



AALBORG UNIVERSITY
DENMARK

Understanding China's Interests in the Arctic: the road to global economic power

The Arctic as alternative maritime shipping route and energy supplier

by

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MSc., Aalborg University, July 2016

Thesis submitted in accordance with the

Requirements for the Degree of

Master in Development and International Relations with specialisation in Arctic Studies

in the

Study Board of International Affairs

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Aalborg University

10th Semester 2016



AALBORG UNIVERSITY
DENMARK

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Degree: **Master of Development and International Relations**
Specialisation in Arctic Studies

Title: ***Understanding China's interests in the Arctic: the road to global economic power. The Arctic as alternative maritime shipping route and energy supplier.***

Supervisor: **Malayna Raftopoulos**

Master Thesis period: **February – July 2016**

Number of pages: **39 pages**

Number of keystrokes:

For Todor and my little Maria.

They are the inspiration for my writing and life. Because of him – as boyfriend, companion, husband, father, and supporter – I was able to work long hours and finish my research.

Thank you, Todor, from the bottom of my heart for being there for me through all this time.

Abstract

Over the last two decades, China has been experiencing an extraordinary economic growth. Challenging the United States, China's economy has become the second largest in the world, aspiring to become the global economic power. Notwithstanding China's economic intentions, the country is facing serious challenges reaching their goal. A major one is related with the fact that Chinese economy relies on exports. Thereupon, China is dependent on secure and rather short shipping lanes. Moreover, the steady growth made China extremely dependent on energy and raw materials imports; thus a major customer of both. Encouraged by their economic development, Chinese government has established an expanded range of foreign policy interests, amongst them, the Arctic. China has paid increasing attention to the Arctic region in the last decades, defining itself as a near-Arctic state. Despite the lack of an official Arctic policy, China has a great interest in the region; both the resources and the will to invest significantly across scientific, economic and political fields in the High North.

The thawing of the Arctic ice has been opening new opportunities in the exploration of resources and navigation within the region. The Far North has become more and more accessible, exploitable and attractive to investors. After two failed attempts of claiming its legitimacy to play a role in the region, in May 2013 the Arctic Council (AC) finally acknowledged China as a legitimate stakeholder, accepting the country as a permanent observer. Hence, throughout this Master Thesis, the researcher aims to analyse to what extent China's strategic interests in the Arctic may contribute for its rise to great power. The analytical process has been driven by mixed-method research applying Kenneth Waltz theory of neorealism and his great power concept; also using the concept of national power from Morgenthau's realism; and the theory of soft power to understand recent China's moves in the Far North. The researcher included a study of the Arctic as an alternative maritime shipping route, and the Arctic as an energy and raw materials supplier, together with a case study of Sino-Icelandic Free Trade Agreement. Moreover, it included a description of China's economy.

The research concludes that China strategic interests in the Arctic are intrinsically related with the country's phenomenal economic development. This growth has made China an emerging great power and competitor in the global stage, abreast with the US. It has also made China into one of the world's major importers of energy and raw materials. Concerning to energy, China is very much dependent on the Persian Gulf, an unstable area dominated by the US. On the other hand, their trading sea route is also threatened by piracy. Therefore, those energy and maritime transport security are the framework for Chinese emerging Arctic interests and possibly future strategy.

Keywords: China; China foreign policy; The Arctic; Climate change; Arctic Sea Routes; Northern Sea Route; Natural resources; Great power; Soft Power.

Acknowledgements

After an intensive and extensive period of research, today is the day. Writing this note of thanks is the finishing touch on my thesis. It has been a period of intense learning for me, not only as a social researcher, but also on a personal level. Writing this thesis has had a big impact on me. I would like to reflect on the people who have supported and helped me to accomplish my aim, many of them unwittingly.

I would first like to express my thanks and appreciations to my supervisor Malayna Raftopoulos for her patient guidance, encouragement, advice and friendly attitude throughout this thesis. I would like to extend my thanks to Ashley Stewart; her feedback was extremely useful. They both definitely provided me with the tools that I needed to choose the right direction and successfully complete my thesis. I am extremely grateful for their support and constructive criticism.

I am also deeply grateful to my colleagues Heidi Hammer and Inés Iglesias for their inspiration, opinions and encouragement.

I have to mention my friends back in Portugal who have been supporting me since I decided back in 2014 to challenge myself to learn English and study a master in Denmark. Without your encouragement would have been harder. A big thank you to you all.

A special category must be reserved for Jorge Val, Francisco Malavé, Rubén Sanchez, Louise Vinther, Kolbrún Gunnarsdóttir, Kristian Ross, Fábio Kushima, Daria Preis and Luca Quarta, my dear friends. Not only for providing support in many ways, but also without you all my experience abroad for the last two years would never have been as wonderful.

I would also like to thank my parents, Lurdes and Francisco, and brothers, António and Vitor, for their boundless support, wise counsel and sympathetic ear.

Finally, I would like to thank my dearest Todor for his relentless encouragement and enthusiasm throughout the writing up process; for his endless patience and understanding. I have no words to express how grateful I am. My deepest debt is to him, Todor Stoyanov, a man with a wondrous great power. You are indispensable.

Aalborg, July 29, 2016

Ana Luísa Alves

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List of Acronyms

AC	Arctic Council
ASR	Arctic Sea Routes
FTA	Free Trade Agreement
GDP	Gross Domestic Product
IR	International Relations
MDG	Millennium Development Goals
NSR	Northern Sea Route
PRC	People's Republic of China
SC	Suez Canal
UNCLOS	United Nations Convention on the Law of the Sea
USD	United States Dollars

Chapter 1.

Introduction

With this opening chapter the researcher aims to guide the reader through the general subject of this study, its objective and providing a summary of the background information.

1.1. Background

[T]he Arctic had, since the end of World War II, been divided between the Western Arctic and the Soviet Arctic, with the two regions becoming strategically important in a military sense. From the late 1980s and early 1990s, however, awareness of the effects of contaminants, transboundary pollutants and climate change played its part in new circumpolar initiatives to assess, understand and call for the development of policy strategies to deal with significant environmental issues that affect the region but are global in origins or impact. Initiatives such as the Arctic Environmental Protection Strategy (AEPS) and since 1996, the Arctic Council have aimed to ensure that Arctic issues remain high on the domestic and international agendas of the eight Arctic states (...) as well a handful of non-Arctic states (Nuttall 2012 in Murray and Nuttall 2014: 2, emphasis added).

A new wave of interest from non-Arctic states in the Arctic also comes from the Asian continent. (...) [T]he changing geopolitical realities in the Arctic as a result of climate change opening possibilities for access to potential Arctic resources have broadened the international focus on the Arctic to include more geographically distant countries such as China (Murray and Nuttall 2014: 18, emphasis added).

China has had a remarkable period of rapid growth shifting from a centrally planned to a market based economy. Today, China is an upper middle-income country that has complex development needs (World Bank 2016a, emphasis added).

The rise of China in global political and economic context has been receiving a lot of attention from International Relations (IR) scholars in the last decades. The interest is mostly driven by the fact that China, a communist governed country, has recently become the second biggest world economy. With the policy reforms in the late 1970s, the People's Republic of China (hereafter PRC) economy has shifted from a centrally-planned to a market-based and ever since then has been experiencing a rapid and steady growth. China

has registered the fastest sustained expansion by a major economy in history, with a pace of growth on an average of 7 up to 10 percent a year since 1980s (World Bank 2016c).

The economic development has brought numerous positive changes to the Chinese society, in 2015 the country has achieved the Millennium Development Goals (MDGs).¹ A considerable achievement for China, but also a major contribution to the accomplishment of the MDGs globally.

Even though the significant economic growth, the Chinese Gross Domestic Product (GDP) per capita of only 7,924.7 USD defines the country yet as a developing. Furthermore, apart from the positive effects, the rapid economic development has brought many challenges to China. The government has to fight the inequality, rapid urbanisation problems, environmental and sustainability issues, external disparities as meanwhile strive to sustain the current economic growth. Thus, China has to make some noteworthy policy adjustments.

The Chinese Dream is a remarkable policy presented by Xi Jinping the current Chinese Communist Party Chief. Known as “the great rejuvenation of the Chinese nation”, in Xi’s words, the dream created a wave of optimism to the nation, stirring hopes and setting expectations of a brighter future. This policy has four main aims associated with a strong, civilised, harmonious, and beautiful China. Xi administration proposes to make China an even more economical, political, scientific and military strong country. Bearing in mind a balanced society, i.e., more equal and with a solid amity among social classes, by 2020 they also expect to double the 2010 GDP per capita, and become a fully developed country by 2049, respectively, the years when China will celebrate the 100th anniversary of the Communist Party and the 100th country’s anniversary (Kuhn 2013, *The Economist* 2013). To reach these goals, as suggested by many experts, China needs to prioritise energy and security strategies (Downs 2006, Jian 2011, Li and Bertelsen 2013, Stang 2014, UEA 2015).

¹ “At the beginning of the new millennium, world leaders gathered at the United Nations to shape a broad vision to fight poverty in its many dimensions. That vision, which was translated into eight Millennium Development Goals (MDGs), has remained the overarching development framework for the world for the past 15 years”, as it is explained in the United Nations Report “The Millennium Development Goals Report 2015” (United Nations 2015). The eight goals are: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (5) reduce child mortality; (6) combat HIV/AIDS, malaria and other diseases; (7) ensure environmental sustainability; (8) develop a global partnership for development.

The country's energy demand has been tightly coupled with the economic growth. By 2006 China was already "the world's second largest consumer and third largest producer of primary energy" (Downs 2006:1). In 2011 China has become the biggest energy consumer and the biggest energy producer (EIA 2015). China's energy demand has rapidly increased, especially for petroleum and other liquid sources, and there is no sign of slowing down; quite the opposite, it is expected to steadily grow.

The Chinese hunger for energy has made the country look overseas. As a major stakeholder on the global energy market, it has invested in assets an estimated \$73 billion only between 2011 and 2013 (IEA in EIA 2015). China has also shown interest in unexploited so far regions of the world, amongst them the Far North.

The Arctic region has in the last decade undergone extraordinary environmental and developmental changes. The Arctic ice is melting and the region is getting more accessible, exploitable and increasingly attractive for economic utilisation. The effects of climate change are not only making former inaccessible natural resources exploitable, but are also enabling regular shipping between Asia and Europe. The prospects of increased shipping in the Arctic are first and foremost associated with the Northern Sea Route (NSR). The NSR is a navigation route in the coastal parts of the Arctic Ocean, following the northern coast of Russia, and providing the shortest sailing route between Europe and Asia. The combination of new shipping routes and formerly inaccessible vast natural resources, fostered prospects for new commercial opportunities.

Over the past several years China has become more and more interested in Arctic affairs, and Chinese scholars often describe their country as a 'near-Arctic' state. Although China does not have an official Arctic policy, it has been actively cooperating with the Arctic states. China is engaged with different Arctic research initiatives, and has been investing in Arctic research. In May 2013, together with India, Italy, Japan, South Korea and Singapore, China received its permanent observer status in the Arctic Council (AC) (Arctic Council 2016b). Chinese companies have already started to take part in many business projects within Arctic states, which has raised concerns around the world.

1.2. Problem formulation

Coupled, the Chinese economic growth and its increasing demand for energy supplies and raw materials have brought many speculations about whether the rise of China will represent a threat or an opportunity for the world.

Given the growing importance of the High North, its strategic significance, and Chinese economic ambitions, this thesis aims at discuss China's emerging Arctic interests and strategy within the context of great power concept, and shed light for understanding its strategical interest. The researcher argues that China's Arctic interests and possible strategy must be seen within the context of China's extraordinary economic rise.

The researcher wonderment on this thesis is centred around why Chinese interests in the Arctic have intensified in recent years and how China's economy might benefit from it. The aim of this thesis will be reached by answering the following research question:

Why China has strategic interests in the Arctic considering their economic development in the global political stage?

Chapter 2.

Methodology

The aim of this chapter is to describe how the researcher approach the main problem, therein including a constructive description and explanation of the research design, methods and data collection selected to be applied in this master thesis. According to van Manen “a methodology refers to the philosophical framework and the fundamental assumptions of research” (van Manen 1990 in Creswell and Clark 2006: 4). Here the researcher aspires to present a main framework for this thesis, clarifies the logic of the structure, and explains why it is believed to be the most suitable approach to reach a conclusion.

2.1. General considerations

Burrell and Morgan (2005: x) consider that “all theories of organisation are based upon a philosophy of science and a theory of society”. They also argue that social science is appropriate to be conceptualised “in terms of four sets of assumptions related to ontology, epistemology, human nature and methodology” (Ibid.: 1). The researcher approach to this thesis is based on its explicit and implicit assumptions about nature and the social world, and the way in which those beliefs may be investigated. Hence, the researcher assumptions involve both ontological and epistemological natures.

“[A]ssumptions of *ontological* nature (...) concern the very essence of the phenomena under investigation” (Ibid., italics in original). The term ontology describes the understanding of the nature and what the social researcher seeks to know about something (Bryman 2016: 28; Burrell and Morgan 2005: 1). Social ontology deals with “nature of social entities” (Bryman 2016: 28). Social researchers meet “a basic ontological question: whether ‘reality’ to be investigated is external to the individual (...) or the product of individual consciousness” (Burrell and Morgan 2005: 1). Reality can be of an objective nature or result of one’s perception.

Coupled with the ontological idea there is a second assumption of an epistemological nature. Following Burrell and Morgan thesis, epistemology refers to “the grounds of knowledge – about how one might begin to understand the world and communicate this as knowledge to fellow human beings” (Burrell and Morgan 2009: 1). Epistemology means knowledge and covers the nature and scope of it; is concerned with questions surrounding the suitability of knowledge. Social science scholars argue that

epistemology refers to how we know that we know, how the researcher distinguish what is true from what is false (Bryman 2016: 24; Burrell and Morgan 2009: 1).

The study of ontology and epistemology leads to two different perspectives. There are scholars who believe in the ability to know and understand the truth about the social world and act as external observers. On the other hand, other scholars claim that the social world can be understood from the position of individuals directly involved in the social activities.

Regarding the issue of reality, the researcher seeks to find out whether China's intentions to become a global economic power will be influenced or not by its interests in the Arctic region. Furthermore, the researcher considers as truth the moment when cultural distance and resource based view are combined; as a result, the researcher can reach a conclusion. In order to prove its beliefs, the researcher intend to find out eloquent answers to the research questions. For the purpose of the investigation of this thesis research questions, the researcher is acting as an external observer and performing objectively.

2.2. Research Design – General considerations

As described by Bryman (2016: 40), research design is a structure within the collection of data and analysis of it takes place. With the purpose of establish a methodological framework, the strategy of the researcher needs to contain the tools necessary to perform an effective analysis. The research design of this master thesis is thus based on a descriptive and explanatory research (New York University, 2003: 1). Descriptive research is fundamental to provide deep knowledge about the fact and dimensions of the phenomenon of China's increasing interests in the High North. On the other hand, a "good description provokes the 'why' questions of explanatory research" (Ibid.: 2). Therefore, the researcher focuses on a descriptive research throughout this thesis, applying an explanatory research in the case studies chapter. In its turn, explanatory research entails developing causal theories for the research (Ibid.: 2).

Considering the nature of causal statements, the approach of this thesis "is *probabilistic* rather than *deterministic*" as social science research tends to follow the first

approach (Suppes 1970 in New York University 2003: 5, italics in original). The researcher intends to offer a probabilistic analysis of China's strategic interests in the Arctic considering their will to become a great power. Although the researcher aims to provide an in-depth description of the topic and an analysis of Chinese intentions, cannot achieve deterministic explanations; not only because of the complexity of the theme but also considering the vast and numerous possibilities to address it, depending on the approach taken and variables analysed (New York University 2003: 5).

According to its style, the researcher chose a theory testing approach over a theory building one. A theory testing approach has a deductive reasoning, starting at a conceptual-abstract level moving to an empirical level. The researcher uses a deductive approach to derive a set of propositions from the theory, moving from the general towards the particular. (Bryman 2016: 21, 22; New York University 2003: 6, 7).

2.2.1. Case-study design

Social research needs a design to ensure that the evidence collected enables the researcher to answer the problem formulation as unambiguously as possible (New York University 2003: 9). Taking into account the research question, the researcher decided to follow a case study design.

The case study is one of the many different ways of conducting social research, amongst experiments, longitudinal design, and cross-sectional design. To decide which design is the most suitable to its investigation, the researcher considers the advantages and disadvantages of each method. According to Yin (2014: 3) case studies are the most suitable method when “how” and “why” questions are presented; the investigator has little or no control over events; and the research focus is on an on-going situation. However, as Yin underlines, the methods are related and interconnected in many and different ways, not defined by sharp boundaries (Ibid.).

The case study design facilitates the exploration of a certain event, contextualising it, using a variety of data sources. The researcher seeks not only to have a deeper understanding of the general case, but also to understand the particular nature of the case in question (Baxter and Jack 2008: 544; Bryman 2016: 60; Yin 2014: 3). This methodology is guided by two main approaches proposed by Stake (1995) and Yin (2014).

According to Stake (1995), case studies can be described as intrinsic, instrumental, and collective. In an intrinsic case study, the researcher focuses its interests in a specific situation, showing an intrinsic interest on the topic. An instrumental case study will give the researcher the opportunity to gain insight and understanding of a particular phenomenon. On the other hand, a collective case study takes place when more than one case is under examination. Given Stake's typology, the research approach in thesis is motivated by an instrumental case study, once the researcher is interested in getting an insight and deep understanding of China's strategic interests in the Arctic in order to solve the problem formulation (Baxter and Jack 2008: 550; Stake 1995).

Considering Yin's typology, the case study selected in this master thesis will be a single case approach. Nevertheless, the case study approach in this thesis tends to be both descriptive and exploratory: on one hand the case study approach of this thesis offers a description of the Chinese interests in trading with Iceland, and of the use of the NSR as a shipping route, and the context surrounding it, together with an investigation of the cases where the outcome has no clear answer or a single set of outcomes (Baxter and Jack 2008: 544; Bryman 2016: 62; Yin 2009: 58).

2.3. Mixed Method Research – a pragmatic research view

The researcher decided to take a mixed method research approach to lead its inquiry. As previously mentioned, research develops from philosophical assumptions, i.e., ontological and epistemological notions that the researcher has about certain topic. Creswell refers to those philosophical assumptions as worldviews, "meaning a basic set of beliefs that guide action" (Guba 1990: 17 in Creswell 2014.: 6). Previous to research, he argues, researchers wonder how they will learn and what they will learn during and from their inquiry (Ibid.). Hence, in this thesis the researcher holds a pragmatic worldview approach; its position is focused on the consequences of actions, problem-centred, pluralistic, and real-world practice oriented (Ibid., table 1.1.).

The pragmatic worldview was developed by Peirce, James, Mead, and Dewey. As described by Creswell (2014: 11), pragmatism is not committed to one philosophy and reality; for this reason, this approach is applicable to mixed methods research allowing the researcher to use both quantitative and qualitative data to support the research. Pragmatists

and mixed method researchers do not see the world as a unity. When collecting and analysing data is foremost important to look from different perspectives to the problem, combining different sources and methods. Also, to pragmatists “truth is what works at the time”; therefore, mixed methods research brings together both quantitative and qualitative data to provide a better understanding of the research problem. Pragmatic assumptions contextualise research within a social, historical and political framework. Considering this, mixed method research uses different theoretical studies to reflect the social and political reality. Important to stress that pragmatism allows mixed methods researchers to apply multiple methods, different views and, above all, different data resources and analysis (Ibid., 11).

The mixed method is thus a research approach in which a pragmatic inquirer brings together narrative and numeric information in order to better address the research problem. Creswell and Clark (2006: 5) define

[m]ixed methods research [as] a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches (...) As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data.

In line with this definition, quantitative and qualitative data are both used by the researcher. However, the proportion of each varies without restrictions, according to the research aim. “[Q]ualitative data consists of open-ended information” whereas “[q]uantitative data includes closed-ended information” (Ibid., 6). Quantitative data includes economic data, and statistics, amongst others, covering closed questions related to the research. On the other hand, qualitative data is related with words, texts, and images (Ibid.; Creswell 2014: 17). Nonetheless, the researcher believes the simply collection and analysis of both data is not enough. They need to be mixed and interpreted so to provide a complete picture of the problem at hands, offering “a better understanding of the study than if either dataset had been used alone” (Creswell and Clark 2006, 7).

Regarding the mixing component of the method, Creswell and Clark (2006) develop three different ways in which data can be mixed: “[1] *merging* or converging the two datasets by actually bringing them together, [2] *connecting* the two datasets by having one build on the other, [3] or *embedding* one dataset within the other” (Ibid.: 7; my italics). In this thesis the researcher has decided to follow an embedded mixed methods design.

Quantitative (quan) data is embedded within the qualitative (QUAL) framework, playing a supportive role in the overall design, as it is shown in the figure 1. Therefore, in this thesis qualitative data is overarching while quantitative data is used as a tool to strengthen the argumentation.

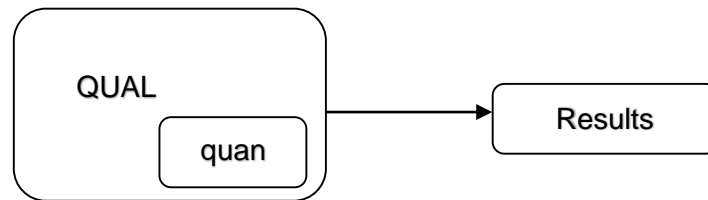


Figure 1. Personal adaptation from the figure “Advanced Mixed Methods Designs” of Creswell (Creswell 2014: 221).

The researcher recognises that all methods when used alone have certain limitations. Therefore, the value of a mixed method research resides “in the idea that all methods had bias and weaknesses, and the collection of both quantitative and qualitative data neutralized the weaknesses of each form of data” (Ibid.: 14). Mixing different types of data will provide a better understanding of the problem and a richer analysis of it. Highlighting the advantages of the method (Creswell and Clark 2006: 9):

- It provides strengths that offset the weaknesses of both qualitative and quantitative research;
- It provides more comprehensive evidence for studying a research problem than either quantitative or qualitative research alone, once researchers are given permission to use all of the tools of data collection available, without restrictions to a certain data collection typical of each of the methods;
- It helps answer questions that cannot be answered by any of the approaches alone;
- It encourages the use of multiple worldviews than a typical association of a certain paradigm related to one of the methods;
- It is practical in the sense that the researcher is free to use all methods possible to address the research problem, using both numbers and words, combining deductive and inductive thinking.

However, and despite its value, conducting a mixed method research is not a easy task. Considering the strengths of the method it takes time and resources to collect and analyse both types of data. It requires a special attention and knowledge from the researcher, who needs to be familiar with both qualitative and quantitative procedures. Even though, the value of this method seems to overshadow the difficulties faced by the researcher in such approach. (Ibid.: 10; Creswell 2014: 15)

There are several design models inside the mixed method approach which can be followed. Creswell stresses three main designs that can be found in social sciences: *convergent parallel*, *explanatory sequential*, and *exploratory sequential mixed methods* (Creswell 2014: 15, 16. My italics). For this thesis, in line with what has been exposed, the researcher selected convergent parallel mixed method:

[The] convergent parallel mixed method is a form of mixed methods design in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In this design the investigator typically collects both forms of data at roughly the same time and then integrates the information in the interpretation of the overall results. Contradictions or incongruent findings are explained or furthers probed in this design (Creswell 2014: 15, my italics).

In brief, the mixed method that will guide the researcher in this master thesis is based on a pragmatic knowledge claim, i.e., problem-centred, pluralistic, and real-world oriented; the procedure involves a collection of both quantitative and qualitative sources, followed by a mixing of the data collected under an embedded mixing procedure. Qualitative data overcomes quantitative data since this last one acts as a tool to facilitate the overall analysis of the research. The researcher believes that a combination of diverse types of data will provide a better grasp of the research problem; leading to a more accurate analysis of it.

2.4. Data Collection

Following the researcher intention of specialising in Arctic Studies, its passion about the Far North and the work developed during this Master, in the absence of a defined problem formulation, the researcher decided to start its research taking into consideration the future of the region. With the purpose of gaining inspiration for this

master thesis, on last November the researcher participated in the annual Arctic Future Symposium, organised since 2010 by the International Polar Foundation, a forum that brings together a wide variety of Arctic stakeholders. The 2015 symposium looked at the regional development in the Circumpolar North, focusing in blue growth, innovation, sustainability, and environmental security. The researcher has also dug in the freshly released Arctic Year Book 2015. After a literature review the researcher begun to build its research topic around China and their interests in the Arctic region. Later, helped the researcher to determine whether the topic is worth studying, and providing enough insight easing the researcher to limit the scope of its research.

In order to gather as much relevant and recent information on the topic as possible, and answer the research question, the thesis is a compilation of both qualitative and quantitative data, following a mixed method research with an embedded approach, as it was explained earlier on. A descriptive and analytical research is carried out to understand China's strategic interests in the Arctic.

As former mentioned, qualitative data will overwhelm quantitative data throughout this thesis. "Qualitative methods rely on text and image data", focusing on processes and meanings that cannot be examined or measure in amount, quantity or frequency (Creswell 2014, 183). Conventional data collection procedures in qualitative research are observations, interviews, review of documents, and audio-visual materials (Ibid.: 190). In this thesis the qualitative source used will be essentially the review of documents. Therefore, the researcher approach to gain knowledge will be through a collection of articles written on-line, research papers, books, journals, governmental reports, and information from government websites; focusing essentially on four angles: civil societies, governmental resources, journalistic articles, and think tanks. With this qualitative approach the researcher seeks to offer the reader an interpretative and realistic approach, aiming to provide a theoretical and analytical frame of China's strategic interests in the Arctic. The researcher decision to take into consideration those four angles of research – civil societies, governmental resources, journalistic, and scholars – is to ensure the integrity and credibility of the data collected. Although the information gathered from the internet is useful, the researcher needs to consider the credibility of the source. Also the information provided by governmental websites is very likely to be biased, as the data from civil societies. Furthermore, a variety of journals and literature written by International

Relations scholars provide a deep knowledge of the topic. All the gathered data combined will help the researcher to draw and reach an objective conclusion of the research question.

Quantitative data will give support and bring effectiveness to the qualitative data, when embedded on it. The quantitative approach is used to quantify in numbers and issue of importance to be. In social sciences is often transformed in statistics. “The reduction to a parsimonious set of variables, tightly controlled through design or statistical analysis, provides measures or observations for testing a theory” (Ibid.: 155). In this thesis quantitative approach will focus on statistical and analytical data performed in selected topic. The quantitative data will cover on economical welfare related to China, other data that may reflect the Chinese economy, linked with the NSR and with the case study.

Needless to say that since this thesis examines an ongoing situation in international relations, new events might take place during this project writing, which the researcher will try to follow up and accommodate appropriately.

2.5. Theoretical framework

The analytical framework of this thesis focus on theoretical framework that will be used to clarify the concepts of *national interest*, *great power*, and *the stages of economic growth*. The researcher will use a combination of different theories of international relations (IR) that will be applied to analyse the data collected and thereafter reach a conclusion. The researcher is looking at China from different angles, therefore its behaviour and positions differs in terms of IR.

Any theory of IR has its advantages and limitations, what makes the use of each of them alone not sufficient and does not cover the overall of the problem. Any theory cannot claim to be able to present universal solutions to universal problems. Nevertheless, each theory of IR gives its contribution to understand the contemporary world, and to address the challenges that the world has been facing. Therefore, the researcher has decided to use collectively different IR theories, trusting that these theories, all together, will provide enough theoretical knowledge to analyse the problem at hands, and consequently reach a more accurate conclusion.

The researcher has selected realism, a mainstream IR theory, to clarify the concept of national interest. With similar purpose, neorealism was selected to explain the concept of great power, developed by Kenneth Waltz. The theories of soft power and Rostow's Stages of Economic Growth will also guide the theoretical framework of this research. The basic assumptions of each theory will be explained.

Realism is a mainstream theory of IR; it has been the dominant theory of world politics since the beginning of academic IR. "Realism is the theoretical approach that analyses all international relations as the relation of states engaged in the pursuit of power" (Baylis et al. 2014: 542). This theory has been able to survive and adapt through time. The main idea of Realism focus on the interests of the state – the national interest. The state is seen as the key actor in international politics, chasing power in military strategic terms. Realists scholars consider war as a natural condition of world politics (Ibid.: 100, 101). "Realism taught foreign policy officials to focus on interests rather than on ideology, to seek peace through strength, and to recognize that great powers can coexist even if they have antithetical values and beliefs" (Ibid.: 100).

The more consolidated expression of realism is brought by Hans Morgenthau (1948), after the Second World War, with his publication of *Politics Among Nations*. The main idea of Morgenthau is that politics are governed by laws that are created by humans; the concept of national interests, defined in terms of power, is used to understand international politics (Ibid.: 103). Yet, transformations in the international environment, as the cold war, the expansion of international organisations, and the acceleration of the globalisation process, have tackled many scholars, realists and others, who began to criticise and review Morgenthau's theory, presenting different visions of realism, as the structural realism (also known as neorealism) of Kenneth Waltz (Ibid.).

Kenneth Waltz is the founder of the neorealist theory of IR. In 1979 he published *Theory of International Politics*. Waltz main idea is that "anarchy leads to a logic of self-help in which states seek to maximize their relative power positions" (Ibid.). According to neorealism, international politics is basically a fight for power. The relative distribution of the power in the world international system is fundamental to understand international outcomes such as war, peace, political alliances, and the

balance of power (Ibid.: 104). In this sense, neorealism tries to identify the great powers that exist at a certain time (Ibid.). They use a set of five criteria to determine a great power: population and territory; resource endowment; economic capability; political stability and competence; and military strength. The concept of great power is thus applicable to a state with a strong political, cultural and economic influence over other states near them and across the world.

The researcher will use in the analysis the concept of national interest from the realistic school, and Kenneth Waltz' definition of great power to analyse China's strategic moves towards the Arctic region.

Finally, the researcher will apply Rostow's Stages of Economic Growth (also known as Rostovian take-off model), a model of economic growth, highly relevant to clarify the modernisation stages of China. It is believed that by determining the stages of modernisation of the Chinese economy will give a further understanding of the incentives and motives behind the Chinese investments in the Arctic.

Walt Whitman Rostow, an American economist, published in 1960 *The Stages of Economic Growth: a non-communist manifesto*, where he presented what turned to be one of the most historical models of economic growth. Rostow argues that economic growth follows a certain pattern in all economies as they went through industrialisation (Baylis et al 2014: 9). According to Rostow, economic growth consists of five elementary stages, which vary in length: (1) traditional society, (2) preconditions for take-off, (3) take-off, (4) drive to maturity, and (5) age of high mass consumption (Rostow 1960: 4). Those stages are not only descriptive, they have an intrinsic logic and continuity. Rostow intended not only to present a component of the dynamic theory of production; he also argues that these stages of economic growth were designed to address a number of issues: "[t]he concept of sequential stages of economic growth was initially presented (...) as a way of looking at the contemporary world that might illuminate a number of quite specific questions of wide interest and concern in the late 1950's" (Ibid.: x).

In this thesis the researcher presents the theory of soft power as an alternative theoretical framework, focusing on China's use of soft power to gain regional influence in the Far North. In this regards, the investigator will draw on Joseph Nye's definition of soft power, to analyse whether, and how, China has been able to use

different soft power strategies to acquire legitimacy for its objectives. The researcher could have study if China has been proficient to follow its national interests via soft power strategies.

The concept of soft power was first developed in 1990 by Joseph Nye in *Bound to Lead: The Changing Nature of American Power*. To understand this theory, it is crucial to establish what power is. According to Nye, “[p]ower is like the weather. Everyone depends on it and talks about it, but few understand it” (Nye 2004: 1). The Oxford Dictionary (2016) broadly defines power as the capacity to do something. This general view refers to power as the ability to get the outcomes one wants. Also, the same dictionary presents power as the ability to shape the behaviour of others to make those outcomes to happen. Nye adds, there are many ways to influence the behaviour of others, as by coercion, induction, attraction, or co-optation (Nye 2004: 2). The author divided the concept into hard power and soft power, according to the means used to influence people’s behaviours. Therefore, hard power might hinge on inducements or threats, while “[s]oft power rests on the ability to shape the preferences of others” (Ibid.: 5).

Nye developed the soft power theory to bring awareness for the importance of persuasion and attraction in world politics. The core idea of the theory is to let people to agree with you rather than trying to force them to do what you want through coercive or military power. Considering that the world has been changing, Nye highlights the changing of the nature of power, discussing that conventional forms of power, as military and economic power, are only one dimension of contemporary power structure (Ibid.: 8, 9).

Henceforward, to understand the Chinese strategic interests in the Arctic, as stated before, the researcher will combine these IR theories and apply them to the collected data.

2.6. Research structure

In order to answer the problem formulation, this project is divided in six chapters, as described below:

Chapter 1, *Introduction*, gives a general description of the field of interest, the background of the topic examined in this thesis, and puts forward the problem formulation, as well as the underlining questions, in order to reach a more accurate conclusion. This section is complemented by additional subchapters, as the abstract and the list of abbreviations, which will facilitate the reader's full comprehension of the text.

Chapter 2, *Methodology*, aims to give a logical framework for this thesis, providing a clarification of the methodological theoretical philosophy followed by the researcher. It also gives a comprehensive overview of the research design and an explanation of the embedded mixed-methods research chosen. In this chapter the researcher gives an explanation of the analytical framework and data collected.

Chapter 3 outlines the *Theoretical Framework*, contextualising this research within the field of international relations. The main theories are realism and neorealism; they will be the foundation of the research analysis. The researcher also uses Rostow's Stages of Economic Growth to guide its analysis of China's Economic Growth. In the end of the chapter the researcher presents the theory of soft power theory, as an alternative theory for the study.

Chapter 4 *Empirical Analysis* is where the researcher presents its findings, analyses and discuss, applying the theories already described in former chapters.

Finally, Chapter 5, *Conclusion*, summarises the findings of this thesis. The researcher reviews the aim of its research, bringing to a close the analysis and concluding that the research problem with the theoretical arguments presented in former chapters.

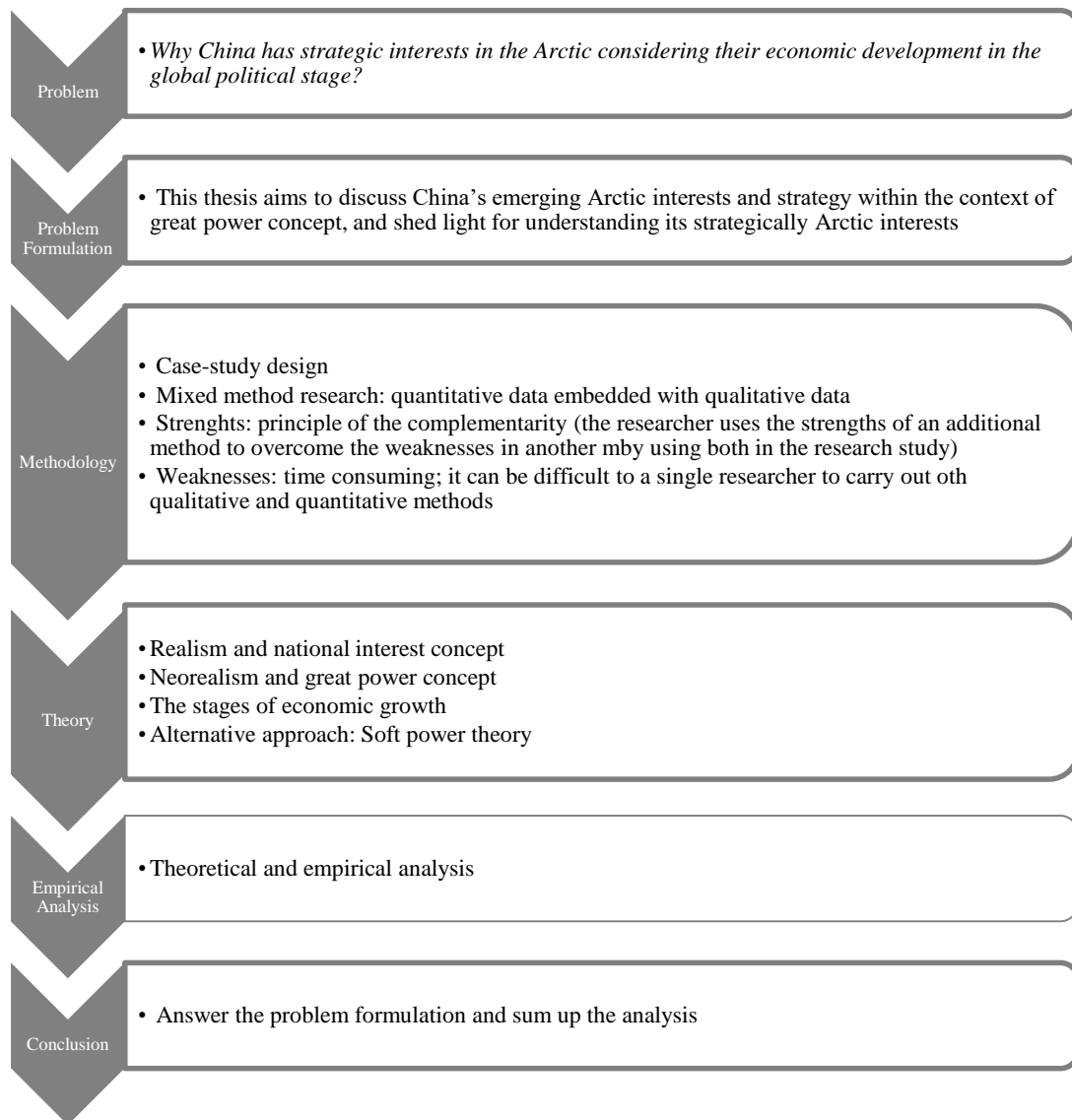


Figure 2: Structural drawing of this thesis.

Chapter 3.

Theoretical Framework

The aim of this chapter is to offer an explanation of important concepts and theories that the researcher uses to address effectively its problem formulation under the scope of a social science investigation. The theoretical framework is the structure that supports a theory of a research study, placing the foundation to work thoroughly with scientific concepts. By using this framework, the researcher expects to explain, predict, and understand phenomena under study (Labaree 2016). Therefore, the theoretical framework is used to drive, later on, this thesis analysis, serving as a basis to test the level of assertion between the theoretic knowledge and empirical data collected. In this section the researcher puts forward the concepts of national interests and great power, by using those two theories of international relations, i.e., realism and neorealism. Rostow's model of economic growth is also developed to give a notion of the Chinese economy. Also, the researcher gives the framework of the theory of soft power, as an alternative theory, that could have been used to analyse the problem formulation.

3.1. A realistic national interest

National interest has become a common term when talking about world politics. National interest is a core concept in International Relations; a concept “invoked by realists and state leaders to signify that which is most important to the state – survival being at the top of the list” (Baylis et al 2014: 539). All nations are constantly acting in accordance or securing their national interests. The researcher finds compulsory clarify the theory of realism, to understand the context on which the concept was developed.

Realism is considered to be a mainstream theory of IR; it has been the dominant theory of world politics “[b]ecause it provides the most powerful explanation for the state of war that is the regular condition of life in the international system” (Baylis et al 2014: 99). Morgenthau defined international politics as the struggle for power (Morgenthau 1948 in Baylis et al 2014: 101). Realists recognise the state as the key actor in international relations, who seeks for power (Baylis et al 2014: 100). The state always acts pursuing the national interests, which is, in its most basic form, the desire to survive; but also in quest for power, considered as an instrument through which states ensure their survival in the world-wide environment (Ibid.: 101). Together with *statism* and *survival, self-help* is another core element of realism. Realists believe that states can only rely on their own ability for ensuring their survival and persecution of interests (Ibid.). It means if a state feels its sovereignty threatened, it should increase its military forces. However, the international

context is dangerous and very often unstable; states have to develop their security strategies in order to warrant its survival. Realists consider the balance of power an essential mechanism to maintain the state. The most common definition holds that if the survival of a state is threatened by a hegemonic state or coalition of stronger states, they should join forces, establish a formal alliance, and seek to preserve their own independence by checking the power of the opposing side.

The concept of national interest was first developed by Hans Morgenthau, a classical realist scholar, who presented in his *Politics Among Nations* (1948) the more consolidated expression of realism. Morgenthau defined the theoretical perspectives of realism, pointing out six principles of political realism (Morgenthau 1948: 4):

1. “politics (...) is governed by objective laws that have their roots in human nature”;
2. “statesmen think and act in terms of interest defined as power”;
3. “interest determining political action (...) depend upon the political and cultural context within which foreign policy is formulated”;
4. “[r]ealism (...) considers prudence (...) to be the supreme virtue in politics”;
5. “nations are entities that pursue their interests as defined by power and should not be judged by universal moral principles”
6. “political realism rejects the legalistic-moralistic approach to international politics”.

In accordance with the realism of Morgenthau, the foreign policy of each country is formulated in the basis of its national interest, in persecution of the state goals. A state always justifies its movements in the international context on the basis of its national interest. Thus, the behaviour of a certain state is conditioned and governed by its national interests. Therefore, it is essential to understand the meaning and contents of the national interest of certain state when analysing the state actions in the international system.

3.2. A neorealist Great Power

The scholars of IR do not agree in terms of great power concept. Through times many scholars had referred to great power as super powers or emerging powers. However, IR scholars agree that historically there are countries that have a wider effect on world

politics than other countries. Those are the great powers. The researcher proposes a theoretical framework for understanding the rise of China, as a great power, in the context of neorealism of Kenneth Waltz. It is thus crucial to offer a definition of the concept *great power*.

[T]he number of consequential states is small. From the Treaty of Westphalia to the present, eight major states at most have sought to coexist peacefully or have contended for mastery. Viewed as the politics of the powerful, international politics can be studied in terms of the logic of small-number systems (Waltz 1979: 131 in Rynn 2001).

Both individually and in interaction with one another, those states that historically have been called the great powers and are known today as the superpowers establish and enforce the basic rules and rights that influence their own behavior and that of the lesser states in the system (Gilpin 1981: 30 in Rynn 2001).

Great powers cannot provide an explanation of international affairs; but they bring a better understanding of the history and ongoing processes. “Since the set of countries that are known as the Great Powers have a preponderant influence on the processes of international relations, it would seem reasonable to know how a Great Power is defined” (Rynn 2001: 2). General rule in IR the state is seen as the main unit of analysis. However, the emphasis on great powers has replaced the focus given to the state, conceived of as an abstract entity.

The definition of the concept of *great power* does not have a consensus amongst IR scholars. Very often the status of *great power* is given to a country by historical reasons in a certain period of the time, making it an intuitive quality of the states. In other cases, the unit of analysis needs to be wisely explained. Rynn calls attention to “the definition of the most important unit of analysis within an area of study [which] should be consistent with, if not integral to, the theory of which it is a part” (Ibid.).

Great power by consensus

In IR the status of great power is given considering two main criteria: by consensus or by a list of capabilities that characterise national power. A state is considered a great power by consensus when there is agreement that certain state was a great power for a specific period of time. Waltz also refers the historical consensus when determining a great power:

[h]istorically, despite the difficulties, one finds general agreement about who the great powers of a period are, with occasional doubt about the marginal cases (...). Counting the great powers of an era is about as difficult, or as easy, as saying how many major firms populate an oligopolistic sector of an economy. The question is an empirical one, and common sense can answer it (Waltz 1979: 131 in Rynn 2001).

There is no defined consensus among the scholars about great powers. Each author considers different pre-conditions to attribute the status. Even though, there is consensus in short times periods. Rynn has done a study of how different scholars attribute this great power status, bringing together assumptions from Kennedy, Levy, Singer, Waltz and Wight (Rynn 2001). He concluded that there is no consensus on who is a great power and when; he adds that “[s]ome scholars attempt to enumerate the list of capabilities which are indicators of international political power” (Ibid.: 11). Likely, great powers would therefore have more power than other countries.

Great power by capabilities

In 1979 Kenneth Waltz published *Theory of International Politics*, addressing international affairs with a neorealist view. Waltz main idea is that “anarchy leads to a logic of self-help in which states seek to maximize their relative power positions” (Baylis et al 2014: 103). Neorealist scholars argue that the fight for power is the basis in international politics. Waltz determines a set of five criteria to identify a great power: population and territory; resource endowment; economic capability; political stability and competence; and military strength. The concept of great power is thus applicable to a state with a strong political, cultural and economic influence over other states near them and across the world.

3.3. Rostow’s Model of Economic Growth – the five stages of economic growth

The American economist Walt Whitman Rostow, known as university professor and adviser at the White House, has published in 1960 *The Stages of Economic Growth: a non-communist manifesto*, one of his most famous theories on economics. Rostow “saw a clear pattern to economic development” (Baylis et al 2014: 9). He suggested a series of economic growth in a capitalist society, finishing with the ascendancy of high mass consumption. The theory of Rostow immediately received a lot of attention from the international

community. Released at the pick of the Cold War, Rostow's theory came in defense of capitalism, an alternative to communism in the developing world. As Rostow denotes "[t]he concept of sequential stages of economic growth was initially presented (...) as a way of looking at the contemporary world that might illuminate a number of quite specific questions of wide interest and concern in the late 1950's" (Rostow 1960: x).

Rostow believes that it is possible to simplify the process of economic growth, breaking it down in five elementary stages, as illustrated in the figure 4: (1) *traditional society*, (2) *preconditions for take-off*, (3) *take-off*, (4) *drive to maturity*, and (5) *age of high mass consumption* (Rostow 1960, emphasis added). The stages of economic growth have an intrinsic logic and continuity, varying in length. According to Rostow these stages are arbitrary to some extent, and his intentions to design them are an exaggerate attempt of the standardisation of the process of modernisation, as well as the distinctiveness of each nation in this growth process (Ibid.: 1).

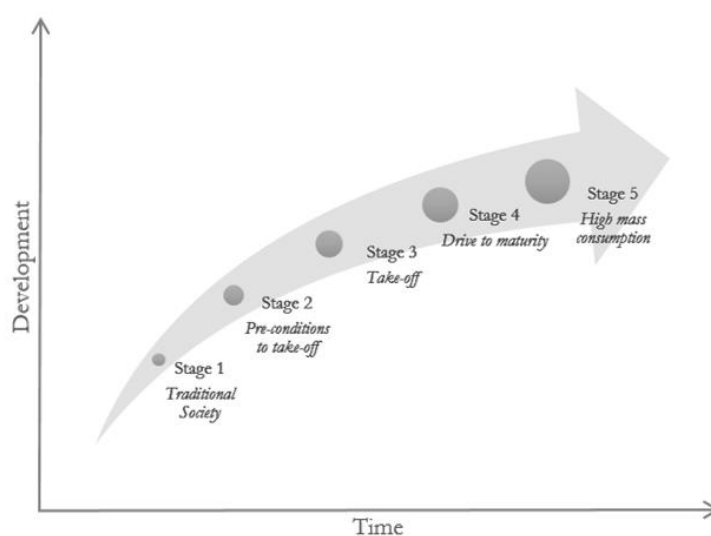


Figure 3: Rostow's Model of Economic Development.

Despite the fact that economic change has a political and social impact, Rostow stresses that economic change itself is a consequence of social, political and economic forces. Therefore, although his theory of Stages of Economic Growth has a main focus on economics, also recognises the influence of social and political factors (Ibid: xxii).

Stage 1. The Traditional Society

The first stage of economic development, *Traditional Society*, is defined by Rostow as a pre-Newtonian state stage, where the state does not have knowledge or science recognition, either attitude towards the physical world as promoted by Newton. In the absence of recognition of Newtonian view, the state is not fully capable within productive manipulation, leaving to the society limited production functions. Rostow describes the traditional society as it is typically characterised by a subsistent, agriculture based economy, with intensive labour and low levels of trading. Also, is very much influenced by hierarchy and family clans, and the social mobility is limited (Jacobs n.d., Rostow 1960: 4).

Stage 2. The Preconditions for Take-off

Preconditions for take-off is Rostow's second stage of economic growth is a transition stage and describes how the preconditions for the following stage, *the take-off*, are developed. During this period the Traditional Society is transformed in the ways required to move forward to the Take-off, and by doing it be able to use the modern science. In general, this is a long process. In line with Rostow, a state develops the Preconditions for Take-off when has the required trading possibilities, social and political structure, and access to natural resources. Historically, some societies have experienced in this stage some external intruders seeking to make profit (Rostow 1960: 6). This stage is marked by the notion that economic growth is not only possible but necessary. Rostow argues that the states come to believe that economic growth has a great purpose as the preservation of national dignity, improving the general welfare, or providing a better life for children (Ibid). Therefore, the society starts developing trade and business at a more national and international level, rather than regional. The economy and industry of the state are subjected to an extensive development during this stage. However, the social values and political apparatus of the society also need to develop from the Traditional Society stage, if not there is a high risk of the state be stuck in this transition stage (Ibid., 7).

Stage 3. Take-off

The stage of *Take-off* is argued by Rostow to be the turning point in the life of contemporary societies, and is the utmost stage of economical development. This stage is characterised by the overcome of the obstructions to steady growth from the *Preconditions*

for Take-off, and expansion of economic progress which comes to dominate the society. Rostow refers technology as the driver of the economic development, notwithstanding the strong political power which is ready to take as priority the modernisation of the economy (Ibid.; 8).

Throughout the *Take-off* new industries develop very fast and likely the profit from these industries will be repeatedly reinvested in new industries. This cycle creates a need for a massive workforce and other types of manufactured goods. Also those fresh established industries require a wide variety of support services and a development of the inner areas. Rostow model recognises that the economic development creates an increase of income for the majority of inhabitants within the society, giving them the opportunity to create savings and to invest their money within the progress of the modern sector. These investments will bring possibilities to expand and promote the flow of investments in the private sector (Ibid.).

In few words, the *Take-off* stage of Rostow is characterised by a short time of intensive growth, in which industrialisation occurs, and the society focus on a new industry.

Stage 4. The drive to maturity

Rostow describes the forth stage of economic growth as *the drive to maturity*, which takes place over a long period of time. Shortly, during this stage the societies' standards of living rise, as the use of technology and the state economy grows. According to Rostow, the state, with a regularly growing economy, seeks to extend the modern technology to the overall of its economic activity. The state will steadily invest part of the national income to insure a solid output. By this time, the state economy will naturally find its place in the global economy. Furthermore, Rostow argues that this stage will demand that goods previously imported will start being produce within the country and import demands will change (Ibid.: 10).

The society present at *the drive to maturity* stage will focus on more sophisticated, advanced and technologically more complex processes than the societies of *the take-off* stage. As analysed by Rostow, during *the take-off* stage the industry is more focused on iron, coal and heavy engineering industries; whereas at *the drive to maturity* stage the states are

mainly focus on production of machine tools, chemicals and electrical equipment. He states that developed states at *the drive to maturity* stage use their technological and entrepreneurial skills to move beyond the initial industries that have started *the take-off* process and to produce whatever they want to produce. Correspondingly, Rostow defends that a state does not have to have all the raw materials required to produce a certain item. By this stage the state should be able to satisfy those needs through economic or political intervention (Ibid. 10).

Stage 5. The Age of High Mass-Consumption

Finally, *the age of high mass-consumption* is Rostow's last stage of economic growth. At this point the society has desires that go way beyond covering the basic survival needs. The focus holds on production with high quality and diffusion of services on a mass basis. This stage is characterised by the concentration of the population in urban areas, who are employed in offices or in skilled factory jobs, reflecting the structure of the labour force at this stage of development.

The states prioritise welfare and security, benefiting the masses. Rostow highlights that such developed societies begin to focus on their military force and foreign policy in the pursuit of external power and influence on the international stage.

Societies at this stage will typically choose to allocate their increased resources into welfare and security and in that way benefit the masses. Another typical feature of this stage is that the society will begin to focus their increased resources on their military and foreign policy in the pursuit of external power and influence on the international scene. "The Age of Mass-Consumption" is characterized by the possibility and necessity of providing the inhabitants with a choice in many aspects of life. Rostow's thesis considered that Western countries are at this last developed stage, where the states economy are very much successful in a capitalist system, defined by mass production and consumerism (Ibid.: 12).

Limitations

Simon Kuznets has criticised Rostow's theory of economic growth. He argues that Rostow theory does not give a clear the distinction between pre-conditions, take-off and

maturity stages. Instead, it is expected that pre-conditions and take-off stages will be similar (Kuznets 1965: 40-1 in Smith 2015: 15). Kuznets refers that Rostow's characterisation of the maturity stage as self-sustaining is too simplistic, and needs clarification (Ibid). Also, the high mass consumption stage is lightly defined, referencing a country who has experienced a not determined level of social affluence. Rostow's model refers to those five stages defining them by a theoretical apparatus instead of having some defined criteria. This expresses how difficult is to establish a historical pattern of development experienced by different states, with different historical backgrounds. Kuznets explains his criticism of the model by arguing that "the analysis of the take-off and pre-conditions stages neglects the effect of historical heritage, time of entry into the process of modern economic growth, degree of backwardness, and other relevant factors on the characteristics of the early phases of modern economic growth in the different 'traditional' countries" (Ibid).

Notwithstanding the critiques addressed to Rostow's model of the Stages of Economic Growth, it is still one of the most cited development theories. Although it is a really old theory, the researcher finds it to be perfectly applicable in today's society. The researcher strongly agrees with Rostow beliefs of the economy being very much influenced by political and societal factors.

3.4. Soft power theory as an alternative approach

The Soft Power theory was first developed by Joseph Nye in his *Bound to Lead: The Changing Nature of American Power*. Nye core idea is that in modern times states are no longer the only significant actors in world politics; there is no more room for the traditional view of the state with military power to ensure survival. Nye argues that nowadays states are dependent in others instruments to achieve their goals (Nye 1990: 157, 160).

To understand Nye's theory, it is foremost important to define what power is. Nye argues that "[p]ower is like the weather. Everyone depends on it and talks about it, but few understand it" (Nye 2004: 1). The Oxford Dictionary (2016) gives a broad definition of the concept, defining power as the capacity to do something. Power is referred as the ability to get the outcomes one wants. Power is also the ability to shape the behaviour of others to make those outcomes happen. Nye defines it as "the ability

to affect others to obtain the outcomes you want (Nye 2008: 94). There are many ways to influence the behaviour of others, as stated by Nye, as coercion, induction, attraction, or co-optation (Nye 2004: 2). Nye divides the concept of power into hard power and soft power, considering the means used to influence people's behaviours. While hard power centres on inducements or threats, "[s]oft power rests on the ability to shape the preferences of others" (Ibid.: 5). Soft power is based on attraction. States choose to follow other certain state through attraction.

"[S]oft power is attractive power. In terms of resources, soft-power resources are the assets that produce such attraction" (Nye 2004: 6). Nye determines three sources of soft power: (1) culture; (2) political values; and (3) foreign policies (Nye 2004: 11). Nye sees culture as a soft power source of a country when it is attractive to others. He suggests there is a great chance to get the desired outcomes when the values of the culture of a certain country are universal, i.e., when the policies of the country promote interests and values shared by others. (Ibid). Another important resource of soft power are the government policies.

Nye developed the soft power theory to bring awareness for the importance of persuasion and attraction in world politics. The core idea of the theory is to let people to agree with you rather than trying to force them to do what you want through coercive or military power. Considering that the world has been changing, Nye highlights the changing of the nature of power, discussing that conventional forms of power, as military and economic power, are only one dimension of contemporary power structure (Ibid.: 8, 9).

Limitations

The theory of soft power has been receiving criticisms from a number of IR scholars, pointing out limitations not only of the concept itself but also in its applicability in the international system, considering foreign policy objectives and national interests. Niall Ferguson, for instance, argues that the concept of soft power is in its essence too soft to achieve national interests. Therefore, Ferguson disagrees with Nye when he argues that the United States can influence the world affairs with its soft power (Dutta n.d.). Takeshi Matsuda criticises Nye's soft power arguing that the use of soft power should be based on bilateral cultural exchange and not only in unilateral cultural imperialism as Nye claims (Ibid.). In addition, Janice Mattern questions the idea of soft power being really soft, suggesting that the notion of power being soft is an illusion (Ibid.).

Chapter 4.

Empirical Analysis

This chapter aims brings together the data collected by the research and the theoretical framework. The researcher applies the theories of international relations previously mentioned in former chapters, taking into consideration the main topic of this thesis: China's interests in the Arctic region.

4.1. China's economy overview

China's economic expansion has been characterising the rise of China within the international system over the last decades. The Chinese economy has been experiencing steady growth since 1979, at an average of 7 up to 10 percent a year (figure 4).



Figure 4. GDP growth (annual %) of China from 1979 to 2015. Source World Bank (2016e).

Recently, China is shifting to a lower but still rapid and likely more sustainable growth path. Economic growth has slowed since 2010. The Wall Street Journal was announcing in earlier 2015 that “China’s economic growth slowed to 7.4% in 2014, downshifting to a level not seen in a quarter century and firmly marking the end of a high-growth” (Magnier et al 2015). The World Data Bank reports a GDP of 6.9% in 2015, showing that the growth of the economy continues to slow.

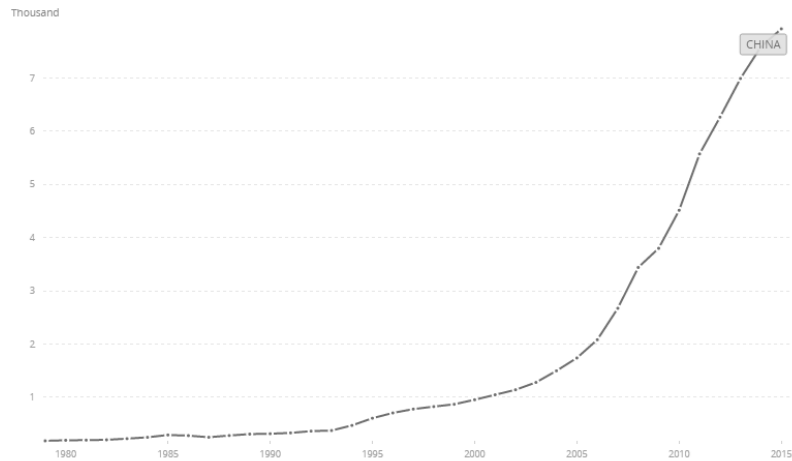


Figure 5. GDP per capita (current US\$) of China from 1979 to 2015. Source World Bank (2016f).

The IMF forecast to the growth of Chinese economy is expected to slow to 6.3% in 2016, “primarily reflecting weaker investment growth as the economy continues to rebalance”, they argue (IMF 2016). This year aim of Chinese government is to grow up to 6.5 to 7%, announced by the premier Li Keqiang earlier this year (The Guardian 2016).

Last July the fresh released Q2 GDP of 2016 of 6.7%. “Second quarter Gross Domestic Product (GDP) was up 1.8 percent from the first quarter, Reuters reported” (CNBC 2016). After some adjustments, as stated in the NBS (2016), in the first half of 2016 the “[Chinese] economy has achieved moderate and steady development”:

faced with complicated domestic and external conditions and mounting downward economic pressure, under the leadership of the Central Party Committee and the State Council, all regions and departments have fully implemented the five concepts of innovative, coordinated, green, open and shared development, accelerated the supply-side structural reform and encouraged mass entrepreneurship and innovation while appropriately expanding the aggregate demand (NBS 2016).

The Chinese economy has grown 6,7% in the first six months of the year, “topping expectations for an expansion of 6,6%”. (Business Insider 2016). The NBS announced a preliminary estimation of the GDP of China in the first half of 2016 of 34,063 billion yuan (approximately 5.10315102 trillion USD), representing a growth of 1,8% during the second quarter of 2016 (Business Insider 2016, NBS 2016).

Determining China's Stage of Economic Growth

Given the research findings and based on Rostow's theory *The Stages of Economic Growth* the researcher will attempt to determine the Chinese stage of economic growth.

The Chinese society has been experiencing many changes for the last three decades. As shown by the research findings, their economy has been rapidly growing since the 1980s. Therefore, analysing the economic development of China and determining the growth stage is particularly interesting. However, for the last decade the growth pattern has slowed down and has become more stable. The Chinese society has been through a period of booming, with an exceptional development and growth. Considering those regular growth rates of their economy, all the conditions indicate that Chinese society is now at the fourth stage of growth, *the drive to maturity*. Rostow describes this level of development as the stage where the economy of the society is settling at a regularly growing rate. Moreover, *the drive to maturity* is the stage of growth immediately after the stage of *take-off*, in which China has been at.

As developed in the theoretical chapter, in the stage of *the drive to maturity* those typical industries of a state at the *take-off* stage still exist. Considering Chinese society industries focusing on mining and metals, coal, are still very much valuable in China (Ibid). Although, the Chinese society has engaged on more developed industries such as producing chemicals, transportation of equipment, electronics, petroleum, and footwear. As predicted by Rostow's theory, lately the Chinese industry shows a tendency towards modernisation.

The researcher knows from before that such production requires high capabilities of the work force, which is considered as a development within the Chinese industry. Rostow argues that "the production of items like machine tools, chemicals and electronic equipment [are] a characteristic of the developmental stage of *the drive to maturity*" (Rostow 1960).

As the researcher mentioned previously, Rostow says that states that developed states at *the drive to maturity* stage use their technological and entrepreneurial skills to move beyond the initial industries that have started *the take-off* process and to produce whatever they want to produce.

The Rostow description of the fourth stage of growth fits very well with the current status of China. For instance, although new industries way more advanced are settling, original industries still exist and they have a significant role in the industry of the society.

China aspires to improve and develop even further within their modernised industry. When doing that, China will need to use their entrepreneurial and innovative skills. Rostow's theory claims that a society at the stage of *drive to maturity* has a certain level of entrepreneurship, enabling the state to develop their industry and produce whatever the society wants.

Considering the solid development of its society, the researcher considers that China must have a high level of entrepreneurship, even though it is a fact that entrepreneurship and innovation are not strong characteristics among the Chinese state. It is known that the Chinese government largely encourages the education of engineers, instead of promoting a general creativity. Chinese people are highly skilled copying products already invented and designed, instead of developing and creating new ideas and products.

Currently, "China's economy has slowed steadily as the ruling Communist party tries to replace a model based on trade and investment with self-sustaining growth driven by domestic consumption". Also, the Chinese government aspires of great development within the welfare area, showing a tendency towards a development on the next stage of Rostow's model, *the High Mass Consumption* stage.

4.2. China's energy consumption

China has a population of 1.371 billion people what makes it the world's most populous country (World Bank 2016a). Has researched before, the country has been experiencing a rapidly growing, which is believed that has driven the country's high energy demand and the quest for securing energy resources (Li and Bertelsen 2013). "China's growing appetite for international trade drives its mounting demand for resources to sustain its economic growth" (Ibid., 3).

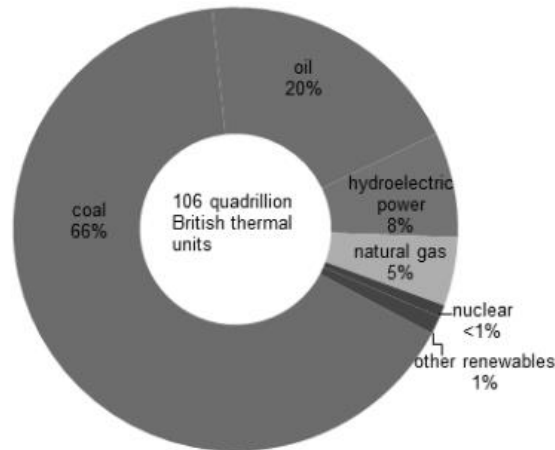


Figure 6. Totally primary energy consumption in China by fuel type, 2012. Source: U.S. Energy Information Administration.

In 2012 China as consumed 66% of coal and 20% of oil. The country has made some changes to diversify its energy supplies, but has only consumed 8% of hydroelectric power and 5% natural gas.

Chinese government is trying to change the patterns of primary energy consumption. As it is stated in the EIA report,

The Chinese government plans to cap coal use to 62% of total primary energy consumption by 2020 in an effort to reduce heavy air pollution that has afflicted certain areas of the country in recent years. China's National Energy Agency claims that coal use dropped to 64.2% of energy consumption in 2014. The Chinese government set a target to raise non-fossil fuel energy consumption to 15% of the energy mix by 2020 and to 20% by 2030 in an effort to ease the country's dependence on coal. In addition, China is currently increasing its use of natural gas to replace some coal and oil as a cleaner burning fossil fuel and plans to use natural gas for 10% of its energy consumption by 2020 (EIA 2015)

With a high consumption of coal, China is the world's leading energy related CO₂ emitter “releasing 8,106 million metric tons of CO₂ in 2012” (Ibid.). However, Chinese government is very much engaged in address these problems with new policies. According to the country's 12th Five-Year Plan (2011-15), China's government intends to reduce carbon intensity (carbon emissions per unit of GDP) by 17% between 2010 and 2015 and energy intensity (energy use per unit of GDP) by 16% during the same period (Ibid.).

China is also the world's second-largest consumer of oil and recently has become the largest net importer of oil in 2014 (figure 6).

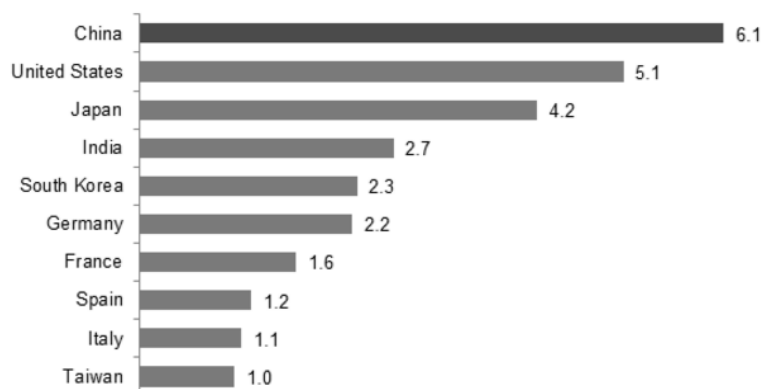


Figure 7. Top ten annual net importers, 2014 (million barrels per day). Source: U.S. Energy Information Administration

According to the *Oil & Gas Journal* (OGJ 2015), China has 24.6 billion barrels of proved oil reserves, up almost 0.3 billion barrels from the 2014 level and the highest in the Asia-Pacific region (excluding Russia). “China’s total petroleum and other production, the fourth-largest in the world, has risen about 50% over the past two decades and serves only its domestic market” (EIA 2015).

Even though, the production growth has not kept pace with demand growth during this period. “In 2014, China produced nearly 4.6 million barrels per day (bbl/d) of petroleum and other liquids, of which 92% was crude oil and the remainder was non-refining liquids and refining gain” (EIA 2015). According to EIA, by the end of 2016 China’s oil production will increase slightly to higher than 4.6 million bbl/d (EIA 2015).

China’s energy policies are thus dominated by the country’s growing demand for oil and its reliance on oil imports (EIA 2015). The consequences of their energy consumption are felt world wide, specially on the world’s energy prices (Li and Bertelsen 2013: 3).

The Arctic as an energy supplier and shipping route

According to the US Geological Survey (2008), a fifth of the world’s unexplored but exploitable gas and oil reserves are likely to be in the Arctic region. The political stability of the Arctic is a significant quality that opens up the possibilities to diversify global energy supply, as Li and Bertelsen state (2013: 8).

Climate change is seen as a driver in these processes together with technological innovation: not only opens up the possibility of exploit new resources freshly accessible, as it open new transport routes between the Norwegian and Russian Arctic and Asian markets (Ibid.).

Primarily, the researcher considers important to define *the Arctic*, as it constitutes the very space dimension of its study's research question. The Arctic has become a focus area in the realm of international relations since the turn of the new millennium. But what is the Arctic? And what boundaries should one consider when studying it? There are multiple definitions of the Arctic what makes the study of the region confuse. There are “essentially three ways of defining the north: by geography, by function and by narrative” (Tamnes and Offerdal 2014: 2). The geographic definition is the most used when referring the Arctic, considering it the area above of the Arctic Circle, i.e., 66° 32'N latitude. The researcher decided to consider in this thesis the Arctic as defined by the Arctic Monitoring and Assessment Programme (AMAP), a working group of the Arctic Council (AC):

The [Arctic] region(...) is (...) essentially the terrestrial and marine areas north of the Arctic Circle (66°32'N), and north of 62°N in Asia and 60°N in North America, modified to include the marine areas north of the Aleutian chain, Hudson Bay, and parts of the North Atlantic Ocean including the Labrador Sea (AMAP 1998: 10).

Considering this definition, the Arctic, as a circumpolar North region, includes eight countries, as they have territory above that circle: Canada, the United States, Denmark (Greenland and Faroe Islands), Norway, Russia, Iceland, Sweden and Finland. These are the member states of the AC (AC 2015). The AMAP definition incorporates the Arctic circle, political boundaries, climate boundaries, vegetation boundaries, and marine boundaries, covering the vast region of the Arctic (figure 1). Even though the AMAP area is a “scientific definition of [the] region (...) broadly accepted among the Arctic countries”, it has “created an international consensus on the physical boundaries of the region” (Heininen and Nicol 2007: 138).

China is facing a problem with the energy import from Africa and the Persian Gulf, given that they need to pass through water dominated by the USA and India, direct competitors. Also, the energy import via those waters is threatened by piracy, the same route that is used to export to the European market.

Li and Bertelsen suggest a “diversification of sea lines of communication for energy and trade” (2013: 9). The prospects of increased shipping in the Arctic are first and foremost associated with the NSR. The NSR (figure 7) is a navigation route in the coastal parts of the Arctic Ocean, following the northern coast of Russia, and providing the shortest sailing route between Europe and Asia. Numerous studies find the thawing Arctic sea ice enables the commercialisation of east-west shipping via the NSR, shortening the travel distance between both continents. Li and Bertelsen refer to Robert Wade, who defends that the opening of the NSR is attractive for reasons of both distance and security and, he continues, “Shanghai to Rotterdam via the north-east sea route across the top of Russia is almost 1000 miles shorter than via Suez” (Ibid.).



Figure 8. Northern Sea Route. Source Fast Company (2010).

Sino-Icelandic Free Trade Agreement

Iceland was the first developed country in Europe to recognise PRC as a full market economy government. Was also the first European country to negotiate a free trade agreement with China. Because of that, the researcher considers this agreement an historical one (FTA 2016).

The Free Trade Agreement (FTA) was signed between Iceland and China in 15 April 2013 in Beijing by Mr. Össur Skarphéðinsson, Minister for Foreign Affairs and

External Trade of Iceland, and Mr. Gao Hucheng, Minister of Commerce of the People's Republic of China, in the presence of the Prime Minister of Iceland and the Premier of China (IMFA 2016).

This FTA main aim is to promote a mutual beneficial cooperation between both countries, facilitating the healthy development by bilateral economic and trade relations (FTA 2016).

The fact sheet of the FTA states that

Iceland-China Trade has been growing constantly over the years in spite of its small scale. Icelandic exports reached ISK 7.65 billion (USD 61,2 million – EUR 47,6 million) in 2012, up by 40.81% from 2011, and Icelandic imports from China reached ISK 42.6 billion (USD 340,8 million – EUR 265 million) up from ISK 35.1 billion in 2011 (USD 287,7million – EUR 216,9 million) (IMFA 2016).

China is now Iceland's 4th biggest importing country and the biggest trading partner in Asia. Icelandic exports to China have been growing fast, but China only ranks as Iceland's number 19 export market in 2012 (Ibid). The FTA expects to be the fuel for the future Icelandic exports to China. "Seafood has been the biggest growth factor of Icelandic exports to China, while the export variety and export value of other products such as electrical scales and ferrosilicon are also increasing" (Ibid.).

4.3. China's great power analysis

Very often China is referred as a great power. Some scholars agree in give the great power status to China. In certain periods in history China has showed to be a great power. Still, is common to read in newspapers, articles or papers about China power in the international stage. The fact is that China has been very active in the last decades in the international political stage. China is trading and negotiating all around the world. Despite of not be very clear in regions as the Arctic, Chinese foreign policy is very extant and tries to accommodate many countries and organisations, with whom China cooperate.

As stated in the theoretical chapter, Kenneth Waltz argues that states fight for power in the basis of international politics. The states try to persecute their interests and they look for power and recognition in the social world.

According to Waltz neorealism, there are five characteristics of a great power: population and territory; resource endowment; economic capability; political stability and competence; and military strength. Concluding that a great power is a certain state with a strong political, cultural and economic influence over states near to them or around the world.

The researcher looks to China data first to analyse the primary conditions of a great power: population and territory. China has a population of 1.371 billion people what makes it the world's most populous country (World Bank 2016a). In terms of territory China is the second largest state by land, with 9.6 million square kilometers (List of Countries 2012).

In terms of economy, as it was earlier developed and presented in this thesis, since the introduction of economic reforms in 1978, China has become the world's second largest economy, after the United States. Considering trade, China is the world's largest exporter and second-largest importer of goods. So, China has a strong economic capability, another capability that Waltz states as great power condition.

China as the world's largest standing army and second largest defence budget. Therefore, it also covers the military condition of Waltz.

Analysing China's political stability becomes more complicated. Even though China is a member of the United Nations, permanent member of the U.N. Security Council, and member of many other organisations as the WTO, APEC, BRICS, and the G-20, the researcher faces some difficulties when seeing China as a political stable country. China is a socialist market economy, governed by a Communist Party. The delivery of a sustainable economic growth is the way to ensure the survival of the system. It is based in this premise that the Arctic comes in in numerous ways. The researcher argues that in case China's cannot assure their economic growth, the system will not have the necessary stability of a great power.

Chapter 5.

Conclusion

In this chapter, the main findings with regard to the research question are summarised. Furthermore, the strengths and limitations of this thesis are considered and suggestions for further research are presented.

This thesis follows a deductive logic of reasoning and applies the theoretical framework of *Realism*, *Neorealism* and *Rostow's Stages of Economic Growth*. These three analytical frameworks have been used to guide the researcher analysis, as well as to draw an answer for the problem formulation, as it has been stated throughout this work:

Why China has strategic interests in the Arctic considering their economic development in the global political stage?

China has a population of 1.371 billion people what makes it the world's most populous country and places the country in the international global stage. The research concludes that China strategic interests in the Arctic are intrinsically related with the country's phenomenal economic development. This growth has made China an emerging great power and competitor in the global stage, abreast with the US. It has also made China into one of the world's major importers of energy and raw materials. Concerning to energy, China is very much dependent on the Persian Gulf, an unstable area dominated by the US. On the other hand, their trading sea route is also threatened by piracy. Therefore, those energy and maritime transport security are the framework for Chinese emerging Arctic interests and possibly future strategy.

There is no clear answer to what will happen in the future in regards to China rise to great power status. The pre-conditions to its rise according to Waltz capabilities are created. However, as the researcher argues, China political stability is dependent on economic sustainability that is in its turn dependent on energy supplies. China needs to make sure that this dependency cycle does not stop. And the results of it will be very much noticeable.

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