Projecting South Korea's Future as a Middle Power in the Arctic

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Abstract

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Because of thinning of Arctic sea ice and economic opportunities such as access to natural resources and new shipping routes caused by climate change, the Arctic has become an area of interest not only of the Arctic states but also of the non-Arctic states. South Korea is one of the five Asian countries that serves as an observer in the Arctic Council. While there is a growing scholarship that analyzes South Korea's approach and interest in the Arctic, the existing literature puts emphasis on the one-dimensional economic benefits such as shipping routes, and natural resources. However, although they do not specifically use the Arctic as an example, there is a growing body of literature that suggests that South Korea's primary interest in international affairs is to enhance its status as a global middle power. Thus, this paper explores South Korea's use of soft power and middle power diplomacy in the Arctic as a contemporary middle power in the current international system. Data were gathered from the official policy documents, news

articles, observations from the 10th Arctic Council Ministerial meeting and the 3rd Korea Arctic Academy, peer-reviewed literature, and an analyses of South Korean activities in the Arctic. Results indicate that South Korea is utilizing the Arctic and the Arctic Council as platforms to pursue its middle power diplomacy to increase its presence in the international system as a concrete middle power.

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Chapter 1. Introduction

It was not until early 2000s that the issues facing the Arctic were recognized as a global problem. Historically, the Arctic region has had a role in conflicts between the West and the USSR due to its strategic importance in the deployment of strategic weapons. Now, with intensified impacts of climate change, countries around the world could become victims of increasingly severe natural disasters such as tsunami and drought. While the melting of the Arctic poses significant risks, it also is providing new opportunities for economic development on a global scale. Countries such as South Korea that are both energy-dependent and export-oriented countries see the melting of the Arctic as an opportunity that could put an end to the 'Asian premium', which Asian countries believe that they have been paying premium for their crude oil sold by the Organization of Petroleum Exporting Countries (OPEC). Triggered by the United States Geological Survey (USGS) 2008 report that revealed increased amount of recoverable oil and gas reserves in the Arctic, compared to earlier results from the late 60s due to advance in technology, it has become a center for potential international cooperation and global development.

Although melting of the Arctic is causing environmental and security challenges, on the other hand, it is creating new opportunities for the entire world. The opening of Arctic waterways heightened the potential use of once considered inaccessible trade routes, of access to mineral resources, and of offshore drilling for Arctic oil and gas. Benefits which the Arctic potentially offers drew the attention of various stakeholders not only from the Arctic nation states but also from non-Arctic states, such as South Korea. In the USGS 2008 report *Circum-Arctic Resource Appraisal : estimates of undiscovered oil and gas north of the Arctic Circle*, researchers have concluded that the Arctic contains 90 billion barrels of undiscovered technically

recoverable oil (Bird et al., 2008). Such promising estimates of recoverable Arctic oil and gas have once again lifted the status of the Arctic in international affairs. Unlike the dark days of the Cold War when the Arctic was considered as a remote, barren, frozen, and a zone of potential missile deployment, its status was lifted to a strategically, environmentally, and economically important zone. Moreover, increased traffic in the Northern Sea Route (NSR), followed by sets of successful test shipments, caught the attention of various stakeholders in international trade and in the shipbuilding industry. Thus, as much as the Arctic states or so called the Arctic Eight (the United States, Canada, the Russian Federation, the Kingdom of Denmark, Finland, Norway, Sweden, and Iceland) are interested in the potential benefits of the Arctic, Asian countries such as South Korea, China, Japan, and Singapore have also started showing great interest in the Arctic.

As an energy-dependent and export-oriented country, South Korea is always in search of reliable energy sources and shorter trade routes. Therefore, the prospects of recoverable oil and gas reserves in the Arctic and the opening of the NSR were more than enough to attract South Korea into the Arctic "cold rush". Since 2008, backed by the inter-ministerial support from the government, South Korea has been showing greater interest in getting involved in various Arctic related projects to find its place in the Arctic and the Arctic Council. Although timing might vary, sooner or later, the Arctic will open up as Arctic sea ice retreats. However, the lack of infrastructure, weather unpredictability, considerable oil reserves in the Middle East, and the recent downward trend in oil prices due to the shale boom raises a question: is the Arctic still attractive enough for a remote country such as South Korea to participate in Arctic affairs and invest in various projects that support sustainable development of the Arctic? However, although physical economic aspects of the Arctic are most often recognized and examined by stakeholders

and scholars, there are more to South Korea's interest in the Arctic. Thus, with this research question in mind of 'Why is South Korea interested in the Arctic even when the price of oil is low and the feasibility of the Northern Sea Route is questionable?', this this paper analyzes South Korea's interest in the Arctic that goes beyond the obvious pursuit of economic gain to explore how South Korea is using the Arctic to strengthen its middle power status globally.

The literature to date on Asian states' approach and their interest in the Arctic has been built by various scholars. Lunde et al. (2016) and Rowe et al. (2013) focused on economic aspects such as developing and navigating through the Northern Sea Route, expanding its shipbuilding industry, and participating in resource development projects. In the scholarly literature on South Korea and the Arctic to date, or on Asian interest in the Arctic in general, scholars have premised that the world oil price will stay high and thus focused on economic factors including the use of the NSR, resource development, and shipbuilding. There is only a very small body of literature (Watson 2014 & 2016) arguing that Korea's involvement in the Arctic is more than just about the economic gains. He suggested that South Korea is an emerging middle power in the current international system and thus argued that its actions in the Arctic, such as use of soft power (non-military power e.g. technology & culture), should also be considered in evaluating Korea's interest in the Arctic (Watson 2014 & 2016).

On a paper by Kim (2015), he examined how the concept of middle power is explained and used in South Korea's foreign policy. Kim defined what the middle power is and how South Korea fits into the middle power category. He argued that South Korea's balance of soft power, network power, and hard power allows it to be considered as a middle power. He also argued that South Korea's economic and technological capacity and political will (behavior) to act as a global citizen promote its status as a middle power. Although the Arctic was not mentioned or

used as an example to support his argument, he used examples such as joining of the Organization for Cooperation and Economic Development (OECD) to argue that middle powers are not only good assets to international community but they also are essential in achieving the goals of international institutions. The way he used these examples to argue that South Korea is capable of being considered a middle power both capacity-wise and behavior-wise, the joining of the Arctic Council can also be considered as part of South Korea's strategy to practice its middle power role.

Uniquely, in a research paper, Watson (2014) used South Korea and the United Kingdom as examples of active non-Arctic middle power states in the Arctic. He argued that middle powers, such as South Korea, have strategic opportunities in the Arctic if they position themselves well. In his later research paper, Watson (2016) used South Korea's diplomatic goals of building an image of a 'Global Korea' in the current international system as an example to support his argument. He argued that unlike other non-Arctic states such as China, South Korea is developing niche markets in the Arctic by building positive bilateral relationships with Arctic states and promoting non-threatening approaches towards the Arctic. He focused on President Lee's (2008-2013) plans and policies toward adopting middle power rhetoric and pursuing middle power diplomacy, which Arctic was also considered as an area of interest for the South Korean government to practice its middle power diplomacy. He provided solid examples of how South Korea as a nation has identified the Arctic as one of its target areas to practice middle power diplomacy. Watson's work is seminal because unlike the dominant scholarly literature, his work specifically examines the relationship between South Korea and the Arctic from a middle power perspective.

Chapter 2. Definitions

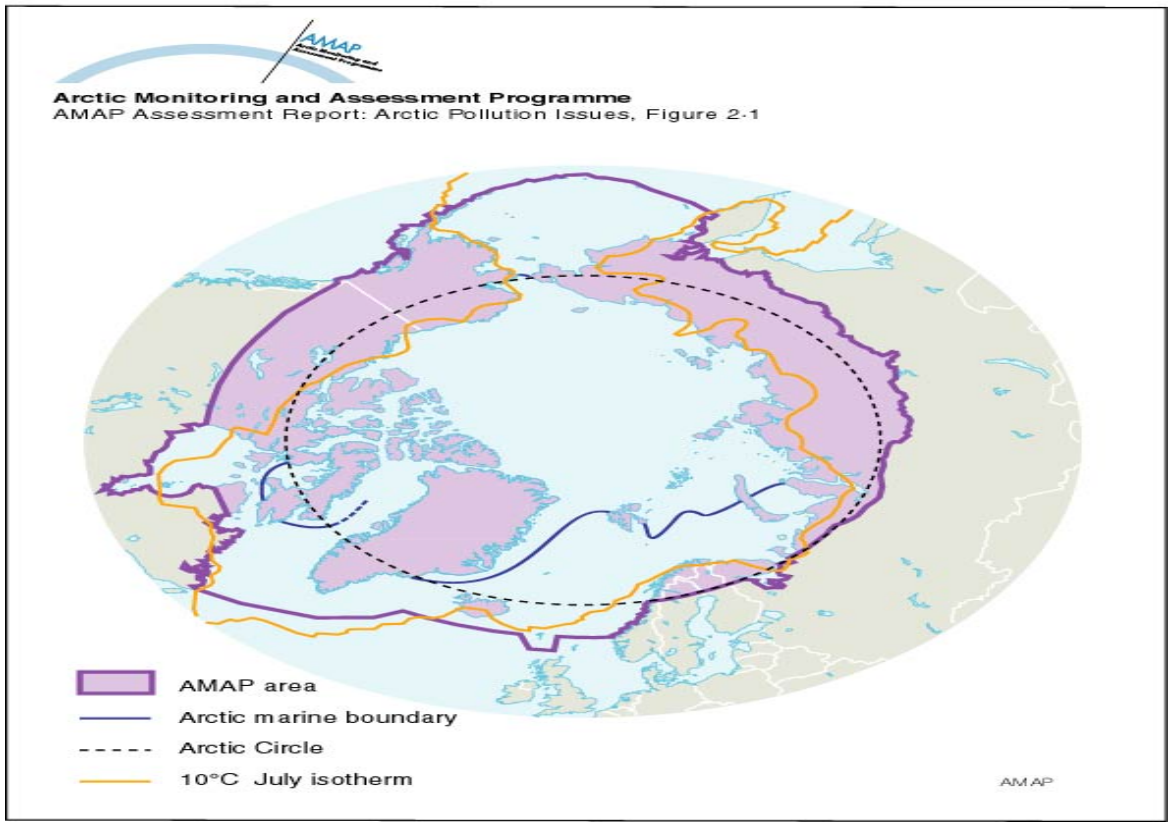
2.1 The Arctic

For many decades, the Arctic did not play a big role in international affairs. During the Cold War era between the U.S. and the USSR, the Arctic was used as a strategic region where the two super powers have deployed their strategic weapons to contain each other from launching intercontinental nuclear missiles. The Arctic became a strategic region for the two super powers because Alaska, often called as the American Arctic, not only was the closest target for Russian bombers but it also was the shortest route for Russian bombers to fly over Alaska to in reaching the continental U.S. However, unlike the dark days of the Cold War era, the Arctic now serves as a focal point where different nation states, international governmental organizations (IGOs), non-governmental organizations (NGOs), and even, uniquely, Indigenous groups cooperate and collaborate on a range of topics from environmental issues to human rights issues. Different issues in the Arctic are governed and managed by the Arctic Council, a high-level intergovernmental form, which will be defined more thoroughly in 2.2.

The Arctic is a region formed by the Arctic Ocean and permafrost that surrounds the North Pole, where about four million people (10% being Indigenous population) reside. As map 1 shows, the Arctic Ocean bounds parts of the Eurasian continent (Russia, Finland, Sweden, Denmark, Norway, and Iceland) as well as parts of the American continent (Alaska of the U.S. and Canada).

Map 1: The map of eight Arctic countries that are member states in the Arctic Council
Source: Sofrep (2013)

The Arctic is usually defined as a region that is north of the Arctic Circle. The Arctic is defined in many different ways depending on the context. It is defined physically, politically, floristically, and even based on climate and oceanographic characteristics that there is no distinct border that defines the region.



Map 2: The Arctic as defined by temperature (after Stonehouse 1989), and the Arctic marine boundary, also showing the boundary of the AMAP assessment area.
Source: AMAP (1998).

Regardless of different definitions, the Arctic Monitoring and Assessment Programme (AMAP), one of six Working Groups of the Arctic Council, defines the Arctic as "The region covered by AMAP is, therefore, 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" (Murray, 1998). Map 2 shows different definitions of the Arctic which could be used for different applications.

2.2 The Arctic Council

The Arctic has its own unique intergovernmental forum called the Arctic Council which manages various relevant issues facing the Arctic. It was formed in 1996 during the first Arctic Council meeting in Ottawa. It serves as a forum for promoting sustainable development, scientific research, and environmental protection. Figure 1 isa schematic chart which shows the relation between the Arctic countries and the Arctic Council.

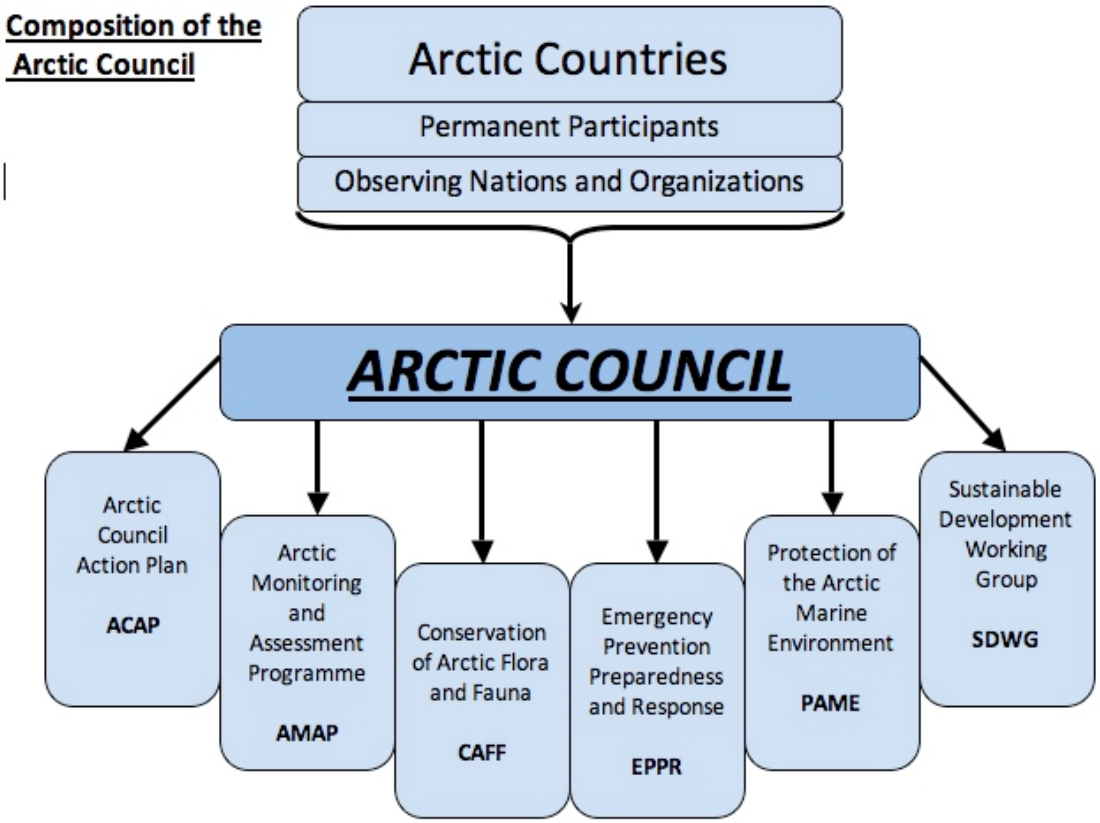


Figure 1: The structure of the Arctic Council described by the AMAP.
Source: AMAP (n.d.)

The Arctic Council is formed by the Eight Arctic Nation States (the United States, the Russian Federation, Canada, Norway, Sweden, Finland, Denmark, and Iceland) as “members”, six Indigenous groups (the Aleut International Association, the Arctic Athabaskan Council, the

Gwich'in Council International, the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North, and the Saami Council) as the Permanent Participants, and non-Arctic observers which include nation states, IGOs, and NGOs. ("Arctic Council Background," 2015) In the past few years, non-Arctic states, especially those of Asian countries have shown greater interest in getting involved in various projects. In 2013 during the Kiruna Ministerial Meeting, six non-Arctic nations were newly admitted to the Arctic Council as observers and five of them were Asian countries. To be more specific, Republic of Korea, Republic of Singapore, Republic of India, People's Republic of China, and Japan. At the time of writing, the Arctic Council currently has thirteen approved countries, nine IGOs, and eleven NGOs serving as observers. Besides member states, Permanent Participants, and observers, it has six "working groups" (Arctic Contaminants Action Program (ACAP), Arctic Monitoring and Assessment Programme (AMAP), Conservation of Arctic Flora and Fauna (CAFF), Emergency Prevention, Preparedness and Response (EPPR), Protection of the Arctic Marine Environment (PAME), and Sustainable Development Working Group (SDWG)) which conduct range of different activities from scientific research to humanitarian projects ("About Working Group," 2015).

The Arctic Council and its working groups are the drivers of Arctic affairs among the Arctic and the non-Arctic states interested in utilizing and developing the Arctic. Since its creation, it has successfully promoted sustainable development of the Arctic. As a leading high-level forum on Arctic issues, the Arctic Council stands as a platform for different sovereign states in building and sharing of information, developing infrastructure, and protecting the environment of the Arctic. It gained more recognition as export oriented and energy-dependent Asian countries became observers in the Arctic Council in 2013. South Korea was one of the five Asian countries that became an observer in the Arctic Council in 2013. Allured by the benefits

which the Arctic potentially offers, South Korea decided to participate in Arctic affairs.

Chapter 3. What are potential tangible benefits for South Korea in approaching the Arctic?

The majority of scientists in different fields agree that climate change has been accelerated by human activities. Impacts of climate change such as irregular climate, sea level rise, and drought are found throughout the world. In the Arctic, sea ice has been retreating at an accelerated rate and temperature has been rising more significantly compared to other regions of the world. Such changes are not only increasing in the Arctic but they are also happening in other parts of the world in many different forms. For example, an accelerated rate of sea-level rise is threatening small islands in the South Pacific and even megacities such as Tokyo, Busan, and Jakarta that border major oceans.

The fact that climate change is dangerous and will cause greater harm is undeniable. However, at the same time, it is also creating new opportunities for for the world as well. Because of the accelerated rate of sea ice retreat in the Arctic, not only the Arctic states but also non-Arctic countries started to put more emphasis on once considered remote and cost-inefficient waterways and resources. Along with the rise of interest in the Arctic around the world, different non-Arctic states have applied for observer status to the Arctic Council and established their own national plans, policies, and agendas on the Arctic.[1] In 2012, the Chinese icebreaker *Xuelong* (the Snow Dragon), successfully completed its first Arctic polar expedition and China has been utilizing *Xuelong* to launch a series of polar expeditions since her first one in 2012 (Pettersen, 2012). Although voyages and research done by the South Korean icebreaker *Araon* which is less

[1] South Korea and Japan established their first own national Arctic policies in 2013. China hasn't yet published its official Arctic policy but the Chinese government is working on it.

known than that of *Xuelong*, *Araon* also has been actively serving in both polar regions since December 2009 by producing meaningful research data and conducting various tasks including rescue missions. As these Arctic missions conducted by Asian state owned icebreakers indicate, the level of Asian interest and involvement in the Arctic is greater than what people would normally think. Besides conducting Arctic expeditions and conducting scientific research, Asian observer states have signed different Memorandum of Understanding (MOU) with the Arctic states to enhance their presence in the Arctic as well as to build better understanding of the Arctic.[2]

3.1 Energy statistics of South Korea

Up until after the Korean War, South Korea was one of the poorest and underdeveloped countries in the world. With financial and technological support from the West, in about fifty years, South Korea became an aid-donor country from being an aid-recipient country. Growth engines for such a rapid and dramatic transformation were manufacturing industry and international trade. However, as an energy-dependent country, this economic model requires heavy oil and gas usage. South Korea has thus been vulnerable to oil and gas price fluctuations since the early 1970s when it first experienced the oil shock.

According to the *Statistical Review of World Energy 2015*, a report on energy usage of the world produced by British Petroleum (BP), South Korea rank as the ninth-largest overall energy consumer, tenth-largest petroleum consumer, fifth-largest oil importer in the world in 2014 (BP Amoco & BP, 2015). As these numbers imply, South Korea is one of the top energy importers and a huge consumer at the same time. Although most of its industries are based on

[2] Four MOUs on energy and resource were signed between South Korea and Greenland in 2012; A MOU on port development was signed between Russia and South Korea in 2013 (Park, 2013).

heavy usage of energy (mostly oil and gas), it lacks domestic energy reserves and thus has been relying heavily on imported fuel from the Middle East as its primary energy source. On a scale of one hundred, it imports 83-4 percent of its oil from the Middle Eastern countries (Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Iraq, and Iran) which, in the case of supply disruptions such as oil crisis or oil embargos, can halt and hurt the overall economy ("Country analysis brief," 2017). Therefore, South Korea is vulnerable to events such as oil shocks.

Since the end of the Korean War when industrialization took place, South Korea has been an energy hungry country. Oil share peaked in the early to mid 1990s and started to decline due to economic problems.[3] In 1997, South Korea was hit by the Asian Financial Crisis. As a consequence, its already downward trending oil share dropped sharply in 1998. After the financial crisis, and since the new millennia, the overall share of oil in primary energy sources has continued to decline (1998: 54.6% oil, 8.3% Liquified Natural Gas (LNG) 0.9% (renewable), 2013: 37.8% oil, 18.7% LNG 3.2% (renewable)). However, although the share of oil has decreased significantly, as these numbers suggest, it still is one of the most used source of energy (Sonn, 2014).

The world has never been more concerned about climate change and thus, the need for introducing green-development paradigms and stressing sustainable development has gained momentum. Various reports produced in the early 2000s have predicted that the use of oil will start to decrease because of its high price and issues facing air pollution. However, due to existing technological and financial problems, renewable energy sources are yet to become the dominant energy source and oil still remains as one of the major energy sources consumed in

[3] For example, the oil share in 1994 was 62.9%, 62.5% in 1995, and 60.5% in 1996 (Sonn, 2014).

South Korea. According to Sonn (2014), South Korea has imported 915,075 barrels (in 1,000s) of crude oil in 2013. During that year, retrieved from the same source, South Korea spent a total of 178,698 million USD on energy imports (about 1/3 of South Korea's total import) (Sonn, 2014). As these numbers indicate, because South Korea does not have oil and gas sources, it not only spends too much money on importing energy sources but it also depends too heavily on imported energy.

The Korean government has been constantly launching oil explorations since the 1960s but it has not been successful in finding oil fields within its territory (Shin, 2016). Moreover, from series of oil shocks from 1973 to 1975 and again in 1979 to 1980, South Korea realized that the energy dependent states will never be invulnerable from the fluctuating waves of oil price. During the two oil shocks which took place in the Middle East, South Korea was hit heavily by the unexpectedly high price of oil because it depended heavily on oil produced by the OPEC countries. As an energy-dependent and export-oriented state, it went through series of rises in consumer prices while facing a significant drop in its export rate (Kim & Kim, 2016). Thus, besides the skyrocketing price of oil during the early 2000s, the spread of resource nationalism and weaponization of oil among oil producing countries led South Korea to set its national goal of becoming an energy independent state by investing more on oil and gas explorations, renewable energy, and nuclear power. Thus, as mentioned earlier, the USGS report which unveiled vast amount of recoverable oil and gas in the Arctic was seen by South Korea as a new way of strengthening its energy security.

3.2 South Korea in the Arctic

South Korea is an Asian country that has no geographical ties to the Arctic region. Unlike the Arctic states, especially those of the five Arctic littoral states: The U.S., Canada, Russia,

Norway, and Denmark, South Korea is neither physically connected to the Arctic by the continental shelves nor it has had a significant presence in Arctic affairs. Although its heightened presence and interest in the Arctic is fairly recent other Arctic or even non-Arctic states such as Japan, South Korea has been in the polar region (Antarctic expedition/research started in 1985 and Arctic expedition/research started in 1993) for more than 30 years. South Korea started its basic research in the Arctic in 1993 but it was not until 2001 when it developed the cornerstone for its Arctic research.

A major step toward approaching the Arctic took place in 2001 when the Korean Arctic Science Council (KASCO) was established. In the following year, South Korea installed its first Arctic research station Dasan in Spitsbergen, Norway, joined the International Arctic Science Committee (IASC), and also established the Korean National Committee on Polar Research (KONPOR). Moreover, South Korea became an ad hoc observer in the Arctic Council in 2008, joined the Svalbard treaty in 2012, and after five years as an ad hoc observer, was officially admitted to the Arctic Council as an Observer in 2013.

Besides becoming a non-Arctic observer to the Arctic Council, for the first time in Korean history, the Blue House (the executive office of South Korea) included the Arctic as one of the 140 major government focus areas to build the image of 'Global Korea' (this will be discussed more thoroughly in chapter 5) as well as to pursue opportunities which the Arctic offers. Getting involved in developing and using the NSR and participating in different projects laid out by the Working Groups in the Arctic Council were ranked as the 13th priority government task of the Park administration. South Korea also accelerated its 'Arctic diplomacy' by sending delegates to various Arctic related meetings, hosting events and conferences in both Arctic states and within Korea, and signing different MOUs with the Arctic states. When South

Korean Arctic ambassador Chanwoo Kim participated in the Arctic Circle Forum in Singapore in November 2015, he stressed the importance of cooperation among the Arctic and the Observer states by stating "Arctic issues could no longer be regarded as regional ones. On the contrary, they should be viewed from a global perspective" (Kim, 2013). His speech during the Arctic Circle Forum is important because it showed how dedicated South Korean government is in being involved in Arctic affairs and various projects in the Arctic.

Another big step towards securing the foundation for its Arctic diplomacy was made in 2013. As a newly admitted non-Arctic observer to the Arctic Council, South Korea felt the need to have a government level policy that solely focuses on the Arctic. Although South Korea is not the only non-Arctic state with an official national Arctic policy, its decision to establish national policy on the Arctic is significant because other observer states such as China still does not have an official Arctic policy to date. In July 2013, the Ministry of Oceans and Fisheries (MOF) started writing its Arctic policy. In December 2013, the Arctic Policy of the Republic of Korea, also known as South Korea's Arctic Master Plan, was adopted by the South Korean Government. This plan was the result of collaborative inter-ministerial work by seven different ministries: MOF, Ministry of Foreign Affairs (MOFA), Ministry of Trade, Industry and Energy (MOTIE), Ministry of Environment (MOE), Korea Meteorological Administration (KMA), Ministry of Land, Infrastructure and Transport (MOLIT), and Ministry of Science, ICT and Future Planning (MSIP) (Ministry of Oceans and Fisheries of Korea, 2013). With its now established Arctic plans, South Korea has a vision for sustaining the future of the Arctic.

3.3 South Korea: a shipbuilding giant

Russia has shown great interest in promoting its Russian Arctic and eventually developing the NSR. Because the Arctic requires special vessels that can break through the

Arctic sea ice to navigate, global leaders in the shipbuilding industry have welcomed the opening of the Arctic.

The South Korean shipbuilding industry began in 1968 when Hyundai Heavy Industries, with the support from the Korean government, decided to invest in the shipbuilding industry. Ever since than, shipbuilding has been one of the major pillars of the South Korean economy. South Korea's decision to investigate in the shipbuilding industry was expected to generate earnings from foreign exchange. Its insight was so successful that in 2008 and once again in 2014, seven out of ten of the worlds' largest shipbuilders were Korean companies (Lee, 2014). As statistics from 2008 suggest, shipbuilding was one of South Korea's flagship industries which drove the South Korean economic miracle.

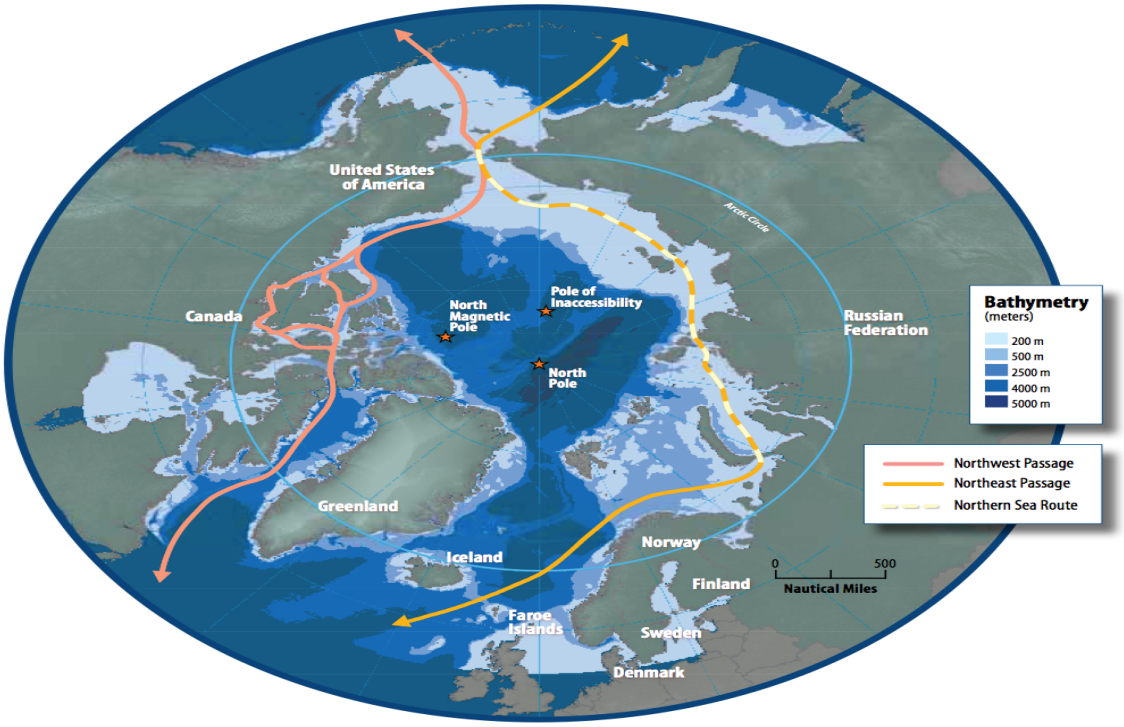
Among many, Hyundai Heavy Industries, Samsung Heavy Industries, STX Offshore and Shipbuilding Company, Daewoo Shipbuilding & Marine Engineering have been most active in receiving orders from both national and international customers. Because the shipbuilding industry is closely related to the global economy and thus heavily affected by global economic condition, lower growth rates and the financial crisis of early 2000s had negative impacts on the South Korean shipbuilding industry. The South Korean shipbuilding sector is more vulnerable to the downturn in global industry than that of its competitors, such as Japan, because South Korean shipbuilders receive about 90% of their orders from foreign clients (Cho, 2017). However, the accelerated rate of Arctic sea ice retreat caused by climate change caught South Korea's attention because less Arctic sea ice meant increased accessibility to the Arctic. As a leader in the shipbuilding industry which uses advanced technology in constructing ice breakers, South Korea expected its shipbuilding sector to re-boot and contribute to its economy. In fact, as most

scholars and economists predicted, the major South Korean shipbuilders managed to continue to receive orders from many different international customers.

3.4 The Northern Sea Route: a trade route with much potential

3.4.1 What is the Northern Sea Route and what aspect of it attract South Korea?

The Northern Sea Route is a sea route that is a part of the Northeast Passage which lies within the Russian Exclusive Economic Zone (EEZ). Thus, vessels sailing through the Northeast Passage should abide by the Russian federal law which regulates ships navigating within the Russian EEZ. The Northeast Passage, which vessels navigate through the NSR, is considered as one of the shortest shipping routes between the Atlantic Ocean and the Pacific Ocean which allows North East Asian countries to reach Northern Europe and the other way around. Thus, export-oriented non-Arctic state such as South Korea puts extra weight on testing the future of the NSR as a potential trade route and participating in oil and gas development in the Arctic.



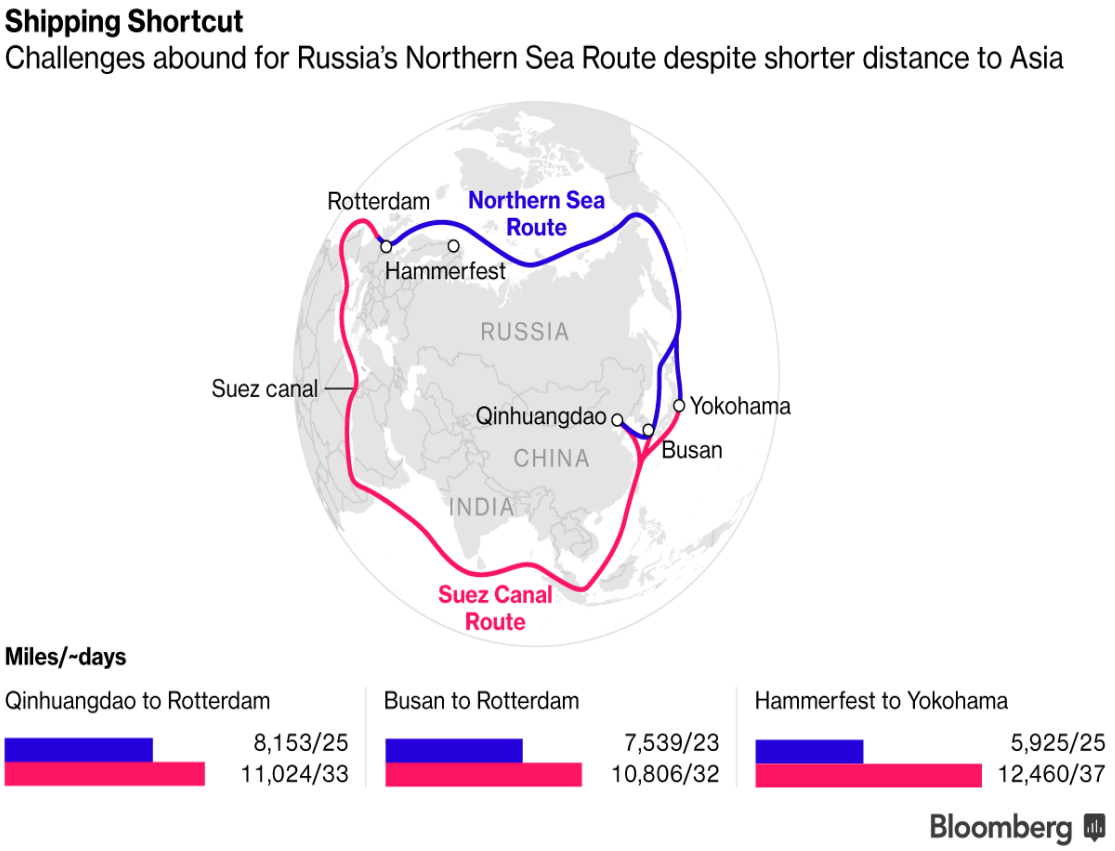
Map 3: The map of Northern Sea Route

Source: AMAP (n.d.)

The NSR was closed to the world during the Cold War, primarily because of security issues related to the national security of the Union of Soviet Socialist Republics (USSR). It was finally opened to foreign vessels in 1991, four years after Mikhail Gorbachev's (1987) famous Murmansk speech which called for peaceful co-operation in the Arctic. Nevertheless, the NSR only began to receive attention as a potential shipping route to connect Asia and Europe in 2009 because Russia lifted its restrictions on non-Russian vessels voyaging through the NSR. On top of Russia's decision to lift the barriers against foreign vessels, the world started to witness record lows of Arctic sea ice. The lesser and thinner sea ice presence in the Arctic was witnessed by various interest groups such as international shippers and shipbuilding companies, which led them to launch test voyages through the NSR to conduct cost-benefit analysis. As a result, the number of transits in the NSR skyrocketed from 15 transits in 1991 to 71 transits in 2013 (Pastusiak, 2016). Although not all 71 transits made in 2013 were made by foreign vessels, such increased rate of transits indicate heightened interest in the NSR among various countries such as South Korea.

The feasibility of the NSR as a potential shipping route has been studied by different scholars. However, many have conflicting opinions on the feasibility of the NSR becoming an economically viable shipping route. Scholars who indicated that the NSR is not economically feasible for international shipping argued that the 40 percent decrease in overall distance from traditional routes do not not necessarily mean 40 percent savings in overall expenditure required for Arctic shipping. Liu, M. and Kronbak, J. (2010) point out that companies would suffer from the high cost of fuel, the high NSR fee required by Russia, and restrictions on service periods. The Arctic ocean still has more days of ice than open water and because the NSR is governed by

the Northern Sea Route Administration (NSRA) of Russia. While some scholars have a negative view on the viability of the NSR, others consider the NSR as an economically viable trade route. For example, Omre A. (2012) conducted a cost benefit analysis of container shipping through the NSR between Rotterdam, Netherlands and Yokohama, Japan by looking at the service period of the NSR and fuel costs. According to this study, whether the NSR had 70 or 120 navigable days and whether the fuel costs were $400 or $700 per ton, the NSR could be considered feasible. Although Omre used Japan as a case study, his analysis also fits into South Korea because Busan, South Korea and Yokohama, Japan are not too far from one another.



Map 3: The map of Northern Sea Route and the Southern Sea Route.
Source: Bloomberg (2017)

Regardless of the different opinions, interest in the NSR among Asian countries was heightened from the fact that it is a potential shortcut that connects Asia and Europe. It is shorter

in distance and faster in time than going through the traditional trade routes such as the Southern Sea Route (SSR) that navigates through the Suez Canal. According to the test voyage conducted by the South Korean shipping company Hyundai Glovis in 2013, the distance from Ust-Luga, Russia to Gwangyang, South Korea via the SSR was 22,576km (42.4days) while it was only 15,538km (29.2 days) via the NSR (Park & Lee, 2015). Figure 2 below created by by Francois (2015) calculated the differences in distance of traveling via the NSR and the SSR from Asian countries to European countries and the other way around.

From:	To:	Great-circle formula (km)	SSR (km)	NSR (km)	NSR against SSR % change
China	Netherlands	7,831	19,942	15,436	-23%
China	Belgium	7,971	19,914	15,477	-22%
China	Germany	7,363	20,478	15,942	-22%
China	United Kingdom	8,151	19,799	14,898	-25%
Japan	Netherlands	9,303	20,996	13,172	-37%
Japan	Belgium	9,464	20,976	13,345	-36%
Japan	Germany	8,928	21,536	13,083	-39%
Japan	United Kingdom	9,574	20,779	13,182	-37%
South Korea	Netherlands	8,573	20,479	14,200	-31%
South Korea	Belgium	8,722	20,458	14,373	-30%
South Korea	Germany	8,140	21,019	14,110	-33%
South Korea	United Kingdom	8,875	20,262	14,210	-30%
Taiwan	Netherlands	9,457	18,822	15,601	-17%
Taiwan	Belgium	9,587	18,801	15,774	-16%
Taiwan	Germany	8,959	19,362	15,511	-20%
Taiwan	United Kingdom	9,790	18,605	15,611	-16%

Figure 2: Different distance values from European countries to Asian countries.
Source: Francois, "Melting Ice Caps and the Economic Impact of Opening the Northern Sea Route" (2015)

Figure 2 suggests that the transit distance between South Korea and the Netherlands is about 31percent shorter (from 20479km to 14200km) than that of going through the Suez Canal (SSR). In this case, the estimated reduction in traveling time is approximately 10 days (from 30 to 20

days) (Francois, 2015). The savings in distance and time attracted export-oriented Asian Countries like South Korea because the shorter distances and the faster shipping time are crucial factors in the international trade industry. Moreover, unlike the SSR, the NSR is free from piracy threats and political disruptions.

3.4.2 Power game in the Strait of Malacca and the South China Sea

Vessels that take the SSR as a trade route to reach their destinations in European countries have to go through the Suez-Malacca Strait. The Strait of Malacca is a shipping channel that lets ships enter the Indian Ocean from the Pacific Ocean. After Ships enter the Indian Ocean, they go through the Gulf of Aden which leads to the Suez Canal, the so called gateway to Europe. Although this trade route is one of the major trade routes with the largest volume of traffic, it has its own drawbacks. The geopolitics that surround the Strait of Malacca and the Gulf of Aden are too complicated to cover here.

First of all, although not likely to happen, the SSR suffers from a possible blockade. Due to the rising tensions in the Strait of Malacca between the U.S. and China. It is important to understand the power game between China and the U.S. in the Strait of Malacca. Asian oil importers such as South Korea, Japan, and China rely heavily on imported oil that comes through the Strait of Malacca. Although the strait is officially controlled by the littoral states: Indonesia, Malaysia, and Singapore, it is clear that there is more to consider than geography. On top of the littoral states, the U.S. has substantive control over the area with its naval presence as well as military partnerships with the littoral countries. Among the major oil importers of Asia, China has shown its concerns over the Strait of Malacca being controlled dominantly by the U.S. and its allies. China has other ways of importing oil via land using pipelines but the Strait of Malacca still stands as the dominant route which supplies up to 85 percent of the oil imported to China

(DOD, 2015). In 2003, former General Secretary of the Communist Party of China Hu Jintao came up with the term 'Malacca Dilemma', and articulated the need for China to have a greater naval presence in the Pacific Ocean and the Strait of Malacca (Davis, 2014). He knew that energy resources including oil are critical for China's growth and realized that a blockade of the Strait of Malacca would slow China's economic growth tremendously. Moreover, he is aware of the fact that China cannot currently challenge a blockade of the Strait of Malacca because she lacks sufficient naval power. His successor Xi Jinping, current General Secretary of the Communist Party of China, is also aware of the importance of having control over the seas and thus has been aggressively investing in Chinese potential naval presence. As a part of its 'One Belt One Road' (OBOR) strategy, which would connect Eurasia with both maritime and inland silk roads, China claims sovereignty over the South China Sea with the controversial Nine-Dash Lines (NDL) which simply demarcates the South China Sea as its territory (Xu, 2014). This claim not only goes against the rules of the EEZ set by the United Nations Convention on the Law of the Sea (UNCLOS), which give coastal states sovereign rights over 200 nautical miles from their coast, but China's NDL claim also lacks legitimacy because it is based on historical evidence which does not have a legal basis (Kline, 2013). Although China's claim was over ruled by the Permanent Court of Arbitration in Hague in 2016, China still claims that it has rights over the South China Sea, which has led to even more disputes among related countries such as Malaysia and Brunei. Besides shorter distance and traveling time, such heightened tension in the region as well as security challenges in the traditional trade route let international traders to give another thought in using the NSR as a potential trade route.

Chapter 4. Are economic potentials of the Arctic still in place?

Due to the fragile environment and harsh conditions, Arctic development or the so called

'Arctic boom' has been slow. Currently, the biggest hurdles that hinder Arctic development are the fall of oil prices, the development of more cost-efficient shale fracking technology, and fall of the global economy.

4.1 Fall of the global economy: is South Korea still a shipbuilding giant?

Unlike the high expectations Korea had due to its leading leading shipbuilding industry, due to the fall of global economy, the drop in oil price, and the rise of competitors, South Korea was not able to win as many contracts as it expected. In 2015, South Korean shipbuilding giants had a combined loss of 6.7 billion USD due to losing contracts to their competitors. Unfortunately, 2016 was not much different from 2015 in terms of received orders ("S.Korea's Top 3", 2017). In 2016, China took the lead in the shipbuilding industry from South Korea by having the largest order backlog. Moreover, Japan, for the first time since 1999, overtook South Korea in order-backlog as well (Cho, 2017). Fortunately, in 2017, Daewoo Shipbuilding & Marine Engineering Co. managed to win a $4.8 billion contract from Russia to construct 15 icebreakers (Moon, 2017). However, even with such an achievement, it decided to lay off its employees and downsize its business because it already seriously suffered from decreased global trade.

Unfortunately, as mentioned earlier, South Korean shipbuilders not only have been suffering from the rise of rivals and the downfall of global trade but it also has been facing difficulties from the low price of oil. Due to the fall in the oil prices, sea drilling projects have been put on hold. In the early 2010s, regardless of the high cost of production of offshore drilling, the offshore drilling industry saw a boom because the oil prices stayed high. As a result, in 2012, three South Korean shipbuilders (Hyundai Heavy Industries, Samsung Heavy Industries, and Daewoo Shipbuilding & Marine Engineering) won orders from the Norwegian sea drilling

company ‘Seadrill’ to construct five drill ships by 2015. However, in 2014, the downward trend in oil price caused by different factors such as the slow growth rate and the rise of new competitors in the oil market began to cause financial problems for Seadrill. In 2015, at Seadrill’s request, the four companies agreed to postpone the delivery of the drill ships from 2015 to 2018 and 2019 (“Seadrill Crisis”, 2017). As the case of Seadrill shows, there are warning signs ahead for offshore development. Oil giants such as Conoco Phillips, Marathon Oil, Chevron, and Exxonmobil are pivoting away from the offshore development and focusing on cheap shale (Schaefer, 2016). As is apparent from what the oil giants have decided and from the downfall of the global economy, the shipbuilding industry can expect further economic hardship.

4.2 Shale gas and oil development: the United States in the oil market

The U.S. is considered as an Arctic state because of its 49th state, Alaska. As mentioned earlier, the study conducted by the USGS discovered that Alaska has a number of recoverable oil and untapped gas fields. However, despite the great amounts of oil and gas found in Alaska, the U.S. interest in energy sources has shifted to a new direction: shale gas. The so called ‘shale revolution’ has seen a boom in the U.S. since 2008 (Schaefer, 2016).

Unlike current profit level of shale industry, the forecast for shale oil and gas production from shale drilling during the early 1990s was not very positive. This was due to the high-cost, the gradual decline of production, and environmental concerns related to the use of hydraulic fracking. However, During the early 2010s, shale oil and gas production started to regain attention. Although the breakeven point for shale oil and gas was still higher compared to OPEC (according to Morgan Stanley, the extracting cost of North American shale was $65/bbl while extracting Middle East’s onshore oil was $27/bbl), the increase in the world oil prices made shale oil and gas production more favorable than before (“Crude Awakening”, n.d.).

From 2014 to 2016, the price of oil dropped dramatically, hitting one of the lowest points in history. This exceptionally low price was caused by the combination of weaker growth rate of the world economy, an incremental increase in American oil production, and a surplus of oil produced by OPEC countries. Such low prices challenged U.S. shale oil and gas producers significantly because they were unable to compete against the low cost of crude oil controlled by OPEC. However, due to the big leap made by technological advancement and slowly recovering (still very low) oil prices, it is now possible to extract shale oil and gas in an eco-friendlier way, with a lower breakeven price, and with a higher recovery rate than in the earlier phases of the shale revolution.

According to the estimates released by the EIA in the *Annual Energy Outlook 2017* (AEO2017), in 2016, the U.S. produced about 4.25 million barrels of crude oil per day from shale (EIA, 2017). Oil extracted from shale fields accounted about half of total U.S. oil production in 2015 and the EIA expects to see a further rise in the daily production rate of shale oil in coming years. With the overall increase in the oil production rate, according to Bloomberg, the U.S. has been cutting its dependence on imported oil and recently has reached the lowest dependence level since 1992 (Murtaugh & Wingfield, 2015). With the boost in oil production supported by the shale revolution, President Obama signed a bill lifting the ban on oil export. After lifting its ban on crude oil export, the U.S. has been exporting oil to different parts of the world.

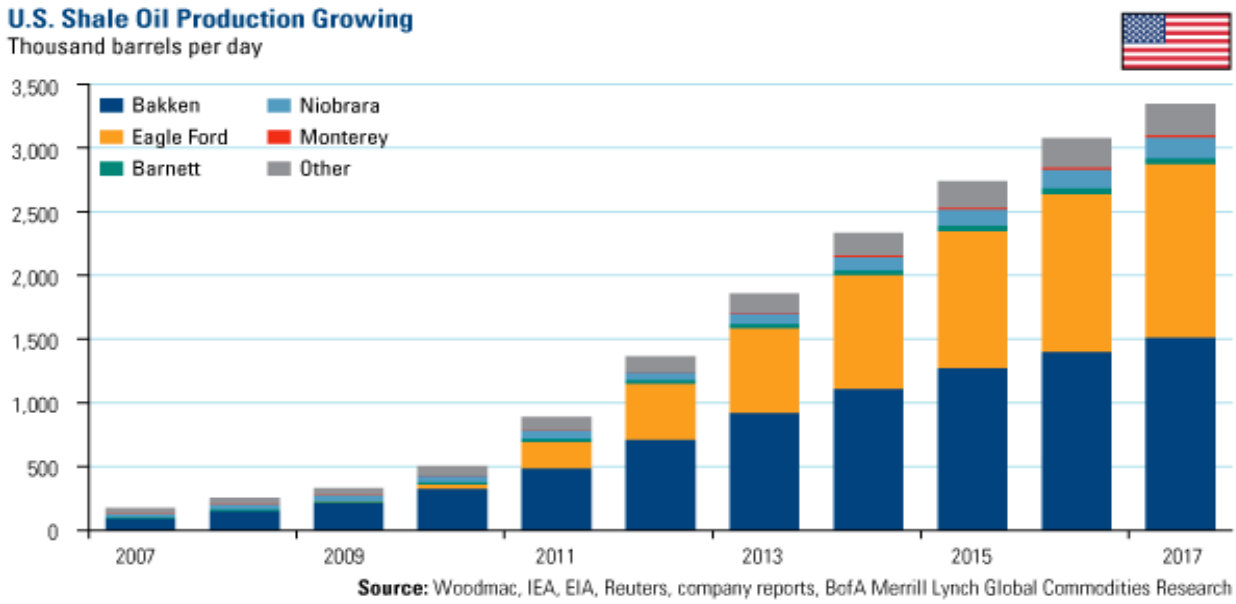


Figure 3: U.S. Shale Oil Production Growing.
Source: Woodmac, IEA, EIA, Reuters, BofA (2014)

The debate on whether shale gas and oil will replace conventional fuels such as fossil oil and natural gas is on going among scientists, environmentalists, and policy makers. Although still controversial, engineers have proved that level of efficiency of current hydraulic fracking technology far exceeds that of the past. The rise of American shale oil and gas industry is worth noting for South Korea because one of the main reasons for South Korea in approaching the Arctic was securing oil and gas for the future. If the United States. can keep its production level of shale oil and gas, as one of the closest U.S. ally, South Korea does not have to rely heavily on expensive oil produced by OPEC countries nor invest in joint oil and gas explorations in the Arctic.

4.3 Dramatic drop in oil price

The goal of doing business is to maximize profit. Like in any other project, in order for the Arctic States and international oil companies to partner up and launch long-term oil and gas extraction projects in the Arctic, the proposed projects must pass the cost benefit analysis to

prove its worthiness. However, as *Figure 4* below produced by *Nasdaq* suggests, the downward trend in oil prices which started in June 2014 is discouraging the major oil giants from drilling and developing new wells in the Arctic.

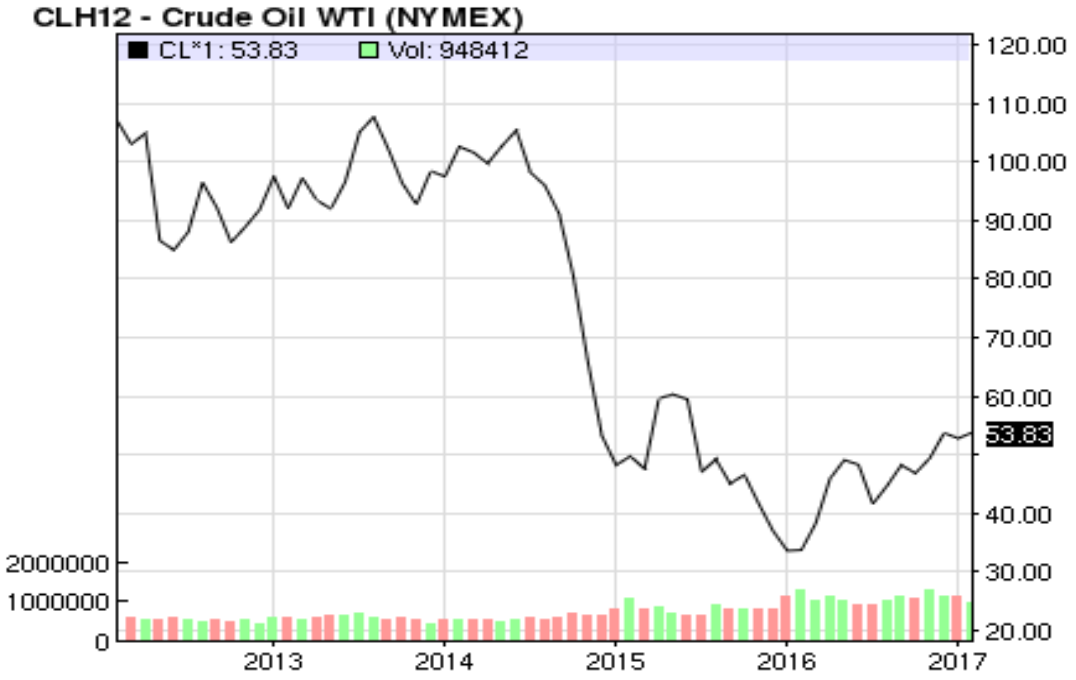


Figure 4: Crude Oil WTI Price graph from 2012 to 2017.
Source: Nasdaq (n.d.)

In December 2014, when the price of oil hit its lowest point since January 2009, the *Economist* listed the factors that were dragging down the price of oil. According to this article, there were four inter-related factors: a) decrease in demand for oil due to a lower overall global growth rate, b) the U.S. became one of the biggest oil producers, c) turmoil in the Middle East did not affect the amount of oil produced in the Middle East, d) OPEC decided not to cut the oil price, even when the price of oil was tilting heavily (E., 2014). Also, as is apparent in the graph provided by *Bloomberg*, the value of the dollar was gradually rising. Since crude oil is usually traded in U.S.

dollars, the demand in buying oil decreases when the value of the dollar increases.

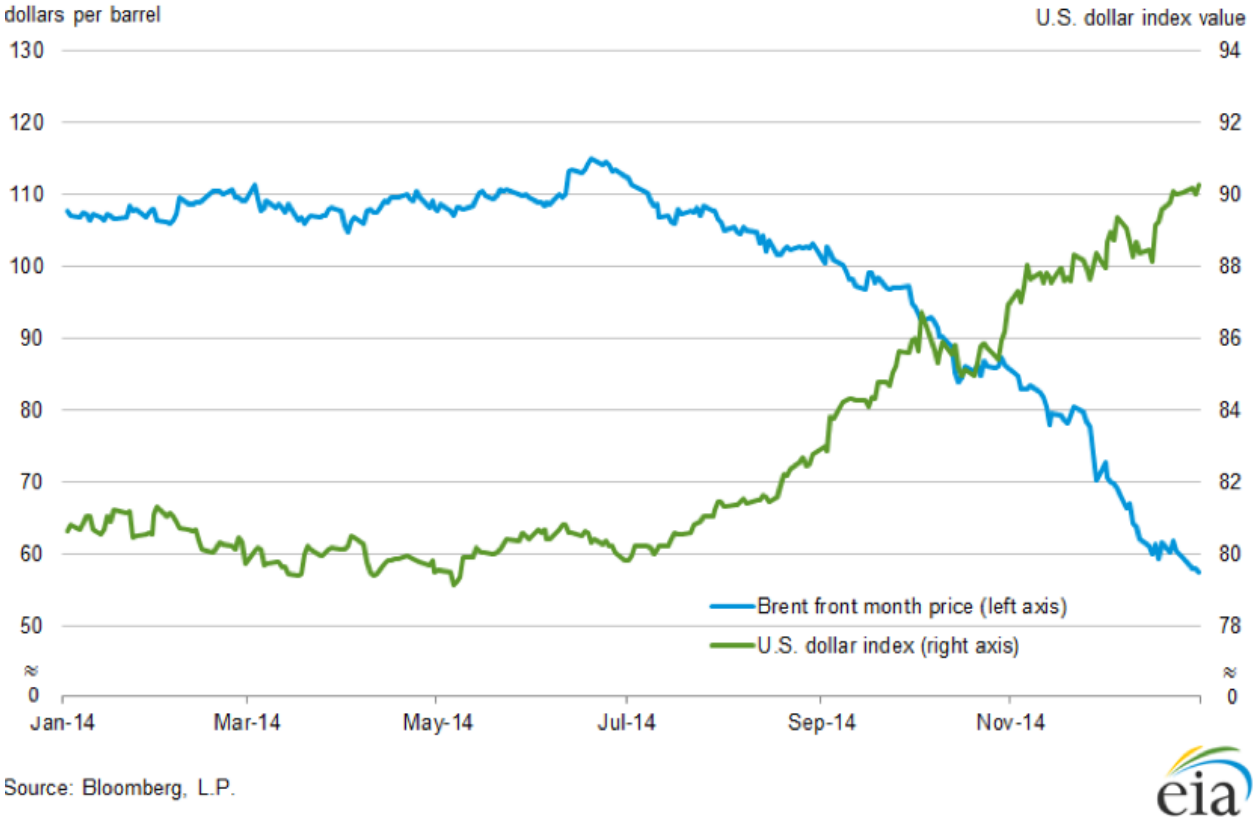


Figure 5: Brent oil and currency movements.
Source: Bloomberg, L.P. (2015)

Ever since the price of oil slid in 2014, the overall price of oil has not recover significantly enough for the oil companies to launch new drilling and exploration projects. Currently, due to the extremely low price of oil, most oil producing countries are producing and exporting their oil at prices that do not meet the break-even point per barrel.

The OPEC countries, even at low prices, have been steadily producing oil to outcompete the U.S. in the global oil market. However, OPEC's strategy to maintain its production rate to keep oil prices low turned out to be a double-edged sword. In 2014 and 2015, even though OPEC was also suffering from the low oil prices, OPEC failed to agree and cut the rate of oil production to put more pressure on American oil producers (Egan, 2014). However, even with

steady output, OPEC was not successful in stopping the U.S. from developing its shale fields. The U.S. now is considered as one of the biggest oil producers in the world. In November 2016, OPEC held another meeting to discuss oil production and finally reached an agreement to cut its level of oil production for six months starting from January 2017 (Wald, 2016). Such a decision by OPEC is remarkable because it means that not only OPEC member countries agreed to cut their production level but also other non-OPEC oil-producing countries such as Russia have agreed to cut their oil production level as well. Even with the reduced production level, world oil prices have not changed significantly. Also, unlike what OPEC and non-OPEC oil-producing countries expect, predictions on future oil prices are not promising. Such low prices of oil raise a question: 'why should a country, South Korea, invest in Arctic oil and gas?'. Due to set of limitations of the Arctic, although the Arctic has one of the biggest oil and gas fields of the world, it still is more profitable to import energy sources from other places than the Arctic. However, although South Korea is very much interested in oil and gas, South Korea is not just a country which only focuses on exploiting the Arctic.

Chapter 5. The Arctic as a ground for middle power diplomacy?

5.1 What is middle power?

Throughout history, political theorists have agreed on the premise that the international political system is essentially anarchic because there is no such thing as a higher entity that can regulate and dictate the behavior of sovereign states. Within an international system or a so called world order, stronger states are capable of securing their survival and exerting more influence on others. Thus, the international system is established by the superpower (hegemon) and, because there is no higher entity over sovereign states, states with power have the biggest influence within the international system. However, although a superpower determines the world

order, the current international system cannot be sustained by only one superpower. The middle powers are important in a way that they are not only capable of exerting the norms and values of a superpower but are also capable of having positive impacts within international system, when they collaborate.

The term *power* is one of the most frequently used words by political scientists. *Power* is often used by political scientists when naming countries by status. Although variables and factors that define and categorize countries as middle powers would vary by different status makers, variables such as political stability, international influence, soft power, military might, and economic capabilities are examples of frequently used variables to categorize countries as middle powers. From classical theorists such as Giovanni Botero to Martin Wight, Kenneth Waltz, and John Nye, the concept of power and the concept of power as a status have been studied by various scholars. Kenneth Waltz (1993) made a point that a country's rank or category of power is derived from various factors and wrote "rank depends on how they score on a combination of the following items: size of population and territory, resource endowment, economic capability, military strength, political stability and competence" (131). Similarly, Thorhallsson (2006) argued that political size and diversity, population, territory, sovereignty, economy, and international influence should also be considered. Power within the realm of international relations has been widely discussed by scholars and is often categorized into four different levels, which are: superpower, great power, middle power, and small power.

A superpower or *superpowers* are sometimes referred to as the pillars or poles of international relations. This term was most often used during the Cold War era. Various scholars such as William Fox, Paul Dukes, Ian Bremmer, and Lyman Miller have defined and argued about what a superpower is. One of the clearest definitions come from Lyman Miller (2005) that

he wrote: “a country that has the capacity to project dominating power and influence anywhere in the world, and sometimes, in more than one region of the globe at a time, and so may plausibly attain the status of global hegemon”. Similar to superpowers, *great powers* are states that are capable of influencing the world but without a hegemonic power. Martin Wight (1946) in *Power Politics* provided a definition of a great power and wrote “great powers are powers with general interests, i.e., whose interests are as wide as the states-system itself, which today means world-wide”. Like other categories of power, *small powers* have been defined in different ways. Thorhallsson and Steinsson (2017) argued that the determinants for small powers are lack of resources, power, and influence.

The term *middle power*, simply put, provides a sense of how big of an influence a state is in the international system. Middle power in international relations describes countries that are neither great nor small powers. The first concept of middle powers dates back to 16th century when Giovanni Botero (1589) wrote “they are exposed neither to violence by their weakness nor to envy by their greatness, and their wealth and power being moderate, passions are less violent, ambition finds less support and license less provocation than in large states”. The concept of *middle powers* gained more recognition around the world during the Cold War when they supported the spread of democracy and acted as important mediators between the two super powers, the U.S. and the USSR. During the bipolar Cold War era, middle powers have been important actors in building and maintaining world order. In the post-Cold War period and since the fall of the USSR, middle powers with converging interests have been collaborating in various areas such as environmental protection, debt relief, refugee support, and etc.

The category of middle powers is interesting in a way that size of the country is not necessarily a determining factor. A developing country can still be considered as a middle power

if it has a large territory. On the same note, a developed or a highly developed country can still be categorized as a middle power country depending on a size of its territory, military power, etc. One of the best examples that not only supports this interesting feature but also provides a good idea of what might middle power countries look like is MIKTA (Mexico, Indonesia, Republic of Korea, Turkey, and Australia). MIKTA is an informal partnership led by five different G20 member states. Although these five countries might consider themselves as bigger powers within an international system (certainly, countries such as South Korea and Indonesia are considered as regional powers), they still fall into the category of a middle power country. MIKTA is a great example that shows size of a country is not a defining factor in determining middle powers. While South Korea is a country that is smaller than Washington State, one of the lower 48 states of the U.S., Mexico is considered as one of the biggest countries in the world.

5.2 The concept of middle power through the lens of theorists

The international system of the 21st century is now more complex than ever before in modern history. As it became more complex with occasional occurrence of global circumstances such as terrorist attacks, natural disasters, the global economic crisis, and wars, the world order cannot be sustained by only one or several superpowers. Because management of such a complicated system can not be carried out by a single country, the role of the middle powers has become more significant within the current international system through the formation of alliances or cooperating under international organizations. To understand behavior of a state, it is important to know different theories that explain the behavior because theories provide a good explanation of strategies and policies that a state pursues.

Realists believe that the international system is anarchic. Realism is one of the most influential schools of thought in international relations theory which puts emphasis on the use of

hard power. Hard power, according to Nye (2011), is “the ability to get others to act in ways that are contrary to their initial preferences and strategies". Realists argue that the international system is a pool of rival states which always pursue *hard power* (military power) to survive and achieve relative gains. Thus, realists believe that the end goal of a state is to accumulate more hard power (soft power is not considered as an important factor) to build military might. Also, although they agree that cooperation among sovereign states is possible, such cooperation is extremely unlikely and, even if it happens, states do so only for their own benefit and survival. Robert Dahl (1957) defined power as “the ability to get someone to do something that he wouldn’t otherwise do”. Like Dahl’s definition, realists believe that the capability to project power shows states’ status in the international system. Thus, in their view, middle powers are the units within the international system that are capable of projecting some power and influence but do not have enough strength to have major impact as the superpowers would.

Aside from realist perspective, another way of understanding power and cooperation in international system, which is still relevant today, developed from the thinkings from the late seventies. Unlike realists, a leading neo-liberal Robert Keohane (1984) would argue that international cooperation among sovereign states, regardless of their power status, is possible because they “adjust their behavior to the actual or anticipated preferences of others, through a process of policy coordination”. Like Keohane, neoliberals argue that sovereign states are more concerned with absolute gains than with relative gains and thus will cooperate to achieve their interests. Two of the most important neoliberal scholars Joseph Nye and Robert Keohane (1977) argued in their collaborative work *Power and Interdependence* that states are, and will be, even more interlinked to one another and it would be impossible for them to survive alone in the international system. Although neoliberals agree that cooperation is difficult in an anarchic

international system, they also believe that sovereign states are capable of pursuing their own self-interests while also achieving international cooperation through various channels such as international institutions. The Arctic Council is a great example of an international institution which different sovereign states cooperate not only for their own national benefits but also for greater causes such as protecting the Arctic and fighting climate change.

One of the key differences between realism and neoliberalism is that neoliberals value *soft powe*r. Neoliberals believe that soft power is as important as hard power in international relations. Nye (2011) in *Future of Power* argued that soft power rests on three factors which are culture, political values, and foreign policies to attract rather than coerce. In most cases, states that are categorized as middle powers lack enough hard power to overthrow the superpowers. Thus, based on neoliberal views, middle powers, instead of considering other states as rivals, need to utilize their soft power through cooperation and building good international relationships with other states.

The basic concept of a middle power, as stated earlier, is a state that is neither a super nor a small power. However, this is a very simplified definition. Although different theorists have defined middle power, it still lacks consensus or a solidly agreed upon definition. Besides widely accepted middle powers such as Canada and Australia, the debate on whether emerging middle powers, whether they call themselves middle powers or not are recognized as much by other sovereign states, should be considered middle powers based on their behavior and foreign policy goals or by their capability to be called middle powers is still on going. However, can a state really be called a middle power if it only satisfies one (either behavior or capacity) factor from the two factors described above? In order to be considered as a middle power, a global citizen which not only acts upon its own national interest but also for the overall absolute benefit of the

international society, a state needs the capacity to do so. Thus, capacity or capability becomes a premise for a middle power. With capacity being a prerequisite, I agree with how neoliberals define middle powers that the middle powers are the states that prioritize participating in various global issues through international cooperation by providing financial, cultural, and technical support to create absolute gains rather than taking the path of endless rivalry against others to chase relative gains.

5.3 South Korea: a contemporary middle power in the Arctic

There is lesser consensus on identified middle powers. Middle powers are defined by a mix of capabilities (such as relative & quantitative rankings), will and behavior as a global citizen, and self-defining or self-identification a a middle power. As a country trying to brand itself as a middle power under the 'Global Korea' slogan, the Arctic was a good area for South Korea. This is because the Arctic is not only an area of high potential which could benefit South Korea in expanding its economy and securing resources but it is also one of the regions where South Korea can best practice its soft power.

Year 2013 was a big year for the five Asian states that became official observers in the Arctic Council from being *ad hoc* observers. However, whether intentional or unintentional, their interests in the Arctic and their acceptance by the Arctic Council were criticized for causing potential problems in the Arctic. Few of the concerns raised were issues of sovereignty, environmental degradation, balance of the Arctic Council, and the issues of the Arctic Council becoming a stage for non-Arctic issues such as political disputes between states. Such concerns are understandable because, of the five newly accepted Asian observer states, three (China, India, and South Korea) countries have a history of causing environmental degradation. Moreover, they also have complicated territorial disputes and relationships some of which stem

from historical and cultural events (India and China, Japan and South Korea, China and South Korea). With these issues, Arctic sovereignty was one of the main concerns raised by the Arctic states in admitting new observers to the Arctic Council. Concerns over sovereignty received heightened attention among Arctic states when Chinese Rear Admiral Yin Zhuo implied that the Arctic Ocean should not only be owned or governed by the Arctic states but rather, it should be seen as a high sea by stating "the Arctic belongs to all the people around the world as no nation has sovereignty over it" (Wright, 2011). Moreover, along with China's various territorial disputes with her neighboring countries, its continued attempts to buy a territory in the Arctic alarmed the Arctic States over China's ambitions in becoming an Arctic state or a stakeholder in the Arctic from a 'near-Arctic state' (Higgins, 2014). Unlike overall issues that were raised about Asia's interest towards the Arctic, especially that of China, South Korea successfully managed to overcome suggested negative concerns by self-identifying itself as a non-threatening global citizen that is willing to contribute to the sustainable development of the Arctic as a middle power.

South Korea's interest in self-defining as a middle power and reforming its image from an aid recipient country to a donor country and a contemporary middle power were triggered by President Moo-Hyun Roh's (2003-2008) government and gained momentum when President Myung Bak Lee (2008-2013) took office in 2008. He had a vision of making South Korea an important international player and thus popularized the slogan 'Global Korea'. Under this slogan, his government interpreted the definition of a middle power as being a bridge, agenda-setter, and a global citizen and applied them to its diplomatic policies and governmental plans. As a small but techno savvy country with economic capabilities and a willingness to be seen as a global citizen, South Korea participated in various multilateral platforms such as hosting the G20

meeting in 2010 and hosting Seoul Nuclear Security Summit in 2012. Moreover, besides hosting international events and influencing with its K-pop culture, South Korea has expanded its use of soft power by establishing World Friends Korea, a national overseas volunteer group, contributing to UN Peace Keeping Operations, and by joining the Development Assistance Committee (DAC) as a first country to transform from a recipient country to a major donor country (Axel & Jadir, 2013). Through these set of actions, South Korea showed its abilities to deliver positive influence to the world. Moreover, these efforts helped South Korea in becoming an official observer in the Arctic Council in 2013.

As stated earlier in this paper, South Korea announced its Arctic Master Plan for the "Arctic Policy of the Republic of Korea", the first solely Arctic focused policy, in 2013. With establishing visions and values under its national Arctic policy, South Korea became the first Asian country among newly admitted observers to have an official national policy on the Arctic. The fact that a seemingly unrelated and remote Asian country showed interest in Arctic issues and also announced a national policy was enough to prove South Korea's willingness to behave as a global citizen that supports and participates in global agendas. However, the real significance of South Korea's willingness to self-identify and to be defined as a middle power can be found from the contents of its Arctic policy. Whether it was to express its interest in securing a good position in the upcoming Arctic cold rush or to pursue middle power diplomacy, South Korea has a vision of "sustaining the future of the Arctic" which is also the vision for the Arctic Council. Moreover, out of three policy goals, two of them are "building a cooperative Arctic partnership" and "enhancing scientific research activities for the Arctic" (Jin et al., 2017). The way South Korea worded its policy goals is important because it used "of the Arctic" and "for the Arctic" instead of putting more emphasis on South Korea. Such wording that considers

the Arctic (an emerging global issue) as equivalently important as its own national interest gave the Arctic Council and the Arctic states a message that South Korea is ready to play a role as a global citizen in the Arctic.

South Korea's interest in playing an important role on the global stage as a middle power can be found in its non-threatening approach and participation in various meetings and projects. In approaching the Arctic, it branded itself as a country that focuses only about the Arctic issues in the Arctic Council, a spearhead in fighting climate change, and a country with much soft power potential. First of all, unlike the concerns on observers using the Arctic Council as a stage for non-Arctic issues, South Korea managed to focus solely on Arctic related issues. South Korea has historical, territorial, and diplomatic disputes with its neighbors China and Japan. South Korea has unresolved historical and diplomatic disputes with Japan on national security and comfort woman issues. Moreover, it has a territorial dispute on an islet called Dokdo. With China, South Korea has a political dispute on deploying the U.S. built Terminal High Altitude Area Defense (THAAD) as means of war deterrence against North Korea. Regardless of these issues, South Korea hosted the very first high-level trilateral talks on Arctic affairs to cooperate and to work on joint projects among neighboring countries.

Second, as a middle power seeking to build global presence, South Korea tackled climate change issues by taking the initiative in hosting the Green Climate Fund (GCF) headquarters in Songdo, South Korea and establishing the Global Green Growth Institute (GGGI). The Arctic, due to Arctic amplification, is one of the most impacted regions from climate change because the Arctic heats up about twice as fast as other regions. Thus, fighting climate change and developing the Arctic in a sustainable way has long been a key missions of the Arctic Council. While serving as an ad-hoc observer in the Arctic Council, as a new Official Development

Assistance (ODA) donor country, it became a donor country of the GCF which operates under the frame work of the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC which provides financial and technical assistance to developing countries by gathering funds from developed countries. South Korea's participation in the GCF is relevant to its middle power diplomacy using soft power because the main objective and goal of the GCF is to "support projects, programmes, policies, and other activities in developing country Parties using thematic funding windows" ("GFC Background," 2016). Moreover, in 2012, South Korea achieved another prestigious moment by hosting the GCF headquarters.

Besides being a donor country of the GCF, to achieve its vision, South Korea established the GGGI in 2010 as a non-profit foundation which focuses on policy innovation that promotes both economic and sustainable development. In 2012, during the Rio+20 Summit in Brazil, the GGGI was ratified and converted into a 'treaty based inter-governmental organization' which serves as a 'think-and-act tank' that focuses on providing strategic support to developing countries to promote green growth and sustainable development. The GGGI has two main areas of focus which are 'country green growth planning & implementation' and 'investment and implementing policy solutions'. As a newly developed country which is capable of relating itself to other developing countries, South Korea uses its soft power by providing strategic and technical support that comes from the experience of achieving its own development in a short period of time.

Both founding of the GGGI and hosting of the GCF headquarters in Songdo happened when South Korea was serving as an ad-hoc observer in the Arctic Council. Although there is no written statement that South Korea's intentions in founding the GGGI and hosting the GCF were to prepare itself to be a competitive candidate for the observer status in the Arctic Council.

However, whether intentional or unintentional, South Korea's moves towards fighting climate change and the mission statements of the GGGI and the GCF share similar vision and value with that of the Arctic Council: promoting sustainable development of the Arctic. The Arctic Council has criteria for admitting observers and two of the important features are "have demonstrated a political willingness as well as financial ability to contribute to the work of the Permanent Participants and other Arctic Indigenous peoples" and "accept and support the objectives of the Arctic Council defined in the Ottawa declaration" ("Observers," 2015). By participating in the GCF and the GGGI, South Korea not only clearly demonstrated its political desire and financial capability to contribute itself in fighting climate change but it also proved its willingness to follow the objectives set by the Arctic Council. Moreover, since two of the Arctic states (Denmark and Norway) are also founding member countries of the GGGI, it was possible for South Korea to leave a good impression with Arctic stakeholders that have decision making power in the Arctic Council. It was very thoughtful for South Korea because the Arctic Council is a consensus based organization and in order for South Korea to become a member, it was necessary to have good bilateral relationships with all eight Arctic states. Thus, by working on climate change issues, South Korea was not only able to brand itself as a middle power but it was also able to become a part of the Arctic Council where it can elevate and strengthen its middle power status.

Third, as a country with much soft power potential, it focused on scientific research, foreign assistance, cultural exchange, and education. The Arctic Council promotes sharing of information and scientific research data that is about the Arctic. As one of the scientific powers with cutting-edge technique and manpower, South Korean government promoted scientific research in the Arctic. As stated earlier in this paper, South Korea has national Arctic institutions

(eg. Korea Maritime Institute (KMI) and Korea Polar Research Institute (KOPRI)), two research stations in the Arctic, and a research icebreaker. To contribute to building an Arctic database, South Korea launched and participated in various joint scientific projects on the North Greenland Emian Ice Drilling, mantle xenolith, environmental change of Tundra region, ice core bank, permafrost, and so on (Park, 2011).

Besides funding the GCF to provide foreign aid that promotes climate change research, South Korea provided other forms of assistance. By building mutual relationship with the Aleut International Association (AIA), South Korea became the first observer state to partner with a Permanent Participant. According to Jim Gamble, a former president of the AIA, South Korea worked with the AIA on the 'Arctic Marine Indigenous Use Mapping' by supporting the AIA by providing experts, technical assistance, and financial support (personal communication, January 2016). Moreover, while focusing on hard science, South Korea also worked on providing educational support as well as cultural exchange. As a way of influencing others with its soft power, the KMI hosted the first Korea Arctic Academy (KAA) in 2015. It is an educational seminar/conference where students from the Arctic states and Korea share their ideas and visions about the future of the Arctic (KMI). Since 2015, South Korea has been expanding this program by accepting more students every year and increasing Indigenous student representation. Through hosting this event, South Korea was able to prove to Arctic community that it is an Arctic-ready state. At the same time, it was also able to show and spread Korean culture to eight different countries. Although the main goal of the KAA is idea and knowledge sharing among students, the KMI included various events which introduce students to Korean history, traditions, and contemporary culture. By exposing the students to Korean culture, South Korea sufficiently pursued *cultural diplomacy*, a form of soft power, which sometimes can have bigger impacts

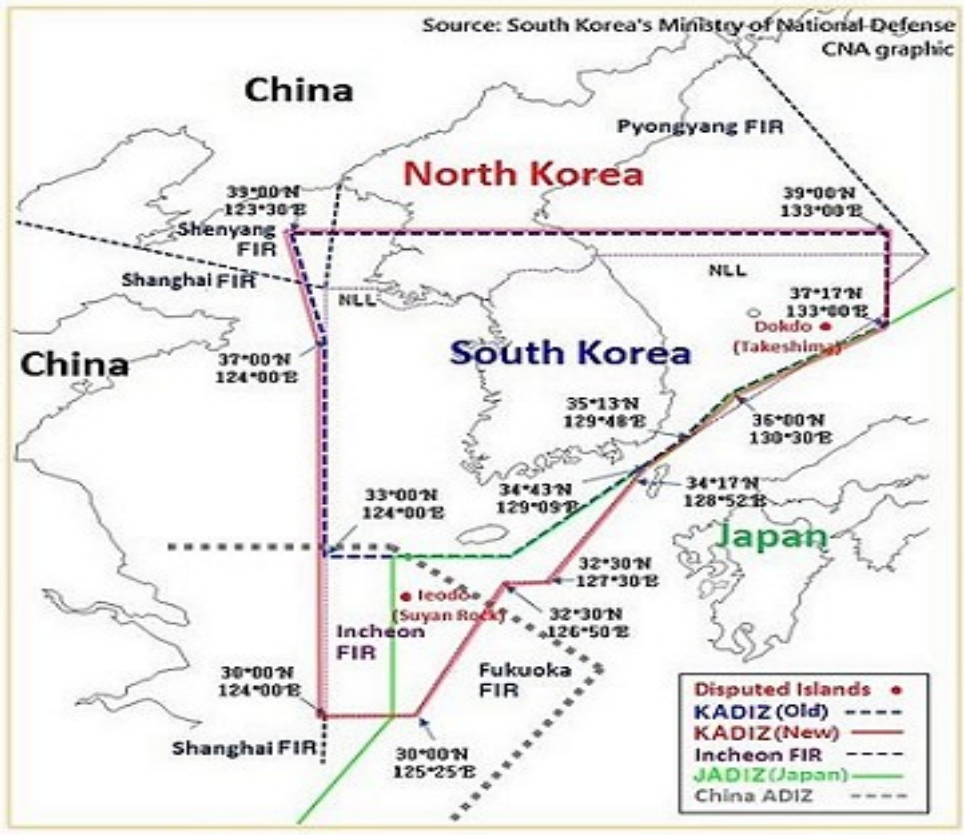
than hard power. As one of the biggest cultural influencers (through K-pop culture) of Asia, South Korea sufficiently used its culture as a form of soft power to influence and spread its culture to the students from the West (Manticore-Griffin, 2011).

The concept and factors that define middle power still lack dominant consensus. However, by analyzing how different scholars try to describe and define middle power, it is possible to infer that the states that qualify into the category of middle power commonly have advanced economies, stable political systems, and the behavior of a global citizen. If these are the commonly used variables used to evaluate the status of a country, there is no doubt that South Korea is a contemporary middle power country that not only serves as a bridge among different powers but also a country that serves as a spearhead and an influencer in niche areas. Looking at South Korea's activities within South Korea and in the Arctic since 2008, these set of actions such as hosting major international forums and institutions, being a financial and technological supporter, using soft power as means of influence, and actively participating in the Arctic Council where different powers collaborate suggest that South Korea has successfully raised its international profile. Therefore, South Korea's interest in the Arctic and the Arctic Council not only came from the obvious economic and resource benefits but they also arose from South Korea's desire to use the Arctic as a platform to promote and concrete its image of being a contemporary middle power.

5.4 Why middle power diplomacy and why the Arctic?

Despite its economic status with famous world class companies such as Samsung, Hyundai, and LG, the South Korean stock market is often devalued. This is because of the so called 'North Korea risk'. The South Korean stock market is devalued because the Korean

Peninsula is still not a war-free zone. Korea is the only divided nation in the world. Although the two Koreas signed an armistice, South Korea still borders and faces North Korean military threats as North Korea tries to secure its hereditary succession of three generations. From sinking of the Cheonan Warship, shelling of Yeonpyeong Island, and to launching of nuclear tests, the level of the North Korean threat has skyrocketed in recent few years. Thus, even with an attractive geo-location, market, and major companies, major investors devalue the South Korean currency (Gearan, 2017).



Map 4: The map of Air Defense Identification Zone
Source: Ministry of National Defense of South Korea

As the Map4 shows, although potential military provocation from the North Korea is the main issue South Korea has been facing over more than half a century, that is not the only conflict which South Korea faces. As a strong but comparably small country which borders

relatively stronger nations China and Japan, survival has always been a key concern for South Korea. Besides the already mentioned dispute over deploying the THADD system in the Korean Peninsula, South Korea has been involved in a dispute over Ieodo, a rock located within the EEZ of South Korea and China, also known as Socotra Rock. Tensions with China sparked when China included Ieodo under the Chinese Air Defense Identification Zone (CADIZ) and it peaked when South Korea revised its Korea Air Defense Identification Zone (KADIZ) for the first time in 62 years by including Ieodo within its area of operations (Kim, 2013). This dispute over Ieodo raised tensions not only between South Korea and China but also between the U.S. and China because the KADIZ put Chia under U.S. surveillance.

As with China and North Korea, as briefly introduced earlier in this paper, South Korea has a territorial dispute over Dokdo as Japan made a claim over this South Korean governed territory. For a small country surrounded by more powerful nations with territorial disputes, these issues are critical and directly related to South Korea's international profile and its sovereignty. Thus, building a bilateral or multilateral relationship with other countries by pursing a middle power diplomacy is crucial for South Korea to sustain in international affairs. By participating in various projects put out by international organizations, building positive mutual and bilateral relationships with other countries, and creating an image of a global citizen would encourage friendly countries to support South Korea in solving the disputes. The best example is South Korea's relationship with the U.S. South Korea has been one of the closest allies of the U.S. since the Korean War. As a strategy, South Korea has become the biggest supporter of the U.S. and thus was able to raise its international profile as a middle power in a short period of time. Moreover, although there are other geo-political reasons as well, the U.S. provides a deterrence against war. This deters North Korea from escalating the existing tension to a full-

scale war, contains China's use of naval and air power in the East China Sea, and holds back Japan's use of its self-defense force near Dokdo.

Although South Korea faces various issues including these territorial dispute, South Korea has not used the Arctic Council as a platform to solve these issues. Rather, regardless of other issues, South Korea successfully promoted joint projects and collaborated not only with the Arctic states but also with China and Japan in various scientific research missions in the Arctic. Even though the Arctic Council does not discuss issues which South Korea has with its neighbors, nevertheless, South Korea's decision to serve as an observer was a thoughtful decision. Besides elevating its national profile as a global citizen, South Korea expanded and solidified its relationship with the Arctic states. This is a huge achievement because South Korea not only made potential business partners but, most importantly, it also gained potential supporters who may support South Korea in discussing and solving the disputes within other international organizations such as the U.N. For example, as stated earlier, South Korea has a major interest in the use of the NSR. Thus, it has formed a mutual relationship with Russia Russia in developing the NSR and has become a provider of icebreakers for the Yamal LNG Megaproject. Similar to South Korea, Russia has a dispute over Kuril Islands with Japan. To put more pressure on Japan, Russia has been one of the biggest supporters of South Korea in the dispute on Dokdo (Min, 2011). By being a partner with Russia on one of the Russia's biggest projects and sharing a similar situation with Japan, it allows Russia to express more support for South Korea's sovereignty claims on Dokdo.

As these examples entail, the Arctic provides more than just access to alternative shipping routes, natural resources, and economic benefits. If the Arctic is approached in non-threatening and strategic ways, it provides opportunities for middle powers to pursue middle

power diplomacy which enables them to survive and thrive in the international system.

Chapter 6. Conclusion

The Arctic is now more reachable than ever due to increased navigable days through different Arctic waterways. As the Arctic received heightened attention, states and scholars focused on typical economic and energy benefits which the Arctic offers. However, to fully understand a country's hidden intentions and behavior, it is necessary to think beyond the typical assumptions and include other variables that might affect a country. South Korea has shown great interest in the Arctic and thus became an observer in the Arctic Council and established its national Arctic Policy. However, regardless of the contents of the South Korean Arctic Policy, South Korea's interests in the Arctic have commonly been interpreted in two ways: economic gains and energy security. Thus, to understand South Korea's hidden or relatively less well known intentions, this thesis looked at South Korea from the *middle power* stand point and examined specific situations from which South Korea can potentially benefit from for being present in the Arctic as a middle power.

This thesis analyzed the triggers (the NSR, oil and gas, and shipbuilding industry) of South Korean Arctic interest and the uncertainty of the expectations of the Arctic. Moreover, this thesis analyzed the concept of a middle power and defined the *middle power* as a state that is neither a super nor a small power, has the right behavior, has a cutting-edge technology, and has economic capacity to serve as a global citizen. With these sets of analysis, this thesis argued that South Korea's interest in the Arctic not only comes from the physical benefits of exploiting using the Arctic but it also comes from the soft benefits. A concrete image of being a global citizen provides opportunities for middle powers to engage with greater powers and stakeholders

in various international relations settings. South Korea could become an observer in the Arctic Council by building mutual relationships with the Arctic states by pursuing a middle power diplomacy. Moreover, by utilizing soft power in the Arctic on various projects, South Korea was able to expand its network, spread its culture, elevate its international profile, open new business opportunities, and gain potential supporters of various issues facing South Korea.

The disputes which South Korea has with its neighboring countries are not as simple as they look because they are more than just territorial or political disputes. South Korea is the most Eastern in-land ally of the U.S. As a U.S. ally and a democratic state that borders the biggest threats and rivals of the U.S.: China, North Korea, and Russia. Thus, because of its geo-political and strategic importance in pursuing "pivot to Asia" which checks North Korea and Russia and contains Chinese expansion, there is an opportunity to station U.S. military forces even after reunification of the two Koreas. This, in other words, means that the dispute over Ieodo might not be solved in a short period of time. Moreover, as recent upsurge of tension between South Korea and China over deploying the THAAD in South Korea implies, South Korea might face further disputes with China. On the disputes with Japan and North Korea, South Korea has a mix of historical and political issues which roots from the colonization of Korea and from the the Korean War. Thus, because of the complexity of these disputes, they will not be solved in the flight of time.

South Korea's decision to diplomatically approach the Arctic as a middle power might not be the ultimate diplomatic solution to the disputes its facing. However, by being an active participant in the Arctic Council, South Korea will be able to build close or closer ties with various countries including the Arctic and the non-Arctic states. Although use of hard power via sanctions and military is still effective, cases such as North Korea prove that use of hard power is

not always the answer. Thus, it seems that South Korea, as a middle power, learned and decided to utilize soft power to not only raise its international profile as a global citizen but also to satisfy its national energy, financial, and security needs by using the Arctic and the Arctic Council as a platform for its middle power diplomacy.

References

Arctic Indigenous Peoples. (n.d.). Retrieved February 21, 2016, from http://www.arcticcentre.org/EN/communications/arcticregion/Arctic-Indigenous-Peoples

Axel Marx, & Jadir Soares. (2013). South Korea's Transition from Recipient to DAC Donor: Assessing Korea's Development Cooperation Policy. *Revue Internationale De Politique De Développement,* (4.2), 107-142; National Role Conceptions in the 'Global Korea' Foreign Policy Strategy. (2013). *The Korean Journal of International Studies,* The Korean Journal of International Studies, 06/30/2013.

BP Amoco, & BP. (2015). *BP Statistical Review of World Energy (London, England : 2015)*.

Bird, K., Geological Survey, & Energy Resources Program. (2008). *Circum-Arctic Resource Appraisal : Estimates of undiscovered oil and gas north of the Arctic Circle* (Fact sheet (Geological Survey (U.S.)) ; 2008-3049). Reston, Va.]: U.S. Dept. of the Interior, U.S. Geological Survey.

Botero, G. (1956). *The reason of state*. Yale University Press.

Chanwoo, K. (2015, November 12). *Presentation by Mr. Chan-woo Kim Ambassador for Arctic Affairs on the occasion of Singapore Forum on the Arctic*. Speech presented at Singapore Forum on the Arctic in Singapore.

Cho, K. (2017, January 5). South Korean shipbuilding looming over a cliff as it's overtaken by Japan. *The Hankyoreh Media Company*. Retrieved March 5, 2017, from http://english.hani.co.kr/arti/english_edition/e_national/777534.html

Country Analysis Brief: South Korea (Rep.). (2017, January 19). Retrieved February 17, 2017, from U.S. Energy Information Administration website: https://www.eia.gov/beta/international/analysis.cfm?iso=KOR

Crude awakening: The impact of plummeting crude oil prices on company finances. (n.d.). *Deloitte*. Retrieved from https://www2.deloitte.com/uk/en/pages/energy-and-resources/articles/crude-awakening.html

Dahl, R. (1957). The concept of power. *Behavioral Science, 2*(3), 201-215.

Davis, M. (2014, November 21). China's 'Malacca Dilemma' and the future of the PLA. Retrieved May 20, 2017, from https://cpianalysis.org/2014/11/21/chinas-malacca-dilemma-and-the-future-of-the-pla/

Egan, M. (2014, December 4). Bitterly divided OPEC fails to reach oil output decision. *CNN*. Retrieved from http://money.cnn.com/2015/12/04/investing/opec-meeting-oil-prices-saudi-arabia/

E.L. (2014, December 8). Why the oil price is falling. *The Economist*. Retrieved from http://www.economist.com/blogs/economist-explains/2014/12/economist-explains-4

Francois, Joseph. (2015). Melting Ice Caps and the Economic Impact of Opening the Northern Sea Route. *18-2012*.

Gearan, A. (2017, August 10). A nuclear-armed North Korea could make smaller disputes with Pyongyang much more dangerous. *The Washington Post*. Retrieved from https://www.washingtonpost.com/world/national-security/a-nuclear-armed-north-korea-could-make-smaller-disputes-with-pyongyang-much-more-dangerous/2017/08/10/b62ee0ce-7dd7-11e7-9d08-b79f191668ed_story.html?utm_term=.f1271c19e793

Gorbachev, M. (1987). *The Speech in Murmansk : At the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk, October 1, 1987*. Moscow: Novosti Press Agency Pub. House.

Higgins, A. (2014, September 28). A Rare Arctic Land Sale Stirs Concerns in Norway. *New York Times (1923-Current File)*, p. 6.

How much shale (tight) oil is produced in the United States? (2017, June 22). *Energy Information Administration*. Retrieved July 2, 2017, from https://www.eia.gov/tools/faqs/faq.php?id=847&t=6

Jin, Dongmin, Seo, Won-sang, & Lee, Seokwoo. (2017). Arctic policy of the Republic of Korea. *Ocean and Coastal Law Journal, 22*(1), 96.

Keohane, R. (1984). *After hegemony : Cooperation and discord in the world political economy*. Princeton, N.J.: Princeton University Press.

Keohane, R., & Nye, Joseph S. (1977). *Power and interdependence : World politics in transition*. Boston: Little, Brown.

Kim, G. (2013, December 8). KADIZ hwakdae sokjeon sogkyul sunpo…jukwonsuho euiji chunmyung [South Korea expands KADIZ to secure its sovereignty]. *Yonhap News*. Retrieved from http://news.naver.com/main/read.nhn?mode=LSD&mid=sec&sid1=100&oid=001&aid=0006638665

Kim, G., & Kim, J. (2016). Jawonweikyo jungchek gyuljung gwajun bikyo boonsuk [Analysis on Resource Diplomacy: 1970 Oil Shock and the Sudden Rise of Oil Price in 2008].

Journal of Government Administration, 11(12), 145-171. Retrieved from http://mju.ac.kr/mbs/mjukr/download/lib_paper/12.pdf

Kim, W. (2015). Rising China, pivotal middle power South Korea, and alliance transition theory. *International Area Studies Review, 18*(3), 251-265.

Kline, Robert T. (2013). The pen and the sword: The People's Republic of China's effort to redefine the exclusive economic zone through maritime lawfare and military enforcement. *Military Law Review, 216*, 122-169.

Lee, J. (2014, August 25). Sungdong Chosun suju zanryang saegye 10wi (Sungdong Chosun ranked world's top 10 shipbuilder). *Busan Ilbo*. Retrieved May 3, 2016, from http://news20.busan.com/controller/newsController.jsp?newsId=20140825000143

Liu, & Kronbak. (2010). The potential economic viability of using the Northern Sea Route (NSR) as an alternative route between Asia and Europe. *Journal of Transport Geography, 18*(3), 434-444.

Lyman, M. (2005). Chia an Emerging Superpower? *Stanford Journal of International Relations*, 6(1). Retrieved from https://web.stanford.edu/group/sjir/6.1.toc.html.

Lunde, L., Yang, Jian, Stensdal, Iselin, & Young, Oran R. (2016). Asian countries and the Arctic future. New Jersey: World Scientific

Manticore-Griffin, N. (2011). K-Pop's Soft Power. *In These Times, 35*(6), 32-33,5.

Min, Y., & North East Asian History Foundation. (2011). *Yurŏp ŭi Tokto insik* [How Europe sees Dokdo], North East Asian History Foundation ; 61). Seoul: Northeast Asian History Foundation.

Moon, J. (2017, March 28). Korea's DSME delivers the world's first icebreaking LNG carrier to Russia. *Pulse by Maeil Business News Korea*. Retrieved April 3, 2017, from http://pulsenews.co.kr/view.php?year=2017&no=210155

Murray, J. (1998). Physical/geographical characteristics of the Arctic. *In: AMAP assessment report: arctic pollution issues*. Arctic Monitoring and Assessment Programme (AMAP), Oslo, pp 9–24

Murtaugh, D., & Wingfield, B. (2015, January 7). U.S. Oil Exports Jump to Record as Shale Production Booms. *Bloomberg*. Retrieved from https://www.bloomberg.com/news/articles/2015-01-07/oil-exports-from-u-s-jump-34-to-record-as-shale-output-booms

Nye, J. (2011). *The future of power* (1st ed.). New York: PublicAffairs.

Observers. (2015, May 07). Retrieved April 6, 2016, from https://www.arctic-council.org/index.php/en/about-us/arctic-council/observers

OMR: A six month probation? (2017, January 19). *International Energy Agency*. Retrieved from https://www.iea.org/newsroom/news/2017/january/omr-a-six-month-probation.html

Omre, Anette, O., Ehlers, Soren, & Norges Teknisk-Naturvitenskapelige Universitet, Fakultet for Ingeniørvitenskap Og Teknologi, Institutt for Marin Teknikk. (2012). *An Economic Transport System of the next Generation Integrating the Northern and Southern Passages*.

Park, J., & Lee, M. (2015). A Study on Competitiveness and Effect Analysis for Developing a Port Specialized in Northern Sea Route. *Journal of Navigation and Port Research, 39*(3), 241-251.

Park, Y. (2014). South Korea's Interests in the Arctic. *Asia Policy,* (18), 59-65.

Pastusiak, T. (2016). *The northern sea route as a shipping lane: Expectations and reality*. Springer International Publishing.

Pettersen, T. (2012, September 27). Chinese icebreaker concludes Arctic voyage. *Barents Observer*. Retrieved April 25, 2016, from http://barentsobserver.com/en/arctic/chinese-icebreaker-concludes-arctic-voyage-27-09

Rowe, Elana Wilson, R., Solli, Per Erik, S., & Yennie Lindgren, Wrenn, Y. (2013).

Seadrill crisis spreads to battered South Korean shipbuilders. (2017, April 6). *Nikkei Asian Review*. Retrieved April 14, 2017, from https://asia.nikkei.com/Business/AC/Seadrill-crisis-spreads-to-battered-South-Korean-shipbuilders

Schaefer, K. (2016, May 31). The Offshore Oil Business Is Crippled And It May Never Recover. *Oilprice.com*. Retrieved April 5, 2017, from https://oilprice.com/Energy/Crude-Oil/The-Offshore-Oil-Business-Is-Crippled-And-It-May-Never-Recover.html

Stephen, B. P., & Yucel, M. K. (2013, October 15). The Shale Gas and Tight Oil Boom. *Council on Foreign Relations.* Retrieved from http://www.cfr.org/united-states/shale-gas-tight-oil-boom-us-states-economic-gains-vulnerabilities/p31568

Shin, S. (2016, October 10). Business Info. Retrieved from https://www.knoc.co.kr/sub03/sub03_1_1.jsp

S. Korea's top 3 shipyards log 8 tln won operating loss in 2015. (2016, January 6). *Yonhap News Agency*. Retrieved March 8, 2017, from http://english.yonhapnews.co.kr/search1/2603000000.html?cid=AEN20160107002000320

Sonn, Y. (2014). *Yearbook of Energy Statistics 2014* (Vol. 33, Rep.). Retrieved from http://www.keei.re.kr/keei/download/YES2014.pdf

South Korea: Hyundai Mipo Launches Panamax Ice Class Bulker. (2013, January 23). *World Maritime News*. Retrieved from http://worldmaritimenews.com/archives/115096/russia-hyundai-mipo-launches-panamax-ice-class-bulker-ns-yakutia/

The Arctic Council: A backgrounder. (2015, May 20). Retrieved March 21, 2016, from http://www.arctic-council.org/index.php/en/about-us

Thorhallsson, B., & Steinsson, S. (2017). Small State Foreign Policy. *Oxford Research Encyclopedia of Politics*. doi:10.1093/acrefore/9780190228637.013.484

Thorhallsson, B., & Wivel, A. (2006). Small States in the European Union: What Do We Know and What Would We Like to Know? *Cambridge Review of International Affairs, 19*(4), 651-668.

United States. Department of Defense. (2015). *Military and Security Developments Involving the People's Republic of China : Annual Report to Congress*

United Nations Framework Convention on Climate Change. (2016, December 02). Green Climate Fund: Background. Retrieved from http://unfccc.int/cooperation_and_support/financial_mechanism/green_climate_fund/items/5869.php

Wald, E. R. (2016, November 30). Oil Prices Spike As OPEC Agrees To Cut Production. *Forbes*. Retrieved from https://www.forbes.com/sites/ellenrwald/2016/11/30/opec-production-deal-in-works/#5d5875034f0e

Wight, M. (1946). *Power politics* ("Looking forward" pamphlets, no. 8). London: Royal Institute of international affairs. P.50

Waltz, K. (1993). The Emerging Structure of International Politics. *International Security, 18*(2), 44-79.

Working Groups. (2015, June 29). Retrieved March 21, 2016, from http://www.arctic-council.org/index.php/en/about-us/working-groups

Wright, David Curtis, & Naval War College China Maritime Studies Institute. Content Provider. (2011). *The dragon eyes the top of the world : Arctic policy debate and discussion in China* (China Martime Study The dragon eyes the top of the world). Place of publication not identified: China Maritime Studies Institute U S Naval War College.

Xu, B. (2014). *South China Sea Tensions*.