

Enhancing Economic Security of China Thorough the Strategic Cooperation in The Arctic: The Polar Silk Road Initiative

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Abstract: Global warming is profoundly affecting the world's nature. As the population grows, so its dramatic impact increases. The increase of greenhouse gases in the atmosphere is the leading cause of melting icebergs in the Arctic region; on the other hand, it paves the way for maritime transportation without using the ice-cutters. Today's economic giant China is sending its products to the European markets via Suez Canal. However, if the Arctic route provides an opportunity, shipping time will fall by nearly a third. Usage of the new path will have increased the export of more Chinese goods from China. So, it would positively influence its economy in the future. Aware of this fact, Xi Jinping wants to work with regional states such as Russia by allocating a considerable amount of funding in opening a new Arctic passage as an alternative to the southern route. This study tries to explain the potential transit situation of the Arctic and its impact on China's economy by the transportation of goods to Europe and North America.

Keywords: *Arctic, Polar silk road, maritime transportation, Ever Given, Christophe de Margerie*

Arktik'te Stratejik İşbirliği Yoluyla Çin'in Ekonomik Güvenliğini Artırmak: Kutup İpek Yolu İnisiyatifi

Öz: Küresel ısınma dünyanın doğasını derinden etkilemektedir. Nüfus arttıkça küresel ısınmanın olumsuz etkisi de artmaktadır. Atmosferde bulunan sera gazı miktarındaki artış Arktika'daki buzdağlarının erimesindeki temel sebeplerden birisi olmakla birlikte bu husus aynı zamanda gemilerin bölgede buz kırıcı olmadan seyahat edebilmesinin önünü açmaktadır. Günümüzün ekonomik devi Çin, üretmiş olduğu ürünleri Avrupa pazarına Süveyş Kanalı üzerinden gönderse de Arktik bölgesinin sağlayacağı potansiyel imkânlar Çin'e yaklaşık üçte birlik bir zaman tasarrufu sağlayacaktır. Yeni güzergâhın kullanımı Çin'in ihraç ettiği mal miktarını arttıracaktır. Bu da Çin ekonomisinin geleceğini olumlu yönde etkileyecektir. Bu durumun bilincinde olan Xi Jinping Rusya başta olmak üzere Arktik bölgesi devletleri ile birlikte güney rotasına alternatif

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olan yeni güzergâhın açılması için büyük fonlar tahsis etme maçını taşımaktadır. Bu çalışma, Arktik bölgesinin deniz taşımacılığındaki potansiyel durumunu açıklamayı ve söz konusu güzergâhın Çin'in Avrupa ve Kuzey Amerika'ya ticareti yoluyla ekonomisini ne şekilde etkileyeceğini ortaya koymayı amaçlamaktadır.

Anahtar Sözcükler: *Arktik, Kutup İpek Yolu, deniz taşımacılığı, Ever Given, Christophe de Margerie*

Introduction

World trade received a massive blow by a ship named "Ever Given", which blocked the Suez Canal nearly for a week during its passage on March 2021. This unprecedented event received special attention worldwide as no such event took place in maritime transportation until that date. The cost was incredibly high, approximately 60 billion USD of goods a week. (Harper, 2021) In fact, 80 percent of global trade by volume is carried in the sea, and 12 percent passes through the Suez Canal. (UNCTAD, 2018; Russon, 2021) Consequently, the case of Ever Given has shown that maritime shipping is the backbone of international business and trade.

Even the Suez Canal provides a vital shortcut for international trade, there appeared new opportunities like shorter sea lines in the maritime business. Due to global warming Arctic region has provided a way for travel for a certain period during summer. The new route will shorten travel time by about 30 percent compared to the Suez Canal. It was discovered first in the Arctic by a Russian ship named Christophe de Margerie, which did not use icebreakers during its voyage in 2017. (Torrent, 2018) This new route will be the shortest passage from the East China Sea through Europe. People's Republic of China (hereafter China), as an economic giant, will be the state that will use the advantage of this new route provided by global warming.

Within the 1880-2012 period, the Intergovernmental Panel on Climate Change (IPCC) predicted a 0.85 degrees celsius increase in global mean temperature (Ng, et al., 2018). As a result of "polar amplification", the warming was more significant in polar regions, reaching 3-4 degrees and causing a fast melting of sea ice (Wu, et.al, 2021). Scientists suggest that the Arctic Ocean can lose all its ice between 2013 and 2040 (Chen, 2012). These drastic changes in Arctic climate conditions and new weather systems bring both challenges

and opportunities for the traditional Arctic countries and non-Arctic stakeholder states.

Today, more than 80% of the global trade is conducted via cargo carriers (Ng, et. al. 2018). Thus the shipping industry is vital for both regional and international economies. Due to the changes in Arctic climate, one major commercial advantage is proposed as the formation of a new trade route starting from east and leading to west, which is expected to shorten the distance between the Pacific and the Atlantic, creating a new and profitable alternative to Panama and Suez Canals (Huang, et.al., 2015). The viability of this Northern Passage which would enable the facilitation of global trade, gave way to creating the Polar Silk Road initiative of China, which has caused a significant interest among the regional states (Ng, et al. 2018).

While China is not a member of the Arctic Council due to geographical constraints and thus does not possess the legal base for any claims in the region, Chinese interest in the Arctic dates back to the 1980s and the establishment of the CAA, the Chinese Arctic, and Antarctic Administration in 1981 (Manta, 2019). Despite that, the official activities were initiated in 1989, when the Polar Research Institute of China was founded. However, until the 2018 White Paper named as "China's Arctic Policy", the Chinese government did not officially announce a formal Arctic strategy (Wright, 2011), even denying having one (Chen, 2012). The Chinese economy is dependent mainly on global shipping; thus the changes in the Arctic region can potentially create important opportunities for the economic benefits of China (Hong, 2012).

Potential trade routes due to Arctic climate change

Scholars have long been pointing out several economic advantages which can result from the melting of ice on the Arctic sea, including facilitation of accessibility leading to lengthened seasons for navigation, higher accessibility, shorter routes, decreased costs of transportation, and lower levels of CO₂ emissions (Theocharis, et al ,2018; Hong, 2012), while creating alternative routes to traditional routes of navigation such as Suez and Panama Canals (Ng, et al., 2018). Currently, there are two major potential routes regarding Arctic-related transportation, namely Northern Sea Route (NSR) along the Russian coast and the Northwest Passage (NWP) via the Canadian Arctic archipelago, which are expected to be used by non-ice class ships by the end of 2050 (Hong, 2012). By the same date, the third route,

named the Transpolar Sea Route (TSR), will be available for Polar Class 6 (PC6) vessels (Smith and Stephenson, 2013). The economic benefits are expected to be more critical of mega-sized ships which currently cannot go through Panama and Suez Canals and have to use Cape Horn or Cape of Good Hope and Cape Horn. With the accessibility of NWP and NSR routes, the transportation periods will be decreased by several days, lowering the fuel costs to a large extent, while at the same time creating a safe-travel channel contrary to the regions which carry the pirate- attack risks and political turmoil (Hong, 2012).

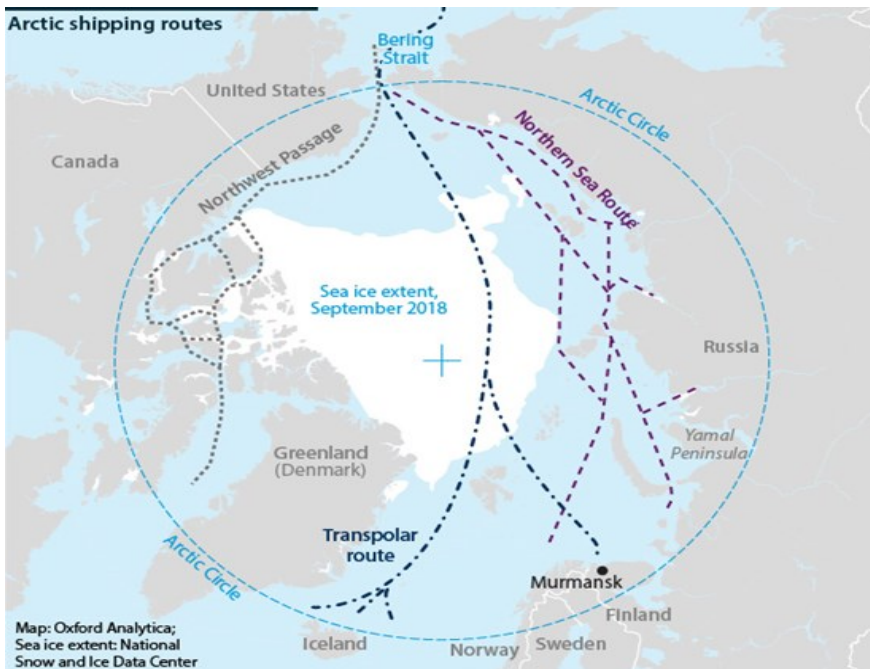


Figure 1 Arctic Shipping Routes (Oxford Analytica (2018), 'Polar Silk Road will reshape trade and geopolitics'. Adopted from: <https://dailybrief.oxan.com/Analysis/DB238508/Polar-Silk-Road-will-reshape-trade-and-geopolitics>)

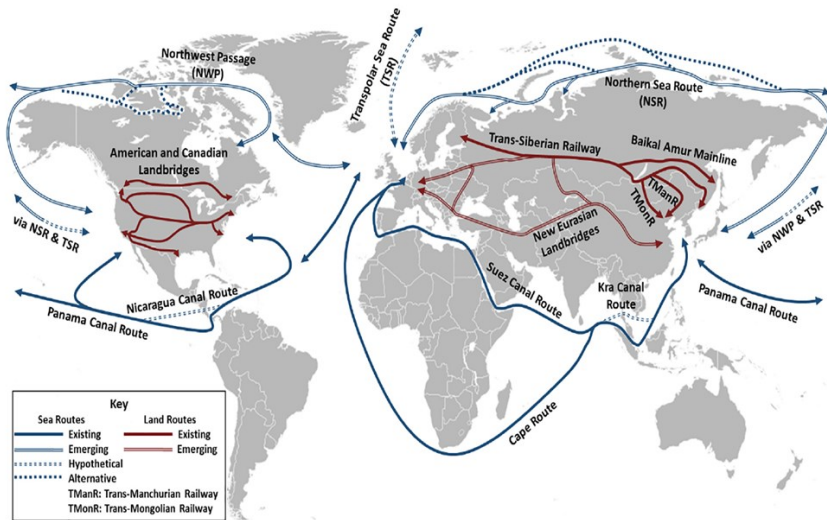


Fig. 3. Alternative sea and land routes between Eurasia and North America. (Authors, based on Rodrigue et al., 2017 and MERICS Research, 2017)

Figure 2 Alternative Sea and Land Routes Between Eurasia and North America (Adapted from: Theocharis, D., Pettit, S., Rodrigues, V. S., & Haider, J. (2018). Arctic shipping: A systematic literature review of comparative studies. *Journal of Transport Geography*, 69, 112-128.)

Besides these benefits, as mentioned earlier, scholars have also pointed out potential harms caused by the new routes with respect to cultural, social and environmental aspects, and increased accidental risks (Ng, et.al, 2018, Hong, 2012).

The Chinese economy is mainly dependent on sea routes and transportation. Both NSR and NWP are expected to lower the distance from the ports in northern parts of China to the ports of Europe and North America's east coast by as large as 40% when compared with Suez and Panama Canals. These new routes are also advantageous for China with respect to new natural resources (Chen, 2012). Although not being an Arctic State, China has been one of the observer member states of the Arctic Council (Tillman et al., 2018). Despite the major benefits, the Chinese government chose to be silent about its Arctic strategy for a long time. One probable reason for this can be stated as the concern of Arctic states about the pursuits of China in the region (Hong, 2012). As an answer to these question marks, China has been calling for regional cooperation for developing and exploring the

economic and environmental outcomes of the new trade routes (Gao, et. al, 2020).

Belt and Road Initiative (BRI)

The Belt and Road Initiative initiative is composed of two sections. The first one is the 'New Silk Road Economic Belt' (the Belt) which links China with Europe through Central and West Asia via six economic corridors. The second part of BRI is an ocean-based '21st Century Maritime Silk Road' (the Road) that connects China with countries in the South China Sea (Wang et al, 2021). The main aim of BRI is to enhance trade links, mutual trust, and policy cooperation among countries that connect China's ancient land and sea silk routes to Europe, the Middle East, Africa, and the rest of Asia (Johnston, 2019). The BRI also targets support China's trade revival, it also provides BRI countries with access to China's foreign direct investment, allowing them to expand and upgrade their infrastructure (Cameron et al, 2021). The BRI, as an infrastructure-led program, actively finances infrastructure projects in partnering nations, contributing to both hardware (infrastructure capacity) and software (transportation network) upgrades. Inland locations (e.g., landlocked countries) and/or developing countries are projected to be most affected. The BRI has the potential to strategically rearrange global transportation networks by bringing new participants into the competitive field with potentials that have yet to be realized due to increased infrastructure capacity. BRI transportation projects are expected to enhance world trade by between 1.7 and 6.2 percent, while also increasing global income by between 0.7 and 2.9 percent (Sun et al. 2021). Despite that, the environmental restrictions and consequences of the Polar Silk Road have clearly become a hot topic in Chinese academic circles in recent years (Woon, 2020). The BRI has a lot of potential to help accomplish the Sustainable Development Goals (SDGs), which call for sophisticated green energy technologies and low-carbon incentives to play a vital role in infrastructure construction and development in order to achieve long-term sustainability (Li, et al 2021). The focus on renewable energy will help countries minimize their typical fossil fuel consumption. To accomplish a sustainable growth process, a focus on cleaner and green technology will improve the quality of the environment (Sun et al., 2021). Tradability has been an important feature of renewable energy in recent years. The BRI initiative gave Chinese construction businesses a significant opportunity to invest in

the countries involved. Scholars argue that wind energy is the most suited option (Hashemizadeh, et al., 2021). As a second alternative, hydropower is China's most developed renewable energy source, as well as the cheapest and most technologically advanced. However, it had a severe negative impact on the environment. As a result, in order to protect the environment, future hydropower development in China must be accompanied by improvements in scientific and technological areas. With a focus on sustainability, Chinese analysts advocated for a clear listing of BRI projects, improved public-private partnerships, better market forces, stronger interaction with partner nations' local businesses, and increased third-party participation (Deng, 2021).

Polar Silk Road (PSR) Initiative

The introduction of the Polar Silk Route (PSR) Project, which would connect China and European states through the Arctic Ocean by using faster logistics and transportation networks, was made by the Russian Minister of Emergency Management in 2011 during the thematic "The Arctic: Territory of Dialogue" conference, following an increase in Chinese activities within the region (Woon et al, 2020; Wu, et al, 2021).

China's approach to Russia for developing the project in collaboration in 2017, and seeking cooperation with other Nordic states (Tillman et al., 2018; Zhao et al., 2021) were among her significant steps. In particular, China's common initiatives with Russia have vital importance for the success of PSR, as Russia possesses the largest coastal area of the Arctic Ocean. The PSR idea was further elaborated with the comprehensive White Paper published by Chinese Government on China's Arctic Policy in January 2018, where the project aims were stated as "the exploration and understanding of the Arctic, the region's environment and the impact of climate change, the use of Arctic resources, the region's governance and international cooperation, and the importance of maintaining peace and stability in the region" (Tillman, et al 2018). The White Paper highlighted the establishment of new shipping routes, including the Northeast, Northwest, and Central Passages that go through the Arctic Circle and link the North American, East Asian, and Western European trading centers (Woon, 2020). The new Chinese Arctic Policy also involved maintaining peace in the Arctic region while at the same time protecting China's rights to trade and transportation activities in the area (Gao and Erokhin, 2020). China also declared her will to share the

benefits gained from PSR with the Arctic and non-Arctic states and protect the interests of the residents of the PSR region.

For China, NSR has the potential to decrease the duration of shipping transportation between China and the Western countries, particularly Europe, which in turn reduces the fuel costs while at the same time forming new well as opening up new routes of trade. Some scholars have even argued that, the economic benefits that PSR create would be less than the geo-strategic advantages for China, including gaining access to the rich mineral and oil reserves in the Arctic region (Li & Peng, 2018), which would cause a natural shift towards using the northern routes. Due to these great expectations, China increased its efforts towards realizing PSR and included that project in its Belt and Road Initiative (BRI), mainly for achieving a more advantageous position in the global trade. With this initiative, China suggested creating new opportunities for all the Arctic states for sustainable socio-economic development. The BRI had five pillars of "policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and closer people-to-people ties" (Tillman, et al., 2018). It offered several trade routes which would enable access to China's largest trade partners, including Latin American states, Europe, and Africa. The effect of BRI started to become concrete as the Latin American members of MERCOSUR already signed bilateral trade agreements with China. Trade BRI also can break the US dominance in the European markets, which will create a substantial competitive advantage for China (Manta, 2019). The routes within BRI are designed to use air, sea, and railroad transportation connected with the modern ICT technologies, thus would require massive infrastructure investments in various parts of the world. BRI also can decrease China's dependency on energy resources imported to the country through the historical Hurmuz and Malacca Straits (Woon, 2020). In November 2017, Russia and China officially declared their joint intent of developing PSR and increase the usage of NSR. The Northeast Passage linking the Atlantic and Pacific Oceans have an economic priority for China and her strategic partner Russia. NSR has crucial importance for Russia as its whole path goes through the Russian region. The melting of the Arctic ice would enable less-equipped ships to use this route. Before that, only two months were available for the largest sea vessels to use NSR, thus a ten times increased transportation is expected in this route with the changes in the climate conditions.

While China and Russia have officially declared a strategic partnership both for PSR and NSR, Russia is reluctant to demonstrate a liberal approach for enabling China to become a major actor who will reap the benefits of NSR in the region, as she claims rights due to her historical ownership of this territory (Gao and Erokhin, 2020). The same reluctant behavior is also observed in other Arctic stakeholders who are not very optimistic about China's future intentions and endeavors in the Region (Woon, 2020). The debate on the potential negative impact of PSR on the environment which the ecological fragility of the region will cause, also added a new dimension to these concerns.

Conclusion

The Arctic is becoming an essential region in the world's economics and politics. From a certain point of view, global warming imposing a real danger to the world. However, it facilitates transportation between East and West via the Arctic. So, it will be faster moving from the Pacific to the Atlantic or vice versa in the near future. There are certain routes in the Arctic; the Northern Sea Route (NSR) along the Russian coast and the Northwest Passage (NWP) via the Canadian Arctic archipelago. A third one, name Transpolar Sea Route (TSR), runs across the Arctic Ocean center. These three routes provide shorter routes, decrease costs of transportation and produce lower levels of CO₂ emissions. Mega size vessels can float, and there would not be any jeopardy as in the accident of Ever Given on the Suez Canal. In addition, it would be safer to travel, and there will be no such threat like piracy as in the Gulf of Aden. Even not being part of the Arctic Council, China has increased its attention to the Arctic due to its enormous economic development and transportation problem to the markets in Europe and North America. China issued an Arctic Policy document in 2018 showing its direct interest in the region, which identifies its economic interests specifically under the name of the "Polar Silk Road." So, China is seeking a strategic partnership, especially with Russia, one of the most important actors in the Arctic, and will find a way to make its dreams come true in the next decade.

China's great plan for the future, which is to unify the world's fractured subregions, starts with the eastern hemisphere. China's Belt and Road Initiative (BRI) is a massive transcontinental and transoceanic project aimed at connecting land and sea routes, industrialized and emerging economies, and megaregional markets.

The BRI also reaches out to countries through culture, education, and language, establishing a network of connections that will outlast any physical initiative (Pantucci, 2021). However, because of the ecological and environmental crises caused by melting ice, greater environmental criteria for industrial activity in the Arctic will be imposed, raising investment costs. Furthermore, the rate at which sea ice melts, the improvement of navigation conditions on conventional routes, and the state of the global economy, changes in oil prices will all have an impact on commercial benefits. As a result, the return on investment along the PSR must frequently be evaluated in the medium- and long-term. While Chinese stakeholders engage in ongoing bankable Arctic projects, they should consider all of the aforementioned factors, gain experience, and collaborate with local partners to ensure that the projects (including infrastructure, energy, and shipping) are consistent with this adaptation process. Here, the economic and environmental factors have a slightly unfavorable link. Once a country or region's economic performance reaches a certain level, necessary rules or policies must be implemented to restrain economic growth and prevent severe environmental consequences. Once a country or region's economic performance reaches a certain level, necessary rules or policies must be implemented to restrain economic growth and prevent severe environmental consequences. There are no substantial interrelationships between the social and environmental aspects, and the social and economic elements have a negative link. Polar silk road countries and regions, on the other hand, have not performed particularly well overall, and these countries are attempting to balance at least two parts of the TBL, either environmental and economic components or environmental and social elements (Wu et al, 2021). For the long-term, there is a potentially more problematic impact of Chinese infrastructure investment, which is most visible in the Digital Silk Road plan. China is laying the groundwork for future national economies by constructing digital infrastructure. This raises concerns about not only Chinese competition, but also possibly Chinese clandestine access to crucial national infrastructure (Pantucci, 2021). In addition, anxieties over the future of Arctic security have been expressed as a result of Chinese investment in infrastructure projects along the Polar Silk Road (Lim, 2018).

Despite these concerns, The Belt and Road Initiative potentially provides major advantages with respect to assisting China's economic

progress while also deepening international economic cooperation and interdependence, thereby changing economic dependence into political dependence. Within the BRI, China should strive to support the development of emerging and developing economies. To assure future growth and growing demand for Chinese (and other nations') export products and services, China would need to consider investing in growth- and wealth-creating activities in these economies. To connect the present primary demand centers, more than just logistics connections would be necessary. The global BRI initiative allows China to ensure not just access to supplies and markets, but also to boost its soft power by allowing it to develop a formidable network of interconnected countries that are independent of Western powers and prepared to cooperate with China in every field. The Initiative has a lot of room for growth, as evidenced by the fact that it expanded its cooperation to the health-care sector during the COVID-19 pandemic.

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