the nation initiated a six-year political boycott, which lasted until 2016. From 2010 to 2016, the two nations experienced a challenging period. The events of 2010 had a substantial impact on the relations and cooperation between the two countries, but despite this trade was never interrupted, and China's policies had a substantial impact on the salmon trade between the two countries. According to Zhang (2016), China has canceled several government agendas with Norway, and has ceased purchasing Norwegian salmon, among other actions. This has impeded Norway's trade with China significantly. The Norwegian Sea Products Association reported that Norway's share of the Chinese salmon market decreased from 92% in 2010 to 29% in the first half of 2013(Zhu,2021). During this period, trade between Denmark and China for salmon markedly increased, coming close to eclipsing Norway's original market share in China.

Although most of the cooperation had ended, there remained some unity between the two nations in the Arctic Council and the Asian Infrastructure Investment Bank (AIIB) (Information Office of the State Council of the People's Republic of China,2015). After 2010, political relations, economic and trade exchanges, and scientific and technological cooperation between the two countries all reached a stalemate, before beginning to improve in 2013. In 2013, Norway supported China's formal Arctic Council observer status (Sverdrup-Thygeson, 2018). This seems to indicate that the two nations remain interested in synergy.

AIIB is a multilateral financial institution that focuses on cooperation and infrastructure in Asia. In 2015, China accepted Norway's application to join the Asian Infrastructure Investment Bank (AIIB) (Sverdrup-Thygeson, 2018). This was the second instance of political level cooperation since 2010, indicating the possibility of reviving bilateral relations.

1.2.3 After 2016

After the normalization of Sino-Norway relations on December 19, 2016, Norwegian Prime Minister Erna Solberg visited China in April 2017 to resume bilateral free trade agreement negotiations (CCTV, 2016). Wang Yi lauded the fact that relations between China and Norway had attained a new level (CCTV, 2016). In October 2018, the King and Queen of Norway visited Beijing for ten days, leading the largest diplomatic mission in Norway's history (Xinhua, 2018; Hou, 2018). This visit's objective was to export Norwegian goods to China and solicit Chinese investment. 26 agreements between Norway and China were signed in Beijing and 11 in Shanghai (Hou, 2018). Economic and commercial cooperation expanded rapidly. China was Norway's fifth largest export market in 2020, and Norway ranked 50/209 among China's exporting nations (OEC,2022). Free trade negotiations resumed in 2018 between sister cities such as Zhejiang Province and Nordland Country (Foreign Affairs Office of the Zhejiang Provincial People's Government, 2020; Luo,2022). After 2018, cooperation in education, science, and technology increased, such as the Ocean Education Alliance (Chen,2017).

1.3 Motivation and Significance

Trade exchanges have increased as a result of improved bilateral relations. Examining bilateral ties and collaboration from China's and Norway's perspectives is necessary. There is currently a dearth of Chinese literature that peruses and discusses China-Norway cooperation and relations, which is another research gap the author aims to delve into. The study of Norwegian literature, education, and social issues are currently more popular among Chinese academics than the analysis of bilateral cooperation in specific fields, along with a broad discussion of the Nordic region, the interaction between Norway and the EU and Russia, and the study of the Nordic region in general.

Some academics contend that China's import competition threatens the Nordic model when it comes to business cooperation between China and Norway (Balsvik et, 2015). There is no systematic research concerning bilateral relations from the perspective of national interests, despite the fact that there are many

publications regarding China-Norway relations and bilateral trade. Chapter 2 will cover pertinent academic research concerning national interests. Therefore, this thesis might offer some fresh perspectives and contribute to a more effective understanding of bilateral relations and cooperation. International politics, international economics, and other fields are all involved in the study of bilateral issues, which means that theoretical support is requisite. The relationship and cooperation between China and Norway are examined in this essay using the theory of national interests. The purpose of this study, which is conducted from the viewpoint of China, is to describe and evaluate Chinese business cooperation with Norway.

1.4 Structure of the Thesis

This master thesis primarily describes and analyzes the cooperation and relation between China and Norway in business from the perspective of China. To be able to do this, I have developed a theoretical framework of references focusing on China. This framework is presented in Chapter 2.

Chapter 3 consists of the research methodology, research design, and data collection used in developing this thesis.

Chapter 4 comprises the empirical component of this study, including data regarding cooperation in several business-related areas.

Chapter 5 combines bilateral relations and cooperation and relates the analyses based on the theoretical framework and empirical evidence.

Chapter 6 provides the conclusion of this thesis with ideas for further research.

Chapter 2 Theoretical Framework

The three components that comprise this chapter create a framework for understanding the relationship and cooperation between China and Norway in business and other areas related to business from Chinese perspectives. China's national interests are therefore important, and section 2.1 serves as an introduction to the concept of national interest theory. Chinese national interest-related research is evaluated in Section 2.2, and the concept is operationalized through Chinese national interests in Section 2.3.

In Sino-Norway relation and cooperation study, it is difficult to use single economic or political theory to explain. According to Xinhua (2022), in the Report to the 20th National Congress of the Communist Party of China (CPC), Xi emphasized that safeguarding national sovereignty, security, and development interests is the starting point, foundation, and sacred mission of China's foreign policy. Protecting China's national interests is the top priority of the Chinese government. National interest theory is one of the international relation theories using in analysis international economic, politic and security issues. Thus, national interest theory will be the framework of this thesis, aims at adding knowledge on China-Norway bilateral issues from the perspective of national interests.

2.1 National Interest Theories

In 1934, Charles Beard proposed the notion of national interest (Beard,1934). Interest analysis is the core of international relations theory. Scholars such as Weldes (1996), Wendt (Qin, 2000) and Morgenthau (1988) analyzed national interests in greater depth (Gao,2021). National interests have become the criterion for many countries' international relations and the foundation for the formulation of national foreign policies. The primary objective of foreign policy is to promote and advance national interests, and foreign policy has a direct impact on these interests (Li, 2010). The needs and interests of the people and all interest groups in this country are reflected in the national interest (Wang,2003; Yan, 1997).

Different divisions of national interests exist in varying scales. In the study of international relations, the notion of national interest is fundamental. At this time, the following definitions are the principal components of national interest:

• The needs and aspirations of a sovereign state toward other sovereign states that comprise its external environment are known as national interests, according to Nuechterlein (1978). These interests include

- those related to national defense, the economy, the world order, and conscious interests (core values).

 Clarifying national interests is the foundation of rational diplomacy.
- According to Nye (1999), human rights and democratic principles are part of a nation's interests.
 Huntington argued that identity, which includes culture and belief, is the source of national interests.
 Faith speaks of values and institutions, whereas culture expresses freedom, democracy, and equality, which are universal principles.
- Men (2017) asserted that 'national interests refer to the goals pursued by a country in terms of independence and survival, stability and development, and international participation'. This includes a wide range of political, economic, social, cultural, military, and security content which can be divided into fundamental and general interests, long-term and short-term requirements, strategic and tactical needs, and domestic and foreign concerns in different situations (Men, &Zhong, 2009; Men.2015). In regard to bilateral issues, there will be more focus concerning relations and cooperation, thus, these six elements can be divided into four parts: political, economic, and security and culture. National interests can be divided into four categories according to Robinson and Men, namely political interest, economic interest, security interest and cultural interest.

National interest is one of the fundamental factors in understanding a country's behaviour and is, therefore, closely related to foreign policy. The realisation of national interests is contradictory. When multiple national interests cannot be satisfied simultaneously or when one interest is realized at the expense of others, it is crucial to handle the relationship between national interests correctly. The fundamental interests of a country primarily include aspects such as national security, territorial integrity, the social system, and economic prosperity. The distinction between fundamental interests and secondary concerns is of great significance, and other requirements may be sacrificed to achieve fundamental interests. Therefore, only by clearly defining national interests and prioritizing different needs can the degree of harm of various threats be accurately judged and the available resources be effectively allocated to defend the national interests of the country to the greatest extent (Men, 2015). When national interests are in conflict, a country's diplomacy will take actions in accordance with these interests. Nuechterlein (1976) distinguished national interests according to three criteria, priority, specialty, and persistence.

Based on the priority perspective, Vital interests, and non-vital interests: These are also known as core interests or strategic interests and involve fundamental objectives such as national security (Nuechterlein, 1976). The National Interest Committee of the United States divides national interests into four levels in a hierarchical way: vital, extremely important, important, less important (Nye, 1999; America, 1996).

- Vital interests are the fundamental conditions for the survival and continuity of a country security interests and political interests.
- b. Extremely important interests refer to matters that can have a serious impact on the interests of the survival and continuity of a country- economic interests.
- c. Important interests refer to the concerns that meet the national aspirations and have a greater impact on the fundamental interests of the country.
- d. Less important interests refer to those that conform to the wishes of the country but have little impact on the fundamental interests of the country.

Priority differentiates the significance of national interests. Vital interests which can also be understood as core/ strategic interests are the most essential. For the non-vital interests section, the four levels of national interests from National Interest Committee of the United States will be used.

From specialty aspect, Nuechterlein (1976) defines specific interests and general interests: Specific interests refer to limited objectives clearly defined by the state, while general interests refer to general global interests, such as maintaining regional peace and promoting economic development. Specialty distinguishes the external and internal environment of national interests, which can be used to monitor the dynamic evolution of national interests.

In regard to the persistence viewpoint, permanent interests, and variable interests, the following should be taken into account: Permanent interests refer to the permanent objectives of the state, such as the protection of territorial integrity. Variable interests involve the state's response at a particular time. National interests are dynamic (Pang and Sun, 2022), and while the factors determining core interests remain unchanged, the content of important interests and general interests frequently change. Three factors determine these changes: the rise and decline of power, changes in the environment, and the demands of the future. Therefore, the judgment of national interests is a changing concept according to future needs, and the acumen of the future

can also affect current strategic choices. Men (2015) also use long-term and short-term interests to divide the persistence of national interest. Persistence distinguishes the timeliness of national interests, which can be used to monitor the dynamic evolution of national interests.

Therefore, national interest theory is concerned with how to divide the level of national interest based on the importance to the nation, which is fundamentally political, economic, security, and cultural interest and there are also three categories including, priority, specialty, and persistence.

2.2 Research on China's National Interest

In China, there is an increasing amount of research analyzing international issues from a national interest standpoint, especially after the government began to use the concept of national interest.

Yan's *Analysis of China's National Interests* in 1997 is the starting point for the systematic study of the theory of national interests in Chinese academia. Yan (1997) adopted the utility analysis method as the usefulness standard and scientific method of national interests, and discussed the contents, interrelationship and maintenance difficulties of political, economic, security and cultural interests in national interests (Yan, 1997; Gao, 2021). Later, an increasing number of scholars use national interests as an analytical method or perspective to analyze the evolution of a country's behavior and the dynamic changes of national relations (Gao, 2021). Chinese scholars distinguish national interests into political interests, security interests, economic interests, and cultural interests based on their characteristics (Men, 2015; Yan, 2021).

Nation interest theory is a framework for analyzing and comprehending a nation's behaviors and goals through the perspective of national interest (Yan,1997). Yan (1997) divided national interests into four dimensions: survival, importance, major and marginal.

- Survival interests are those of the highest latitude and are associated with the survival of the nation.
- Important interests are less threatening than survival interests but are still crucial to the nation's survival.
- Main interests: The main interests of the nation are in the environment without obvious international threats, such as the development of overseas markets, which are development related.
- Marginal interests are enterprises and foreign individuals with no bearing on national defense or strategy.

In regard to the allocation of national interests, Chinese academics are also divergent (Gao,2021). Wang (2003) argued that national interests have three dimensions: development interests take precedence over sovereign interests, and sovereign interests supersede over responsibility interests. According to Men (2017), national interests are the objectives pursued by a nation in terms of independence and survival, stability and development, and international participation. It encompasses a vast array of political, economic, social, cultural, military, and security content that can be categorized as fundamental and general interests, long-term and short-term needs, strategic and tactical concerns, as well as domestic and foreign requirements in various circumstances (Men, 2015).

According to Fang (2002), the national interest is a variable that fluctuates with the national strength and external environment (Fang, 2002). Also changing are the determination and ranking of national interests (Fang, 2002; Wang, 2003).

Furthermore, Gao (2021) posits that 'Whether or not a country can accurately define, fully realize, and effectively expand its national interests depends, in part, on how its decision-makers or notification groups determine its national interests and how it employs diplomatic means to protect and expand those interests' (p26). In addition, Gao (2021) concluded the concept, evolution, and transformation of national interests of the Communist Party of China (CPC's leading groups throughout all generations since the reform and opening up in 1978). Gao (2021) stated, 'The national interests of contemporary China have formed a relatively complete and substantial theoretical system after 40 years of development. The dynamism of China's national interests is consistent with its adaptable foreign policy.' (p.196) (Gao, 2021).

- In the 1980s, under the leadership of Deng Xiaoping, China embraced peace and development as its theme, socialist modernization as its greatest national interest, diplomacy as its means of achieving national interests, and the concept of the unity of national interests and world interests as its guiding principle (Qin, 2009).
- The third-generation central leadership group, led by Jiang Zemin, was particularly concerned in the 1990s with defending the nation's overall interests, pursuing win-win cooperation, dissolving the Cold War mentality, and creating a new concept of security interests (Jiang, 2006; Jiang 2006).
- China defined the scope of core national interests at the commencement of the twenty-first century (Information Office of the State Council,2001). Former Leader of the CPC, Hu Jintao, asserted that

China maintains its commitment to peaceful development and actively upholds its international commitments and responsibilities in the face of the external environment's rapid changes in international relations and order. China is now a regional and global power with a significantly better international standing and influence (Men & Zhong, 2009; Liu, 2011)

• China's national interests have exhibited an overflowing trend since the 18th National Congress of the CPC (2012) as its power and influence have grown while the global environment is more unpredictable. Lead by President Xi Jingping, the Communist Party of China's Central Committee conducted an accurate analysis of the various levels and types of national interests. In addition to resolutely safeguard the country's core interests and peaceful development, it proposed safeguarding national interests in emerging areas and constructing a community with a shared future for humanity (Xi, 2017).

In terms of the realization and preservation of national interests, numerous academics emphasized the significance of development (Yan,1997; Ni,2001; Men,2017; Gao,2021). Cooperation, according to Yan (1997), is the primary means of protecting national interests. Men (2005) emphasized that China should maintain strong self-sufficiency. Furthermore, as the international pattern and science and technology evolve, non-traditional security interests, such as economy/science and technology/energy, have greater requirements regarding realization and preservation (Men,2015; Gao,2021).

2.3 Operationalization of Chinese National Interest

The objective of this section is to present the theoretical concepts used in the study and to ascertain a theoretical frame of reference. Based on the research presented in Sections 2.1 and 2.2, this part of the study will describe the content of Chinese national interest and the framework of the Chinese national interest theory will be used in the thesis.

2.3.1 The Content of Chinese National Interest

According to Chinese scholars' research, Chinese national interest can be operationalized into four types of interest connected to different contexts.

Political Interests

Political interests refer to the state system and the state's ability to conduct domestic issues and foreign trade independently (Yan, 1997). China's political goals include adhering to the socialist system with Chinese features and protecting the country's standing in the international community (Zu, 2011).

China has three levels of national political interests (Gao, 2021):

- 1. Political independence, adherence to and continuous improvement of the socialist system, and maintaining and promoting political and social stability (Yang, 2004).
- 2. Protecting citizens and protecting the Chinese people's human rights interests.
- 3. Responsibilities of the international community, such as establishing a new reasonable international order. Foreign policy and bilateral ties are the focal point of overseas political interests.

Economic Interests

The economy is the material underpinning for a nation's survival and growth, and a vital component of national interests. Yan also argued that 'once national survival and security are ensured, economic interests will rank higher in national interests and become one of the country's primary foreign policy goals.' (Yan, 1997). Gao (2021) concluded that China's view of national economic interests is to prioritize economic construction and continuously strengthen the nation's comprehensive power.

Economic interests include cooperation in international trade, finance, technology, and industry serves to advance economic objectives; foreign commerce and energy security, such as natural gas and oil imports and exports, are frequently used as indicators of a nation's economic interests (Men,2014; Gao,2021).

Security Interests

Security concerns are crucial to the existence and growth of a nation. National security interests are comparable to a documentary depicting the relationship between the security environment, international norms, national identity, and security concepts (Zu, 2011). Security interests are the protection of national sovereignty and territorial integrity, creation of a peaceful and stable environment, maintenance of traditional and non-traditional security, and protection of the security of citizens at home and abroad.

Traditional security interests and non-traditional security concerns can be distinguished among security interests (Gao,2021). Traditional security interests are national security, sovereignty and territorial integrity, military superiority/maritime rights, and interest.; Political security, economic security, and cultural security. Non-traditional threats to security are network security, terrorism, the proliferation of weapons of mass destruction, the financial crisis, severe natural disasters, climate change, energy and resources security, food security, and public health security (the Information Office of the State Council of China, 2011).

Culture Interests

Significant cultural concerns are included among national concerns. Not only do cultural differences contribute to the world's cultural wealth and increase the diversity and value of art, but they also hinder cross-cultural contact and have even become a strategic factor for the nation. Maintaining cultural interests will have an impact on national identity and soft power in international interactions and international affairs (Li,2021).

Cultural interests can be defined as the positive perception and evaluation by foreigners of a country's cultural soft power, such as cultural products, moral traditions, ideological concepts, and national quality; consequently, the benefits brought to the country include not only the cultural industry but also the cultural industry itself (Li,2021). Overseas cultural interests are determined by overseas economic and political interests, a manifestation of undeveloped and future interests, and an indirect, deep, vague, and convoluted expression of them. Once formed or acquired, cultural interests impede the acquisition, possession, dominance, enjoyment, and protection of larger economic and political interests. China aggressively pursues collaboration in Arctic affairs, promotes the expansion of Sino-European trade and the "Belt and Road Initiative" and "Community with a Shared Future for Mankind" scheme, and has significant cultural interests abroad. China's pursuit of cultural interests abroad is also motivated by the large number of Chinese people who have settled, resided, and studied abroad (Li,2021).

The primary national interests and their contexts are summarized in Table 1 based on study conducted by Men in 2008 and Gao in 2021.

National interest	Context
Political interest	1. National sovereignty
	2. Independently manage internal affairs and foreign policy
	3. Protecting citizens and protecting the Chinese people's human rights
	interests
	4. Bilateral foreign politics and bilateral relations
	5. International status
Economic interest	1. Trade and trade agreements
	2. Investment
	3. International financial cooperation
	4. Energy and resource supply
	5. Technology imports and exports
Security interest	Safeguarding national sovereignty and territorial integrity
(Traditional & Non-	2. Military superiority
traditional)	3. Creating a peaceful and stable surrounding environment
	4. Safeguarding the security of citizens at home and abroad
	5. International channel security
	6. Political security, economic security, and cultural security
	(Non-traditional)
	7. Network security
	8. Addressing terrorism and the proliferation of weapons of mass
	destruction
	9. Addressing the financial crisis
	10. Addressing climate change and severe natural disasters
	11. Energy and resources security; Food security
	12. Public health security
Cultural interest	1. Improve the sense of identity of the nation
	2. Promoting Chinese culture
	3. Promoting Chinese political ideas to the world? Prevent corruption in
	foreign countries

Table 1: The content of Chinese national interest based on the concept and definition. Source:

Men,2008; Gao, 2021

2.3.2 The Framework of Chinese National Interest

Gao (2021) examined the influence of several generations of CPC leaders on China's national interests and outlined the fundamental principles of China's national interests as follows: *strengthening security interests*,

placing importance on economic interests, focusing on political interests, and protecting cultural interests (Gao, 2021).

Based on the priority perspective, Yan (1997) developed the Chinese national interest order which combined Nuechterlein (1967) and The National Interest Committee of the United States from the priority perspective which will be used in this study.

- a. Survival interests comprise independence of political power, protection of citizens' lives, territorial integrity, economic security, and continuation of the national political system.
- b. Important interests comprise national strategy, international reputation, development model and economic guarantee of important industries.
- Main interests comprise overseas market development, technology development, technology competition, and absorption of international capital
- d. Marginal interests comprise industries/ enterprises which are insignificant to national defense and strategy, overseas interests of enterprises and individuals.

Gao (2021) derived his conclusions from the specialty aspect and divided Chinese national interest into specific interests and general interests from Chinese scholars and Nuechterlein (1976).

- General interest: national security, international relations, and state sovereignty
- Specific interests: China's pursuit of global leadership and order

From the persistence viewpoint, Gao (2021) provided a summary of the duration of China's national interests by Men (2015) and other scholars. Long-term interests, medium-term concerns, and short-term requirements can be distinguished according to their duration and three factors (the rise and decline of power, changes in the environment, and the demands of the future).

- Long-term interests (permanent interests) such as territorial integrity, national independence, national sovereignty, economic development, ecological balance, and military modernization, among others.
- Medium-term interests, such as the introduction of advanced military or scientific technologies.
- Short-term interests: such as securing commercial loans and adjusting tariffs.

This is the theory building the frame of reference that this study will employ to answer our research questions regarding the factors and their functions influencing Sino-Norwegian relations and business collaboration.

Chapter 3 Methodology

This chapter is about the research methods and research design in Section 3.1, Section 3.2 and 3.3 relates to data collection and data analysis, Section 3.4 outlines the validity and reliablity, Section 3.5 relates to ethical consideration, and limitation will be found in Section 3.6.

The methodology shows the idea and logic of how to conduct scientific research and tools for collecting empirical data (Front Matter,1980). Methodology describes ways to test theories that are systematically organized or codified. Thus, the methodology is essential for enabling the assessment of theory and the advancement of research.

3.1 Research Method and Research Design

According to Saunders, Lewis and Thornhill (2009), the research design includes the choice of the research purpose and question, data collection, and analysis methods. The answers to the research question of this study will be determined by deductive and inductive approaches, using the following methods: case study analysis, and qualitative and quantitative analysis methods. These techniques would be beneficial for this study, as they offer a theoretical and empirical foundation for drawing conclusions that are consistent with the research question.

Research Method 1: Case Study

Lakatos (1986) pointed out that case studies can help test the validity of preexisting theories. The case study is one of the most common methods in varied investigations, especially in a holistic, in-depth investigation (Bennett, 2002;Odell, 2002; Lewis,2015;Yin,2018). Bennett and Odell (2002) both created case study analysis in the international political economy from the perspectives of international relations, international economics and politics, and international security studies.

This thesis examines the relationship and cooperation between China and Norway in business related area thus case study strategy will be the main methodologies in this thesis. The basis for this choice was the previous literature review (in Section 1.2 and Section 2.2) and careful consideration of the topic and research question. The relationship and cooperation between China and Norway is a long, dynamic process including several important events. This thesis selects bilateral cooperation in business as the key case while the arctic

collaboration, energy resource cooperation, new energy vehicles and Free Trade Agreement negotiation as four mini cases in Sino-Norway study. Therefore, the case study allows this thesis to discuss the history and variables, and qualities of bilateral cooperation (Tellis, 1997).

Research Method 2: Qualitative and Quantitative Analysis Method

The objective of qualitative research methods is to discover what people think and feel about a phenomenon, as well as what motivates their actions. In addition, qualitative research is characterized by a smaller sample size of respondents and a 'softer' data set than quantitative research. Since the collected data are in the form of text or sound, they cannot be inserted directly into an analytical program. This thesis primarily uses qualitative data collection (Hox & Boeije, p.593). When analyzing data that is subjective rather than numerical, qualitative analysis is used. The objective of the study is to describe and analyze the factors in business-related relations and cooperation between China and Norway. Here, government documents, news, journals, and research have been used. It also requires quantitative analysis of the impact of China's national interests regarding China's state/enterprises and other actors, as well as quantitative analysis and evaluation of the behaviors of these actors'using data.

Research Design

In Section 1.2, the history between China and Norway shows a background of bilateral relation. Chapter 2 examines the theory of national interests in Section 2.1 and Section 2.2 from Chinese viewpoint, the connotation of Chinese national interests and Section 2.3 as the theoretical frame of reference. The theory of national interests is based on the capacity of national interests to affect diplomatic action. The following hypotheses are advanced in response to the research questions: From the standpoint of national interests, the relationship and cooperation between the two nations in the commercial sphere can be explained with the aid of the theory of national interests, and the following hypotheses are advanced:

- The prioritization of China's national interests is the foundation of China's foreign policy.
- The dynamic evolution of China's national interests has altered China's diplomatic conduct towards Norway.

Chapter 4 is an empirical analysis of the cooperation cases between China and Norway, and it also examines the official Chinese media and academic discourse in Norway. Chapter 5 is devoted to the case analysis. The section will begin with a summary of the national interests involved in the cooperation between the two countries, based on the historical carding section of Chapter 4 and Chapter I and the theory of national

interests presented in Chapter 2. The thesis will then analyze the interaction between the two countries as well as typical cases of cooperation based on the theory of national interests and demonstrate these hypotheses.

3.2 Data Collection

This thesis utilized qualitative research methods to collect primary and secondary data for the empirical study. Literature and archives are the key primary sources for this case study(Lewis,2015). Secondary data are statistics that already exist (Tripathy, 2013).

In this thesis, the collection of Chinese publications including articles, journals, news, books and meeting documents from the website of China National Knowledge Infrastructure (CNKI) and news from the People's Daily as the primary data.

CNKI is one of the largest scholarly databases in China. CNKI has developed into a collection of journals, doctoral dissertations, master theses, conference papers, newspapers, reference books, yearbooks, patents, and standards. Thus, in regard to Chinese publications, CNKI is a good option as a tool. Therefore, the author use Norway, Norway and China, as key word searches in CNKI, from thousands of publications, as it provides the trend of Chinese scholars' interests in Norway. The government documents are collected based on the information from the Chinese Embassy in Norway, the Chinese Ministry of Commerce, and the Chinese Foreign Ministry's reports. The data were collected from government agencies such as the Statistics Bureau of China, Statistics Norway.

People.cn is the source of the news, which is the People's Daily's website. The People's Daily is a publication of the Central Committee of the CPC. It is also the largest comprehensive core newspaper in China at present. It is the most authoritative in conveying Party and national policies (Zhang & Yu, 2013). This paper examines the online reports on Norway by the Chinese official authoritative media People's Daily/People.cn and examines the hot spots that China pays attention to in Norway from a Chinese perspective in conjunction with the major topics that are covered.

In terms of secondary data, this thesis supplements the primary data as summarized above by analyzing academic papers, journals, and government documents pertaining to Sino-Norwegian relations and cooperation in the business-related area. In conclusion, this study combined primary and secondary data, classified them, and evaluated bilateral cooperation cases based on the theory of national interests.

3.3 Data Analysis

Secondary Data Analysis is used in this study, a technique that performs empirical data analysis on collected data in relation to current data for a different purpose. This helps researchers analyze data quickly when time and resources are limited. The data collected from government websites, OECD and publishers will be used in case studies for this thesis in order to describe the trend of biliteral coopreation. During the process of data analysis, the gathered information, which relates to cooperative endeavors in multilateral commercially relevant fields, is summarised in accordance with national interests. The first step of the inductive process consists of investigating the results based on the national interest theory's three dimensions: priority, continuity, and variability. The last part of this discussion will focus on the reasons behind these factors that affect bilateral cooperation.

3.4 Validity and Reliability

Validity is how closely the data corresponds to reality (Smith, 2008), which will strengthen the quality of the research. Lakshmi & Mohideen (2013) also stated that 'in a case study, data collection should be treated as a design issue that will enhance the construct and internal validity of the study, and the external validity and reliability. Internal validity also called credibility, encompasses whether the results of the study are legitimate. External validity, often called 'generalizability', involves whether the results given by the study are transferable to other groups of interest '(p.2752). This is relevant to case study, so this study will provide a relatively detailed case explanation through the case study and hope it can assist in understanding other bilateral cooperation cases.

First of all, the documents and reports selected in this paper are all from official government documents in China and Norway, or public reports from other authoritative media. Secondly, the sources of trade and investment data come from government websites such as China Customs, and databases such as the OECD, to support validity.

Reliability is enhanced by the triangulation of data collection and multiple analysis methods. There are several factors related to reliability, one being the data. The second-hand data used in this article comes from the official website of the Chinese government, publications, such as a journal, books. This thesis will also conduct secondary verification through other channels to make the data real. For instance, the trade data in

this thesis collected from China's government and the United Nations. Additionally, the news is supported by reports from Chinese official media and Norwegian official media.

3.5 Ethical Considerations and limitation

Research ethics is a codification of scientific morality in practice, according to the National Committee for Research Ethics in the Social Sciences and the Humanities (The National Committee for Research Ethics in the Social Sciences and the Humanities (NESH).2022; Canadian Political Science Association (CPSA),2022). The fundamental values and norms of the research community are outlined in research ethics guidelines. The collected data contains information concerning relevant businesses and other third parties, which poses an ethical risk regarding the protection of third parties' private rights. However, the risk is limited because the presented information has been vetted by stakeholders and the data and information were gathered from publicly accessible websites, journals, and articles.

Due to the lack of relevant Chinese materials and the author's barriers in the Norwegian language, this master's thesis only uses the relevant materials that the author was able to access, so some studies that may have been relevant but are not included. Moreover, the author use Chinese perspective for this research, whereas in this bilateral study, the Norwegian perspective is equally as important as the Chinese. This bias may cause this study to be insufficiently comprehensive.

In the empirical descriptions this study only selected a few products that the author regarded as representative and selected the data of relevant years for analysis according to the important years of bilateral relations. It could be possible that there are other patterns if other sectors and products have been analyzed. The results and conclusions may therefore be influenced by this limitation.

Due to the length and complexity of the history and bilateral relations between these two nations, one of the limiting factors for this paper is the amount of time required for writing. It is nearly impossible to focus on every event and detail, so the case study method can, alternatively, only demonstrate an outline. In addition, it is important to note that due to the submission deadline, here there is only collected data before December 2022, and some collaborations are still on process.

Both the qualitative method and the induction method employed are subjective, which may influence how the author perceive certain problems and obstacles. The secondary data in this study will be taken from authoritative official websites, but due to the huge number of policy documents, it will be difficult to access every policy document. In addition, the study lacks private data and primary data. During the process of data collection, due to time constraints, the study will only search and analyze literature by Chinese scholars on the CNKI database. However, other academic websites in China and elsewhere in the world could be used. This research does not verify all of them. Therefore, in further research, these data may be considered. Besides being restricted by the government regarding information disclosure and some earlier information that cannot be retrieved due to timeliness issues, it is difficult to cover everything in cases of selection, historical review, and other content.

This chapter confirms case study analysis and qualitative and quantitative analysis as the research methods for this study. The cooperation cases between China and Norway were chosen as the case study, with the national interest theory providing a theoretical framework for analysis using the induction method. Finally, research ethics, reliability, and validity, as well as certain limitations, were discussed. The subsequent chapter will present the empirical findings in detail.

Chapter 4 Empirical Study

Chapter 4 examines China's and Norway's bilateral cooperation from the standpoint of empirical analysis. Trade between the two countries is analyzed in Section 4.1, then bilateral investment is discussed in Section 4.2. Common cases of business cooperation are considered in Section 4.3, business-related cooperation is discussed in Section 4.4, and a discussion of Norway in Chinese publications and research is analyzed in Section 4.5. In order to present the results more precisely, the author tabulates and presents these results in each section.

4.1 Identifying China-Norway Cooperation in Trade

The objective of this paragraph is to illustrate the evolution of bilateral trade status over the past decade. Bilateral trade history can be divided into three periods: fluctuation (2011-2013), steady decline (2014-2017), and steady growth (since 2017). There are statistics from three distinct public databases: the General Administration of Customs of China, the Guide for Countries (Regions) of Foreign Investment Cooperation - Norway (The Guide, 2016 & 2020 & 2021), and the Trading Economics website.

Despite a fluctuating period (2011-2013), China's exports to Norway were relatively stable. It decreased slightly between 2011 and 2013, whereas data on Chinese exports to Norway decreased to approximately 550 million dollars in 2012, then rose to 4.47 billion dollars by 2014 (The Guide, 2016). Between 2014 and 2017, this was a period of decline. In 2017, China's exports to Norway totaled \$2.49 billion, the lowest amount in the past decade. The import portion was reduced to 3.11 billion dollars. After 2017, the growth rate accelerated, particularly in 2019 and 2020. Prior to 2020, China's imports from Norway amounted to approximately 4 billion dollars, but by 2020, they reached 7.27 billion dollars, an increase of nearly \$3.3 billion in one year (The Guide, 2021).

Here is data from the COMTRADE database of the United Nations regarding China's imports from Norway in order to verify the information. Figure 1 depicts the number of Norwegian exports to China from 2012 to 2021; in summary, the trend is similar to Table 2, and the significant increase from 2018 to 2021 raises the question of what kind of product China's astronomical demand is for and why it has suddenly risen.

The following table and graph compile information from the Trade statistics between China and Norway from 2011 to 2020, the Guide from 2016 to 2021, and Trading Economics (2022).

	Total	China Export to Norway	China Import from Norway
2011	7.41	3.79	3.62
2012	6.09	3.02	3.07
2013	6.21	2.74	3.47
2014	7.20	2.73	4.47
2015	7.00	2.86	4.14
2016	5.83	2.60	3.23
2017	5.62	2.49	3.11
2018	6.06	2.64	3.41
2019	7.35	3.45	3.90
2020	10.87	3.53	7.27

Table 2: Trade statistics between China and Norway from 2011to 2020 (*Unit: USD 1 billion*) Source: General Administration of Customs of China (2016-2021)

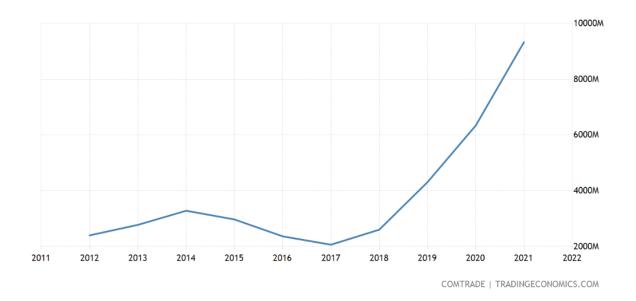


Figure 1: China Imports from Norway from 2012 to 2021 Sources: Trading Economics (2022)

China has had a long-term trade deficit with Norway, and the bilateral trade deficit exceeded \$3.5 billion in 2020. Overall, China's exports to Norway are relatively stable, among \$2.5 to \$3.8 billion. China's exports are influenced by its political relationships. From 2011 to 2017, China's exports to Norway experienced a direct decline. After the restoration of political relations in 2017, a clear upward trend emerged, indicating that good political relations had a substantial impact on China's exports to Norway. However, political factors cannot fully explain the changes in trade. For instance, between 2013 and 2015, fluctuations in imports and exports did not fully reflect the political climate. Consequently, this section will examine bilateral import and export trade in detail.

4.1.1 China Imports from Norway

The overall change from 2011 to 2019 is modest, but there is a clear upward trend in 2020. According to Chinese statistics, the majority of raw materials, such as ores, were imported between 2011 and 2016, and a substantial amount of energy products were imported in 2017. In Figure 1 and Table 2 there is a significant increase between 2017 and 2020. To ascertain the reason behind this rise, it is prerequisite to search for the different products and their proportion. After rebuilding bilateral relations, the imports from Norway to China has increased exponentially. Thus, section 4.1.1 aims to discuss the possible connection between these trade items and bilateral relations and ascertain the kinds of products that play an essential part in the import component and explain the motivations of the Chinese side. There is a table to show the products and their respective proportion of China's imports from Norway in 2017 and 2020. In addition, each item has a

different color and its proportion of the total trade in that year. The most significant difference, as shown in Table 3, is crude petroleum-the red square section, which increased from \$557 million in 2017 (19.3% of total trade in 2017) to \$3.93 billion in 2020 (57.8% of total trade in 2020). In the top three items, carboxamide compounds and non-fillet frozen fish are relatively stable. It also shows slight variations in the number of bilateral trades from the Chinese government.

China imports from Norway in 2017 (Total: \$2.89) & China imports from Norway in 2020 (Total: \$3.93) (unit: billion)

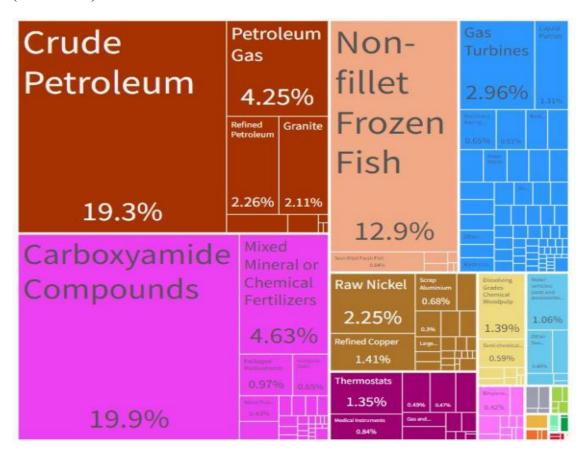


Table 3.1: China Import from Norway 2017 Source: China and Norway Trade (OEC,2022)

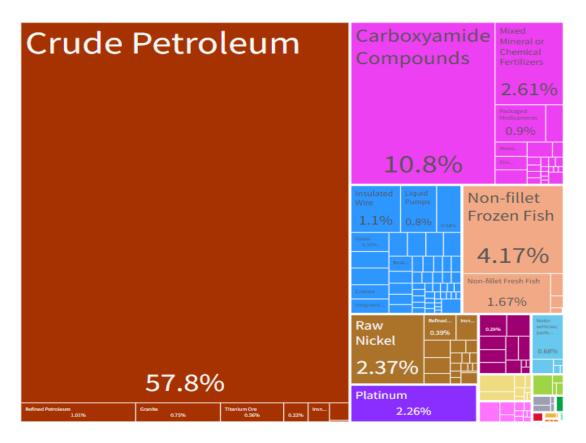


Table 3.2: China Imports from Norway 2020 Source: China and Norway Trade (OEC,2022)

Even though data from different databases differ slightly due to different classification or data collection methods, they all show that the top three items in 2020 were petroleum, mineral products, and fish. According to the following chart from Trading Economics, mineral fuel, oil, and distillation products were the main product in 2020, reaching \$ 3.99 billion. Furthermore, China spent 43,1 billion RMB (\$6.04 billion: exchange rate based on \$1=7.1403 RMB) to import 13,19 million tons of crude oil from Norway in 2021, elevating Norway to the tenth position among China's crude oil exporters.

Norway Exports to China	Value	Year
Mineral fuels, oils, distillation products	\$3.99B	2020
Organic chemicals	\$740.93M	2020
Fish, crustaceans, molluscs, aquatics invertebrates	\$411.72M	2020
Machinery, nuclear reactors, boilers	\$286.29M	2020
Commodities not specified according to kind	\$208.98M	2020
Electrical, electronic equipment	\$181.13M	2020
Nickel	\$161.23M	2020
Optical, photo, technical, medical apparatus	\$93.21M	2020
Articles of iron or steel	\$43.82M	2020
Salt, sulphur, earth, stone, plaster, lime and cement	\$42.07M	2020

Table 4: The items of China import from Norway in 2020 Source: Trading Economics (Trading Economics, Norway exports to China, top 10 items in 2020)

Mineral products are among the most important commodities. In Table 3, organic chemicals were the top two items in 2020, with a total value of \$740.93 million. Carboxamide Compounds were worth \$737 million in 2020, according to Table 3. While, according to the Country Report from 2010 to 2019, mineral products were one of the most important commodities in 2010. Mineral product exports to China have increased rapidly since 2010, with a value of \$ 190 million in 2010, \$710 million in 2018, and \$ 152 billion in 2019. Organic and electrical products (\$610 million), base metals and products (\$450 million), live animals and animal products (\$380 million), and chemical products (\$360 million) were the top commodities exported by Norway to China in 2010. While mineral products (\$152 billion), chemical products (\$940 million), and live animals and animal products (\$590 billion annually) were the main commodities exported by Norway to China in 2019, (Country report, 2010-2020).

In general, China imports from Norway primarily resource products, energy, aquatic products, and metal ore.

4.1.2 China Exports to Norway

As demonstrated in Table 2, the pattern of China's exports from Norway is generally consistent. According to OEC (2022), the main exports from China to Norway between 2010 and 2019 were broadcasting

equipment, computers, ships, office machine parts, and telephones. Cars, however, are the only recent addition to the top four in 2020. The exports of China to Norway in 2017 and 2020 are detailed here.

China exports to Norway in 2017 Total: \$6.61 Billion

China exports to Norway in 2020 Total: \$7.79 Billion

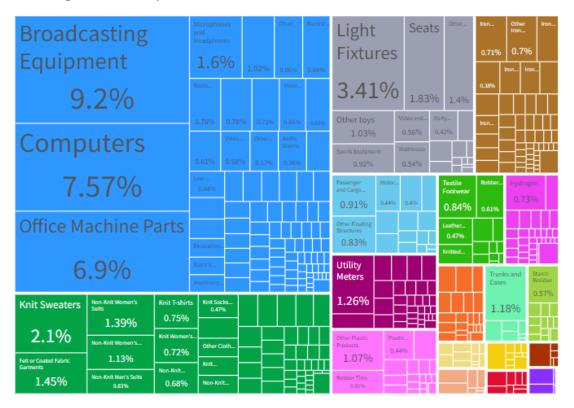


Table 5.1: China Export to Norway 2017 Source: China and Norway Trade (OEC,2022)

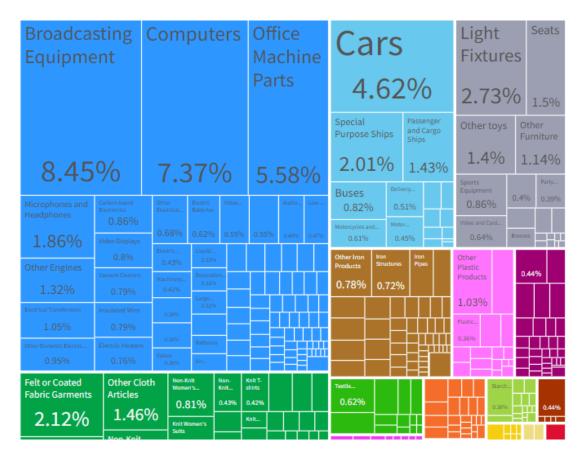


Table 5.2: China Export to Norway 2020 Source: China and Norway Trade (OEC,2022)

In 2017, the cost of broadcasting equipment is \$608 million, which increased by \$51 million in 2020. The second line item, Computers, increased from \$501 million to \$574 million between 2017 and 2020. The third item, parts for office machines, decreases from \$457 million to \$435 million. In terms of light fixtures (\$225 million), the top 4 products in 2017 fell to \$213 million in 2020. While automobiles will climb into the top four and reach \$360 million in 2020.

From the perspective of trade, the overall bilateral trade declined from 2010 to 2016, while after the restoration of diplomatic relations, bilateral trade increased significantly, indicating that political relations have a direct impact on bilateral trade, and good political relations are the basis and influencing factors of trade exchanges. From the perspective of China's import to Norway, energy has grown rapidly after 17 years, and bilateral energy dependence has increased, becoming the main product of bilateral trade. The trade of resource products, such as metals and ores, was also less affected in 2010-2016, but the impact of aquatic products, such as salmon, was greater in 2010-2016.

4.2 Identifying China-Norway Cooperation in Investment

This section examines China's investments in Norway over the past ten years. In recent years, Chinese businesses have begun to concentrate on the Norwegian market (The guide, 2020). By the end of the year 2020, Chinese direct investment in Norway reached \$1.04 trillion.

The investment cases based on this information are depicted in Table 6 and Figure 2 below. According to the report Country (Region) Guide for Outbound Investment and Cooperation 2020 in Norway, when investment comes to Norway, the projects invested by Norway focus on advantageous industries such as petrochemical, metallurgy, medicine, ship equipment, papermaking, and fishery, which are in line with China's industrial policy and the fields encouraging foreign investment.

There are four typical investment examples.

- In 2010, China Bluestar invested \$2 billion to acquire Norwegian Elkem. Star Elkem paid \$620 million to acquire the plant of REC Solar Holdings AS, a Norwegian solar panel manufacturer, in order to integrate the industrial chain and have technological advantages.
- In 2016, Kunlun Wanwei Technology Co., Ltd (Kunlun) acquired the Norwegian web browser Opera for \$575 million (Till 2021). Through the continuous purchase of circulating shares, Kunlun holds 53.88 percent of Opera's equity, and Opera became the holding subsidiary of Kunlun's wholly owned subsidiary. This action means that Kunlun's globalization and platform strategy have been further advanced, and its financial performance has also been significantly enhanced (China News, 2018).
- Zhimei Creation Home Furnishing (Shanghai) Co., Ltd. invested \$630.46 million in 2018 to acquire the
 entire share capital of Ekornes ASA (Ekornes), as its global strategy to enter European and American
 markets.
- According to Everbright Limited (2018), Everbright Group invested \$200 million to acquire all of Boreal Holding AS's equity for two reasons: the opportunity to introduce the application of clean energy technology; medium-and long-term contracts with the Norwegian public transport sector.

Elkem in 2010, REC Solar Holdings AS in 2015, Opera in 2016 and Ekornes ASA in 2018 suggest that China-Norway production capacity cooperation focuses on marine engineering, nonferrous metals, electric power, communications, construction machinery, and ship field. All of these instances demonstrate the diverse nature of China's investments in Norway. Large Chinese state-owned corporations invest primarily

in Norway's energy, communication, chemical, engineering, and shipbuilding sectors. This is consistent with joint commerce's core industries. Energy resources play a significant role in bilateral business cooperation, as evidenced by trade and investment, particularly in oil and gas trade and energy cooperation.

These Chinese companies include state-owned enterprises and publicly traded companies, indicating that Chinese companies that choose to invest abroad

Year	Institutions(Norway)	Chinese	Investor	Business scope
		shareholding		
		ration		
2010	Elkem	58.3%	China Bluestar	Silicon material,
			(China national chemical	chemical
			corporation)	industrial products
2015	REC Solar Holdings AS	100%	China Bluestar	Solar energy
			(China national chemical	industry
			corporation)	
2015	China classification	100%	China classification society	Ship
	society Bergen office			inspection ,etc
2015	Malungen	100%	Beijing guotongbao limited	Travel
			investment company	
2016	Biovac Enviromental	100%	Anhui guozhen ring energy	Energy saving
	Tachnologu AS		saving technology company	technology
			limited	
2016	Brondrebe AAAS	40.68%	Guangdong Shipping group	Transport
			Co.Ltd	
2016	Opera	47.5%	Kunlun Wanwei Technology	Communication
			Co., Ltd.	
2018	Ekornes ASA	100%	Zhimei Creation Home	Furnishing
			Furnishing (Shanghai) Co., Ltd.	
2018	Boreal Holding AS	100%	Everbright Group	Transport

Table 6: Major Chinese-funded institutions in Norway Sources: The guide 2021pp.32-33

Despite the deterioration of bilateral relations between 2010 and 2017, China continued to invest in Norway, demonstrating that bilateral relations did not have an absolute impact on investment. From the data, China did not invest Norway in 2011,2012 and 2014.

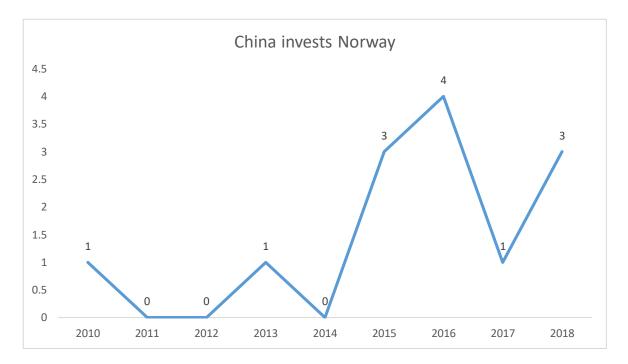


Figure 2: The number of investment cases (China invests Norway) (2010-2018)

In conclusion, the majority of China's investments are made in Norway's energy, communication, chemical, engineering, and shipbuilding industries. The objectives are to integrate the industrial chain and technology advantages; globalization and platform strategy have been advanced, and the company's financial performance has been significantly improved; to enter the Norwegian, European and American markets; to introduce the application of clean energy technology; and to secure medium- and long-term contracts with the Norwegian public transportation system.

4.3 Identifying Cases on China-Norway Business Cooperation

There are three cases that demonstrate the business cooperation between the two nations. The following are three case studies focusing on business cooperation between the two countries. The first case examines Cooperation in the Arctic from the perspectives of the Chinese government and academics. The second case

concentrates on bilateral negotiations for the establishment of Sino-Norwegian Free Trade Zone. The last one explores the import and export of new energy vehicle and salmon, two major products in Sino-Norway trades.

4.3.1 Arctic Cooperation

China's Arctic Policy (2018) emphasized the significance of the Arctic to China's economic interests, scientific research and other areas of development. According to Wang (2013), economic interests occupied the most important place. Numerous Chinese academics have studied the Arctic issue and analyzed the existing and potential for commercial value and increased commercial cooperation in the region, including the opening and commercial operation of the Arctic waterway, exploration and development of abundant and high-quality oil and gas and mineral resources in the Arctic, as well as the expansion of tourism and fishing in Arctic waters.

It is important to note that although the Chinese government and academics have endorsed the importance of commercial cooperation in the Arctic, discussions of political interests and non-commercial cooperation in the region are more prevalent. The People's Republic of China (PRC) Information Office of the State Council of the People's Republic of China (2018) stated that China considered the Arctic issue to involve the interests of both the international community and nations outside the Arctic region and that the issue had progressed from a regional to an increasingly significant international issue. According to China's Arctic Policy (white paper), the nation has been continuously and actively engaging in Arctic affairs and creating a global community with a shared future as a result of its proximity to the Arctic. Zhao (2021) also highlighted the ways in which China's economic interests in fields like agriculture, forestry, fisheries, and oceans had been impacted by the Arctic's natural conditions, the global climate system and ecological environment.

To help increase its involvement in Arctic affairs and its international voice, China should deepen its cooperation with Norway. Norway has significantly influenced China's involvement in Arctic affairs and growth of cooperation with Nordic nations (Xia, 2013). With the support of Norway, China joined the Arctic Council as an official observer in 2013. Eight Arctic nations make up the Arctic Council. Norway, a country in the Arctic and a member of the Arctic Council since its establishment in 1996, is a key player in regional

affairs. A few nations have taken part in some Arctic affairs as Arctic Council observers, despite the fact that other non-Arctic nations are not allowed to participate in Arctic decision-making (Wang, 2021).

Professor Li Zhenfu of Dalian Maritime University is a pioneering researcher investigating Arctic affairs in China and establishing the theoretical underpinnings for China's involvement in Arctic governance (Li et al., 2021). Professor Zhao Ningning of Central China Normal University is a significant researcher on Arctic-related issues in China. Based on earlier research, he has published 26 papers on topics related to the Arctic (CNKI, 2022). He emphasized that China is committed to developing a discourse system on its obligations to the Arctic on a global scale (Zhao, 2021). The relationship between China and the Nordic nations was also examined in the study on China's involvement in Arctic governance. These academics emphasized China's cooperation with Norway in Arctic scientific research. The Yellow River Station of China in the Arctic is crucial.

The cooperation in the Arctic on energy and resources will become deeper and more varied. Numerous academics have been researching the exploitation of the Arctic's oil and gas resources since 2010. The supply and demand for oil and natural gas are out of balance globally, claims Huang (2010). East Asia and North America both consume a lot of oil (BP,2021). China will continue to lack access to petroleum-based energy. China is encouraged to actively participate in the development and management of the Arctic because of its advantageous geopolitical location and wealth of resources.

Norwegian companies are one of the leaders in the worldwide in terms of capital and technical prowess in fields like offshore oil and gas exploration, design, development, and digitalization. Since the normalization of relations between China and Norway, the two countries' current energy cooperation is restricted to the sales of oil and natural gas products, but future collaboration is possible in other fields such as energy exploration and offshore engineering (Guo,2022). Guo also represented Norwegian National Energy Chamber of Commerce to show the willingness of strengthen bilateral energy cooperation (Guo,2022).

4.3.2 Free Trade Agreement and Free Trade Zone Negotiation

Sino-Norwegian Free Trade Agreement and Free Trade Zone negotiations lasted for many years. A timeline of FTA negotiations between China and Norway is available on the website of the Chinese Ministry of

Commerce. According to the Ministry, the two nations first discussed the possibility of an FTA in 2007. However, due to an event in 2010, which is the year of the eighth negotiation, the ninth negotiation was not held until 2017 when bilateral relations began to recover. By 2022, after many rounds of negotiations, the two sides have not signed an agreement (Press Office of the Ministry of Commerce, 2021). These discussions are about trade in goods and services, investment, rules of origin, technical barriers to trade, dispute settlement, and other areas.

From China's official perspective, President Xi has emphasized in multiple meetings the importance of adhering to the dual-cycle strategy and the fundamental objective of ensuring employment since 2020,(Xi, 2020). And Wang Yi also stated the Chinese willingness to complete the FTA with Norway in 2022 (Ministry of Foreign Affairs, 2022). In 2022, Gao Feng, a spokesman for the Chinese Ministry of Commerce, predicted that 'import and export trade between China and its free trade partners whose agreements have entered into force increased by 23.6% annually, 2.4% more than with non-free trade partners.' The Chinese Ministry of Commerce will continue to promote the China-Norway Free Trade Agreement (Luo, 2022; Press Office of the Ministry of Commerce, 2021).

China initiated negotiations for free trade agreements with Switzerland, Iceland, and Norway almost at the same time. China signed its first FTA with Switzerland in Europe in 2013. In 2013, a similar agreement was also signed with Iceland. Press Office of the Ministry of Commerce stated that China's commitment in the FTA with Iceland exceeds WTO standards, indicating that China is approaching EU standards (Press Office of the Ministry of Commerce, 2013). Growth of trades between China and Switzerland demonstrates the positive impact of the China-Switzerland FTA, which serves as a model for the EU-China Investment Agreement, according to the president of the European Union Chamber of Commerce in China, Joerg Wuttke (Wuttke, 2017; Yao, 2017). The three countries are not European Union (EU) citizens but belong to the European Economic Area (EEA). Some Chinese scholars have argued that this may be due to China's desire to enter the European market (China Quality News Network, 2013). Chinese academics have explored various angles of the free trade agreement between China and Norway. For example, Huang (2015) studied the benefits of establishing a free trade zone between the two countries while Yu (2011), Ying (2021), and Huang (2015) examined the economic effects of doing so. These studies demonstrate the vast potential for expanding

trades between the two countries' industries, and that the creation of a free trade zone is beneficial to bilateral trades. None of these studies can provide a cogent explanation for the failure of Sino-Norwegian free trade negotiations.

4.3.3 Main items in business

New Energy Vehicle

Norway is a crucial market for Chinese exports of alternative-fuel vehicles. (Fan& Wu, 2022; Xia &Zhang, 2022; Yang 2022; Zhang, 2022; Wei, 2021; Liu & etc. 2021; Huang, 2021) Other scholars analyzed China's new energy vehicle industry, while Guo examined BYD's path to internationalization (Xi, 2021). According to Huang (2021), Norway is very accommodating to electric vehicles. For electric vehicles, the government has enacted tax and fee reductions, monetary subsidies, and additional measures. In addition, Norway has a sizeable share of the market for pure electric vehicles. Due to these factors, several Chinese automakers have chosen Norway as the country for their initial internationalization and entry into the European market. Numerous Chinese automobile manufacturers have entered the Norwegian market, making Norway their first stop in Europe (OEC,2022). As part of Chinese automakers' efforts to establish localization teams abroad, NIO, BYD, and additional brands have entered the Norwegian market. Xpeng Motors collaborated with their Norwegian dealer Zero Emission Mobility AS in December 2020. (ZEM). Xpeng is a brand and symbol of the Chinese automobile industry (Zhang, 2021). In September 2021 (Xinhua, 2021), the first Chinese NIO (a Chinese automobile brand) store opened in Oslo; it was also the company's first store in Europe. The positive relationship between the two countries provides the foundation.

In fact, the Norwegian market is currently dominated by Tesla, Audi, Volkswagen, and other brands. Chinese brands face numerous challenges when entering the market,, such as establishing brand recognition, localization, and intercultural relations. Compared to the massive investment in the Norwegian market and the current sales data of various car companies in Norway, China's new energy. However, Chinese manufacturers of new energy vehicles continue to swarm the Norwegian market and intensify their entry. According to Huanqiu (2022), VOYAH officially announced its entry into the European market in February 2022, landing for the first time in Norway. VOYAH Free began shipping to Norway in September and will be officially delivered to Norwegian users by the end of this month. In 2023, VOYAH Dreamers will also officially debut on the European market, following its debut in Norway. VOYAH will also enter the markets

of Sweden, the Netherlands, Denmark, and Israel, ushering in a new era for Chinese automakers. In November 2022, VOYAH Automobile announced that the financing agreement for the A round of war had been signed and delivered. After financing, VOYAH Automobile's market value was nearly 30 billion RMB. This round of funding raised nearly 5 billion RMB (Huanqiu, 2022).

VOYAH serves as a microcosm of new energy vehicles in China. Numerous automakers are aware that Norwegian automobiles are extremely competitive and that Chinese brands have no advantages (Huanqiu,2022). The expense of traveling to Norway is enormous, whereas the sales revenue is very low. However, they continue to invest actively in the Norwegian market. This is due to the fact that, these automakers are using Norway as a test market for further entry into the European market. The target market is not just Norway, but rather the European market behind Norway.

Aquatic products (salmon)

The salmon trade is one of the most typical cases in Sino-Norwegian bilateral trade and diplomacy (Ma,2007). One of the primary food products of Norway is fishing. Salmon and arctic cod are Norway's primary fishing exports. As a result, Norway seeks to expand its fish exports. Before 2010, Norwegian salmon had a monopoly position in the Chinese market. In October 2010, Sino-Norwegian relations deteriorated, and China stopped importing Norwegian salmon. After 2010, the Norwegian salmon on the Chinese market was replaced by salmon from other nations, such as Denmark. Beginning on March 23, 2015, the Chinese government suspended imports of whole Norwegian salmon from the counties of Sor-Trondelag, Nordland, and Troms. Other countries may still export salmon to China but must provide proof that the fish are free of pancreatic disease and infectious salmon anemia (Zhang, 2018). Former Norwegian prime minister Erna Solberg led a diplomatic mission to China in April 2017. In Shanghai, Solberg promoted Norwegian salmon and expressed a desire to increase exports. This event was referred to as salmon diplomacy by Chinese media (Sun, 2017). During the 2018 visit to China by the King of Norway, a number of agreements concerning salmon were reached. Salmon is not merely a commercial good, but also a political instrument and a cultural symbol of Norway. From 2018 onwards, China began importing large quantities of Norwegian salmon. Eventually on July 3, 2019, China lifted its partial ban on Norwegian salmon imports.

According to Chinese scholars,

- The salmon trade was affected by political relationships. Zhu (2021) analyzed China and Norway's salmon trade in 2021. From 2010 to 2016, the volume of commerce decreased. Following the normalization of bilateral relations between 2016 and 2019, economic expansion resumed between 2016 and 2019. In 2020, trade volume decreased because of the epidemic. The greatest threat to the salmon trade between the two countries is political risk. Increasing China and Norway's bilateral free trade zone can reduce investment risk. China is the market for Norwegian seafood exports with the fastest growth in 2019, according to Wang (2019). The export volume reached nearly 112,000 tons by the end of the third quarter of 2019, a 14% year-over-year increase to 3.6 billion NOK, or approximately 2.793 billion RMB.
- The comparative advantage of Norwegian aquatic products is increasing, whereas that of Chinese aquatic products is decreasing. Shao, Duan, and Li (2020) analyzed trade in aquatic products between China and Norway. China must prioritize the cultivation of brand images and upgrade the structure of its fishing industry.

In conclusion, bilateral relations exerted immediate impact on the salmon trade, and China used ban on imports of Norwegian salmon as a diplomatic tool.

4.4 Identifying China-Norway cooperation in business-related area

Bilateral cooperation is not solely about business; some collaboration is also business-related. For business-related cooperation, this section will describe local-level cooperation, as well as higher education and research cooperation between China and Norway. 4.2.1. local level cooperation between the two countries and 4.2.2. bilateral higher education and institutions cooperation will be discussed.

4.4.1 Local Level Cooperation

Consider first the reason of cooperation at the local level is vital for business. A city-to-city relationship is one example. The term "sister cities" refers to active exchanges and cooperation between cities on both sides in multiple fields, including politics, economy, science and technology, education, culture, health, sports, environmental protection, and youth exchanges. Consequently, economic cooperation is one of the principal forms of cooperation between sister cities. China's exports to Norway in 2020 originated primarily in Zhejiang Province, Shandong Province, Guangdong Province, Jiangsu Province, and Fujian Province, while imports originated primarily in Beijing, Shanghai Province, Shandong Province, Guangdong Province, and

Zhejiang Province. Consequently, there is a high level of consistency in bilateral trade between sister cities; therefore, this consistency explains that local level cooperation (cities cooperation) is business-related collaboration.

On June 10, 1999, the Zhuzhou City (which belongs to Hunan Province) and Fredrikstad City, Kingdom of Norway, friendship city agreement was signed at Fredrikstad City Hall. Since 1994, Zhuzhou and Fredrikstad have interacted as the first pair of sister cities between China and Norway. A letter of intent to establish sister city relations was signed in April 1995. In recent years, the two parties have engaged in extensive exchanges and collaboration. The cooperation of the "China-Norway (Zhuzhou) Environmental Project" has been promoted and facilitated by the exchanges between the two cities. With the signing of this accord, the parties agreed to establish sister cities and engage in various forms of exchange and cooperation in the fields of economy, trade, culture, education, science and technology, health, environmental protection, sports, and personnel based on equality and mutual advantage, while almost of these collaborations ceased during 2010-2017.

A delegation of eight individuals from the Frederista Municipal Government of the Kingdom of Norway and a delegation of six people from the environmental protection delegation paid a cordial visit to Zhuzhou from the 14th to the 23rd of October 2019. The delegation visited businesses, schools, and the "China-Norway Environmental Project Seminar" (Zhuzhou). Based on the original sister city agreement, the two cities signed three exchange agreements: the "cultural cooperation agreement," the "educational cooperation agreement," and the "exchange agreement between Hongqi Road Primary School and Ampolode Primary School." This signifies that Zhuzhou and Fredrikstad have begun exchanges and cooperation in the fields of education, culture, and the arts, based on their cooperation in science and technology, environmental protection, and personnel training.

According to the Foreign Affairs Office of the Shanghai Municipal People's Government (2012), the Secretary of the Shanghai Municipal Party Committee Huang Ju led a delegation to Norway in October 1999. The mayor of Oslo expressed to Shanghai his desire to strengthen the relationship between the two cities. During the November 2001 visit of the mayor of Oslo to Shanghai, the two cities signed an agreement for environmental protection, cultural exchange, and school cooperation. In 2001, the two cities collaborated on

employment training, care for the elderly, and environmental protection. In 2001, 2006, and 2007, the two cities collaborated on cultural events. In 2010, the official delegation of Oslo was invited to travel to Shanghai, visit the World Expo, and participate in a number of exchange activities at the Norwegian National Pavilion. According to Hong (2022), Vice Mayor of Shanghai and Mayor of Oslo, Norway signed the Memorandum of Understanding between the two cities for 2022-2025 on September 13, 2022. The parties agreed to strengthen cooperation and exchanges in the areas of technological innovation, environmental protection, elderly care services, and the humanities.

Ningbo City, Zhejiang Province, and Stavanger City established positive ties on September 9, 2004. In May 2020, Ningbo supported 27000 masks to Stavanger(Zhejiang Provincial People's Government Foreign Affairs Office, 2020).

According to Xinhua (2005), on March 21, 2005, Ningxia and Kingdom of Norway Sogn og Fjordane signed an agreement establishing friendly county relations in Yinchuan. Since 2001, the exchanges of goodwill between Ningxia and the Kingdom of Norway Sogn og Fjordane have grown steadily. Three times, the leaders of the autonomous region led a delegation to Sogn og Fjordane County, and the Minister of Culture of Sogn og Fjordane County, Osrad, led a delegation to Ningxia. Particularly, Chen Jianguo, Secretary of the Party Committee of Ningxia Hui Autonomous Region, led the Ningxia delegation to visit Sogn og Fjordane County at the end of July 2004. On August 25, they hosted the "China Ningxia Week" cultural exchange activity in Sogn og Fjordane County, which widened the exchanges between the two regions and countries and strengthened the friendship between the people of the two regions and countries (Office of the Foreign Affairs Committee of the Ningxia Hui Autonomous Region Committee of the Communist Party of China, 2018).

In 2006, Telemark and the Hubei Province became sister cities. The two parties engaged in fruitful cooperation with a strong bond of friendship. Even during the outbreak, the two sides continued to communicate. Hubei as the sponsor also invited Norway to join in 2022 China Nordic Economic and Trade Cooperation Forum. Additionally, 24 key cooperation projects with a total amount of 73.5 billion RMB were signed. In addition, Hubei has held Nordic Healthy Cities Forum, Wuhan European funded Enterprise

Cooperation Symposium, China Hubei Europe Energy Industry Development Matchmaking Conference, and other European trade negotiation activities over the past few years in order to strengthen the economic and trade cooperation and exchange between Hubei Province and Nordic and other European nations (Xiao,2022). Before 2010, there were culture activities between two cities. After 2017, more cultural cooperation including higher education collaboration were developed. For example, on November 12, 2019, Dawn Syvertsen and Vibeke Jakobsen, members of the government of the delegation of Telemark County, Norway, and the officer of the international exchange project of Telemark County, were invited to visit Hubei Preschool Takers college's kindergarten. Hubei Preschool Teachers college and University of South-Eastern Norway established a friendly cooperative relationship in 2010 with the assistance of the Department of Education of Hubei Province and the government of Telemark County. The cooperation with Hubei Province in the field of education is one of the key research projects (Li,2019).

The establishment of a friendship city agreement between South-Trondelag and Chongqing was on 2007. Zhejiang Province (China) established friendly relations with the country of Nordland (Norway)from May 31, 2010 (Foreign Affairs Office of the Zhejiang Provincial People's Government, 2020). Zhoushan and Norway have a long history of economic and trade exchanges and cooperation, with great collaboration in oil trade, ship maintenance, seafood, and other areas. Using the first quarter of 2018 as an example, the import and export trade volume between Zhoushan and Norway reached more than 77 million yuan, a 54.9% increase over the same period the previous year (Li, 2018).

A comparison of government documents involving cooperation with the seven cities cooperation, this memorandum establishes the following aspects of the cooperative relationship between these cities. On the basis of commerce and trade, the bilateral relationships between the two countries share similarities with cooperation between cities, cooperation in science and technology, and an emphasis on education. Loften Middle School and High School collaborate with Bergen Confucius Institute, the first school in Northern Norway to offer Chinese courses. This also demonstrates the value of sister city cooperation.

There is the lists of sister cities between the two countries, the author arranged this chart based on the previous information.

Time	China	Norway	
1999.06.10	Zhuzhou (belongs to Hunan Province)	Fredrikstad	
2001.11.10	Shanghai	Oslo	
2004	Ningbo (belongs to Zhejiang Province)	Stavanger	
2005	NingXia Hui Autonomous Region (NingXia)	Sogn og Fjordane	
2006	Hubei Province	Telemark	
2007.6.14	Chongqing	South-Trondelag	
2010	Zhejiang Province	Nordland country	

Table 7: Bilateral sister cities list

Even though some cities in the two countries do not have official designations as friendly cities, they are still able to establish connections and cooperate. On May 25th, 2022, while in Bergen, Ambassador Yi Xianliang met with Asklan, the mayor of Vestland County, where the city is located. He states that Vestland is a significant county in bilateral business and innovation (Yi,2022). According to Ambassador Yi, the Vestland Country plays an important role in China-Norway cooperation. The two sides can then strengthen practical cooperation in areas like sustainable development and scientific and technological innovation, in addition to traditional economic and trade cooperation, in the next stage. At the same time, they will continue to enrich the channels of people-to-people and cultural exchanges, as well as enhance people's friendships. As always, the Chinese Embassy in Norway is inclined to provide assistance and support in order to encourage cooperation between the Vestland countries and the Chinese side (Yi,2022).

The China Norway Innovation Center opened in 2019 in Laishan District, Shandong Province, with the participation of Shandong Laishan Government and Norwegian Entrepreneur Association. The project is in its early stages, due to the lack of relevant information, in this study will not use this cooperation to analyze (Qilu,2019).

In conclusion, the two countries' cities cooperate primarily in business, including trade and investment, and business-related area --culture and education, and science and technology. When sister city relationships are established, relevant cooperation projects will be developed, particularly in the areas of trade, investment,

and education. One notable aspect of sister cities and cities cooperation is that they contribute to education cooperation, indicating that both the national and local governments of China are eager to promote bilateral education cooperation. Therefore, in section 4.4.2 will describe the bilateral education cooperation in order to explain why education cooperation is so vital in China.

4.4.2 Higher Education and Institutions Cooperation

According to Zhang (2016), China suggests that talent development will follow wherever the economy and trade go in bilateral development. Language instruction and industry-related subjects are examples of talent development. The primary focus of China-Norway education cooperation is on higher education, institutions, and Chinese language education in Norway (Confucius Institute).

First, cooperation in higher education fosters the exchange of talents and the growth of disciplines. In recent years, the rapid increase in the number of Chinese students in Norway is an obvious indicator. In 2016, there were about 700 Chinese students in Norway. China has surpassed the United States as the fifth largest source of international students for Norway. By 2020, there was 2000 Chinese students studying in Norway. (Guide, 2021). The number of university collaborations is an additional metric.

4.4.2.1 University Cooperation

The following information was gathered from university websites and news articles; it is presented in the chart below. There are approximately ten official cooperation projects between Chinese universities and Norwegian universities. This type of cooperation is typically one-on-one and focuses on a particular subject.

Cooperation with Longer History

The Fudan University BI (Norway) International Cooperative MBA Program was jointly held by the School of Management of Fudan University and BI Norwegian Business School in 1996. In 2021, it will rank the third in the world in the global ranking of EMBA programs of the Financial Times (FT). It is the longest cooperation program between China and Norway in education and has a very high international reputation (Fudan, 2022).

According to Wuhan University (2022), the University of Oslo is one of global partners of Wuhan University.

The two universities have established a regular annual undergraduate exchange program (law and literature),

who's the earliest date can be traced back to 2010, after which there are exchange projects every year. Besides, there are some joint scientific research courses.

In 2010, Wuhan University of Technology and Telemark University College (TUC) established joint master program, each year around ten students were enrolled in this program. in 2010, eight Chinese students got scholarships from Norway. In 2016, TUC and Buskerud and Vestfold University College merged into a new school---University College of Southeastern Norway. Thus, this program continues after the establishment of University of South-Eastern Norway. Further, due to the long-term connection, education cooperation extended to government and companies. In September 2022, Wuhan University of Technology hosted a video seminar on "green development" hydrogen energy cooperation between Hubei and Telemark Norway. Both sides' government departments, universities, and businesses engaged in cloud-based discussions regarding hydrogen energy technology and industrial development. Terje Riis Johansen, the Norwegian mayor of the county of Telemark, stated that he hoped to play a catalytic role in this seminar and foster a deeper collaboration between universities and businesses on both sides in the hydrogen energy sector (Johansem, 2022).

In 2010, Hubei Preschool Teachers college and University of South-Eastern Norway established an amicable cooperative relationship that allows Norwegian education students to study abroad in China and gain internship experience in Hubei province's kindergartens and mutual visits between the two universities (Xiao,2019).

Prior to 2010, the Norwegian University of Science and Technology, NTNU, had made numerous trips to Shanghai Jiaotong University and established long-term, in-depth partnerships with the School of Ship Building, the School of Motor Vehicles, and the School of Materials (Shanghai Jiaoda Bao,2010).. Shanghai Jiaotong University and Norway University of Science and Technology (NTNU) signed an agreement in 2010 to establish the SJTU-NTNU Joint Research Center in Sustainable Energy in order to leverage the scientific research advantages of both institutions and promote the education and research of sustainable energy technology. Twelve representatives from Norwegian University of Science and Technology visited Shanghai Jiaotong University in May 2011. The energy research delegation from Shanghai Jiaotong University returned to Norway in September of the same year (Shanghai Jiaoda Bao,2011). In addition, Shanghai Jiaotong University's law school has an exchange program with the University of Bergen for

master's students; each year, approximately five students study law in Norway during a semester-long exchange from Shanghai.

New cooperation started after 2017

The China-Norway-Russia 'International Governance and Business/ Global Management' master program, jointly organized by East China Normal University (ECNU)'s International Relations and Regional Development College, Nord University's Business School, and Moscow Institute of International Relations, started in 2020. This program combines the advantages of the three universities in the three countries-International Relations in ECNU, International Business and Management in Norway, and International Energy and Regional Governance in Moscow are the disciplines (Liu,2021). Though this is a new program, it shows a huge potential in academic cooperation. Among the 10 Chinese students who graduated in 2021 from ECNU the first group exchanged to Nord University, six of them studied Norway/Nordic countries' energy and digitization in their master papers (CNKI,2022).

Ocean University of China, Harbin Engineering University(Li,2019), Shandong University, Cheeloo College of Medicine also have jointed program with Norway, majors including Marine, Molecular and Biology, Marine Ship equipment and Medicine. In February 2019, the 'Arctic University Alliance Harbin Institute of Technology Training Center' was established, Harbin Engineering University is the only non-Arctic university as the member of Arctic University Alliance. These are science and technology disciplines that involve innovation and development, as well as trade cooperation between the two countries, which also mirror the integration of disciplines and industries.

China	Norway	Established	Project	Major
		time		
ECNU	Nord	2019	Master program	Global Mangement
ECNU	University of Oslo	2021	Exchange program	Education
			(on process)	
Jiaotong	NTNU	2011	SJTU-NTNU Joint	Energy technology
University			Research Center &	
			Master program	
Jiaotong	University of Bergen		Exchange program	Law
University			for Master student	
FuDan University	IB	1996	Master program	MBA
Wuhan University	University of	2017	Master program	Engineering and
of Technology	Southeast Norway			other related majors
	TUC	2010		
Wuhan University	University of Oslo	2010	as Global Partners	Law,Arts
			(Exchange	Environmental
			program and	science
			joint courses)	
Hubei Preschool	University of South-	2010	Exchange program	Education
Teachers college	Eastern Norway			
Nanjing University	University of Oslo		as partner	
Ocean University	University of Bergen	2020	Joint research	Marine Molecular
of China			center	Biology
Harbin	NTNU	2018	Build/Establish	Marine
Engineering			inter-school	Ship equipment
University			partnerships	
Shandong	University of Bergen	2015	the China-Norway	Medicine
University			Brain Science	
Cheeloo College of			Research Center	
Medicine		2018	Cooperative	
			Research Central	

Table 8 : Higher education coopertaion

Higher education cooperation is not the cooperation in education, but also in science and technology area. For instance, aquatic products and marine engineering are key industries for economic cooperation between the two countries.

4.4.2.2 Cooperation guided by the government

China-Norway Marine University Consortium Alliance (CNMUCA) is another example of education cooperation, guided by the bilateral government. According to Ocean University of China (2021), the education departments of both nations have strongly supported the alliance's formation. The Chinese Ministry of Education and the Norwegian Ministry of Education and Research reached an official agreement in June 2019 to establish the China-Norway Ocean University, with Ocean University in China and the University of Bergen in Norway serving as the leading universities, including 23 universities, and Shanghai Jiao Tong University and Norwegian University of Life Sciences (NMBU) joined in the Alliance in 2022 (Ocean knowledge circle, 2022)

CNMUCA focuses on ocean and fisheries issues and seeks to expand bilateral cooperation in personnel training, scientific research, transformation of accomplishments, and cultural exchanges. The formation of the alliance has resulted in the establishment of an important cooperation platform between Chinese and Norwegian maritime-related colleges and universities, fostering extensive cooperation between China and Norway in marine-related fields and contributing to the development of a marine destiny community. This is the first instance of cooperation between the two nations based on discipline. This project has received the utmost care from both nations, as it is a very representative collaboration. China and Norway engage in significant trade and commercial cooperation in the areas of aquaculture and shipbuilding (Zhai, 2021). In 2022, CNMUCA also hosted the China Norway Enterprise Forum to provide a venue for enterprises in relevant industries of the two nations to network. 'The university alliance is based on the connection between the six sectors of promoting China's higher education development: industry, learning, research, politics, commerce, and use. It has played a positive role in promoting China and Norway's extensive cooperation in marine education, science and technology, and industry.' Shang stated (2022)

Here is a chart based on the units of alliance members.

China	Norway		
Ocean University of China	Oslo Metropolitan Universit		
Shanghai Ocean University	Norwegian School of Economics		
Dalian Ocean University	University of South-Eastern Norway		
Guangdong Ocean University	University of Oslo		
Zhejiang Ocean University,	University of Agder		
Hohai University	University of Stavanger		
Xiamen University	University of Tromsø (UIT)		
Tongji University	Nord University		
East China Normal University	Norwegian University of Science and Technology		
Nanjing University	Western Norway University of Applied Sciences		
Sun Yat-sen University	University of Bergen		
China University of Geosciences (Wuhan)	Norwegian University of Life Sciences (NMBU)		
	(joined in 2022)		
Shanghai Jiaotong University			
(joined in November 21, 2022)			

Table 9: CNMUCA List Sources: Ocean University of China (2021)

Cooperation in scientific research is not limited to colleges and universities alone, but also includes universities and some research institutions, some of which are funded by the two countries.

In 2009, the Norwegian Research Council established the China Norway Research Cooperation Plan (CHINOR) as a key component of the Norwegian government's "China strategy." From 2009 through 2017, the agency allocated 20 million NOK annually to China-Norway cooperation projects. These projects include climate change, environmental research, welfare policy, renewable energy, and climate technology as areas of research. There are also individual scholarship programs for Chinese researchers.

China and Norway have signed a cultural agreement that includes two bilateral scholarship projects aimed at establishing and expanding educational and research institutions, as well as academic and cultural exchanges between the two nations, as well as the provision of some funding (Nordic Chinese Communication, 2019).

In 2017, China hosted the China-Norway Polar Agricultural Climate Change and Agricultural Innovation Cooperation Forum. During the Forum, the Norwegian Institute of Bioeconomics and Science and Technology of China signed an agreement on agricultural science and technology (Chen, 2017).

4.4.2.3 Chinese language education in Norway

Education in the Chinese language plays a crucial role in disseminating Chinese culture and enhancing cultural soft power, two areas to which China attaches great importance. In Norway, five Chinese scholars have studied Chinese education. The earliest Norwegian Chinese School was opened in 1995, the Oslo Taiwan Chinese School; In 2003, local Chinese and foreign students jointly founded Stavanger Chinese School; In 2007, Bergen Confucius Institute was established and established a cooperative relationship with Beijing Sport University and China University of Political Science and Law (Liu,2008; Lu,2020). The Confucius Institute project continued from 2010 to 2016, and then ended in 2021, a relatively unique existence in the education cooperation between the two nations (Li & Ran, &Yu, 2021).

To summarize, higher education cooperation has grown gradually in 21 centuries, especially after 2017. Bilateral university cooperation is expanding in terms of modes, fields, and scale. There are not only student-teacher exchanges but also collaboration in subject projects. Some subjects, such as business, law, energy, marine, and biology, are directly related to business cooperation. Higher education cooperation has a strong connection with bilateral business cooperation, which provides an idea for future research into whether higher education cooperation has a positive influence on bilateral business cooperation, such as the China-Norway Ocean University cooperation. Universities are not the only institutions that collaborate on scientific research projects. Following that, scientific research collaboration in institutions between China and Norway also discussed. Scientific research cooperation is related to the two countries trade industries and to the two countries' historical relationship. The increase in international students following the restoration of bilateral relations is directly related to the increase in university cooperation.

4. 5 Chinese Publication and Research on Norway

This thesis discusses bilateral cooperation from the perspective of China's national interests, so it is important to examine Chinese scholars' perspectives on bilateral cooperation and relations, from the China National Knowledge Infrastructure website and the People's daily. Here is a collection of Chinese publications from

the China National Knowledge Infrastructure website, including articles, journals, news, books, and meeting documents, among other things.

The Chinese academic community has maintained a level of concern and research interest in Norwegian issues over the past two decades. The purpose of this chapter is to discuss how Chinese academia views Norway's politics, economy, culture, education, the trend of China-Norway relations, and the scope for China-Norway cooperation. This chapter organizes the hot topics and main views of China's research on Norway over the past two decades, refines the characteristics and trends of research, and clarifies the characteristics and trends of research.

4.5.1 Trends in Chinese Publication and Research on Norway

The author found a total of 6341 relevant Chinese documents after searching the CNKI database for Norway in Chinese as title before November 2022. Between 1980 and 2000, each year was under 100 documents written about Norway. After the year 2000 (101), there was a clear upward trend in the number of documents related to Norway, which peaked at 275arcticles in 2010, decreased in 2011 (196) and 2012 (157), and then increased till 2014 (226), and then decreased rapidly to 149 in 2016, and a slight increase to 160 in 2017, then it drops gradually,142 in 2020 and 124 in 2021. From 1988 to 2022, the following graph (Figure 3) depicts the relevant document count. Prior to 2010, the Chinese academic community's interest in Norway had increased. After the stagnation of bilateral relations, the academic community's interest in Norway diminished. Intriguingly, after the resumption of bilateral relations in 2017, the academic community's focus on Norway did not increase to the 2010 level. The following Figure 3 shows that some Chinese scholars move away their attention from Norway after 2015, especially after 2017 the recovery of bilateral relation, the research interest on Norway even decreased faster.

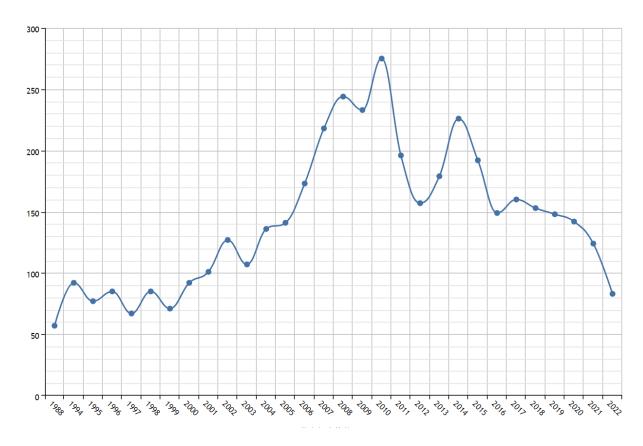


Figure 3: The number of publications related Norway in CNKI Source: CNKI,2022

Chinese politics and international politics (634), industrial economy (568), world literature (360), building science and engineering(268), oil and gas (204) and agricultural economy (181),make up the majority of these documents, according to CNKI website statistics. These documents are primarily concerned with the economy, politics, culture (literature, education, sports), and technology in Norway, and some of them have substantial overlap with China and Norway's relevant cooperation fields, including industrial economy, oil and gas industry, agricultural economics.

4.5.2 Trends in Chinese Publication and Research on Norway and China

There are a total of 401 relevant Chinese documents after searching the CNKI database for 'Norway' and 'China' in Chinese as headlines in November 2022. Subjects are mainly in trade and economy, especially in some industries. The number of articles shows the interest and trend of Norway study in Chinese academic. There is an increasing trend before 2010. And a fluctuation in 2010 and 2017 After 2017, it decreased again. The trend shows some similarities with bilateral trade and could be explained by bilateral relations. Overall, in the last three decades, Chinese scholars do not pay much attention on Sino-Norway study, especially after

the normalization of bilateral relations, the research interest of Chinese scholars in Norway has declined significantly.

In these articles, the main areas involved bilateral cooperation are bilateral trade; aquatic trade and aquaculture, salmon; discussion on the construction of free trade zone; Arctic cooperation; oil and gas cooperation; winter sports, education.

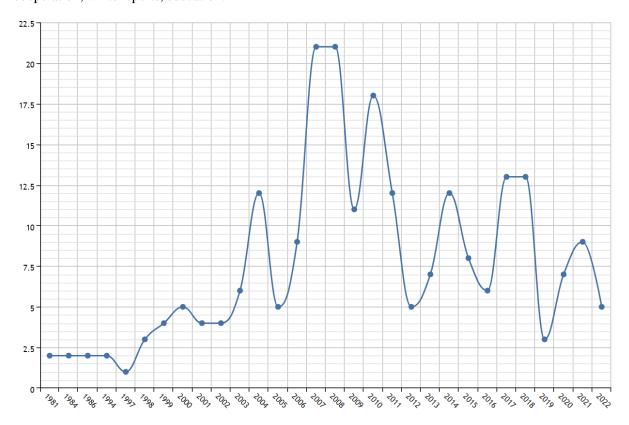


Figure 4: The number of publications related China and Norway in CNKI (CNKI,2022)

4.5.3 Hotspots and Characteristics of Norwegian Studies in Official Media

Hotspots and Characteristics of Norwegian Studies in Official Media and Chinese Academia

People.cn is the source of the news. The People's Daily's online edition. The People's Daily is a publication of the Central Committee of the PRC. It is also the largest comprehensive core newspaper in China at the present time. It is the most authoritative in conveying Party and national policies (Zhang & Yu, 2013). This paper examines the online reports on Norway by the Chinese official authoritative media People's Daily/People.cn s and examines the hotspots that China pays attention to in Norway from a Chinese perspective in conjunction with the major topics covered.

Norway ranks third in terms of the number of news articles published in the People's Daily, behind Sweden (5,530), Denmark (4,133), Finland (238), and Sweden (280). It is evident that the Chinese official media pay more attention to Norway in the Nordic countries.

Number	News	Publication
Norway	3420	238
Sweden	5530	280
Denmark	4133	233
Finland	3028	161
Iceland	1028	49

Table 10: The number of articles in People's Daily Source : People's Daily, 2022

As of October 2022, using the keyword Norway in the Chinese version search on People, cn can search 3,770 reports about Norway, primarily pertaining to ice and snow sports, the China-Norway Free Trade Agreement, new energy vehicles, the China Expo, and energy, Most studies focus on its economy, including its industrial economy (oil, energy, new energy vehicles, and other industrial products), agricultural economy (aquatic products), and trade and investment.

To sum up, in terms of the number of studies and discussions on Norway conducted by Chinese scholars, Norway receives relatively little attention. Following the resumption of bilateral relations, the number of scholarly articles pertaining to Norway decreased, indicating that stable political relations have diminished scholars' interest. From the perspective of the research topic of Chinese scholars, bilateral business cooperation is generally involved (trade, industry). In recent years, a number of academics have examined technical issues in various industries. Chinese scholars are interested in the oil and gas industry not only from the standpoint of economic interests, but also of political interests, energy security strategy, energy industry and technology. Oil economy and trade and energy cooperation were discussed.

There is also a small amount of research on Norwegian culture, language, and education, and the total amount of research in this area is also quite limited, indicating that the Chinese academic community lacks a comprehensive understanding of Norway and an accurate understanding of its culture, which is also detrimental to bilateral exchanges. Both Chinese society and Norwegian thought have been significantly

shaped by the Chinese academic community. These studies have successfully incorporated objective/positive perspectives, but they may also contain erroneous conclusions. In order to strengthen the academic research and scientific research cooperation, exchange, and exchange between the two countries in the future, these research achievements summarize past development and cooperation, classify the policy recommendations/cooperation fields/specific projects proposed therein, and dispel some misconceptions. The bilateral cooperation between universities has a positive impact on the academic community. A considerable number of students and scholars who went to Norway for exchange/study have studied Norway. Among the first ECNU students who went to Norway for exchange, 60% of their master's theses have studied Norway (or Northern Europe)-related sectors. China's academic community has not conducted an in-depth analysis and discussion of China-Norway relations, as a neglected field at the moment which is another research gap this study aims to delve into. Norway receives an average amount of coverage in the official media of the Nordic countries. The reports from the previous year focus on winter sports and alternative energy vehicles.

In conclusion, the cases of bilateral cooperation in trade, investment, the Arctic, local governments, higher education and institutions are detailed in Chapter 4. They share several similarities. One is the normalization of bilateral relations in 2017 has a positive effect on cooperation in various fields. Second is cooperation in these business-related fields is significant and lasting. Chinese publications and research on Norway also demonstrate China's interest in Norway.

Chapter 5 Chinese National Interest in Bilateral Cooperation

The National Interest Framework (Men,2017; Yan,1997; Gao.2021) describes elements that assist Chinese policymakers in formulating China's foreign policies and determining the behavior of the Chinese state. These theories are the basis to answer the research questions and determine the factors influencing bilateral cooperation and their functions. This chapter will combine the theoretical framework of Chapter 2 and the empirical analysis of Chapter 4. First, defining China's national interests in bilateral cooperation in section 5.1. Furthremore, analyzing the priority and persistence of China's dynamic changing national interests and their functions in bilateral relation and cooperation in section 5.2.

5.1 Identify Chinese National Interests in Bilateral Cooperation and their function

In Chapter 2, national interest theory and national interest have been discussed. This section aims to integrate the literature that discussed in previous chapters to describe the Chinese national interest in Sino-Norway collaboration.

According to the historical overview in section 1.2, between 2010 and 2016, the political relationship between the two countries deteriorated, affecting multilevel bilateral cooperation. Political interests are the foundation of economic interests, and economic interests can also facilitate political decision-making or serve as a tool for political interests. The events of 2010 marked a turning point in international relations. China's diplomatic conduct is easier to comprehend when viewed through the lens of national interests. China's sovereignty, internal affairs, and national honor are the utmost importance and vital in priority rank. Safeguarding national interests and dignity is grand diplomacy's mission with Chinese characteristics (Xi,2022). National dignity is part of the national interest, while in line with the overall national interests. This could explain why after the Nobel Price in 2010, China officially stopped most cooperation with Norway.

5.1.1 Trade

After analyzing the trade between the two nations, four conclusions has been drawn from Chapter 4 (the trade data presented in Section 4.1, the cases of two trade products presented in Section 4.3, and the theory of national interests).

Good political relations promote trade growth. Overall, bilateral trade has increased significantly since the resumption of bilateral relations, indicating that political relations (political interests) directly affect trade (economic interests). Compared to bilateral trade data from the past decade in section 4.1, it is evident that

changes in political relations have a direct effect on commerce. Before 2017, there was a general decline in bilateral trade. After the resumption of diplomatic relations, trade grew substantially, and good political relations facilitated this growth.

Energy products are the critical reason for Chinese fast-growing trade deficits. Prior to 2011, China was in a trade surplus with Norway. However, according to China's trade data, China experienced a long-term trade deficit after 2011. The bilateral trade deficit exceeded \$3.5 billion in 2020. Overall, China's exports to Norway are relatively stable, declining from 2010 to 2016 and exhibiting a slow growth trend after 2017. The political relationships influence China's exports. In recent years, China has primarily imported energy products from Norway, contributing to China's widening trade deficit.

All of the Norwegian energy products that China imports, are strategic resource-based products including oil/mineral products, and metal products. In addition to being economic interests, strategic resource products are also security interests. Therefore, even if the relationship between two nations is severed, trade in relevant fields will continue, as economic security concerns take precedence (economic interests and political interests), which are classified as essential interests according to priority. According to the sustainability analysis, they belong to China's long-term interests.

Salmon trade is more like a diplomatic tool. For China, non-defense strategy-related products, such as aquatic products (salmon), ceased to be imported from Norway after bilateral relations deteriorated. However, this did not affect China, as substitutes such as Denmark quickly filled the market void. China's abundant aquatic and large complementary products have, to some extent, also fostered the growth of Chinese salmon. China is willing to forego the economic benefits of such products, so it uses salmon as a diplomatic tool to contain Norway, which are classified as margin interests according to priority. According to the sustainability analysis, they belong to China's short-term interests.

For the Norwegian market, but not just for the Norwegian market - new energy vehicles. China's new energy vehicles use Norway as a testing ground for their entry into the European market, aiming for the European market after Norway and going global. In addition, China's new energy automobile industry has occupied the industry advantage and will create scale barriers, both economically advantageous and economically advantageous in the medium term.

5.1.2 Investment

From section 4.2, China's investment in Norway is intended to expand the market and acquire technology (development-oriented), obtain orders (profit-oriented), and acquire resource-based industries (strategic security oriented). The economic interests associated with industry and market development, as well as the economic interests of strategic industries, are associated with economic security interests, which are prioritized as significant. According to the sustainability analysis, they belong to China's medium--term interests.

The investment in strategic resource-related industries was not discontinued due to political relations. From the standpoint of industry, resource-related industries did not cease investment due to bilateral relations. Energy and other industries continued bilateral investment exchanges from 2010. Though it is difficult to evaluate how the bilateral relationship influences the investment/acquisition procedure, the research of China's overseas investment market in 2022 provides five indicators to evaluate investment risks: the economic, solvency, political risk, social risk, relationship rating with China (National Think Tank, 2022). In National Think Tank's research, bilateral relation plays and important role in Chinese enterprises' overseas investment. Take Australia as an example; when China -Australia relations are cold, China's investment in Australia will decrease significantly, and the investment projects under negotiation may be postponed or canceled. The question emerged. Why did Sino-Norwegian relations not result in a suspension of investment or a postponement until the normalization of bilateral relations? Due to bilateral relations, the two countries' investment has not been completely halted, and during 2010-2016, Chinese enterprises invested in nine Norwegian companies.

Additionally, political stability encourages investment. Following the resumption of bilateral relations, investment in other related industries has increased, indicating that stable political relations also encourage investment. Local governments have contributed to the construction of a bilateral industrial platform in recent years as investment cooperation has become more in-depth. Hubei aims to provide a business platform for Nordic nations by hosting forums and promoting multi-level collaborations in higher education, cities, and industries, as stated in section 4.4.1. Shandong province (China) also opened a new bilateral business cooperation platform in Laishan in November 2022. Although there is little information available to evaluate at this time, this is additional proof of the local government's role in bilateral business cooperation.

5.1.3 Arctic Cooperation

The economic interests of the Arctic region are the most important, but China places greater emphasis on the region's political interests. In addition to the safety of shipping lanes, climate concerns, and geopolitical risks in the Arctic, China has security interests in these areas, which are classified as survival interests according to priority. China has more security and political interests in the Arctic and pays more attention to issues like climate change, the environment, scientific research, waterway developments, resource exploration and developments, security, and international governance. Arctic cooperation is in China's long-term interests, the fact that China published a white paper in 2018 outlining the importance of the Arctic to China.

This is the most important aspect of Sino-Norwegian business cooperation, as demonstrated by the data in Sections 4.1 and 4.2.

- Oil and gas trades have increased significantly in China and Norway since 2018 (BP,2021). Oil and gas
 have become China's most important imports from Norway. China and Norway are cooperating more
 in the energy sector, which is also the primary area for investments.
- Norway's mineral products have historically constituted a significant portion of bilateral trade and are also an industry in which Chinese companies have invested.
- Since the resumption of bilateral fishery relations, international trade has increased dramatically, and
 Chinese firms have also invested in tourism.

The author believes that China's Arctic cooperation objectives and pursuits are long-term. Currently, Russia and China have the most Arctic commercial cooperation among Arctic nations. China requires Norway's assistance to realize its economic, political, and security interests in the Arctic. Norway is crucial to China's pursuit of Arctic interests, but China has less influence over Norway's willingness to cooperate with China in the Arctic.

5.1.4 Free Trade Agreement and Free Trade Zone Negotiation

During 2010-2016, China delayed FTA negotiations due to political events, indicating that FTA's economic interests (role) are subordinate to political interests. Even though Chinese officials emphasized their willingness to promote FTA after the normalization of bilateral relations, they were still in the negotiation phase. It indicates that the current FTA parties have insufficient internal motivation; that is, after promoting

FTA, the benefits for both parties or one party are small or even lower. Based on the two countries' industrial structure and market size, it can be argued that China's interests after the FTA is signed will be greater than Norway's. Currently, China has a significant trade deficit with Norway. China has a more extraordinary ability to promote FTA and reduce its trade deficit due to its own industrial structure advantages. To sum up, FTA is China's short-term interests.

5.1.5 Local Level Cooperation

Although economic interests are the primary factor, political interests are the expression, and cultural interests (cultural exchanges and educational cooperation) are more obvious (cultural exchanges and educational cooperation are common methods). The general driving force behind cities cooperation is commerce and industry. For instance, through long-term trade ties, Zhejiang Province, Shanghai, Ningbo, and Chongqing have laid the groundwork for stable cooperation. From 2010 to 2016, nearly all political and cultural exchanges between sister cities were suspended, indicating that the benefits brought by Local Level Cooperation were subordinate to national political interests. After 2017, cooperation and exchanges between the majority of cities have increased, indicating that positive political relations contribute to Local Level Cooperation. The cooperation between Zhejiang Province and Nordland was delayed to 2018 because of the relationship between the two nations. However, In order to advance cooperation in more areas and at higher levels, Shanghai and Norway added intergovernmental cooperation agreements in 2021. As a result, the cooperation in education and other areas grew. The China Nordic Economic and Trade Seminar in 2022 integrated resources and built platform based on the cooperation Hubei and the Nordic (Norway) regions. It has been fostering in recent years by docking Hubei universities with Norwegian universities, establishing school cooperation, and holding regular seminars (with the participation of the government, universities, and enterprises). Ningxia is one of the seven sister cities. Before 2010, there were some cross-cultural interactions, but after that, there was very little collaboration.

The depth and breadth of the ongoing cooperation between sister cities are influenced by the zeal with which the two sides approach it, as well as by the respective industries and other relevant factors. Sister cities have established a stable cooperative relationship. Government, businesses, universities, residents, and other stakeholders, including economic interests (trade, industrial cooperation), political interests

(intergovernmental cooperation, diplomatic relations), and cultural interests, are primarily involved in locallevel cooperation (promotion of cultural activities, education). These have short-term, long-term, and medium-term interests, respectively.

The epidemic influences urban cooperation as well. Because of the pandemic, previous bilateral exchanges had to be suspended or rerouted. For instance, Shanghai signed new agreement with Norway online and Wuhan hold online meeting to communicate the cooperation with sister cities.

5.1.6 Higher Education and Institutions Cooperation

Education cooperation primarily serves cultural interests, with some medium-term economic benefits. Cooperation in education is crucial for developing talent and advancing science and technology. Education is a medium-term interest that involves cultural interests.

From section 4.4.2, both the breadth and depth of education cooperation have increased due to the resumption of bilateral relations. It demonstrates that good political relations have a positive effect on education cooperation. Higher education bilateral cooperation has grown since 2017, and this has a direct geographic bearing on urban cooperation. Numerous Norwegian universities and Wuhan University of Technology have collaborated on various levels, thanks to Hubei. The China Scholarship Foundation has funded the joint venture between ECNU and Nordland University. Universities from the two nations have also intensified their collaboration, increased their collaboration on scientific research and exchange initiatives, increased national funding for projects, and established CNMUCA.

A considerable part of higher education is connected to business, has potential for commercial value, and serves financial interests. Interaction between universities lays the groundwork for formal cooperation and alliances, which has ability to facilitate/create economic cooperation in the future. Political concerns do not take precedence. The fact that pre-2010 cooperation activities with universities continued uninterrupted during 2010-2016 is the first indication that the impact has been limited. The second piece of evidence is that between 2010 and 2016, Shanghai Jiao Tong University (2011) also established new cooperation and scientific research institutions among colleges and universities, demonstrating that when it comes to disciplines (involving strategic resources and technologies), there is always exception for the bilateral cooperation, even in higher education.

Table 11, based on the above discussion, analyses bilateral cooperation with national interests.

	Political	Economic	Security	Cultural
	Interests	Interests	Interests	Interests
Trade in strategic	+	+	+	
industries like energy				
industries				
Trade in non-strategic		+		
industries (salmon)				
Investment in strategic	+	+	+	
industries like energy				
industries				
Investment in non-		+		
strategic industries				
Local level cooperation	+	+		+
Higher education and		+		+
institution cooperation				
Arctic cooperation	+	+	+	

Table 12: Chinese national interests in bilateral cooperation (+ means "have")

5.2 Findings in China's dynamically changing national interests

Combining the findings of Section 1.2 and Chapter 4, Section 5.1 identifies Chinese national interests in Sino-Norwegian cooperation using national interest theory. In Section 5.2, the function and the priority and persistence of these factors in China-Norway cooperation will be analyzed.

China's national sovereignty and no interference in its internal affairs as the primary determinants of bilateral cooperation and relations between 2010 and 2016 are political factors. The Chinese government announced in 2010 that it would cease diplomatic ties with Norway and cease bilateral multilevel activities. China's national sovereignty was a matter of principle during this time period, so political interests took precedence. China believed that interference with national sovereignty in domestic affairs was unacceptable. When political interests are prioritized, bilateral trade suffers, cultural exchange activities are nearly halted, bilateral exchanges are reduced, and local cooperation is postponed or canceled.

Good political relations are the basis for bilateral cooperation, which can facilitate commerce, investment, and business-related cooperation (culture, city, education). After the normalization of bilateral relations, trade has increased significantly, cultural exchanges have resumed, and cooperation at the local level has also increased. Furthermore, multi-level collaborations and deeper cooperation demonstrate the positive effect of establishing good political relations.

After political interests stabilized (2017-2022), the influence of other factors increased: security, economic development in economic interests, and cultural interests. Security interests are connected to strategic security and energy security. From China's energy perspective, Norway is an interesting energy security and diversification partner. Therefore, China's security, political, and economic interests have the power to encourage energy cooperation (trade/investment) between the two nations. This also explains why China has actively maintained a good relationship with Norway in recent years, and why China considers Norway to be its most important partner in the Nordic region. One evidence is in bilateral cooperation, after 2010, many collaborations in economic, political, cultural and educational fields stopped until 2016, but cooperation involving security interests (such as strategic resources) was not affected, including trade, investment, highereducation (scientific) cooperation. These exceptions between 2010 and 2016 are the cooperation involving security interests (strategic and resource security), which is the most important (survival) interests in priority. Take the resource industries as an example. From 2010 to 2016, China imported from Norway, and its investment in Norway was continuing and quite stable. The importance of resource-based industries belonging to national strategy (energy security/strategic resource security) is higher than that of political interests. In the education cooperation, the existing exchange projects have not been suspended. In 2011, Shanghai Jiaotong University and Norway still opened new research cooperation projects. To some extent, scientific research and education are exceptional projects of bilateral cooperation, and they do not belong to purely commercial projects or cultural projects, and scientific research and education cooperation in specific fields is supported by the government. Second evidence is that energy became the main product in bilateral trade. In terms of imports, China has imported a large number of energy products from Norway in recent years, which has increased its dependence on trade. This is an industry related to national defense and national strategy. It should be considered from the perspective of China's strategic security and energy security. The importance of economic interests in this part is lower than its security interests. Energy relates to Chinese energy security interest (strategic interest) also as the survival interest.

What is the driving force of China's business cooperation in political stability and non-energy/resource industries? That is economic benefits-technology development and to expand market. China values Norway's technological advantages, the integration of technology and resources brought about by cooperation between the two countries, and the Nordic and European markets behind Norway. The Norwegian market is relatively modest in terms of size and development space. China's direct profits and economic returns are limited, based on its export data and investment in Norway. For instance, from the perspective of trade, the growth of China's exports to Norway is not obvious. The Norwegian market (with a total population of 500000) is small, and the FTA has not been signed. Although Norway's ranking among China's exporters has improved, it is not the main export target. Taking the new energy automobile industry as an example, a large number of Chinese enterprises choose Norway as the first overseas market, which is not entirely due to the profits brought by the Norwegian market. Chinese enterprises choose Norway, focusing on the Nordic and European markets behind Norway, which is the choice of the globalization strategy of Chinese enterprises, rather than the profit-oriented choice.

Nondefense related industries, salmon industry also grew rapidly after 2017. In addition to trade, bilateral investment in salmon industry, technical cooperation, and scientific research/university cooperation in aquaculture also improved. Economic interests can promote bilateral cooperation.

The Arctic Cooperation represents China's pursuit of a global status as a great power and its involvement in international affairs, both of which involve China's political interests. In 2013, China became one of the observers in the Arctic Council. This is a political level cooperation shows the importance of pursuing international status and joining Arctic issues for China.

Climate change in the Arctic has security implications for all of humanity. China also hopes to participate in business cooperation, resource development, and the construction of an Arctic waterway in the Arctic, which will have an impact on China's economic interests. China is therefore motivated to seek Arctic cooperation. We therefore need more research about the Arctic cooperation between China and Norway.

Cultural interests: both local-level cooperation and educational cooperation have positive and probably lasting effects on the business relations. However, cultural interests belong to marginal interests and are often the first to be abandoned in external interaction. After the normalization of bilateral relations, cooperation involving cultural interests has increased, especially in the field of education. Chinese education cooperation focus on personnel training and scientific research cooperation and promoting bilateral industrial cooperation and technology upgrading. Even for Local level cooperation, which involves political, economic and cultural interests and belongs to medium term interests, but its relative importance is not high.

The political interests in China Norway cooperation can be divided into 1. National sovereignty/political security and independent management internal affairs and foreign policy (as a principle), as the bottom line, which is the most important. Followed by 2. Bilateral relations and international status. The importance of international status and bilateral relations will change according to the external environment and national internal affairs. These two factors are survival in national interest.

The main security interests are connected to strategic security and energy security. It is the main motivation for China Norway cooperation in recent years, laying the foundation for bilateral cooperation, which is survival interest.

The importance of economic interests can be subdivided. Those related to security interests are survival (the most important interests), those related to develop pillar industries; technology development and expanding market are important interests, followed by major interests. Non national defense and strategic related economic interests can be marginal interests.

Cultural cooperation often brings more benefits, although the importance of cultural interests is relatively low. In bilateral interaction, when interests conflict, cultural interests are often the first to be abandoned; But when it is necessary to develop bilateral relations, cultural interests are often used as tools, as margin interest.

Table 13 in combine the national theory in chapter 2 and chapter 4 and chapter 5.

Chinese National Interests	Priority	Persistence
	(Survival/	(Long-term/
	Important/	Medium tern/
	Main/margin)	Short-term)
Trade in strategic industries like energy industries	Survival	Long-term/Medium tern
Trade in non-strategic industries (salmon)	Margin	Short-term
Investment in strategic industries like energy	Survival	Long-term/Medium tern
industries		
Investment in non-pillar strategic industries	Margin	Short-term
Local-level cooperation	Margin	Short-term/Medium tern
Higher education and institution cooperation	Margin	Short-term/Medium tern
Arctic cooperation	Survival	Long-term
Free Trade Agreement and Free Trade Zone	Main	Short-term

Table 12: The level of Chinese national interests in bilateral cooperation

In conclusion, the political issues of 2010-2016 reveal China's attitude and fundamental concerns-national sovereignty/political security and independent management internal affairs and foreign policy as China's principle. Good political relations are the prerequisite for cooperation. Energy/strategic industries cooperation and Arctic cooperation are currently the most important bilateral cooperation areas based on the analysis of Chinese national interests. The two countries build strong collaboration in strategic resource industry by trading and investing, and also promote cooperation in education, Arctic development and other fields due to the security interest and political pursuits. Other business cooperation relates to develop pillar industries; technology development and expanding market are important interests, followed by major interests. For the collaborations are non-national defense and non-strategic related, they belong to marginal interests. Although the importance of cultural interests is relatively low, long-term cultural cooperation may open up vast opportunities for commercial cooperation.

Chapter 6 Conclusion

The first chapter provides an overview of China-Norway relations. The second chapter provides a theoretical foundation for national interest theory. The methodology for this thesis was discussed in chapter 3. The fourth chapter identifies bilateral cooperation case in trade, investment, the arctic, local-level governments, higher education, and institutions to provide an overview of bilateral collaborations. Chinese publications and research on Norway also indicate a trend of Chinese interest in Norway. The chapter 5 identifies the national interests of China in bilateral cooperation. This chapter provides a conclusion of the thesis in section 6.1 and a recommendation for further research section 6.2.

6.1 Review of bilateral cooperation

The type and direction of bilateral cooperation are discussed in the empirical analysis. Chapter 5 combines bilateral cooperation with China's national interests and provides findings. The research question of this thesis goes as follow: What factors influence the relationship and level of cooperation between China and Norway in business-related sectors? And how do they work?

After identifying the bilateral collaboration cases and Chinese national interest, the principal conclusions for the first part of research question are as follows: There are three crucial factors in bilateral business-related cooperation: political considerations (national sovereignty); security considerations (energy security), and economic benefits (technological development, technological competition, and market expansion). In addition to China's pursuits in Arctic, China's international status and participation in international affairs, participation in international affairs also influences China's behavior in Arctic cooperation. Cultural interests associated with scientific advancement, talent development, and exchange activities also have influence on the relationship. All these factors serve as the basis and primary impetus for China-Norway cooperation. In general, non-economic factors related to politics, security, and culture play an important role in China's bilateral business-related cooperation.

For the function of these factors, political considerations serve as the guiding principle. When the political considerations turn to stable, China's motivation for establishing a relationship with Norway is security-related (energy security). According to this study, China's security interests are significant for Norway. When

it comes to energy-related business, China is more willing to collaborate with Norway. When political and security interests are safeguarded, economic and cultural factors will grow in significance. Different industries exhibit distinct patterns of business cooperation. When these connections can contribute to China's technological advancement, technological competition, and market expansion (economic interest) in these industries, China has an incentive to establish them. Other factors (cultural interest) also contribute to multilevel cooperation like education cooperation.

Regarding China-Norway relations, China is a large country, but it does not dominate bilateral relations from the perspective of bilateral cooperation. Norway has greater influence in some areas of bilateral cooperation, such as energy cooperation and arctic cooperation due to its resource advantages and industrial advantages. China has more influence in the bilateral salmon cooperation. In general, political considerations serve as the guiding principle during 2010-2016. Then the security interest (energy interest) plays an important role after 2017, thus it could explain the willingness of China to build a stronger relationship with Norway, the bilateral cooperation is following the bilateral relation. Thus, building a strong Sino-Norway relation will contribute to the bilateral collaborations. By doing so, Chinese interests and Chinese motivations need to be evaluated.

6.2 Recommendation for Further Research

Consequently, when it comes to the concept of future research, this study has some flaws and issues that need to be resolved further. This study is limited by the fact that many instances of bilateral cooperation are still in their infancy, the impact of COVID-19, and the absence of a Norwegian viewpoint.

Initially, there are several noteworthy bilateral cooperation cases started from 2019, due to the influence of factors such as COVID-19, the information disclosed by the project is insufficiently detailed, and the project's future direction requires additional research. Therefore, for future research on bilateral cooperation, it is preferable to collect primary data through field surveys, questionnaires, and interviews. Second, the Covid-19 in 2020 compelled China to suspend a large number of projects that would have normally been carried out, and it was difficult to collect specific practical results for many projects. Third, bilateral cooperation encompasses diverse fields, including politics, economy, culture, and security. Therefore, not only does this massive plan necessitate long-term focus, but it will also achieve better results by shifting the focus of research to specific areas.

Reference

- 1. America, (1996) The Commission on America's Interest. America's National Interests. July.
- 2. Bai, Y.(2022) Norway's first "Xpeng" car-operated experience store opened in the capital O slo.URL:https://www.163.com/dy/article/H7RS400M0514BIH4.html
- 3. Balsvik, R., Jensena, S., & Salvanes, K.G. (2015). Made in China, sold in Norway: Local la bor market effects of an import shock. Journal of Public Economics, Vol.127, pp.137-144.
- 4. Beard Charles A,(1934), The Idea of National Interest: An Analytical Study in American F oreign Policy.pp1-29
- 5. Bekkevold, J.I. (2021) Norges relasjon med Kina i 70 år: Småstatsidealisme og realisme i møte med en stormakt. Internasjonal Politikk, Vol. 79(10, pp. 65-89.
- 6. Bennett, A. (2002) Case study methods:design, use, and comparative advantages., Case, nu mbers,models:international relations research methods, edited by D.F.Sprinz and Y.Wolinsky
- 7. Bergen, A & Li, Q. (2017). Norway: a country in transition Import and Export Manager, Vol. 06, pp.18-20
- 8. BP, (2021) Statistical Review of World Energy 2021, China's energy market in 2020.URL: https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-china-insights.pdf
- 9. BP,(2021) Statistical Review of World Energy 2021.URL: https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf
- 10.Cao,Y.W. (2020) Research on China's participation in Arctic governance (master's thesis, S handong Normal University) URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202
 002&filename=1020031204.nh
- 11.CCTV, (2016) Norwegian Foreign Minister visits China for the first time in six years: Wang Yi: China-Norway relations have entered a new stage. URL: http://tv.cctv.com/2016/12/19/VIDEqfx2B62fNE12E9yCJn1S161219.shtml
- 12. Central People's Government of the People's Republic of China, (2021) The Fourteenth Fiv e-Year Plan for National Economic and Social Development of the People's Republic of China and Outline of Vision 2035. URL: http://www.gov.cn/xinwen/2021-03/13/content 5592681.htm.

- 13.Chen, T.J. (2017) Chinese Academy of Agricultural Sciences and Norwegian Institute of Bi oeconomics Open a New Chapter of Agricultural Science and Technology Cooperation.URL: htt
 htt
 htt
- 14. China Electric Power News, (2021) Norwegian Ambassador to China: China-Norway energy cooperation has a solid foundation and great potential. URL: https://mp.weixin.qq.com/s/WNW2e 56pXigoOMI90JE6NQ
- **15.**China Quality News Network, (2013) FTA of China and Iceland, The first free trade area between China and European countries.URL:http://fta.mofcom.gov.cn/article/chinaiceland/chinaicla ndgfguandian/201508/27568_1.html
- 16. Chinanews. (2021) Kunlun Wanwei acquired Opera and completed the delivery of the global Internet platform. URL: https://baijiahao.baidu.com/s?id=1688827000578770321&wfr=spider&for=pc
- 17. Canadian Political Science Association(CPSA), (2022) research ethics.URL:https://cpsa-acsp.c a/research-ethics/
- 18.CNKI, (2022) search Zhaoningning (Central China Normal University).URL:https://kns.cnki.net/kcms/detail/knetsearch.aspx?dbcode=CJFQ&code=000042544559&sfield=au&skey=赵宁宁&uniplatform=NZKPT
- 19.CNKI,(2022). search Norway as theme.URL:https://kns.cnki.net/kns8/DefaultResult/Index?dbco de=CDMD&kw=挪威&korder=SU
- 20. Commerce of the People's Republic of China, (2021) 2020 Statistical Bulletin of China's F oreign Direct Investment.URL:http://images.mofcom.gov.cn/www/202109/20210929084957284.pdf
- 21.Everbright Limited (2018) Optical Control Overseas Infrastructure Investment Fund acquires

 Norwegian public transport operator Boreal Holding AS.URL: https://www.everbright.com/en/nod/e/10866
- 22. Fang, L. & Zhao K.J. (2021). National Core Interests and China's New Diplomacy. International Political Science (03), pp68-94. doi: 10.16513/j.cnki.qjip. 2021. 0018.
- 23.Fang, C.P. (2002) Constructivism Analysis of National Interests, pp.17

- 24. Fauchald, Ole Kristian, & Haakon Vennemo. (2012). Environmental impacts of a free trade agreement between China and Norway.
- 25.Front Matter. (1980) Sociological Methodology, 11, i–xxiii. http://www.jstor.org/stable/27085
- 26.Foreign Affairs Office of Shanghai Municipal People's Government (2012) Oslo, URL: https://wsb.sh.gov.cn/node550/20120920/0018-17755.html
- 27.Fudan,(2022)Fudan University BI (Norway) International Cooperative MBA Program. URL:h ttps://www.fdsm.fudan.edu.cn/xsjy/home2/fudan-norway-mba
- 28. Førland, T.E. (1995) Far out: International history in Norway. *Scandinavian Journal of Histo ry*, Vol. 20(3), pp. 167-183.
- 29.Gao, Z.B. (2021) Research on Contemporary China's View of National Interests and Its Di plomatic Practice (doctoral dissertation, Lanzhou University) .URL:https://kns.cnki.net/KCMS/det ail/detail.aspx?dbname=CDFDTEMP&filename=1022605396.nh
- 30.General Administration of Customs of China,(2022).URL: http://english.customs.gov.cn/statics /report/preliminary.html
- 31.Guo, J.(2022) President of Norwegian National Energy Chamber of Commerce in China G uo Jian: Norway's plan for new energy transformation. URL: https://www.cimee.com.cn/news.as px?type=59&id=15191
- 32. Grydehøj, Adam, Anne Grydehøj, and Maria Ackrén. (2012) 'The Globalization of the Arct ic: Negotiating Sovereignty and Building Communities in Svalbard, Norway." *Island Studies Jo urnal*, 7(1).
- 33. Gåsemyr, H.J. (2020) Norway: Crisis highlights normality in bilateral relations with Chin a. *Covid-19 and Europe-China Relations: A Country-level analysis*.
- 34. Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary. 593-599.
- 35. Huanqiu (2022) VOYAHA Round of financing nearly 5 billion yuan, the largest round of financing in the new energy vehicle industry. URL: https://m.huanqiu.com/article/4AWOov7PLGF
 36. Huang Y.L. (2015) Research on the Competitiveness and Complementarity of China and N orway's FTA Shang (27), 97-9

- 37.Hong J.J. (2022) Shanghai and Oslo Sign the Memorandum of Cooperation between Sister Cities, Shanghai Observer, INFORMATION OFFICE OF SHANGHAI MUNICIPALITY. https://m.jfdaily.com/news/detail?id=527705 viewed in October 3th 2022
- 38.Hou, J. (2018) The Norwegian King's Journey to China .*China Economic Weekly (42) ,UR L:* http://news.sohu.com/a/504181486_120099902
- 39.Information Office of the State Council of the People's Republic of China, (2011), China's peaceful development, URL: http://www.china.org.cn/government/whitepaper/node_7126562.htm
 40.Institute of International Trade and Economic Cooperation, Ministry of Commerce Economic and Commercial Section of the Chinese Embassy in Norway, Department of Foreign Invest ment and Economic Cooperation Ministry of Commerce, (2016) Country (Region) Guide for Outbound Investment and Cooperation in Norway(The Guide 2016), http://images.mofcom.gov.cn/no/201701/20170123190831947.pdf
- 41.Institute of International Trade and Economic Cooperation, Ministry of Commerce Economic and Commercial Section of the Chinese Embassy in Norway, Department of Foreign Invest ment and Economic Cooperation Ministry of Commerce, (2020) The Guide 2020, URL: http://www.mofcom.gov.cn/dl/gbdqzn/upload/nuowei.pdf.
- 42.Institute of International Trade and Economic Cooperation, Ministry of Commerce Economic and Commercial Section of the Chinese Embassy in Norway, Department of Foreign Invest ment and Economic Cooperation Ministry of Commerce, (2021)The Guide 2021. URL: http://www.mofcom.gov.cn/dl/gbdqzn/upload/nuowei.pdf
- 43. Jiang, Z.M.(2006) Selected Works of Jiang Zemin Vol.02
- 44. Jiang, Z.M.(2006) Selected Works of Jiang Zemin Vol.03
- 45.Jensen, L.C.(2015) International relations in the Arctic: Norway and the struggle for power in the New North. Bloomsbury Publishing,
- 46.Information Office of the State Council of the People's Republic of China, (2011)China's p eaceful development, URL: http://www.china.org.cn/government/whitepaper/node_7126562.htm
- 47.Information Office of the State Council of the People's Republic of China, (2015) China w elcomed Norway to join AIIB.URL: http://www.scio.gov.cn/m/xwfbh/gbwxwfbh/xwfbh/wjb/Document/1397859/1397859.htm

- 48.Institute of international trade and economic cooperation, Ministry of Commerce (2020) *country (region) guide for foreign investment cooperation Norway*, URL: http://images.mofcom.g ov.cn/no/201701/20170123190831947.pdf
- 49. Johnsen, Ingvild. (2014) Gifts favour the giver: Norway, status and the Nobel Peace Prize. 50. Small States and Status Seeking. Routledge,pp. 108-125.
- 51. Kolstad, I. (2016) Too big to fault? Effects of the 2010 Nobel Peace Prize on Norwegian e xports to China and foreign policy[EB/OL]URL:.https://www.cmi.no/publications/5805-too-big-to-fault
- 52.Lakatos,I.(1986) Falsification and the methodology of scientific research programmes. In cri ticism and the growth of knowledge, edited by I.Lakatos and A.Musgrave.Cambridge: Cambrid ge University Press.
- 53.Lakshmi, S., & Mohideen, M. A. (2013). Issues in reliability and validity of research. International journal of management research and reviews, 3(4), 2752-2758.
- 54.Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. Health promotion practice, 16(4), 473-475.
- 55.Li, X.L., Ran,M.Y. & Yu,J.Y. (2021)Analysis of the characteristics and paths of the development of Chinese teaching resources in the five Nordic countries Journal of Yunnan Normal University (TCFL and Research Edition) (05), 7-13. doi: 10.16802/j.cnki.ynsddw.2021.05.003 56.Li,H.L. (2021) Research on the maintenance of China's overseas cultural interests. Administ rative Reform (08), 57-63. doi: 10.14150/j.cnki. 1674-7453.2021.08.005.
- 57.Li, H. (2019) Harbin Engineering University established inter university cooperation with N orwegian University of Science and Technology.URL:http://gongxue.cn/info/1017/3379.htm 58.Li L.X. (2021). Study on Xi's concept of national cultural security (master's thesis, Hebei University) https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202201&filename=102170 1885.nh
- 59.Li, K.Q.(2022) Government Work Report ——At the Fifth Session of the Thirteenth National People's Congress on March 5, 2022 (2022 Government Work Report).URL:http://www.gov.cn/zhuanti/2022lhzfgzbg/index.htm
- 60.Li, M.M. (2009) On Euroscepticism and its popular roots International Watch (06), 55-62

- 61.Li S.J. (2012) On the Predicament and Response of China's Dual Identity. *World Economy and Politics* (04), 4-20+155.
- 62.Li,S.J. (2003) On National Interests, World Economy and Politics (01) pp4-9
- 63.Li, T. (2019) The government delegation of Tylamak County, Norway was invited to visit our kindergarten.URL: http://hbyzedu.cn/syxw/info/show/3473.aspx
- 64.Li,Z.F. (2018). Xi Jinping Holds Talks with King Harald V of Norway. *Guangming Daily*. URL: https://m.gmw.cn/baijia/2018-10/17/31751969.html
- 65.Li, Z.F., Han, C.M. Liang, S.S. & Chen X. (2021). The academic evolution of the Arctic route to the "Silk Road on Ice". *Journal of Beijing Jiaotong University* (Social Science Editio n) (04), 78-89. URL:https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAS T2022&filename=BFJD202104008&uniplatform=NZKPT&v=2lZluFUb5L5wiBhMM1IPW-itAlUKJ lk4RLDSFwG6q5f1r4zMtTV2f7wQeffMlo8y
- 66.Liu,X.Q. (2008) Gains and losses of overseas Chinese teaching from the perspective of Chinese teaching in Norway Journal of Nanjing Forestry University (Humanities and Social Scien ces Edition) (02), 123-126. doi: 10.16397/j.cnki.1671-1165.2008.02.020
- 67.Liu, Z.Y. (2011) The evolution of the CPC's view of national interests International Outloo k (04), 35-45+155. doi: 10.13851/j.cnki.gjzw.2011.04.005
- 68.Liu, J.W. (2021)0ur school (ECNU)launched the Sino-Norwegian-Russian tripartite joint training master's program.URL:https://rus.ecnu.edu.cn/t/9023
- 69.Lu,X. (2020) Norwegian Localized Chinese Textbook Come on Research (Master's thesis, Beijing Foreign Studies University) URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=C MFD202101&filename=1021002184.nh
- 70.Luo, J.B. (2019). Seize the period of strategic opportunity in the world's unprecedented changes in a century, *Scientific socialism* Vol. (03), PP.14-22
- 71.Luo, S.S. (2022) The total import and export volume between China and its free trade partners was 10.8 trillion yuan in 2021. *People's Daily, February 18, 2022 Version 02.URL:* https://cpc.people.com.cn/n1/2022/0218/c64387-32354478.html

- 72.Ma,J. (2007) Analysis on the competitiveness of Norwegian salmon in the Chinese and Jap anese markets Entrepreneur World Second Half Monthly (Theoretical Edition),Vol. (12), pp.237 -238
- 73.Men, H.H. (2015) Maintenance and expansion of China's national interests. Internation Revi ew. Vol.06, pp13-25
- 74. Ministry of Foreign Affairs, 2022, Wang Yi Meets with Norwegian Foreign Minister.URL: https://www.mfa.gov.cn/web/wjbzhd/202209/t20220922_10769679.shtml
- 75.Men.H.H. & Zhong, T.F. (2009) China's overseas interest study: development, situation and future, Diplomatic Review, Vol. (05), pp57-71
- 76.Morgenthau, H. (1988) The national interest of the United States. American Political Scien ce Review, Vol 46,pp961
- 77. National Think Tank, (2022) *In the Country Risk Rating Report for China's Overseas Inve stment* China Social Sciences Press. pp:25-42
- 78. Newcomer, K.E. and Conger, D. (2015). Using Statistics in Evaluation. In Handbook of Pr actical Program Evaluation (eds K.E. Newcomer, H.P. Hatry and J.S. Wholey). URL:https://doi.org/10.1002/9781119171386.ch23
- 79. Nodic Chinses Communication, (2019), introduction of China and Norway Academic cooper ation program, URL: https://norchinese.com/2019/12/30/%E4%B8%AD%E5%9B%BD%E6%8C%AF%E5%90%88%E4%BD%9C%E9%A1%B9%E7%9B%AE%E4%BB%8B%E7%BB%8D/
- 80. Nuechterlein, D. E. (1976). National Interests and Foreign Policy: A Conceptual Framework for Analysis and Decision-Making. *British Journal of International Studies*. Cambridge Univer sity Press. Vol. 2, No. 3 (Oct., 1976), pp. 246-266
- 81.Nye.J.S. (1999) Redefinng the National Interest. Foreign Affairs July/August.URL: https://www.jstor.org/stable/20096778.
- 82.Ocean knowledge circle (2022) Shanghai Jiao Tong University joined in China-Norway Ocean University Alliance.URL:https://www.163.com/dy/article/HMO0IK0Q0511KMS0.html
- 83.Odell,J.S. (2002) Case study methods in international political economy. Case,numbers,mode ls:international relations research methods, edited by D.F.Sprinz and Y.Wolinsky

84.OEC (2022) China and Norway Trade. URL:https://oec.world/en/profile/bilateral-country/chn/partner/nor?depthSelector=HS4Depth&dynamicBilateralTradeSelector=year2017

85.Office of the Foreign Affairs Committee of the Ningxia Hui Autonomous Region Committ ee of the Communist Party of China,(2018),Profile of European local governments that have e stablished international friendly relations with Ningxia (updated on May 16, 2018).URL:http://f ao.nx.gov.cn/wsbs/yhcs/202009/t20200908_2224305.html

86.Pan, W.G. (2014). Research on Vietnam's Participation in ASEAN Political-Security Coope ration: Dual Perspectives of National Interest and National Identity (PhD dissertation, Fudan U niversity).URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2016&filename=1015414331.nh

87.People's Daily (2018) Xi Jingping hold a ceremony to welcome the King of Norway to China and hold talks with him. URL: https://baijiahao.baidu.com/s?id=1614495540308262930& wfr=spider&for=pc

88.Press Office of the Ministry of Commerce, (2007) The first meeting of the feasibility stud y of the China-Norway Free Trade Area was held in Norway.URL:http://fta.mofcom.gov.cn/norway_special.shtml

89. Press Office of the Ministry of Commerce, (2013). The Free Trade Agreement between the Government of the People's Republic of China and the Government of Iceland was signed in Beijing.URL:http://fta.mofcom.gov.cn/article/chinaiceland/chinaiclandnews/201304/11995_1.html 90. Press Office of the Ministry of Commerce, (2021). China and Norway will complete free t rade agreement negotiations as soon as possible.URL:http://fta.mofcom.gov.cn/article/chinanorway/chinanorwaynews/202103/44658 1.html

91.Qi, H.G. (2019). The course, characteristics, and challenges of new China's peripheral multi lateral diplomacy in the past 70 years, *World economy and Politics* (06), pp.43-64 + 156-157 92.Qilu,(2019) Set up the first 200 million yuan industrial fund, and the China Norway Inno vation Center will be located in Laishan, Yantai. URL:https://www.jiemian.com/article/3689284. html

- 93.Qiu, Y.M. (2019). Distribution characteristics and strategic analysis of world oil and gas re sources (master's thesis, Chinese Academy of Geological Sciences) URL: https://kns.cnki.net/K CMS/detail/detail.aspx?dbname=CMFD201902&filename=1019157227.nh
- 94.Qin,Y.Q. (2000) Social Theory of International Politics, pp119.
- 95.Qin, Z.W. (2009) Research on Stalin's View of National Interests (doctoral dissertation, Sh andong Normal University). URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFD0 911&filename=2009125371.nh
- 96. Robinson, T. (1969) National Interests, *International Politics and Foreign Policy: A Reader in Research and Theory*. New York: Free Press, pp 184-185
- 97. Saunders, M., Lewis, P., and Thornhill, A. (2009) Research methods for business students. Pearson education.
- 98.Shao,G.L. Duan, H.X.&Li, C. (2020) A comparative analysis of the dynamic comparative a dvantages of aquatic products trade between China and Norway China Fishery Economy, Vol. (03),pp 66-74
- 99.Shang,Q.L. (2022) China Norway Marine Enterprises Forum was successfully held.URL: https://www.163.com/dy/article/HMF86VP40530WJIN.html
- 100. Shanghai Jiaoda Bao (2010)Zhang Jie Meets with the Delegation Led by the Presid ent of Norwegian University of Science and Technology.URL: https://shjdb.sjtu.edu.cn/index/article/articleinfo?doc id=94287
- 101. Shanghai Jiaoda Bao. (2011).Energy research delegation visited Norwegian Universit y of Science and Technology.URL:https://shjdb.sjtu.edu.cn/index/article/articleinfo?doc_id=96064
- 102. Sun L. & Wang J.S. (2019) 70 Years of New China's Diplomacy: Review and R eflection, P1-2.URL:http://www.cssn.cn/gjgxx/201910/t20191006 4980124 1.shtml
- Sun, M.W. (2017) Xi Jinping Meets with Leaders of Finland and Norway, China E xplores Cooperation with Nordics in the Arctic.URL: https://www.thepaper.cn/newsDetail_forward_
- 104. Sverdrup-Thygeson, B. (2018) 'The Norway-China Relationship: For Better, For Worse, For Richer, For Poorer'. In Sverdrup-Thygeson, Bjørnar; Yennie Lindgren, Wrenn; Lanteig ne, Marc. (Eds.) *China and Nordic Diplomacy*, 2018. Oxon: Routledge, pp.77-100.

- 105. Tellis, W. M. (1997). Application of a Case Study Methodology .*The Qualitative R eport*, Vol.3(3), PP1-19. URL:http://nsuworks.nova.edu/tqr/vol3/iss3/1htp://nsuworks.nova.edu/tqr/vol3/iss3/1
- The National Committee for Research Ethics in the Social Sciences and the Human ities (NESH).(2022). *Guidelines for Research Ethics in the Social Sciences, Humanities, Law a nd Theology*. URL: https://www.forskningsetikk.no/en/guidelines/social- sciences-humanities-law-a nd-theology/guidelines-for-research-ethics-in-the-social- sciences-humanities-law-and-theology/
- 107. The State Council Information Office of the People's Republic of China. (2018).Chi na's Arctic policy.URL:http://www.scio.gov.cn/zfbps/32832/Document/1618203/1618203.htm.
- 108. Trading Economics (2020) Norway exports to China, top 10 items in 2020. URL:<u>ht</u> tps://tradingeconomics.com/norway/exports/china
- 109. Tripathy J. P. (2013). Secondary Data Analysis: Ethical Issues and Challenges. *Irani* an journal of public health, Vol.42(12), pp.1478–1479.
- Wang, C.J. (2018). Strategic Research on the Development and Utilization of Arctic Coil and Gas Resources in China (doctoral dissertation, China University of Geosciences (Bei jing)). URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2018&filename=1018029954.nh
- 111. Wang, L.B.(2019) My country has become the fastest growing market for Norwegi an seafood, Xinhua News Agency.URL: http://www.gov.cn/xinwen/2019-10/31/content_5447287.ht m
- Wang, Y.W. (2021). Research on the Regulatory Change of the Arctic Council Modern Commerce and Trade Industry Vol.26, PP.19-20. doi: 10.19311/j.cnki.1672-3198.2021.26.0
- 113. Wang, Y.Z. (2002) Rethinking of national interests, Chinese social sciences.Vol.2, p p.60-170
- 114. Wang,Y.Z.(2003) Global Politics and China's Diplomacy: Exploring New Perspectiv es and Interpretations pp.41
- 115. Weldes, J. (1996) Constructing national interest. European Journal of International Relations. No.2, pp.275-276

- 116. Wu, S.Q. (2012) Research on China's diplomatic strategy adjustment in the 1980s (doctoral dissertation, Nankai University) .URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbna me=CDFD1214&filename=1013175202.nh
- 117. Wuhan University (2022) the global partners of Wuhan University.URL: http://openday.whu.edu.cn/zjwd/guojijiaoliubu/2015-06-09/1570.html
- 118. Wuttke, J.(2017) Sino-Swiss FTA delivers "positive energy" to Sino-European coope ration.URL:http://fta.mofcom.gov.cn/article/chinaswitz/chinaswitzgfguandian/201701/34111_1.html
- 119. Xia, LP.. &Xie Q. (2020) The New Characteristics of Nordic Countries' Internation al Role and Its Impact on China -- Based on the reconstructed "Small Countries' International Role Theory" Journal of Shandong University (Philosophy and Social Sciences Edition) (03), 6 3-72. doi: 10.19836/j.cnki.37-1100/c.2020.03.007
- 120. Xia, X.N.(2013) Norway supports China as a permanent observer of the Arctic Co uncil, China-Norway relations ease. URL: https://www.guancha.cn/europe/2013_01_22_122444.sht ml.
- 121. Xiao, L.X (2022) 2022 China Nordic Economic and Trade Cooperation Forum. UR L:https://baijiahao.baidu.com/s?id=1750191286058561259&wfr=spider&for=pc
- 122. Xiao, Y. (2019) Our pre-school education delegation returned from Norway.URL: https://www.hbssyys.cn/dwjl/info/show/3331.aspx
- 123. Xinhua (2005) Ningxia and the Kingdom of Norway Sogn og Fjordane establish fri endly county relations.URL:https://news.sina.com.cn/o/2005-03-23/10285439682s.shtml
- 124. Xinhua (2018) Xi Jinping Holds Ceremony to Welcome the King of Norway to Ch ina and Hold Talks with him. URL:https://baijiahao.baidu.com/s?id=1614495540308262930&wfr = spider&for=pc
- 125. Xinhua, (2020) Wang Yi Meets with Norwegian Foreign Minister Victoria. URL:htt ps://baijiahao.baidu.com/s?id=1744651870873125749&wfr=spider&for=pc
- 126. Xinhua, (2021) Chinese EV maker NIO opens first NIO House in Norway, URL: http://news.cn/english/2021-10/01/c_1310220787.htm
- 127. Xinhua, (2022) Report to the 20th National Congress of the CPC.URL:http://www.g ov.cn/xinwen/2022-10/25/content_5721685.htm

- 128. Yan, D.L.(2021) An analysis of China's National Interests from The Perspective of A Hundred Years of Great Changes. PP24-33
- 129. Yan, X.T. (1997) An analysis of Chinese national interest. pp10-11.
- 130. Yan, X.T. (1994) Deng Xiaoping's Chinese national interest. Contemporary International Relations, Vol.07, pp28-32.
- 131. Yang, J. (2018) Interpretation of China's Arctic policy, *Journal of the Pacific* (03), pp.1-11 doi:10.14015/j.cnki. 1004-8049.2018.3.001.
- 132. Yi, X.L. (2022) China's development prospects are bright, and the future of China-Norway cooperation is promising Ambassador Yi Xianliang attended the annual forum of the Norway-China Chamber of Commerce and delivered a keynote speech. URL: http://no.china-e mbassy.gov.cn/chn/zngx/jgmx/202103/t20210326_9043056.
- 133. Yin, J.J. (2021). Research on the Trade Effects of the Establishment of China Nor way Bilateral Free Trade Area (Master's Thesis, Shandong University of Finance and Economi cs) URL: https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202102&filename=102158614
 7.nh
- 134. Yin, R. (2018). Case study research: Design and methods (5th edition). California: SAGE Publications.
- 135. Yu W.J. (2011). Research on the Economic Effects of China Norway FTA (Master's Thesis, Ocean University of China).URL: <a href="https://kns.cnki.net/KCMS/detail/detail.aspx?dbname="https://kns.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail/detail/detail/detail/detail/detail/detail/deta
- 136. Yu, Q.Q. (2020) Bilateral trade between China and Norway from January to Octob er 2020.
- 137. Zhai, Y. (2021) The founding meeting and signing ceremony of China Norway Oc ean University Alliance was held. URL:http://bkzs.ouc.edu.cn/2021/1124/c7211a357533/page.htm
- 138. Zhang, W.M. (2002) China's National Interests in the Process of Globalization. *Strategy and Management*. Vol.01,pp.52-64.
- Zhang,X.Y.(2021) Explainer: Why Chinese EV companies are using Norway as a global pilot, URL: https://news.cgtn.com/news/2021-10-06/Explainer-Why-Chinese-EV-companies-are-using-Norway-as-a-global-pilot-148mROnLbZm/index.html.

- 140. Zhang,Y. (2005) On Cultural Interests (Doctoral Dissertation, Fudan University). htt ps://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFD9908&filename=2005121056.nh
- 141. Zhang, Y.M. (2019) Research on the Arctic Council in Arctic Governance (Master's Thesis, School of Foreign Affairs) URL: <a href="https://kns.cnki.net/KCMS/detail/detail.aspx?dbname="https://kns.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detail.aspx.cnki.net/KCMS/detail/detai
- 142. Zhang Y.L. (2018) 40 years of China's Foreign Relations: review and prospect, *Wo rld economy and politics*, Vol.01, pp.5-26 + 156
- 143. Zhang. Y.L. (2019) Analysis and Reflection on "great changes in a century", *Journ al of Shandong University (PHILOSOPHY AND SOCIAL SCIENCES EDITION)*, Vol.05, pp1-1
- 2144. Zhang, G.K. (2016) China and Norway resume normalization of relations. URL: http://mww.guancha.cn/politics/2016_12_19_385053_s.shtml
- 2 Zhang, Y. (2018) China lifts ban on imports of Norwegian salmon, may becomes its largest consumer market. URL:https://news.sina.com.cn/o/2018-07-07/doc-ihexfcvm3177670.sht ml
- Zhang Z X&Yu, W (2012) China's perception of Australia before the establishment of diplomatic relations -- from the perspective of People's Daily's report on Australia in 194 90 and 1972, Historical experience and the latest developments of China-Australian relationshi ps, edited by C.S.Yu (2012)
- 147. Zhao,N.N. (2017) The Big Pattern of Small Countries: An Analysis of Norway's A rctic Strategy World Economic and Political Forum (03), pp.108-121
- 148. Zhao,N.N. (2021) On China's International Responsibility in Arctic Governance and Its Practice Path. *Socialist Studies* (01), pp.148-155.
- 149. Zhejiang Provincial People's Government Foreign Affairs Office (2020). URL:http://www.zhoushan.cn/newscenter/zsxw/201805/t20180525 887774.shtml
- Thou, Nianlin, Jin Guo, and Manyuan Jiang. (2021). Tariff Relief and Promoting F ree Trade Agreement Between China and Norway. *Modern Management based on Big Data II and Machine Learning and Intelligent Systems III*. IOS Press, pp.77-88.

- 151. Zhu, W.Q. (2021) Investment Risks and Countermeasures of China Norway Salmon Trade Foreign Trade and Economic Cooperation (04), pp.28-30
- 152. Zhu, L. (2018) There is huge potential for energy cooperation between China and Norway.URL:https://news.sina.com.cn/c/2018-10-30/doc-ihnaivxq5976971.shtml
- 153. Zu, Y.(2011) Research on the National Security Interests of China's Northeast Asia in the Early 21st Century (PhD dissertation, Jilin University).URL: https://kns.cnki.net/KCMS/det ail/detail.aspx?dbname=CDFD0911&filename=1011095073.nh

Appendix

It is critical to understand the item and what it contains. Because different databases may employ various classifications.

- Crude oil is a naturally occurring, unrefined petroleum product composed of hydrocarbon deposits and
 other organic materials and Crude oil is a type of fossil fuel that can be refined into usable products such
 as gasoline, diesel, and various petrochemicals;
- Carboxamide compounds are classified as organic chemicals by the OEC.
- Cyclic amides, derivatives, nets, salts thereof;
- Acyclic amides, derivatives, salts; and Urines, derivatives, salts thereof are among them.
- Non-fillet Frozen Fish is a type of fish that also includes crustaceans, mollusks, and other aquatic invertebrates.