<https://helda.helsinki.fi>

China's Economic Presence in the Arctic : Realities, Expectations and Concerns

Stepien, Adam

Brill

2020-03

Stepien , A , Kopra , S , Nojonen , M , Kauppila , L , Käpylä , J , Lanteigne , M & Mikkola , H
2020 , China's Economic Presence in the Arctic : Realities, Expectations and Concerns
T Koivurova & S Kopra (eds) , Chinese Policy and Presence in the Arctic . Brill , pp. 90-136 .

<http://hdl.handle.net/10138/328101>

cc_by

acceptedVersion

Downloaded from Helda, University of Helsinki institutional repository.

This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Please cite the original version.

China and Arctic economy

Chapter 6. China's economic presence in the Arctic: realities, expectations and concerns

*Adam Stepien, Liisa Kauppi, Sanna Kopra, Juha Käpylä, Marc Lanteigne, Harri Mikkola and
Matti Nojonen*

6.1. Introduction

This chapter focuses on the economic presence of China in the Arctic regions. First, we consider the economic relations between China and the Nordic states, the North American Arctic and Russia, as Chinese activities have different characteristics in different parts of the Arctic. Second, the chapter looks at the key Arctic industries in which China's role is or may become relevant: shipping, oil and gas, minerals extraction, and tourism. Finally, we consider various concerns related to Chinese economic activities: the anxiety related to the economic and political influence gained through investments, the apprehension regarding the environment and social performance of Chinese actors, as well as doubts about the reliability of Chinese companies. Many of these concerns – related to a great extent to Chinese actions in regions such as Africa or South-East Asia – have not yet materialized in the Arctic context, although they have led to the termination of some proposed investments. The chapter does not make predictions as to whether these concerns may materialize as the role of Chinese actors becomes more prominent in the future.

The definition of Arctic regions in the chapter is based on the Arctic Human Development Reports from 2004 and 2014. The overall economic relations pertaining to the Arctic states as a whole are not discussed. Certainly, economic activities are at the core of China's presence in the Arctic. Chinese companies are present in a number of sectors, in particular in resource extraction, transport and tourism. Chinese public and private investors are carefully monitoring various developments in the Arctic. The Chinese market is an important destination for a variety of Arctic products, including mineral resources, pulp from boreal forests and fish. Chinese companies are likely to be important users of future Arctic shipping lanes and China will be one of the main places either of origin or destination of products transported through the northern seaways. Including the Arctic maritime shipping lanes in the Belt and Road Initiative is testament to these predictions. Companies based in Arctic regions buy from China,

China and Arctic economy

sell to China and establish production facilities in China. The numbers of Chinese tourists have also been on the increase across the Circumpolar North.

Overall, Chinese economic actors are increasingly active in the region, especially in the Russian Arctic. However, these activities remain relatively limited, and many developments expected or proposed in the last few years, especially in the Nordic countries and North America, have not taken place or have been significantly delayed.

6.2. Arctic economies

There is a wide difference between Arctic regions in terms of their economic profiles. In some parts of the North there is a high level of economic diversity. Yet, the northern regions of Arctic states share a number of characteristics relevant to the role that Chinese actors can take in economic developments and the perception of Chinese investments in the Arctic states. A cold and often harsh climate, low population density and sparsity, remoteness, great distances, a vulnerable environment and the presence of traditional subsistence livelihoods determine the conditions for economic activities. The subsistence economy, including traditional fishing, gathering, hunting or pastoralism, remains important across the circumpolar North, although the character and role of traditional activities differs greatly from region to region. Many Arctic residents combine cash employment or entrepreneurship with subsistence activities, which results in the emergence of mixed economic systems. The small size of settlements and, in some regions, relatively low income levels – when compared to other parts of the Arctic states – results in many inhabitants being dependent on public welfare. Many communities experience challenges such as high outmigration (especially of youth and women) and the resulting depopulation of the countryside, in addition to unemployment and high suicide rates. Moreover, the public sector, including administration, constitutes a major component of employment and regional GDP. The service sector is on the rise across the North, mirroring global trends.

Arctic regions are usually associated with resource extraction, including hydrocarbons, minerals, forestry and living resources. Primary sectors are indeed of central importance. The need to address the aforementioned socio-economic challenges often results in positive attitudes towards new extractive activities, which are seen as an opportunity to boost local economies. On the other hand, there are problematic issues related to the expansion of resource extraction,

China and Arctic economy

including environmental impacts, land-use tensions, interaction with other industries such as tourism, and impacts on traditional livelihoods. The fair distribution of benefits from extractives remains a challenge, and the legacy of past expropriation increases anxieties related to new projects. In some regions, there is an increasing realization that excessive dependence on extractive industries, which are highly prone to fluctuations in global resource prices, can be problematic in the long term. Efforts are therefore made to diversify northern economies and increase local processing of resources extracted in the North. These latter objectives are, however, challenging due to a lack of critical mass in terms of the number, diversity and concentration of companies and clients. Other barriers include the small size of northern markets, gaps in human capital, and difficulties in securing financing for new projects or expansion of activities (Glomsrød and Aslaksen, 2009; Huskey et al., 2014; Stepien et al., 2016 - several chapters in an edited volume).

Economic actors from outside the Arctic regions play an increasingly important role in shaping economic developments in the North. Their presence may bring both benefits and problems, support or hinder desired development pathways, and bring wealth to some interest groups while adversely impacting others. There are fears that more wealth originating from resource extraction would flow out of the Arctic regions. China and Chinese economic operators are particular objects of these concerns due to the size of the Middle Kingdom's economy and the financial resources Chinese investors are capable of mobilizing. Additional factors are the high level of activity of Chinese actors around the globe and the controversies related to these activities in other parts of the world.

6.3. The economic dimension of China's Arctic policy

For many analysts, the main purpose of an external economic actor's interest is profit-generation or, more generally, national welfare. For instance, Aki Tonami (2019) believes that the general goal of Chinese involvement in the Arctic – as an extrapolation of China's overall foreign policy – is to support internal economic development and prosperity, with other interests being of secondary nature. This appears to be confirmed by Rosen and Thuringen (2017: 61), who define the purpose of most Chinese investments in the regions as follows:

China and Arctic economy

As one of the last remaining sources of unexploited resources, the Arctic is an attractive source of the raw materials that China needs to fuel its development. Beyond resources, the Arctic is the potential launching pad for Chinese state owned enterprises (SOEs) seeking profit and market dominance. The Arctic is also a location where many Chinese laborers could find employment and possibly residence. For China, the Arctic is a vast landscape of opportunity.

In the White Paper on China's Arctic Policy from January 2018, Beijing sought to explain the role of economic interests in Chinese engagement in the Arctic, including in the areas of energy, resources and shipping, as well as bilateral cooperation with the 'Arctic Eight' through various routes. Through 2017 and 2018, the Northern Sea Route was included in the Belt and Road Initiative. What remains unclear, however, is what sort of new projects beyond existing ones such as Yamal LNG might form a part of this new wing of the Belt and Road Initiative (BRI), and which Arctic countries might be the beneficiaries of Chinese BRI investment.

Many Arctic economic and political decision-makers perceive China's increasing presence and interest in the region as an opportunity for regional economic growth, new or better jobs and an influx of new resources to local and regional budgets, supporting the mitigation of numerous socio-economic challenges that trouble sparsely-populated Arctic regions. A number of investment gaps, challenges and obstacles have been identified for Arctic regions (for the European Arctic, see e.g. Arctic Investment Platform 2019: 13). China could, in principle, contribute to addressing these gaps by providing additional sources of financing for developments in the Arctic regions, but also via increased demand for Arctic resources and products, affecting prices and levels of production, offering lower costs for construction, etc. Other stakeholders, however, view the Chinese economic presence with a degree of anxiety. Various concerns are discussed at the end of this chapter.

6.4. Chinese investments overseas in general

The expansion of the Chinese economy has been one of the most important global socio-economic developments in the past few decades. The spectacular growth has not only lifted more

China and Arctic economy

than 600 million people out of poverty and created a large middle class, but it has also turned China into the world's de facto manufacturing house.

China is deeply integrated into the world economy. After the U.S., the country is the second-largest recipient of foreign direct investments (FDI) in the world. However, Chinese Outward Direct Investment (ODI) has also increased dramatically. In 2015, Chinese ODI surpassed the incoming FDI for the first time. In 2016, China became the second-largest ODI actor in the world, a position that it has since held (UNCTAD website).

The Chinese government has provided long-standing support for outbound investments. In order to facilitate overseas activities, the banking sector was reformed and a number of financial institutions were established. Among these are the Silk Road Fund and Asia Infrastructure Bank, which actively provide finance for Chinese companies overseas. Two Chinese policy banks – China Export and Import Bank and China Development Bank – and their provincial subsidiaries have become significant global financial institutions that offer funding for Chinese companies investing abroad.

The history of Chinese ODI policies can be divided into four periods. The first stage covers the period between 1982 and 1991, during which the ODI was strictly controlled and around 100 companies managed to acquire approval for overseas activities. The country didn't adopt its first ODI regulations until 1984. In 1992, the reform wing of the Communist party won the intra-party power struggle, which launched the second phase of Chinese ODI development. Beijing cut some of the ODI red-tape and the limited restrictions on access to foreign exchange. However, the Chinese ODI remained rather modest. In 1999, China ranked only 23rd in the world with a stock of US\$27 billion for ODI, representing a mere 0.4 percent of the global total.

In 2001, China joined the World Trade Organization. That resulted in the gradual loosening of ODI regulations and improved access to capital. What followed was a rapid growth of ODI from 2004 onwards. Chinese companies were particularly eager to grasp the investment opportunities in the aftermath of the global economic crisis in 2008. In 2008, the value of global FDI fell by 14 percent, while simultaneously the Chinese ODI more than doubled to US\$60 billion. This growth accelerated rapidly until 2017, when the central government issued "Guiding Opinions on Further Guiding and Regulating Outbound Investment" (Guiding Opinions)

(Guanyu Jinyibu Yindao he Guifan Jingwai Touzi Fangxiang de Zhidao Yijian 关于进一步引导

China and Arctic economy

和规范境外投资方向的指导意见) (NDRC, 2017). The adoption of this legally-binding document marks the beginning of the current period in Chinese ODI, characterized by the attempt to mainstream investments and by an increased focus on the Belt and Road Initiative (BRI). Due to the new regulations, China's ODI saw a dramatic drop from US\$196 billion in 2016 to US\$158 billion in 2017, and further to US\$130 billion in 2018 (UNCTAD Fact sheets, n.d.).

The Guiding Opinions is a set of regulations that provides a list of restricted or prohibited illegal and “irrational” investments such as sport clubs, culture and entertainment business. It also lists priority projects related to the BRI. The Guiding Opinions highlight the following sectors:

- Infrastructure projects related to the construction of the BRI, including the surrounding and interconnecting infrastructure.
- Investments facilitating the utilization of China's industrial capacity and export of China's high quality equipment and technology standards.
- High-tech, advanced manufacturing enterprises, and overseas research and development (R&D) centers.
- Oil, gas, mineral, and energy resource projects that are based on a careful assessment of economic benefits and national interests.
- Industries such as agriculture, forestry, animal husbandry, side-line production, and fishery.
- Investments in service sectors such as commerce, culture, and logistics, as well as investments that help qualified Chinese financial institutions to establish offshore branches and service networks.
-

The Guiding Opinions document was issued at the central government level by four ministry level units: the National Development and Reform Commission or NDRC (*Guojia Fazhan he Gaige Weiyuanhui* 国家发展和改革委员会), the Ministry of Commerce (MOFCOM), the People's Bank of China, and the Ministry of Foreign Affairs. These four ministry-level bodies have subsidiaries at each provincial, prefecture and county level. These subsidiaries are the actual decision-making entities in the bureaucratic application process that companies have to get

China and Arctic economy

through before they acquire the final approval for their planned ODI operations. The implementation of the Guiding Opinions at the lower levels will determine the direction of the Chinese ODI and will likely have a significant influence on the success of the BRI. Among the challenges is the availability and reliability of ODI statistics. There is no centralized process or a responsible institution that approves the BRI projects, so there is no clear understanding of the actual value of BRI projects that are carried out in all corners of the world. Furthermore, the performance of local level bureaucrats, party cadres and businesses is currently measured by their ability to deliver BRI projects. As a result, local level actors eagerly label all possible international-bound projects as components of the BRI. This has induced some local actors to even fabricate their BRI activities. One recent example of such dynamics was the case of the China Railway Corporation, which was reported to have sent empty railway cargo-cars to Europe in order to present a BRI success story (Leng, 2019, August 20).

[PLACE FIGURE 6.1. HERE]

Figure 6.1. Mainland China's ODI 1990-2017. Source: UNCTAD's FDI database.

Notwithstanding the aforementioned bureaucratic challenges and recent decrease in the value of Chinese ODI, and despite China being the second largest ODI actor, there is still much untapped potential for growth. Measured in ODI stock as a percentage of GDP, the proportion for China was at 14.5% in 2018. Keeping in mind that China is the world's second-largest economy with the biggest foreign exchange reserves, the country is lagging far behind the USA (31.6%), Japan (33.5%), Germany (41.1%) and the UK (60%) (UNCTAD Fact Sheets, n.d.) in terms of the value of the ODI as a percentage of the GDP. While the economic structures and histories of these economies vary significantly, China has room for growth in its outbound investments. Beijing can therefore be expected to continue encouraging the Chinese economy to internationalize – including via activities in the Arctic, as was clearly confirmed in the 2018 White Paper (PRC State Council, 2018).

6.5. China's economic relations with Arctic states

China and Arctic economy

There are substantial differences in regards to governance systems and economic characteristics between the Arctic regions of Russia, the Nordics and North America. Correspondingly, the presence of China, the type of investments and the nature of economic relations will differ as we move across the circumpolar North. The focus in this chapter is on Chinese economic activities in circumpolar regions of the eight Arctic states. Nonetheless, in order to provide some background, we present below the trade (figures 6.2 - 6.4) and offshore direct investments (ODI) statistics (see figure 6.5).

[PLACE FIGURE 6.2. HERE]

Figure 6.2. Arctic states' imports from and exports to China. Data for 2018 in US\$thousands. Compilation by Adam Stepien, Arctic Centre. Source: International Trade Centre statistics at <https://www.trademap.org>

[PLACE FIGURE 6.3. HERE]

Figure 6.3. Percentage of Arctic states' imports from China of the Arctic states' total imports and China's total exports. Data for 2018 based on US\$ value. Compilation by Adam Stepien, Arctic Centre. Source: International Trade Centre statistics at <https://www.trademap.org>

[PLACE FIGURE 6.4. HERE]

Figure 6.4. Percentage of Arctic states' exports to China of the Arctic states' total exports and China's total imports. Data for 2018 based on US\$ value. Compilation by Adam Stepien, Arctic Centre. Source: International Trade Centre statistics at <https://www.trademap.org>

[PLACE FIGURE 6.5. HERE]

Figure 6.5. Chinese (mainland) offshore direct investment towards (whole) Arctic states, 2009-2018 in US\$bln. No data for Iceland. Source: American Enterprise Institute at <https://www.aei.org/china-global-investment-tracker/>, data retrieved 8 October 2019.

Russia as a key partner in the Arctic

Among Arctic states, Russia has had the greatest number of Chinese economic cooperation initiatives located above the Arctic Circle. After the fall of the Soviet Union, Chinese-Russian relations went through upturn and downturn phases and were characterized by a degree of distrust, especially on the Russian side. In resource exports, Russia was focused on Europe, and it did not take the potential of the Chinese energy market seriously. Until 2013/2014, there were informal barriers for Chinese investments and market access in different sectors, including infrastructure, resources and cars. The Russian government feared that China could become a senior partner in bilateral relations – a source of raw materials and market for Chinese goods – and that it would advance strategic interests via economic presence. Nonetheless, already by that time, China was Russia's second-largest trading partner after the European Union (Gabuev, 2015).

The gradual intensification of economic relations commenced from 2012, when the Putin government began a policy of 'turning to the East' after the Asia-Pacific Economic Cooperation summit in Vladivostok (APEC summit, *Yatai Jingji Hezuo Zuzhi* 亚太经济合作组织). This process was accelerated in the wake of the 2014 Crimea/Donbas crisis and subsequent US and Western European sanctions, which left China as the primary partner for numerous Russian energy and infrastructure initiatives that involved the Siberian and Russian Far Eastern regions. Until a few years prior, activities in the Russian North and the Far East were not an economic priority for China, with the exception of Chinese provinces bordering Russia, such as Heilongjiang, which engaged in stronger cooperation. In April 2014, then-Vice-Premier Wang Yang (汪洋) suggested during a meeting in Vladivostok that the Russian Far East was becoming increasingly attractive to Chinese business interests. Wang was also a keynote attendee at the fourth annual Arctic forum at Arkhangelsk in March 2017, where he discussed various potential Sino-Russian cooperation projects taking place in the Arctic or being of potential relevance for the Arctic.

Energy cooperation has dominated Beijing's interests in the Russian Arctic, including a July 2013 agreement between the China National Petroleum Corporation or CNPC (*Zhongguo*

China and Arctic economy

Shiyou Tianranqi Jituan Gongsi 中国石油天然气集团公司) and Rosneft (worth approximately US\$270 billion) to supply Russian petroleum for a twenty-five year period. An even more ambitious natural gas partnership, worth an estimated US\$400 billion, was struck between the CNPC and Gazprom. Finally, the CNPC as well as China's Silk Road Fund are major stakeholders in the Yamal liquefied natural gas (LNG) project in Siberia. The project, overseen by Russia's Novatek, officially came online in December 2017. Its second phase became operational in August 2018. Novatek delivered the first shipment of LNG to China via the Northern Sea Route (NSR), with the CNPC seeking to commence exports of three million tonnes of gas out of Yamal from 2019. China's activities in regards to Arctic shipping, with a focus on the Northern Sea Route, are discussed in Section 6.4. below.

Nordic states: investments and trade

Three of the Nordic states – Finland, Sweden and Denmark – are members of the European Union (EU) (although EU legislation and trade agreements do not apply to Greenland and the Faroe Islands). The EU has not commenced free trade agreement (FTA) negotiations with China, as the Union believes that there are still barriers for such an agreement on the Chinese side, including a lack of transparency, industrial policies discriminating against foreign companies, strong governmental intervention in the economy and poor protection and enforcement of intellectual property rights (European Commission website, n.d.). Despite recent progress in regard to industrial subsidies (Blenkinsop and Emmott, 2019, April 9), the chances of adopting a comprehensive trade agreement remain slim. However, in 2013, the two parties started negotiations on an agreement on investments. While these negotiations are ongoing, the concerns about Chinese investments in Europe are on the rise. This led to the cancelation of several Chinese investment projects, including a port in southern Sweden (Suokas, 2018, January 31). The anxieties also resulted in the adoption of legislation (Regulation (EU) 2019/452) that gives the European Commission power to screen major investments of strategic importance for the whole EU (European Commission, 2019, April 10).

After trying unsuccessfully to commence formal free trade talks with the EU, China sought to engage non-EU European economies in bilateral trade talks. The best candidates were the European Free Trade Area (EFTA) countries: Iceland, Liechtenstein, Norway, and

China and Arctic economy

Switzerland. Since China was unsure about negotiating with all four EFTA members at once, Beijing decided to commence talks with one state at a time. The asymmetry between China and individual EFTA countries might make it an attractive choice for Beijing to engage these small countries separately. Iceland was the first Arctic state to enter an advanced negotiation phase (Lanteigne, 2010). There was a pause in the talks due to Iceland's application to join the EU (within which the country would not be able to negotiate a separate FTA), and at the same time Iceland was attempting to recover from the post-2008 banking crisis (*kreppa*). By the time the FTA meetings resumed in 2012, Iceland was seen by China as an essential partner in Beijing's Arctic policy development. The free trade agreement was finalised in 2013, with Sino-Icelandic relations remaining strong. They were further augmented by tourism and other services. China is Iceland's largest trading partner in the Asia-Pacific, and there has been discussion about possible Chinese investment in Icelandic ports, including Akureyri and Finnaþjórdur (Kynge, 2017). Switzerland (and by extension Liechtenstein via a customs union between the two countries) also signed an FTA with China in 2013 (Lanteigne, 2014; Switzerland Federal Department of Foreign Affairs, 2018).

The situation proved more complicated for Norway. Although the initial round of talks proved successful, further negotiations were abruptly severed by Beijing in the wake of the decision by the Norwegian Nobel Committee to award the 2010 Peace Prize to Chinese dissident Liu Xiaobo (刘晓波). Anger at this perceived "insult to the Chinese nation" resulted in a severing of high-level ties, including any further economic talks, until an agreement to restore relations was struck in December 2016. In December 2016, both governments released a document that confirmed the *normalization* of relations, including a promise by the Norwegian government to "do its best to avoid any future damage to bilateral relations" (*Statement...*, 2016). The resolution was welcomed by the Norwegian government but some experts assessed (and criticized) the agreement as an example of a small country submitting to Beijing's pressure (ChinaFile, 2016, December 21).

However, even during the six-year diplomatic freeze between China and Norway, there were still contacts between the two states in multilateral forums, including in the Arctic context, via conferences such as the Arctic Frontiers conference in Tromsø and the China-Nordic Arctic Research Center, or CNARC (*Zhongguo Beidou Beijing Yanjiu Zhongxin* 中国-北欧北极研究中心), based in Shanghai. Norway also chose not to block Beijing's application to become an

China and Arctic economy

Observer in the Arctic Council in 2013, affirming that Arctic cooperation would be, to a degree, shielded from the poor bilateral relations. In March 2015, Beijing did not prevent Norway from becoming a member in the Asian Infrastructure Investment Bank (AIIB) (*Yazhou Jichu Sheshi Touzi Yinhang* 亚洲基础设施投资银行), which China oversees (Government of Norway, 2015).

At present, all Arctic states, with the exception of the United States, have shares in the AIIB.

With regard to economic relations, Chinese-Norwegian trade actually grew during the period of diplomatic freeze, although there were some problematic issues such as periodic stoppages of Norwegian salmon imports to China on the pretext of health concerns. Norwegian energy and shipping interests found it difficult to discuss new partnerships with their Chinese counterparts. With full diplomatic relations restored, Norwegian companies today are eager to make up for lost time, especially given the growing interest in China to develop Arctic shipping. One example of a possible Chinese investment is the option of financing port facilities in the Norwegian city of Kirkenes (Breum, 2018).

The Sino-Norwegian FTA negotiations have not been finalized at the time of completing this book. However, the outlook for a final agreement appears promising. At a conference in Singapore in August 2018, Chinese Foreign Minister Wang Yi (王毅) suggested to his counterpart, Ine Eriksen Søreide, that the final stages of the trade talks should be accelerated (Reuters, 2018, August 2). Several Norwegian sectors, especially the fishing and shipping industries, have been interested in a deepened trade relationship with Beijing.

Greenland, a country within the Kingdom of Denmark, has also been on China's economic radar. A controversial issue in the recent history of relations between China and Denmark was the expansion of Greenland's airports at Nuuk, the capital, as well as Ilulissat and Qaqortoq. The airport expansion project ran into political headwind when it was revealed that a Chinese firm, the China Communications Construction Company (CCCC) (*Zhongguo Jiaotong Jianshe Youxiangongsi* 中国交通建设有限公司) was interested in bidding on the contract to overhaul and renovate the airports. This caused concerns in Copenhagen about economic sovereignty and raised security questions (including the relations with the US and the possibility of double-use infrastructure). Analysts were alarmed with the excessive increase in Chinese influence and the possibility of Greenland being caught in a debt trap (McGwin, 2018). In September 2018, the Danish government offered to underwrite the airport project, and the US

China and Arctic economy

government also offered, during the same month, to offer financial support for Greenland infrastructure (McPherson, 2018; Ministry of Foreign Affairs Denmark, 2018; Lim, 2018). These moves appeared to be designed to prevent the CCCC bid from going forward, a prospect that was worrisome to both Denmark and the United States.

North American Arctic: politicized resources

China is, overall, the key trade and investment partner for both Canada and the USA. However, the Chinese presence in Alaska and in the Canadian Arctic territories has been limited so far. There are Chinese investment plans related to oil and gas and raw materials in Alaska and northern Canada, but they have been shelved at this point.

In general, China is the main international trade partner for Alaska, with the state's exports reaching almost USD1.2bln in 2016 (Lee Falsey, 2017, April 8). In April 2017, following a meeting with the US president, Xi Jinping paid a visit to Alaska. The stopover underlined the importance of the Arctic and the investment interest in the Alaskan LNG project that was to supply the Chinese energy market. However, the current Chinese-US trade war led to the suspension of a planned LNG project (as of September 2019). In a speech given in Rovaniemi in May 2019 before the Arctic Council Ministerial Meeting, the US Secretary of State strongly warned against Chinese investments in the Arctic, even if underlining that "transparent" investments are welcome (Department of State, 2019, May 6). This indicates that Alaskan projects may have little support in Washington.

In Canada, Chinese investors, originally interested in more strongly entering mineral extraction – a major sector of Canadian economy – appeared to be partly discouraged by the challenging procedures related to obtaining local consent and permitting processes. These developments are discussed in greater detail in the following sections dedicated to the extraction of hydrocarbons and minerals (sections 6.5. and 6.6.). Overall, Canadian-Chinese relations have significantly worsened following the arrest of Meng Wanzhou, a Huawei executive (e.g., Zhou, 2019, August 3). However, it is yet to be seen whether this will have long-term implications for economic relations between the two countries.

China and Arctic economy

6.6. Maritime transport and shipbuilding

In its policy statement from January 2018, the Chinese government puts emphasis on Arctic shipping as a key element of its Arctic engagement. China wishes “to work with all parties to build a "Polar Silk Road" through developing the Arctic shipping routes” (PRC State Council, 2018). The Northern Sea Route (NSR) (or, more broadly, the Northeast Passage (NEP))¹, which follows the coast of Siberia, is not mentioned in the document. However, due to more favourable (as compared to other Arctic waters) navigational and ice conditions as well as China’s exchanges with Russia before 2018, it is the use and development of the NSR that is of greatest interest. That was clearly confirmed later in 2018, when a credit line for Chinese investments in Russia included the NSR as a priority in the context of the BRI (Moe and Stokke, 2018).

The Chinese government believes that “[t]he utilisation of sea routes and the development of resources in the Arctic may have a huge impact on the energy strategy and economic development of China”. On the other hand, China’s “capital, technology, market, knowledge and experience is expected to play a major role in expanding the network of shipping routes in the Arctic” (PRC State Council, 2018). While perhaps overly optimistic, these statements convey the notion that China is important for Arctic shipping just as Arctic maritime transport should be important for China. What is, then, the actual role of Chinese actors in Arctic shipping against the background of the current status of maritime transport in northern waters? As is often in the case of Arctic economic developments, high future expectations contrast with a very limited level of current activities, both overall and in regard to Chinese activities specifically.

Elevated global interest in Arctic shipping goes back to the mid-2000s, following the broader realization that the climate change-driven diminishing of the Arctic Ocean ice cover may

¹ The Northern Sea Route constitutes the part of the Northeast Passage between the Kara Gate Strait and the Bering Strait, while the Northeast passage includes the Bering Sea and the Barents Sea, and it connects Asia and Europe. Russia considers the straits through which the NSR passes (between the coast of Siberia and Russian archipelagos) close to the Siberian coast to constitute internal waters, while the whole area within Russia’s Exclusive Economic Zone is subject to legislation (2012) based on Art.234 of the UN Convention on the Law of the Sea. Art.234 allows coastal states to adopt additional non-discriminatory measures for navigation in the ice-covered waters within their EEZ (normally, shipping in exclusive economic zones enjoys almost full freedom of navigation).

China and Arctic economy

lead to increased maritime traffic in the Arctic and in particular to the opening of new shipping lanes between Europe and Asia (Zellen, 2009). The NEP/NSR, the Northwest Passage, which crosses the Canadian Arctic archipelago, and the Polar Route are distinguished as three potential future routes. The latter, which crosses the Central Arctic Ocean, is projected to be traversable only in the very distant future. The navigation on the North American side of the Arctic Ocean is difficult due to the prevalence of thick, multiyear ice and the particularly high variability of ice conditions from year to year. In contrast, the NSR enjoys a relatively long – and, given the effect of climate change, most likely an increasingly longer – navigational season. The waters of the NSR are characterized by the dominance of thinner and weaker one-year ice. The route was used extensively by the Soviet Union until the end of the 1980s. Since the 2000s, it has been promoted by Russia as an international shipping route (Sander et al., 2016).

While there was much optimism related to the rapid expansion of maritime activity, the developments thus far present a less optimistic and certainly more complex picture. As early as in the 2009 Arctic Marine Shipping Assessment (AMSA), it was outlined that Arctic shipping is likely to remain dominated by destinational shipping² for many decades to come. This contrasts with the perception that the Arctic waters would soon become a major transit link between Europe and Asia. As predicted by AMSA, destinational shipping has significantly increased, owing to Russian Arctic resource extraction projects (predominantly onshore) coming online. Recently, the current overall shipping volumes along the NSR have exceeded those at the end of the Soviet era. For these types of shipping, there are, in fact, few or no reasonable alternatives to the NSR. Growing shipping volumes in the past few years confirm this evaluation. In contrast, transit shipping volumes are negligible and, especially in regard to container transport, remain a future prospect. Chinese actors are involved both in Arctic destinational shipping as well as in testing Arctic routes for transit. Chinese maritime traffic related to scientific research supplements these activities (Moe and Stokke, 2019).

The advantages of Arctic shipping routes include decreased shipping distance and, consequently, potentially lower carbon emissions. The NSR in particular can be seen as an alternative or supplementary route if disruptions along the southern routes occur, for instance due to conflicts, blockades or piracy around the Malacca Strait, around the Horn of Africa or any

² Destinational comprises primarily the exports of Arctic resources, cruise tourism, and voyages related to the development of Arctic construction projects.

China and Arctic economy

problems with the operation of the Suez Canal. However, there are numerous challenges for Arctic maritime navigation that hinder the emergence of the NSR as a significant component of the global transport network. The navigational conditions in Arctic waters will remain difficult, even with less ice and a longer shipping season. Vessels continue to face numerous risks, a concern exacerbated by insufficient search and rescue infrastructure. Many parts of the Arctic also have sparse refueling facilities. In winter, ice, darkness and severe weather conditions will continue to constitute risk factors, even if the ice is thinner and its extent smaller. High year-to-year variability presents challenges for shipping companies' logistical planning, as it is difficult to schedule shipments many months in advance. Moreover, while the distances are shorter than traditional routes, this does not necessarily translate to significant time or cost savings. As ships operate at slower speeds in Arctic waters, travel times are not as short as they would be in ice-free waters. The costs may be inflated by higher fuel expenses, the need to use expensive purpose-designed vessels, as well as fees imposed by Russian authorities in its exclusive economic zone, including for icebreaker assistance. Costs may be further elevated by Polar Code requirements for construction, equipment, the environmental performance of vessels, and crew training. The lack of ports of call for container ships between the Asian and European ports – due to sparse population and limited economic activity in these regions in sectors other than resource extraction – means that container transport would be characterized by point-to-point operations, restricting options for versatility. This constitutes a major difference compared to traditional southern shipping routes, which benefit from complex systems of logistics, cargo diversity and developed infrastructure. In general, the profitability threshold for Arctic shipping – if non-Polar alternatives are available – is high (see e.g., Sander et al., 2016, Humpert, 2014; Sun, 2018). As a result, transit voyages are few and the majority of transits actually involve vessels without any cargo (Kirkenes Nearingshage, 2018: 21-22).

There are additional challenges for container transits as compared to bulk transport transits. The first container didn't cross the NSR until the summer of 2018, carrying Korean electronics and Russian fish products (Jacobsen, 2018, August 24). Nonetheless, future predictions are difficult, as the changes in Arctic climate that would allow a significant opening of Arctic Ocean sea lanes – including for low-class vessels or non-Arctic ships – would mean that the changes in global climate are likely to have impacts on all economies around the world. These changes are difficult to model, thus making long-term predictions highly challenging.

China and Arctic economy

Another challenge is the unclear attitude of Russia towards the use of the NSR, at the same time promoting the NSR and introducing restrictions. On the one hand, the Russian government has been promoting the NSR as an international shipping route, with the hope that this would contribute to the development of the Russian North and partly pay for the infrastructure needed to maintain the safety of navigation. In 2012, the bureaucratic procedures for transit voyages were streamlined (Sanders et al., 2016). Recently, parts of the area governed by the law on the NSR have been opened for vessels with lower ice classes (Humpert, 2018, November 26). On the other hand, in the past few years, Russian authorities have banned (albeit with major exceptions) the use of foreign-built and foreign-registered vessels from exporting Russian hydrocarbons extracted in the Arctic. Furthermore, a new set of stricter rules have been reportedly introduced for vessels entering the Russian ice-covered EEZ. Rhetorically, Russian policy-makers increasingly underline the need for greater self-sufficiency in terms of retaining or acquiring maritime shipping capabilities to transport Russian resources and to develop projects in the Russian Arctic. The governance of the NSR has been transferred to Rosatom, which operates Russia's nuclear icebreakers, underlining the key role of mandatory icebreaker assistance in the management of the Arctic shipping route (Staalesen, 2019, January 2; Humpert, 2019, March 21).

It appears that Chinese experts are aware of the limitations and challenges related to Arctic shipping and they have limited trust in Russian openness to Chinese navigation along the route (Sun, 2018b). At the same time, container shipping flows to and from China may actually be expected to shift further southwards rather than northwards, with China's increasing economic (including resource) relations with Africa and South-East Asia and economic growth in these regions (Erokhin, Tianming & Xinhua, 2018).

After the BRI was formalized by the Xi Jinping government in 2013, there was much speculation as to whether the Arctic would form a part of the growing economic links that China was seeking to create between itself and key markets in Africa, Europe and Eurasia. Although the initial stance by Beijing was that although the Arctic, and especially the NSR, was of interest to China for trade in the coming decades, it was not a priority for the BRI. Nonetheless, signs began to appear in 2017 that the official linkage between the Arctic and the BRI would eventually be established. For example, one prominent Beijing academic noted in a report by the *South China Morning Post* in May 2017 that the time had come to add a 'Circle' to the Belt and

China and Arctic economy

Road idea (Huang, 2017), and also in the same year, talk began to take shape about potential China-supported port projects in Russia (such as Arkhangelsk) as well as in Iceland and Norway.

The first official government confirmation that Arctic waters would be incorporated into the BRI appeared within a paper co-published by the NDRC and the then-State Oceanic Administration. Entitled “Vision for Maritime Cooperation under the Belt and Road Initiative” (*Yidaiyilu Jianshe Haishang Hezuo Shexiang* 《“一带一路”建设海上合作设想》), the report cited the Arctic, along with the Indian Ocean/Mediterranean and the Pacific Ocean as “blue economic passages” essential for Chinese maritime trade under the auspices of the BRI. This document set the stage for the release of the White Paper in January 2018, which brought together many strands of scientific, economic and political policies into a single document (PRC State Council, 2018), including re-affirming China’s identity as a “near-Arctic State” and its interest in developing the Arctic Ocean as an ‘Ice Silk Road’ as part of the “Maritime Silk Road” within the BRI.

With the Arctic officially part of the BRI, there is much anticipation as to how the Arctic economies could benefit from Chinese investments and other forms of economic partnerships. The Arctic is being incorporated into both the maritime ‘Road’ via proposed port projects as well as the possibility of greater Chinese shipping through the NSR and the land-based ‘Belt’, including via a proposed railway and other transportation links via Siberia and the Russian Far East (RFE) and as far away as the Nordic region. The rail transport between Central Europe and China via Russia and Central Asia constitutes another alternative to the Suez Canal route and competition to Arctic container transport. These rail connections, while growing and being suited for specific goods and situations, involve much smaller volumes and higher costs per unit compared to sea transport.

While Chinese interest is focused on the NSR, some attention has also been given to the Northwest Passage (NWP). In the more distant future, transit shipping between East Asia and the North American east coast can become feasible. Transit routes can reach as far as Iceland and Greenland, especially if mining in the latter country begins to take off in the coming years (Fife & Chase, 2017). In April 2016, China’s Maritime Safety Administration released a navigation guide to the NWP in the Canadian Arctic. China has thus far not sent a cargo vessel through the passage, but the icebreaker *Xuelong* has traversed the passage with Canadian consent.

It is unlikely that the Arctic will be a primary trade route for Chinese goods in the near

China and Arctic economy

future. Nonetheless, China appears to have switched towards a more optimistic rhetoric in regards to the prospects of Arctic shipping after the adoption of the 2018 White Paper. This new optimism contrasts with the actual activities in the past few years, as well as with the earlier reluctance to include Arctic sea lanes in the BRI initiative, presumably because the Arctic shipping potential was considered limited compared to other elements of the BRI framework (Moe and Stokke, 2018). In 2017, there were merely five Chinese sailings in both directions through the whole NSR. The more general reasons discussed above play a role. The lack of progress could be partly explained also by the temporary financial problems of China Ocean Shipping Company (COSCO) and its subsidiaries (especially the COSCO Specialized Carriers Company), the main player in the scene of China's Arctic shipping. Also, trade with Northern Europe – where the NSR transits could be competitive – constitutes a mere 2.9% of China's international trade volumes (Moe and Stokke, 2018). Consequently, the main area of Chinese involvement in Arctic shipping is resource extraction projects and exports, which are related to the construction and commencement of production at the Yamal LNG project. The carriers exporting the LNG from the Yamal LNG Sabetta port are co-owned by COSCO and Japanese company Mitsui (Staalesen, 2018, June 29). In 2019, the first Chinese-built LNG carrier for the Yamal LNG project was completed in a Shanghai shipyard, although the vessel, “LNG Dubhe” is not an ice-strengthened unit and is likely to be used for transshipments in Murmansk (Staalesen, 2019, September 27).

Chinese (state-owned) shipping companies have some reserves for investments and are willing to put these resources into projects such as unprofitable trial voyages that are seen as opening the door for future possibilities as well as activities that support governmental agenda, especially the BRI. Against this background, COSCO announced the opening of the regular trial container lane and commissioned three multi-purpose ice-class carriers (Moe and Stokke, 2018).

The development of the infrastructure within the BRI is to be carried out through cooperation between China and individual countries. For the time being, Russia is the only Arctic state that has formally joined the BRI. The 2018 White Paper emphasises that “[c]oncrete cooperation steps include coordinating development strategies with the Arctic States, encouraging joint efforts to build a blue economic passage linking China and Europe via the Arctic Ocean [...] and building a global infrastructure network”. Chinese involvement in ongoing and planned Russian projects, mainly focused on resource extraction and exports, can be seen as

China and Arctic economy

contributing to the development of the NSR as a part of the BRI. These include the Belkomur Railway between Siberia and Arkhangelsk, a deep-water port in Arkhangelsk, as well as Yamal LNG, Arctic LNG (planned to be launched on the Gydan peninsula) and associated shipping infrastructure (Soldatkin and Jaganathan, 2019, September 5).

China's overall interest in the NSR is also demonstrated in research activities. Chinese institutes have been engaged in a number of studies dedicated to the feasibility of the NSR (in particular comparing the NSR to the Suez Canal) and the technological solutions needed for operating therein, in particular regarding smaller conventional container vessels (Kirkenes Nearingshage, 2018: 8).

6.7. Oil and gas production

The accelerating pace of polar ice erosion has resulted in an increase in the level of international attention to potential fossil fuel (oil and gas) extraction in the circumpolar Arctic. A 2008 survey report by the United States Geological Survey (USGS) evaluated the probability of hydrocarbon occurrence in the Arctic. It concluded that the area within the Arctic Circle, representing six percent of the world's surface, may hold thirteen percent of the globe's unrecovered petroleum supplies (ninety billion barrels), and as much as thirty percent of its natural gas (approximately 47.3 billion cubic meters). A large majority of these fossil fuels, eighty-four percent, would be found offshore, most notably in the Arctic Ocean north of Siberia, in the waters north of Alaska and also between Baffin Island in Nunavut, Canada and Greenland (Bird et al., 2008; Gautier et al., 2009). However, various obstacles have hampered the earlier predicted "scramble" with regard to offshore extraction. First, the rapid drop in oil prices after 2014 made Arctic fossil fuels less attractive from a cost/benefit ratio, considering the difficult operating environment in the North. There are also concerns about the environmental safety of oil and gas drilling in Arctic waters, especially in light of the "Deepwater Horizon" oil spill disaster in the Gulf of Mexico in 2010, as well as the logistical problems of large-scale drilling in the Arctic. Advances in the Russian Arctic – the most prospective region for future development – have been hampered by Western sanctions, which have limited the access of Russian energy companies to international financial markets and have halted most development activities in Russia's northern seas (though not onshore, such as the Yamal peninsula).

China and Arctic economy

For China, the Arctic remains a long-term area of interest considering the country's ongoing need for external energy supplies. Despite the costs of Arctic drilling, the region is attractive to Beijing given its political stability and predictability. A report on the development of China's domestic and overseas oil and gas supplies (*2017 nian guonei wai youqi hangye fazhan baogao* 《2017年国内外油气行业发展报告》) published in 2017, predicted that China's high dependence on overseas oil would be at around 70 percent in 2018. Meanwhile, the report indicated that China has been the second-largest gas importer while global gas consumption in 2017 hit a new high record. China has been seeking to diversify its sources of oil and gas commodities, with a similar situation being faced by its neighbours, Japan and South Korea. The majority of Chinese energy resources are imported from the Middle East, Africa, Central Asia and Oceania (including Australian coal).³ Arctic resources may play a part in the diversification endeavors, but only to a limited extent. China's dependence on Africa and the Middle East for oil and gas imports will continue in the mid-term.

So far, Russia has been the focus of China's Arctic energy interests (see e.g., Reuters, 2018, August 19). China has been viewed by the Putin government as an emerging energy partner as a result of Moscow's 'Look East' policies and due to Western sanctions. In May 2014, a Sino-Russian natural gas deal, worth approximately US\$400 billion, was completed between the Russian energy firm Gazprom and the CNPC. The agreement would lead to regular gas shipments to China via the Russian Far East for approximately thirty years. This was followed by a Sino-Russian liquefied natural gas project on the Yamal Peninsula in Siberia (Yamal LNG), valued at US\$27 billion, which officially became operational in December 2017, and is financially supported by the CNPC and the Chinese Silk Road Fund. Further energy initiatives may be possible in light of the June 2018 announcement that a US\$10 billion development initiative, jointly overseen by the China Development Bank and Russia's Vnesheconombank, would include projects involving the Russian Arctic. A sister-project of Yamal LNG – Arctic LNG 2 with total development costs estimated at US\$25.5 billion – has also attracted Chinese

³ The East China Sea, which has a contested maritime border between China and Japan, also contains a gas field, known in Chinese as the *Chunxiao* (春晓油气田) and in Japanese as the *Shirakaba*, which both governments claim (Kim, 2012).

China and Arctic economy

investors. The CNPC and the CNOOC have each acquired 10 percent shares in the project (Staalesen, 2019, July 1; Staalesen, 2018, June 14).

China has been less successful in projects in other Arctic jurisdictions. In 2013, Eykon Energy in Iceland created a partnership with the CNOOC and Petoro of Norway to seek out oil and gas in the Jan Mayen/Dreki region of the North Atlantic. However, poor survey results prompted both the Chinese and the Norwegian firms to withdraw from the project in January 2018 (Over the Circle, 2018). However, this does not mean that Beijing has lost interest in the Atlantic Arctic in regards to its energy potential. In October 2018, it was announced that Chinese firms, including the CNPC and the CNOOC, were expressing interest in bidding for exploration contracts in maritime blocks off the coast of Greenland when they become available in 2021 (Daly, 2018).

A Memorandum of Understanding (MoU) was struck between China and the US state of Alaska in 2017 to potentially construct an LNG pipeline and production facilities. Sinopec (China Petrochemical Corporation), the Bank of China (*Zhongguo Yinhang* 中国银行) and China Investment Corporation (*Zhongguo Touzi Youxian Zeren Gongsi* 中国投资有限责任公司) were negotiating a joint development project with the Alaska Gasline Development Corporation in regards to gas extraction, refining it into LNG and transportation in Alaska. The project, which includes a 1250km pipeline, would cost US\$43 billion (press estimates) with 75% of funding coming from the Bank of China and 75% of total capacity being directed to the Chinese market. The final Energy Information Administration (EIA) statement was expected to be issued by the end of 2019 and, in an optimal scenario, the project could go online in 2025 (Graeber, 2018, March 28; Lim, 2018). However, the project experienced problems from the beginning. Before Chinese involvement, major investors (Exxon Mobil, ConocoPhillips and BP) had already abandoned the endeavor (Käpylä and Mikkola, 2018: 217). Currently, the simmering ‘trade war’ between China and the United States since the beginning of 2018 has limited the likelihood and timeline for that endeavor, despite earlier support from both Presidents Trump and Xi. As of October 2019, the project is effectively on hold.

6.8. Mining

China and Arctic economy

So far, the involvement of Chinese companies in Arctic raw materials mining projects has been limited, especially in contrast to the Chinese presence in Africa or Australia (Lajeunesse & Lackenbauer, 2016).

The most well-known Arctic mining projects related to China involve the extraction of rare earth elements (REEs). China is the world's largest consumer and producer of REEs. REEs are seventeen chemical elements on the periodic table that play vital roles in modern industries and new technologies, including communications, electronics, green technology and national defense. Although many countries have REE deposits, China has taken the lead in their mining and production. Developing the utilization of REEs is an indispensable part of China's 13th Five-Year Plan, which encourages China's corporations to cooperate internationally (Central Committee of the Communist Party of China, 2015). China has also been interested in developing REE mines in the Arctic, starting with Greenland.

One of the most significant and advanced REE projects to be operated is at Kvanefjeld, located in Southern Greenland. The project is estimated to have an after-tax net value of US\$1.4 billion. The mining operator is Australia-based Greenland Minerals (formerly Greenland Minerals and Energy), in partnership with Shenghe Resources (*Shenghe Ziyuan* 盛和资源), a Chinese company, which acts as a stakeholder and partner. The two companies signed a MoU in August 2018 for further cooperation on the Kvanefjeld project (Birney, 2018). The project proponents expect the mine to commence operations in the coming years. Furthermore, a zinc mine at Citronen Fjord is planned in Greenland's far north. The project is overseen by Perth-based Ironbark in cooperation with China Nonferrous Metal. Finally, General Nice, a Hong Kong-based company, currently holds the rights to a potential iron mine at Isua in western Greenland (McCrae, 2017; Shi & Lanteigne, 2018). General Nice was the same corporation that fell afoul of the Danish government when it attempted to purchase an abandoned American-built naval facility at Grønnedal. That sale was blocked by Copenhagen, a decision backed by the USA (Matzen, 2017).

The Canadian mining industry is among the most important sectors of the country's economy, and Canada is one of the biggest mining nations globally. Many Canadian mining companies established relationships with Chinese companies, including SOEs, ranging from sources of capital to long-term buyers or active operators. Between 2010 and 2016, there was an elevated interest by Chinese mining companies and investors in Canadian the mining industry

China and Arctic economy

and resources (Lajeunesse & Lackenbauer, 2016). Most projects, however, took place south of 60°N. For instance, China's CGN Mining Co Ltd bought a nearly 20-percent share in the Fission Uranium Corporation (Canada does not allow foreign investors to have majority shareholding in operating uranium mines). In 2011, Baosteel Resources International Inc, a Chinese state-owned company, invested US\$17.7 million in Noront in Northern Ontario's James Bay lowlands, considered one of the largest mineral discoveries in Canada in recent decades. Many Canadian companies received significant Chinese investment, including Teck Resources Ltd, Barrick, Ivanhoe Mines Ltd and Pretium Resources Inc. Moreover, Canadian mining companies partner with Chinese investors in financing and operating projects overseas (see e.g., Friedman, 2018, July 27).

Despite Canada's strong promotion of Chinese investments in its mining sector, the Chinese interest appeared to diminish after 2016. According to media reports (see e.g., Beeby, 2016, June 7), Chinese companies found it challenging to meet complex legal requirements and to manage community relations as well as carry out impact mitigation and negotiate benefit-sharing arrangements. Also, the investment and decision-making processes in Canada turned out to be slower than Chinese actors had wished. For instance, in Nunavut, MMG Ltd (associated with China Minmetals Corp) had long tried to start a zinc project, but without success. In British Columbia, Chinese company HD Mining International Ltd's plan to recruit Chinese labor was met with strong opposition from local communities. Some of the proposed Chinese investment plans did not proceed beyond initial expressions of interest due to restrictions placed by the Canadian government on foreign investments in resources considered highly strategic (e.g. oil sands, uranium).

In Russia, the Nornickel company has sought Chinese investment in the exploitation of rare-earth metals, vanadium, molybdenum, and wolframite in the Kola Peninsula, Taimyr Peninsula, and in the Sakha Republic (Ivanov, 2016, as quoted in Erokhin, Tianming & Xinhua, 2018).

There appear to be no Chinese companies or investors actively engaged in mining projects in Northern Fennoscandia beyond initial market surveys.

6.9. Tourism

China and Arctic economy

The growing middle class in China and its increasing prosperity has resulted in increased international travel by Chinese tourists. Chinese travelers are also becoming increasingly interested in relatively expensive polar tourist destinations. This resonates with the Chinese interest in both ‘green tourism’ (often understood as nature tourism, which does not have to imply sustainability) and adventure tourism. The numbers of Chinese tourists to the Arctic and Antarctica have increased steadily in recent years, and China is one of the largest countries of origin of polar tourists (Yang, 2017). In 2012, one year before China was awarded observership in the Arctic Council, China Economic Weekly (*Zhongguo Jingji Zhoukan* 《中国经济周刊》), an economic journal under the People’s Daily Press (*Renmin Ribao She* 人民日报社) published a brief article on Arctic tourism, suggesting possible ways for Chinese tourists to visit the region. Additionally, a look at Chinese online tourism forums reveals various discussions on costs and different kinds of tours in the Arctic. The circumpolar North attracts Chinese tourists with activities including Northern Lights tours, circumpolar fauna and flora watching, experiencing the spectacular Arctic landscape and outdoor activities, especially in winter. Iceland and Finnish Lapland are good examples of increasingly popular destinations. With intensifying media exposure in China, along with a smooth bilateral relationship with the country, Iceland has experienced significant growth in Chinese interest — the number of Chinese passengers at Keflavik airport grew from 9500 passengers in 2007 to 86,000 in 2017 (Icelandic Tourist Board, 2018). Chinese tourism and investments in the sector in Finnish Lapland are discussed in Chapter 7.

Parts of the Arctic less accessible compared to the Nordic countries are also attempting to attract Chinese and East Asian travelers. Northern Canada is strongly marketed in China and Japan (Rosen, 2018). However, the sharp downturn in diplomatic relations between Beijing and Ottawa at the beginning of 2019 over the arrest of the Huawei executive resulted in both governments placing travel warnings regarding each of the countries respectively in January (CBC News, 2019, January 26).

Greenland has also been hoping to develop a stronger tourism base with an eye on Chinese guests. One initiative has been to expand Greenland’s airports to better attract greater tourist traffic.

Russia is also seeking to cooperate more closely with China to develop Arctic tourism in Siberia and in the Arkhangelsk region (RT, 2018, July 27).

6.10. Concerns related to Chinese investments and economic cooperation

Many stakeholders in Arctic regions generally welcome foreign, including Chinese, investments. However, analysts have identified risks related to Chinese investments and some actors have expressed concerns. Some of these risks and concerns are specific to China, while many characterize any foreign investments.

First, there is a perception that Chinese investment and economic, scientific and other forms of cooperation may constitute instruments of increasing Chinese influence in the region. The mechanisms which we define as expressions of *sharp power* appear to be of greatest concern among actors in Arctic regions. Simultaneously, high levels of Chinese investments and economic cooperation could increase the exposure of small Arctic countries and sparsely-populated Arctic regions to any future fluctuations in the Chinese economy.

Second, there are concerns related to the performance of Chinese actors as investors or business partners. This refers to environmental impacts and the effects on local socio-economic development, including: social impacts, competition with local businesses, or an adverse influence on the labor market. Moreover, issues related to intellectual property rights or industrial espionage may be problematic for some types of projects. On the other hand, local actors, who are often strongly in favor of Chinese investments, have misgivings that plans announced by Chinese investors, which raise hopes for regional development, may eventually remain unrealized. That may lead to disappointment and the wastage of local human and financial resources mobilized towards the implementation of Chinese investment plans.

Chinese political and economic influence

Some analysts, decision-makers and members of the public, both in the Arctic regions and in Arctic capitals, are uneasy about the political and strategic leverage that China can gain via an elevated economic presence. These fears are based on the notion that China is an authoritarian, centralized state with strong governmental control over its economic actors. The Chinese government has proven in the past that it is willing to exercise forceful pressure – also using economic instruments – on countries that it felt had infringed on Chinese core interests or had

China and Arctic economy

“offended” China. Two Arctic states – Norway in the aftermath of awarding the Nobel Peace Prize to Liu Xiaobo, and Canada after the arrest of the Huawei executive Meng Wanzhou – experienced the sharp edge of such pressure. It is argued, primarily in the Western media, that closer economic ties with China and greater Chinese economic influence in relatively small Arctic states (apart from Russian and the USA) would give China increasing influence over Arctic states’ foreign policies and their economic and domestic decision-making, to gradually bring them more in line with Chinese economic and political interests. Such influence could be even more visible in the context of politics and the economies of the sparsely-populated and resource-deficient northernmost regions of the Arctic states.

Deepening interaction with Chinese actors creates new risks with implications for the security policy calculus of small Arctic countries. The concept of *power* helps us scrutinize and anticipate these developments. In the Arctic context, the concept of *sharp power* is particularly useful. In general, power refers to an actor’s ability to influence others’ behavior to achieve desired outcomes. In addition to the traditional understanding of *hard power*, which is based on the threat or the use of military force, Joseph Nye coined the concept of *soft power* in the 1990s. Soft power builds on the attractiveness of a state’s culture and ideals; it seeks to attract other states to voluntarily follow its policies (Nye, 2018). To complement the soft-hard framework,⁴ Walker and Ludwig (2017) coined the term *sharp power* that describes the ways in which authoritarian states seek to influence the behavior of other actors by shaping public opinion and perceptions around the globe. Sharp power includes instruments and mechanisms that spread deceptive information, bribe politicians and civil servants, widen socio-political cleavages, weaken the coherence of the targeted society, restrict liberty of speech, and interfere with elections. These instruments are used in order to shape national politics and to silence displeasing views in other states, as they could prevent an authoritarian state from increasing its global outreach (Walker & Ludwig, 2017; Walker, 2018). In its most extreme form, the use of sharp power may even reduce the targeted state’s sovereignty. The idea of sharp power is also clearly parallel and interlinked with *hybrid influencing*, a form of power use that has recently attracted plenty of attention in Western public debate. Similarly with sharp power, hybrid

⁴ Joseph Nye (2009, July/August) also introduced the term “smart power” to describe the cost-effective combination of hard and soft power instruments. Normally, smart power does not necessarily involve deception or clandestine influence methods.

China and Arctic economy

influencing refers to hidden, non-military methods of exerting power that clearly advance the interests of the influencer by intensifying and creating fissures and polarization in targeted societies (e.g. Cederberg et al., 2017; Mikkola et al., 2018, 24-25; Wigell, 2019). However, unlike with sharp power, hybrid influencing is often – but not always – seen to ultimately rely on the underlying threat of (consequent) military action (e.g. Salenius-Pasternak, 2017). To a great extent, it is the instruments grouped here under the umbrella of sharp power that appear to be of the greatest concern to Arctic stakeholders, decision-makers and analysts.

Identifying the above-mentioned forms of power helps us to distinguish four ways in which China can exercise power in Arctic affairs and beyond: it can coerce others with threats, induce them with payments, manipulate or deceive them, or it can attract them to voluntarily follow its policies and interests (Nye, 2008; Walker & Ludwig, 2017). In real-life situations, of course, it is not always easy to distinguish between these strategies, as different dimensions of power often overlap. For example, the line between soft power and sharp power can be very thin — while both seek to improve a state's international image, they utilize divergent tools to reach that goal. Economic influence is particularly difficult to categorize; whilst some scholars think it is about hard power, others regard it as a domain of soft power. Nevertheless, an analysis of China's exercise of these three kinds of power (*hard*, *soft* and *sharp*) helps us scrutinize concerns that China's growing involvement in the Arctic – which remains primarily economic and scientific in nature – causes amongst the regional actors.

First, China's use of hard power refers to the adoption of either military or economic strategies to increase the country's influence in the Arctic countries. Arguably, global great power competition, especially between the USA and an increasingly stronger China, has arguably intensified and is unlikely to subside rapidly. In contrast to the classic realist tendency to believe that the rise of China will evidently cause a hegemonic war (e.g. Mearsheimer, 2001), current evidence gives little reason to believe that the use of armed force by China in the Arctic region would be a likely scenario, at least in the short-term to mid-term future (e.g. Lanteigne & Ping, 2015, but see also Office of the Secretary of Defense, 2019: 114; Brady, 2017). Nonetheless, in the name of mapping all kinds of potential scenarios, it is possible to imagine a situation in which the country's interest in Nordic harbour cities – e.g. Kirkenes and Akureyri – would make it easier for Chinese warships to enter the region and could eventually result in a dual-use of these ports. In a similar vein, the Chinese aurora observatory in Iceland, the research

China and Arctic economy

station in Svalbard and the country's new plan to build a nuclear-powered ice-breaker have been linked to dual-use speculations, especially by US observers (Office of the Secretary of Defense, 2019: 114). However, there is no publicly available evidence of current illicit, covert activities.⁵

Outside the Arctic, concerns related to Chinese control over strategic infrastructure and its use in the case of potential tensions have been expressed in particular in the context of Africa or regarding digital infrastructure, especially the deployment of 5G network infrastructure across Europe (see, e.g., Hillman, 2019; Xu Klein, 2018, September 14). Under the current circumstances, rather than via establishing its own infrastructure, it is more likely that China's rapidly modernizing military forces will indirectly shape the dynamics of the Arctic. No region is immune to the impacts of shifts in the balance of power on a global scale.

Second, examples of China's attempts to attract desired partners through the pull effect of the country's culture (i.e. the use of soft power) in the Arctic context include *panda diplomacy* (e.g. Hartig, 2013) in Finland (e.g. Wang, 2018) and the organization of public relations events, such as the China Night Gala at the Arctic Circle Assembly in Reykjavik in 2018 (e.g., Ministry of Foreign Affairs PRC, 2018). In addition to cultural diplomacy, Chinese soft power is strongly based on its economic prowess: its economic model is especially attractive to African and Southeast Asian countries (e.g. Ding, 2008; Percival, 2007). And while China's politico-economic model as such may not be alluring for societies in most (if not all) Arctic states, the visions of investments (from China) or new markets (in China) are easily a part of promotional strategies. As Nye (2018) reminds us, "soft power is not good or bad in itself", but it can be used to advance both positive and negative ends. China's soft power can hence have positive impacts by increasing trust and intercultural understanding – intellectual capital necessary to increase cooperation between China and the Arctic states. Yet, it may also have negative impacts if Arctic actors seek to please Chinese investors to the extent that China's regional influence increases to

⁵ However, a new aspect in the broader strategic situation in the circumpolar north is China's ability, in the future, to maintain a continuous sea-based nuclear deterrent through its strategic nuclear submarine force. Some of these assets may also start patrolling in the Arctic Ocean (Stewart and Ali, 2019, May 3). China's military presence could become more visible in the Arctic if great power competition intensifies and this could reflect the growth of China's naval (and other) capabilities. Among others, a related concern is that, over time, dual-use ports and other facilities on the European side of the Arctic could become useful, while in the short term, the Asian side of Arctic/sub-Arctic might be more relevant.

China and Arctic economy

the point where Arctic states' national interests – including long-term economic interests – are adversely affected.

Third, the use of sharp power remains the most complex and least discussed form of China's attempts to influence the Arctic countries. In general, the use of sharp power is nothing new in the region – these methods have always been used in politics – but, traditionally, more attention has been paid to Russian attempts, perhaps due to the fact that China's global engagement has only recently reached a notable level (Nye, 2018). Also, the fact that digitalization and globalization have increased the efficiency of these methods makes current instances of sharp power different from the past (Nye, 2018), with Russia's (alleged) Global Positioning System (GPS) jamming attempts during military exercises in Finnish Lapland offering a representative example (BBC, 2018; Mikkola, 2019). So far, there is little publicly available evidence of China's use of sharp power in the Arctic context. As the country's role in the region increases, it may, however, attempt to use questionable methods in Nordic countries. Possibly, this could occur in a similar manner as in Australia, where China has reportedly tried to interfere in the country's domestic politics (e.g. Hamilton, 2018; Walker, 2018). Such attempts may either shape national politics in each country or indirectly affect cohesion within the Nordic region. For instance, differences in China's policy and relations with different Nordic states may prevent these countries from acting as a uniform front on the international stage or from supporting each other.

For the time being, the most likely arena of Chinese sharp power in the Arctic context is academia. Researchers may be influenced both directly or indirectly to produce results that support China's Arctic plans and strategies. China offers generous grants and treats researchers with dinners and gifts in addition to organizing government-funded academic exchange programs and conferences. The aim is primarily to build trust and to strengthen China's status as a legitimate Arctic stakeholder that is interested in more than the region's resources. However, in addition to the positive outcome of increasing Arctic researchers' understanding of the Chinese context, these forums and programmes, and the prospect of future access to such opportunities, may put academics under pressure to censor their words. Although the Arctic context is less sensitive than many other sectors or geographies, it is a priority for the Chinese government to advance the image of China as a responsible Arctic stakeholder. For this reason, it is indeed

China and Arctic economy

within the realm of possibility that actions such as refusing to grant a Chinese visa could be taken to silence unwanted voices.

Clearly, China's growing leverage in the Arctic is largely based on its economic prowess, which inevitably increases its influence in the domestic affairs of small Nordic countries or relatively small sub-divisions of Canada, Russia and even in Alaska. The emerging risks are therefore both political and economic. Transport systems in particular are candidates for attracting Chinese investments and thus represent a domain in which countries' security of supply could be affected. Examples of such concerns playing a role in decision-making, in most instances leading to the cancellation of Chinese investment plans, are the aforementioned cases of Greenlandic airport expansions, the Swedish Lysekil port, extensive land purchase proposals in northern Norway, Svalbard and Iceland, as well as the idea of choosing a Chinese operator or a major investor for the railway connection proposed between Rovaniemi and Kirkenes (see Chapter 7 for details on this project) .

Although the Chinese economy has thus far continued to grow according to expectations, disruptions may arise from several sectors, as the Chinese economy is undergoing a challenging process of structural transformation. The growing debt levels of local governments, households and companies, as well as increasing pressure to tackle pollution and inequality, are major risks that the Chinese government currently faces. In addition, external factors such as a trade war with the US may equally upset the balance. In the case of political conflicts, Chinese ownership or control of critical infrastructure would possibly place Chinese operators in a position to decide how it is used and by whom. However, open use of such power is very unlikely, as states generally have the possibility to impose their control on private property in crisis situations. In a similar vein, Chinese economic investments may be used as political leverage in policy disagreements, as was the case in Norway in the aftermath of the Nobel Peace Prize controversy.

Chinese institutions present the decisions of Chinese investment banks and financial institutions as being based primarily on economic evaluation, without requirements related to good governance, human rights, economic restructuring or sustainable development indicators. Such requirements are, at least formally, part of the decision-making process in Western financial institutions such as the World Bank or the European Investment Bank. However, Mattlin and Nojonen (2015) believe that Chinese financing decisions cannot be disentangled from political motives, especially when state-controlled institutions are concerned (this view was

China and Arctic economy

also expressed in personal communication, Interviewee 1, June 13, 2018). Therefore, as China wishes to have a gradually stronger presence in the Arctic, many instances of investment and cooperation can serve larger political aims, alongside project-specific business objectives.

There are related concerns that Chinese investments may, in the long-term, result in debt dependence, which may further reinforce their capabilities to influence the policies of investment-recipient countries. Such questions partly arise from the experiences with Chinese activities in Africa, South America and South-East Asia. Cumulative Chinese investments generate tangible development in recipient countries. Yet, on the other hand, they gradually and organically create strong and potentially dangerous path-dependency mechanisms between recipient countries and China. Each investment has its own path-dependency pattern that binds the recipient country to the Chinese supplier through financial obligations, hardware and software, and updating technology and workforce education. Eventually, following the path leads countries to a lock-in phase. The lock-in can emerge either through the cumulative effect of seemingly unrelated Chinese investments or simply through one critical Chinese investment that make it hard or impossible for the recipient country to find alternative suppliers. At this stage, Beijing gains the upper hand and can exert direct or indirect influence over national decision-making. At times, the recipient states' governments actively make concessions in the pursuit of further benefits from China (Mattlin and Nojonen, 2015; see also the recent case of Argentina at Patey, 2019, January 24). These dynamics may be troubling for countries and communities that are just now engaging in investment cooperation with China, as is the case in the Arctic.

While such processes may seem less likely to occur in rich, developed and relatively well-governed Arctic states, various actors express concerns (e.g., Lackenbauer et al., 2018; Lasserre et al., 2017; Department of State, 2019). Rosen and Thuringen (2017) claim that Chinese investments could indeed constitute a security risk, particularly in smaller Arctic jurisdictions:

Unregulated FDI is a significant, multifaceted security issue. It must be addressed before the influx of unregulated investments, and the soft power politics that come from those investments... We believe that FDI should be tracked carefully, because the impact of large quantities of investment dollars flooding into some Arctic nations

China and Arctic economy

(Greenland) or tribally governed land can have an impact on political sovereignty (Rosen & Thuringen, 2017: 2, 53).

A good example of how such concerns related to major Chinese investments change legal framework applicable to investments in the Arctic (here, in Sweden and Finland) is a recently adopted EU legislation (Regulation 2019/452). The new regulation gives the European Commission power to scrutinize foreign investments in areas of strategic importance such as infrastructure or energy (i.e., investments that are likely to affect projects or programs of Union interest on the grounds of security or public order). The legislation is perceived as targeting Chinese investors to a great extent, as it was drafted in response to cases such as the Chinese acquisition of the Greek Port of Piraeus. The law was intensely debated in several EU Member States that have benefited from Chinese investments in recent years, such as Portugal or Greece.

The example of the above EU legislation points to a new challenge for Western Arctic states in regards to their relations with China. How should they take account of concerns and possible pressure from their major Western partners – in Brussels and Washington – in regard to enhancing ties with China? Nordic states already need to take heed of the discussion taking place in the EU about China's influence. Moreover, the US Secretary of State in a speech delivered in Rovaniemi, Finland in May 2019 effectively warned Arctic states against Chinese investments (Department of State, 2019). In other contexts, especially regarding the deployment of 5G network in various European countries, the USA openly threatened states considering contracts with Chinese companies that security cooperation with the USA may be limited.

The performance and reliability of Chinese investors and partners

The behavior of some Chinese economic operators in other parts of the world feeds anxieties regarding the reliability of Chinese investors to implement their plans or the social and environmental performance of Chinese companies. This is particularly important in the context of Arctic regions, where land rights, participatory decision-making, broad consultations, and co-management are an important part of any development process — frameworks that often are outcomes of intense conflicts or difficult negotiations. There are also concerns regarding the excessive economic influence of major Chinese players within small Arctic economies.

China and Arctic economy

Rosen and Thuringen (2017) highlight that “China’s recent foreign direct investment (FDI) activities in the Arctic are significant in overall dollar value and could be larger than any other country’s FDI”. The authors, who discuss only the Arctic Ocean littoral states in their paper, not Finland or Sweden, suggest that high levels of the Chinese FDI in the Arctic could mean that there is a “potential that one state could, by enacting low standards, stimulate a race to the bottom in terms of the environmental or labor standards associated with resource extraction”. However, the Chinese government usually underlines the company’s obligation to adjust to local regulatory frameworks (Stepien, 2017). Therefore, in an operational environment in which regulations are stronger, such as in the Nordic countries, the above-mentioned risks are less likely to turn into actual problems than in states with weaker administrative, regulatory and political systems.

Investments, including Chinese FDI, are always aimed at generating profit or other benefits for the investor, including national access to resources. The authors see many of the Chinese investments in Africa and South America as having a goal to secure resources for the growing Chinese economy.

Various environmental and social impacts of Chinese investments are highlighted in literature and media. For instance, especially in the mid-2000s, there were, allegedly, cases of Chinese mines in Africa having lower labor standards than those run by local or Western companies. There are opinions that the local workforce is treated worse than Chinese expats (which may be characteristic for most foreign investments in developing states) and that the interests and rights of groups such as Indigenous Peoples and minorities are not always observed. At times, Chinese investors pick up projects that have been abandoned by Western investors or international investments banks due to social and environmental challenges (International Rivers, 2012; Cannon, 2019; Canuto, 2019, March 12; Mourdoukoutas, 2018; Marsh, 2015). According to Rosen and Thuringen (2017: 51):

Widely publicized instances of environmental damage, labor abuse, and violence in South America and Africa have made countries in North America and Europe wary of Chinese direct investment. Had Chinese companies been more attentive to good corporate behavior and had the Chinese government been more effective at managing

China and Arctic economy

the behavior of Chinese SOEs, then perhaps China might have a better reputation abroad.

At the same time, analysts highlight that there has been significant improvement in the past decade, both regarding the behavior of Chinese companies and the standards imposed on the Chinese SOEs by the government (Rosen & Thuringen, 2017: 52).

At a general level, international standards and recommendations referring to foreign direct investments (e.g. by the United Nations (UN) or the Organization for Economic Cooperation and Development, OECD) advise the recipient countries and regions to consider both the benefits and disadvantages of particular investments. These include over-dependence on extractive industries, limiting exposure to market volatility, local employment, generation and transfer of technology, eliminating anticompetitive practices, and preventing crowding-out of local investments. The Arctic states and their peripheral Arctic regions – characterized by small economies, populations and limited economic diversification – may be particularly concerned about such risks.

Perhaps being aware of the above concerns and reputational issues, the Chinese government states in its 2018 White Paper (PRC State Council, 2018) that all extractive activities in the Arctic should “proceed in a sustainable way on the condition of properly protecting the eco-environment of the Arctic and respecting the interests and concerns of the indigenous peoples in the region”. In general, the Chinese government also advises Chinese companies to abide by local regulatory frameworks (Ministry of Commerce PRC 2013; 2014; China Banking Regulatory Commission, 2013). This commitment is reiterated in the 2018 White Paper:

[China] requires its enterprises to observe the laws of the relevant States and conduct risk assessments for resource exploration, and encourages them to participate in the exploitation of oil, gas and mineral resources in the Arctic, through cooperation in various forms and on the condition of properly protecting the eco-environment of the Arctic...respecting the efforts made by the Arctic States to empower the local citizens, foster their social and economic progress, and improve education and medical services, so that the Arctic residents, including the indigenous peoples, will truly benefit from the development of Arctic resources. (PRC State Council, 2018)

China and Arctic economy

The latter can be also understood as an encouragement for Chinese companies to engage in corporate social responsibility actions (e.g., community wellbeing support activities) in communities and locations in which they carry out operations. Moreover, in the 2018 White Paper, the Chinese government commits to respecting local and indigenous values and traditions. This is in line with the so-called 'Nuuk Observer rules' (Arctic Council, 2011; Graczyk & Koivurova, 2014; Stepień, 2017), to which China expressed its consent upon applying and taking up an observer status in the Arctic Council.

Such declaratory statements, while not without an intrinsic value, do not necessarily determine the actions of particular Chinese companies or investors, or may not be reflected in actual pressure by the Chinese government on Chinese companies and researchers. They can be, however, used by various Arctic actors in their dealings with Chinese economic operators or investors or in cases when intervention by Chinese authorities is sought with the aim of exerting pressure on Chinese companies that are seen as not meeting the declared standards when conducting activities in the Arctic.

Among key challenges for northern sparsely populated areas is the (mis)match between the skills of the Northerners and the needs of new development projects (Prime Minister's Office, 2013; Stepień & Koivurova, 2017; Olsen et al., 2016). In some northern locations, the existing workforce is too small to meet the labor needs of major investments/developments, especially during the construction phase of projects. The short-term nature of construction activities deters locals from acquiring the skills that would be used for implementing a single project. Therefore, new and expanding businesses often rely on a fly-in workforce. If Chinese construction companies win contracts for major investments in Arctic regions, there is a possibility that Chinese workers will fill a part of the short-term demand for a labor force during the projects' construction phase. In some parts of the Arctic, plans to bring in Chinese workers already proved problematic for local communities. This was the case in Greenland and Canada in which Chinese mining companies planned to use a Chinese workforce. Anxieties related to Chinese subcontractors and a Chinese workforce are related to unfair pricing, a lack of local multiplier effects and undercutting national labor standards. The calculation of the socio-economic benefits and risks may be different for each project, depending on the location, scale and the characteristics of professionals who arrive in the North to support project implementation

China and Arctic economy

and operation. Currently, in other parts of the world, the tendency is for highly skilled Chinese professionals to leave after the completion of projects, while unskilled workers tend to remain (Rosen & Thuringen, 2017: 59). The nature of operations in the harsh Arctic climate may result in the dominance of high-skilled professionals among the Chinese workforce. These, usually relatively small groups of expats, may be seen as less problematic or even as desirable newcomers.

Chinese investments related to tourism have proven controversial in some parts of the Arctic. In northeast Iceland, Svalbard and in the Lyngen area in Norway, Chinese billionaire and property tycoon Huang Nubo planned to purchase vast swaths of land with a declared purpose of developing tourist services. However, local resistance and national environmental and security concerns prevented the finalization of these transactions, and in the Lyngen case, the construction of the tourist resort itself (see, e.g., Higgins, 2014, September 27; Staalesen, 2014, October 21).

While many analysts and Arctic residents are concerned about China's increasing economic presence, many actors in Arctic regions look with much hope at Chinese investments, with the belief that it can boost economic development and create much needed jobs (e.g. in Finnish Lapland, personal communication, Interviewee 2, June 12, 2018). For these actors, an important concern is that planned investments and partnerships will ultimately not materialize. This is particularly important if we take into account that social impacts occur from the moment the plans are announced (e.g., Schweitzer et al., 2019; Hansen and Johnstone, 2019). Among other things, local hopes and anxieties are triggered. Conflicts between different interest groups and values may emerge. Local businesses start planning expansion or withhold new investments in line with expected changes in the local economy. Rosen & Thuringen (2017: 32-34, 52) highlight cases in which Chinese investments went bankrupt, leaving local communities and businesses in distress. These failures were often the result of lack of experience and understanding by the Chinese economic actors of local conditions and regulations. However, the same authors also underline that Chinese investments are much better planned nowadays, and investors more carefully consider local conditions and regulations. Investments are more strategic and long-term, with less willingness to engage in risky ventures. In cases of resource extraction in particular, Chinese operators nowadays tend to engage only in secure, promising projects, rather than taking up any opportunity and creating unrealistic expectations.

China and Arctic economy

6.11. Conclusion

The Chinese economic presence in the Arctic region is clearly increasing, and both the current activities and future expectations are related to the expanding role of China in the global economy, the trajectories of Chinese economic development and the changes in global market flows. However, at present the actual Chinese investments and operations are very limited in all major sectors: shipping, energy and non-energy extractive industries or infrastructure. The extension of the Belt and Road Initiative towards the Arctic has not yet produced a tangible increase in the Chinese presence, with the prominent exception is the Chinese involvement in the extraction and shipping of gas from Russia. Moreover, for many sectors such as shipping, extractives and tourism, China is expected to be a major long-term partner, buyer or investor, due to the size of its market and the resources at the disposal of Chinese financial institutions and companies.

Many investments do not come to pass, be it because of economic – as is the case with many mining projects – or political reasons. The latter stem from concerns related to Chinese investors', construction companies' or operators' influence on critical infrastructure (e.g. airport upgrades in Greenland) or are connected to broader economic or geopolitical tensions, as seems to be the case at the moment with the suspended LNG project in Alaska. Apart from strategic concerns, there are also anxieties related to the environmental and social performance of Chinese companies. These concerns are based on past experiences with Chinese activities in other parts of the world. So far, however, no problematic cases have been registered in the Arctic, presumably because Chinese actors tend to adjust to local regulatory frameworks as well as because the number of Chinese investments and operations is still small.

The case of Chinese economic activities in one country – Finland – is discussed in the next chapter. Chapter 7 exemplifies a number of the dynamics discussed above and also provides examples of Chinese investments – or the potential for such investments – outside of the major economic sectors.

Literature

China and Arctic economy

AMSA. (2009). *Arctic Marine Shipping Assessment*. Arctic Council: Protection of Arctic Marine Environment.

Arctic Council. (2011, May). *Senior Arctic Officials (SAO) Report to Ministers*. (pp. 50-51). Nuuk, Greenland.

Arctic Investment Platform. (2019). *Arctic Investment Platform Feasibility Study*. Retrieved August 14, 2019, from https://arcticsmartness.eu/wp-content/uploads/AIP-Feasibility-Study_web.pdf

BBC. (2018, November 12). Russia suspected of jamming GPS signal in Finland. *BBC News*. Retrieved July 26, 2019, from <https://www.bbc.com/news/world-europe-46178940>

BDI. (January 2019). Partner und systemischer Wettbewerber – Wie gehen wir mit Chinas staatlich gelenkter Volkswirtschaft um? BDI Grundsatzpapier China. [A partner and a systemic rival – How do we deal with China's state-controlled economy?, in German] Retrieved July 19, 2019, from https://g8fip1kp1yr33r3krz5b97d1-wpengine.netdna-ssl.com/wp-content/uploads/2019/01/BDI-Grundsatzpapier_China.pdf

Beeby, D. (2016, June 7). Chinese mining companies feel misled by Canada, report says. *CBC News*. Retrieved October 8, 2018, from <https://www.cbc.ca/news/politics/china-mining-ambassador-investors-infrastructure-1.3619228>

Bird, K. J., Charpentier, R. R., Gautier, D. L., Houseknecht, D. W., Klett, T. R., Pitman, J. K., ... Wandrey, C. J. (2008). Circum-Arctic resource appraisal: Estimates of undiscovered oil and gas North of the Arctic Circle. United States Geological Survey. Retrieved June 10, 2018, from <http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>

Birney, M. (2018, August 21). Greenland minerals sets growth plan with Chinese shareholder. *Business News - Western Australia*. Retrieved August 25, 2018, from

China and Arctic economy

<https://www.businessnews.com.au/article/Greenland-Minerals-sets-growth-plan-with-Chinese-shareholder>

Blenkinsop, P. & Emmott, R. (2019, April 9). EU hails breakthrough with China on industry subsidies. Reuters. Retrieved September 3, 2019, from <https://www.reuters.com/article/us-eu-china/eu-hails-breakthrough-with-china-on-industry-subsidies-idUSKCN1RL00B>

Brady, A-M. (2017). *China as a polar great power*. Washington, D.C.; Cambridge, United Kingdom: Woodrow Wilson Center Press.

Breum, M. (2018, June 30). How a dispute over China and Greenland's airports worked its way toward a solution. *Arctic Today*. Retrieved July 15, 2018, from <https://www.arctictoday.com/dispute-china-greenlands-airports-worked-way-toward-solution/>

Cannon, B.J. (2019). Is China Undermining Its Own Success in Africa?. *The Diplomat*. Retrieved September 10, 2019, from <https://thediplomat.com/2019/02/is-china-undermining-its-own-success-in-africa/>

Canuto, O. (2019, March 12). How Chinese Investment in Latin America is Changing. *Americas Quarterly*. Retrieved September 10, 2019, from <https://www.americasquarterly.org/content/how-chinese-investment-latin-america-changing>

CBS News (2019, January 25). Huawei arrest: What's happening between Canada and China?. Retrieved September 9, 2019, from <https://www.cbc.ca/news/world/huawei-meng-timeline-1.4989139>

Cederberg, A., Eronen, P., & Mustonen, J. (2017). Regional Cooperation to Support National Hybrid Defence Efforts. Working Paper 1. Helsinki: The European Centre of Excellence for Countering Hybrid Threats. Retrieved July 17, 2019, from https://www.hybridcoe.fi/wp-content/uploads/2017/12/hybridcoe_wp1_regional_cooperation.pdf

China and Arctic economy

Central Committee of the Communist Party of China (2015). 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016–2020). Retrieved September 8, 2019, from <http://en.ndrc.gov.cn/newsrelease/201612/P020161207645765233498.pdf>

China Banking Regulatory Commission. (2013). Green credit guidelines. (Unofficial translation for internal use). Retrieved June 20, 2018, from pfbcbf.org/docs/news/avril-mai-13/RDP12-Mars-2013/DCC-China%20Banking%20Regulation%20-%20Green%20Credit%20Guidelines.pdf

ChinaFile (2016, December 21), Did Oslo Kowtow to Beijing? (A ChinaFile Conversation). Retrieved 20 May 2019 from <http://www.chinafile.com/conversation/did-oslo-kowtow-beijing>

Creemers, R. (2018). China's Social Credit System: An Evolving Practice of Control. SSRN. Retrieved September, 9, 2019, from <https://ssrn.com/abstract=3175792> or <http://dx.doi.org/10.2139/ssrn.3175792>

Daly, T. (2018, October 30). Greenland says China oil majors eyeing Arctic island's onshore blocks. *Reuters*. Retrieved November 5, 2018, from <https://www.reuters.com/article/greenland-china-investment/update-1-greenland-says-china-oil-majors-eyeing-arctic-islands-onshore-blocks-idUSL3N1XA33A>

Department of State (US). (2019, May 6). Looking North: Sharpening America's Arctic Focus. Speech by the US Secretary of State Mike Pompeo in Rovaniemi, Finland on 8 May 2019. Retrieved September 26, 2019, from the Department of State website at <https://www.state.gov/looking-north-sharpening-americas-arctic-focus/>

Ding, S. (2008). To build a “harmonious world”: China's soft power wielding in the Global South. *Journal of Chinese Political Science*, 13(2), 193–213.

Economist. (2018, April 14). China wants to be a polar power. *Economist*. Retrieved June 10, 2018, from <https://www.economist.com/china/2018/04/14/china-wants-to-be-a-polar-power>

China and Arctic economy

Erokhin, V., Tianming, G., & Xinhua, Z. (2018). Arctic Blue Economic Corridor: China's Role in the Development of a New Connectivity Paradigm in the North. In L. Heininen & H. Exner-Pirot (Eds.), *Arctic Yearbook 2018*. Akureyri, Iceland: Northern Research Forum.

European Commission (2019, April 10). EU foreign investment screening. Press Release. Retrieved September 3, 2019, from https://europa.eu/rapid/press-release_IP-19-2088_en.htm

European Commission website (Directorate-General for Trade), "China" (last update 2 August 2019). Retrieved 3 September 2019 from <https://ec.europa.eu/trade/policy/countries-and-regions/countries/china/>

Fife, R., & Chase, S. (2017, September 10). China used research mission to test trade route through Canada's Northwest Passage. *Globe and Mail*. Retrieved August 14, 2019, from <https://www.theglobeandmail.com/news/politics/china-used-research-mission-to-test-trade-route-through-canadas-northwest-passage/article36223673/>

Friedman, G. (2018, July 27). The world's most insatiable consumer digs deep into Canadian miners. *Financial Post*. Retrieved October 8, 2018, from <https://business.financialpost.com/commodities/the-worlds-most-insatiable-consumer-digs-deep-into-canadian-mines>

Gabuev, A. (2015). A "soft alliance"? Russia-China relations after the Ukraine crisis. *European Council on Foreign Relations*. Retrieved May 20, 2019, from https://www.ecfr.eu/page/-/ECFR126_-_A_Soft_Alliance_Russia-China_Relations_After_the_Ukraine_Crisis.pdf.

Gautier, D. L., Bird, K., Charpentier, R. R., Grantz, A., Houseknecht, D., Klett, T. R., ... Wandrey, C. J. (2009). Assessment of undiscovered oil and gas in the Arctic. *Science*, 324(5931), 1175-1179.

China and Arctic economy

Global Innovation Policy Centre. (2018). China. *Global Innovation Policy Centre*. Retrieved October 10, 2018, from <https://www.theglobalipcenter.com/ipindex2018-details/?country=cn>

Glomsrød, S., & Aslaksen, I. (2009). *The Economy of the North 2008*. Statistics Norway: Oslo-Kongsvinger.

Government of Norway. (2015, March 31). Norway confirms intention to join Asian infrastructure investment bank. *Government of Norway*. Retrieved June 10, 2018, from https://www.regjeringen.no/en/aktuelt/Norway_intends_AIIB/id2404331/

Graczyk, P., & Koivurova, T. (2014). A new era in the Arctic Council's external relations? Broader consequences of the Nuuk observer rules for Arctic governance. *Polar Record*, 50(3), 225.

Graeber, D. J. (2018, March 28). Chinese lender gets in line behind Alaska LNG project. *UPI*. Retrieved November 4, 2018, from <https://www.upi.com/Chinese-lender-gets-in-line-behind-Alaska-LNG-project/5221522228885/>

Hamilton, C. (2018). *Silent invasion: China's influence in Australia*. Melbourne & Sydney, Australia: Hardie Grant Books.

Hansen, A. M., & Johnstone, R. L. (2019). In the Shadow of the Mountain: Assessing early impacts on community development from two mining prospects in South Greenland. *The Extractive Industries and Society* 6(2): 480-488.

Hartig, F. (2013). Panda diplomacy: The cutest part of China's public diplomacy. *The Hague Journal of Diplomacy*, 8(1). <https://doi.org/10.1163/1871191X-12341245>

Higgins, A. (2014, September 27). A rare Arctic land sale stokes worry in Norway. *New York Times*. Retrieved October 10, 2018, from <https://www.nytimes.com/2014/09/28/world/europe/a-rare-arctic-land-sale-stirs-concerns-in-norway.html>

China and Arctic economy

Hillman, J.E. (2019). Influence and Infrastructure: The Strategic Stakes of Foreign Projects. Centre for Strategic and International Studies. Retrieved September 10, 2019, from https://csis-prod.s3.amazonaws.com/s3fs-public/publication/190123_Hillman_InfluenceandInfrastructure_WEB_v3.pdf

Hoffman, S. (2018, June 28). Social credit. *Australian Strategic Policy Institute*. Retrieved July 10, 2018, from <https://www.aspi.org.au/report/social-credit>

Huang, K. (2017, May 21). Will the Arctic be the next stop on China's New Silk Road?. *South China Morning Post*. Retrieved October 20, 2018, from <https://www.scmp.com/news/china/diplomacy-defence/article/2095078/will-arctic-be-next-stop-chinas-new-silk-road>

Humpert, M. (2014). Arctic Shipping Potential Along the Northern Sea Route. Report. The Arctic Institute. Retrieved September 3, 2019, from <https://www.thearcticinstitute.org/arctic-shipping-potential/>

Humpert, M. (2018, November 26). Traffic on Northern Sea Route Doubles as Russia Aims to Reduce Ice-class Requirements. Retrieved September 3, 2019, from <https://www.highnorthnews.com/en/traffic-northern-sea-route-doubles-russia-aims-reduce-ice-class-requirements>

Humpert, M. (2019, March 21). Novatek Allowed to Operate Foreign LNG Carriers on Northern Sea Route. High North News. Retrieved September 3, 2019, from <https://www.highnorthnews.com/en/natural-gas-company-novatek-was-granted-exemption-new-law-banning-foreign-flagged-oil-and-gas>

Huskey, L., Mäenpää, I., & Pelyasov, A. (2014). Economic Systems. In J. Nymand Larsen, & G. Fondahl (eds.), *Arctic Human Development Report (2): Regional Processes and Global Linkages*. Nordic Council of Ministers.

China and Arctic economy

Icelandic Tourist Board. (2018). Numbers of foreign visitors. *Icelandic Tourist Board*. Retrieved November 20, 2018, from https://www.ferdamalastofa.is/en/research-and-statistics/numbers-of-foreign-visitors?fbclid=IwAR1W0HzIat2SA4IiKh50_AaC6bdyrNCLhjnrx5cOaQdSP0a7jLp-uYutMY

International Rivers (2012). The New Great Walls: A guide to China's Overseas Dam Industry. Retrieved September 9, 2019, from <https://www.internationalrivers.org/resources/the-new-great-walls-a-guide-to-china%E2%80%99s-overseas-dam-industry-3962>

Ivanov, S. (ed.). (2016). Asian players in the Arctic: Interests, opportunities, prospects. Moscow, Russia: Russian International Affairs Council.

Jakobsen, S. (2018, August 24). Maersk sends first container ship through Arctic Route. *Reuters*. Retrieved October 21, 2018, from <https://www.reuters.com/article/us-arctic-shipping-maersk/maersk-sends-first-container-ship-through-arctic-route-idUSKCN1L91BR>

Kim, S-K. (2012). China and Japan maritime disputes in the East China Sea: A note on recent developments. *Ocean Development & International Law*, 43(3): 296-308.

Kirkenes Næringshage. (2018, January). An Arctic railway vision. Report for Finnmark Fylkeskommune and Sor-Varanger Utvikling.

Kynge, J. (2017, July 16). Chinese purchases of overseas ports top \$20bn in past year. *Financial Times*. Retrieved June 20, 2018, from <https://www.ft.com/content/e00fcfd4-6883-11e7-8526-7b38dcaef614>

Kynge, J., Campbell, C., Kazmin, A., & Bokhari, F. (2017, January 13). How China rules the waves. *Financial Times*. Retrieved June 10, 2018, from <https://ig.ft.com/sites/china-ports/>

Käpylä, J., & Mikkola, H. (2018). US engagement in the Arctic. In: Aaltola, M., Salenius-Pasternak, Ch., Käpylä, J. & Sinkkonen, V. (eds). *Between change and continuity: making sense*

China and Arctic economy

of America's evolving global engagement. FIIA Report 54, Finnish Institute of International Affairs, 205-225.

Lackenbauer, P. W., Lajeunesse, A., Manicom, J., & Lasserre, F. (2018). *China's Arctic Ambitions and what they mean for Canada*. University of Calgary Press. E-book. Retrieved August 14, 2019, from https://prism.ucalgary.ca/bitstream/handle/1880/106384/9781552389027_web.pdf?sequence=1&isAllowed=y

Lajeunesse, A., & Lackenbauer, P. W. (2016). Chinese mining interests and the Arctic. In D. A. Berry, N. Bowle & H. Jones (Eds.), *Governing the North American Arctic. St Antony's Series* London, United Kingdom: Palgrave Macmillan.

Lanteigne, M. (2014, February). The Sino-Swiss free trade agreement. *CSS Analyses in Security Policy*, 147. Retrieved June 10, 2018, from <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyses147-EN.pdf>

Lanteigne, M., & Ping, S. (2015). China's Developing Arctic Policies: Myths and Misconceptions. *Journal of China and International Relations*, 3(1), 1–25.

Lanteigne, M. (2010, June). Northern exposure: Cross-regionalism and the China-Iceland preferential trade negotiations. *China Quarterly*, 202, 362-80. <https://doi.org/10.1017/S0305741010000287>

Lasserre, F., Huang, L., & Alexeeva, O. (2017). China's strategy in the Arctic: Threatening or opportunistic? *Polar Record*, 53(1), 31-42.

Lee Falsey, J. (2017, April 8). A surprise guest: Chinese president makes Anchorage stopover, meets Gov. Walker and takes in some sights. Anchorage Daily News. Retrieved September 3, 2019, from <https://www.adn.com/alaska-news/2017/04/07/chinese-president-makes-surprise-visit-to-alaska-following-summit-with-trump/>

China and Arctic economy

Leng, S. (2019, August 20). China's belt and road cargo to Europe under scrutiny as operator admits to moving empty containers. *South China Morning Post*. Retrieved October 2, from <https://www.scmp.com/economy/china-economy/article/3023574/chinas-belt-and-road-cargo-europe-under-scrutiny-operator>

Lim, K. S. (2018). China's Arctic policy & the Polar Silk Road vision. In L. Heininen & H. Exner-Pirot (Eds.), *Arctic Yearbook 2018*. Akureyri, Iceland: Northern Research Forum.

Marsh, J. (2015). Supplying the World's Factory: Environmental Impacts of Chinese Resource Extraction in Africa. *Tulane Environmental Law Journal* 28(2): 393-407.

Mattlin, M., & Nojonen, M. (2015). Conditionality and path dependence in Chinese lending. *Journal of Contemporary China*, 24(94), 701-720. DOI: 10.1080/10670564.2014.978154.

Matzen, E. (2017, April 7). Denmark spurned Chinese offer for Greenland base over security: Sources. *Reuters*. Retrieved June 10, 2018, from <https://www.reuters.com/article/us-denmark-china-greenland-base/denmark-spurned-chinese-offer-for-greenland-base-over-security-sources-idUSKBN1782EE>

McCrae, M. A. (2017, August 11). Zinc project in Greenland receives Chinese backing. *Mining.com*. Retrieved June 10, 2018, from <http://www.mining.com/zinc-project-greenland-receives-chinese-backing/>

McGwin, K. (2018, May 29). As Greenland's plans to build new airports gather momentum, Denmark is struggling to get on board. *Arctic Today*. Retrieved June 10, 2018, from <https://www.arctictoday.com/greenlands-plans-build-new-airports-gather-momentum-denmark-struggling-get-board/>

McPherson, R. (2018, September 11). Parliament's 700 million kroner offer to fund Greenland's airports splits Island's coalition. *Copenhagen Post*. Retrieved November 24, 2018, from

China and Arctic economy

<http://cphpost.dk/news/parliaments-700-million-kroner-offer-to-fund-greenlands-new-airports-splits-islands-coalition.html>

Mearsheimer, J.J. (2001). *The Tragedy of Great Power Politics*. New York: W.W. Norton & Company.

Mikkola, H. (2019, April). The Geostrategic Arctic: Hard Security in the High North. *FIIA Briefing Paper* 259. Helsinki: Finnish Institute of International Affairs. Retrieved July 17, 2019, from https://www.fiia.fi/wp-content/uploads/2019/04/bp259_geostrategic_arctic.pdf

Mikkola, H., Aaltola, M., Wigell, M., Juntunen, T., & Vihma, A. (2018). Hybridivaikuttaminen ja demokratian resilienssi. Ulkoisen häirinnän mahdollisuudet ja torjuntakyky liberaaleissa demokratioissa. *FIIA Report* 55. Helsinki: Finnish Institute of International Affairs. [Hybrid influencing and the vulnerabilities and resilience of democracy, in Finnish] Retrieved July 17, 2019, from https://www.fiia.fi/wp-content/uploads/2018/05/fiia_report55_web_hybridivaikuttaminen-ja-resilienssi.pdf

Ministry of Commerce PRC. (People's Republic of China). (2013). Guidelines on environmental protection in foreign investment and cooperation. *Ministry of Commerce*. Retrieved June 20, 2018, from english.mofcom.gov.cn/article/policyrelease/bbb/201303/20130300043226.shtml

Ministry of Commerce. (PRC) (2014). *Ministry of commerce introduces newly revised measures for foreign investment management*. Ministry of Commerce People's Republic of China. Retrieved June 20, 2018, from english.mofcom.gov.cn/article/newsrelease/significantnews/201409/20140900729955.shtml

Ministry of Foreign Affairs Denmark (2018, September 17). The Kingdom of Denmark, including Greenland, welcomes the United States "Statement of Intent on Defense Investments in Greenland". Retrieved September 20, 2018, from <http://um.dk/en/news/newsdisplaypage/?newsid=bfc95523-956b-4df9-aba1-6e3f93cfb06d>

China and Arctic economy

Ministry of Foreign Affairs (PRC) (2018). China Night Lights Up 2018 Arctic Circle Assembly. Ministry of Foreign Affairs of the People's Republic of China. Retrieved July 19, 2019, from https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zwjg_665342/zwbd_665378/t1606536.shtml

Moe, A. & Stokke, O. S. (2019). Asian Countries and Arctic Shipping: Policies, Interests and Footprints on Governance. *Arctic Review on Law and Politics* 10: 24-52.

Mourdoukoutas, P. (2018, Aug 4). What is China doing in Africa? *Forbes*. Retrieved June 5, 2019, from <https://www.forbes.com/sites/panosmourdoukoutas/2018/08/04/china-is-treating-africa-the-same-way-european-colonists-did/#6023dac6298b>

Munro, K. (2018, June 27). China's social credit system could interfere in other nations' sovereignty. *The Guardian*. Retrieved July 10, 2018, from <https://www.theguardian.com/world/2018/jun/28/chinas-social-credit-system-could-interfere-in-other-nations-sovereignty>

NDRC (2017). Opinions on Further Guiding and Regulating Outbound Investment. [关于进一步引导和规范境外投资方向的指导意见] National Development and Reform Commission.

Retrieved October 2, 2019, from http://www.ndrc.gov.cn/gzdt/201708/t20170818_858265.html

Nye, J. S. Jr. (2008). *The powers to lead*. Oxford, England; New York, NY: Oxford University Press.

Nye, J. S. Jr. (2008, July/August). Combining Hard and Soft Power. *Foreign Affairs*. Retrieved September 9, 2019, from <https://www.foreignaffairs.com/articles/2009-07-01/get-smart?page=1>

Nye, J. S. Jr. (2018). How sharp power threatens soft power. *Foreign Affairs*. Retrieved August 14, 2019, from <https://www.foreignaffairs.com/articles/china/2018-01-24/how-sharp-power-threatens-soft-power>

China and Arctic economy

Office of the Secretary of Defense. (2019). Annual report to Congress: Military and security developments Involving the People's Republic of China. *Office of the Secretary of Defence*. Retrieved August 14, 2019, from https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf

Olsen, L. S. et al. (2016). Sustainable Business Development in the Nordic Arctic. Stockholm: Nordregio Nordic Centre for Spatial Development.

Over the Circle. (2018, January 24). Stumbling block: China-Iceland oil exploration reaches an impasse. *Over the Circle*. Retrieved June 10, 2018, from <https://overthecircle.com/2018/01/24/stumbling-block-china-iceland-oil-exploration-reaches-an-impasse/>

Patey, L. (2017, January 24). China Made Mauricio Macri a Deal He Couldn't Refuse. *Foreign Policy*. Retrieved October 3, 2019, from <https://foreignpolicy.com/2017/01/24/china-made-mauricio-macri-a-deal-he-couldnt-refuse/>

Percival, B. (2007). *The Dragon Looks South. China and Southeast Asia in the New Century*. Westport, CT: Praeger Security International.

PRC State Council. (2018, January 26). Full text: China's Arctic policy. Beijing, China: The State Council Information Office of the People's Republic of China. Retrieved March 26, 2018, from http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

Prime Minister's Office. (2013). Finland's strategy for the Arctic region 2013.
Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union.
European Union.

China and Arctic economy

Reuters. (2018, August 2). China says free trade talks with Norway should be accelerated.

Reuters. Retrieved, August 20, 2018, from <https://www.reuters.com/article/asean-singapore-china-norway/china-says-free-trade-talks-with-norway-should-be-accelerated-idUSL4N1UT006>

Reuters. (2018, August 19). Russia's Novatek ships first LNG cargo to China via Arctic. *Reuters*.

Retrieved August 20, 2018, from <https://www.reuters.com/article/us-novatek-cnpc-lng/russias-novatek-ships-first-lng-cargo-to-china-via-arctic-idUSKBN1K90YN>

Rosen, K. (2018, January 2). N.W.T. needs to get ready for influx of Chinese tourists, says tour operator. *CBC News North*. Retrieved August 20, 2018, from

<https://www.cbc.ca/news/canada/north/nwt-tourism-chinese-tourists-1.4439402>

Rosen, M. E., & Thuringen, C. B. (2017, November). Unconstrained foreign direct investment: An emerging challenge to Arctic security. *CNA Analysis and Solution*.

Russia Today. (RT). (2018, July 27). China planning to develop tourist routes across Russia's Arctic region. *Russia Today*. Retrieved August 20, 2018, from

<https://www.rt.com/business/434409-china-tourist-routes-arctic/>

Salonius-Pasternak, C. (2017). An effective antidote: The four components that make Finland more resilient to hybrid campaigns. *FIIA Comment* 19/2017. Helsinki: Finnish Institute of International Affairs. Retrieved July 17, 2019, from https://www.fiia.fi/wp-content/uploads/2017/10/comment19_finland.pdf

Sander, G., Gille, J., Stępień, A., Koivurova, T., Thomas, J., Gascard, J-C., & Justus, D. (2016). Changes in Arctic maritime transport. In A. Stępień, T. Koivurova & P. Kankaanpää (Eds.), *The Changing Arctic and the European Union*. Leiden, Netherlands; Boston, MA: Brill & Nijhoff.

Schweitzer, P., Stammler, F., Ebsen, C., Ivanova, A., & Litvina, I. (2019). Social Impacts of Non-Renewable Resource Development on Indigenous communities in Alaska, Greenland, and Russia. Resources and Sustainable Development in the Arctic Gap Report #2A. Lakehead

China and Arctic economy

University and Yukon College. Retrieved September 10, 2019, from <http://yukonresearch.yukoncollege.yk.ca/wp-content/uploads/sites/2/2013/09/2-Schweitzer-Gap-analysis-final.pdf>

Shi, M., & Lanteigne, M. (2018, March 30). The (many) roles of Greenland in China's developing Arctic policy. *The Diplomat*. Retrieved June 20, 2018, from <https://thediplomat.com/2018/03/the-many-roles-of-greenland-in-chinas-developing-arctic-policy/>

Soldatkin, V., & Jaganathan, J. (2019, September 5). Russia ups LNG race with green light on \$21 billion Arctic LNG-2 project. Retrieved October 3, 2019, from <https://www.reuters.com/article/us-russia-energy-novatek-lng/russia-ups-lng-race-with-green-light-on-21-billion-arctic-lng-2-project-idUSKCN1VQ0IH>

Staalesen, A. (2014, October 21). No Chinese resort in Svalbard, after all. *The Barents Observer*. Retrieved October 10, 2018, from <https://thebarentsobserver.com/en/arctic/2016/10/no-chinese-resort-svalbard-after-all>

Staalesen, A. (2018, June 14). China's National Oil Company looks at Russian Arctic LNG. *The Barents Observer*. Retrieved October 2, 2019, from <https://thebarentsobserver.com/en/industry-and-energy/2018/06/chinas-national-oil-company-looks-russian-arctic-lng>

Staalesen, A. (2018, June 29). Arctic LNG carriers sail into deep ice with course for China. *The Barents Observer*. Retrieved October 2, 2019, from <https://thebarentsobserver.com/en/industry-and-energy/2018/06/arctic-lng-carriers-sail-deep-ice-course-china>

Staalesen, A. (2019, January 2). It's a law - Russian Arctic shipping to be regulated by Rosatom. *The Barents Observer*. Retrieved September 3, 2019, from <https://thebarentsobserver.com/en/arctic/2019/01/its-law-russian-arctic-shipping-be-regulated-rosatom>

China and Arctic economy

Staalesen, A. (2019, July 1, 2019). Japan teams up with Russia in big Arctic LNG. *The Barents Observer*. Retrieved October 2, 2019, from <https://thebarentsobserver.com/en/industry-and-energy/2019/07/japan-teams-russia-big-arctic-lng>

Staalesen, A. (2019, September 27). China's first Yamal LNG tanker is soon on its way to Murmansk. *The Barents Observer*. Retrieved October 2, 2019, from <https://thebarentsobserver.com/en/industry-and-energy/2019/09/chinas-first-yamal-lng-tanker-sets-course-murmansk>

Statement of the Government of the People's Republic of China and the Government of the Kingdom of Norway on Normalization of Bilateral Relations (2016, December 21). Retrieved September 8, 2019, from https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/statement_kina.pdf

Stepien, A. (2017). Incentives, practices and opportunities for Arctic external actors' engagement with indigenous peoples: China and the European Union. In T. Koivurova, T. Qin, S. Duyck & T. Nykänen (Eds.), *Arctic Law and Governance: The Role of China and Finland*. Oxford, England: Hart Publishing.

Stepień, A., & Koivurova, T. (2017, February). *Arctic Europe: Bringing together EU Arctic policy and Nordic cooperation*. Publications of the Government's Analysis, Assessment and Research Activities 15/2017. Prime Minister's Office.

Stepien, A., Koivurova, T., & Kankaanpää, P. (2016). *The Changing Arctic and the European Union*. Brill/Nijhoff.

Stewart, P., & Ali, I. (2019, May 3). Pentagon warns on risk of Chinese submarines in Arctic. *Reuters*. Retrieved October 3, 2019, from <https://www.reuters.com/article/us-usa-china-military-arctic/pentagon-warns-on-risk-of-chinese-submarines-in-arctic-idUSKCN1S829H>

China and Arctic economy

Sun, Y. (2018). The Northern Sea Route: The myth of Sino-Russian cooperation. *Stimson Centre*. Retrieved May 15, 2018, from <https://www.stimson.org/sites/default/files/file-attachments/Stimson%20-%20The%20Northern%20Sea%20Route%20-%20The%20Myth%20of%20Sino-Russian%20Cooperation.pdf>

Suokas, J. (2018, January 31). Chinese investors cancel plans for massive deepwater port in Sweden. *GB Times*. Retrieved on September 9, 2019, from <https://gbtimes.com/chinese-investors-cancel-plans-for-massive-deep-water-port-in-sweden>

Switzerland Federal Department of Foreign Affairs. (FDFA). (2018). Bilateral relations between Switzerland and Liechtenstein. *Federal Department of Foreign Affairs*. Retrieved September, 2018, from <https://www.eda.admin.ch/eda/en/home/representations-and-travel-advice/liechtenstein/switzerland-liechtenstein.html>

Tonami, A. (2019). The rise of Asia and Arctic legal order-making: political-economic settings. In A. Shibata, L. Zou, N. Sellheim, & M. Scopelliti (eds.) *Emerging Legal Orders in the Arctic: The Role of Non-Arctic Actors*. Routledge: New York.

UNCTAD Fact Sheets (n.d.). Country fact sheet: China. UN Conference on Trade and Development. Retrieved October 2, 2019, from <https://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Country-Fact-Sheets.aspx>

UNCTAD (UN Conference on Trade and Development) website at www.unctad.org. Retrieved October 2, 2019.

U.S. Geological Survey. (2008). Circum-Arctic resource appraisal: Estimates of undiscovered oil and gas north of the Arctic Circle. *U.S. Department of the Interior*. Retrieved August 14, 2019, from <http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

Walker, C. (2018). What is "sharp power"? *Journal of Democracy*, 29(3), 9-23.

China and Arctic economy

Walker, C., & Ludwig, J. (2017). From 'Soft Power' to 'Sharp Power': Rising Authoritarian Influence in the Democratic World. In J. P. Cardenal, J. Kucharczyk, G. Mesežniko & G. Pleschová (Eds.), *Sharp Power: Rising Authoritarian Influence* (8-25). Forum: International Forum for Democratic Studies. Retrieved from <https://www.ned.org/sharp-power-rising-authoritarian-influence-forum-report/>

Wang, M. (2018, January 20). Finland welcomes China's panda pair. *China Daily*. Retrieved July 19, 2019, from <http://www.chinadaily.com.cn/a/201801/20/WS5a62afc7a3106e7dcc1357a1.html>

Wigell, M. (2019). Hybrid interference as a wedge strategy: a theory of external interference in liberal democracy. *95 International Affairs* 2: 255–275.

Xinhua Agency. (2017, July 17). *Xinhua*. Retrieved October 10, 2018, from http://www.xinhuanet.com/politics/2017-07/17/c_1121333722.htm

Xu Klein, J. (2018, September 14). It's not just the US: around the world, doors are shutting on Chinese investment. *South China Morning Post*. Retrieved September 10, 2019, from <https://www.scmp.com/business/banking-finance/article/2163974/its-not-just-us-around-world-doors-are-shutting-chinese>

Yang, M. (2017, November 30). Polar Tourism: A New Favorite in China. CGTN. Retrieved June 15, 2018, from https://news.cgtn.com/news/3267544d7a637a6333566d54/share_p.html.

Zellen, B. (2009). *Arctic Doom, Arctic Boom: The Geopolitics of Climate Change in the Arctic*. Praeger Security International.

Zhou, L. (2019, August 3). Canada's detention of Huawei executive Meng Wanzhou 'angered Chinese people'. *South China Morning Post*. Retrieved September 3, 2019, from <https://www.scmp.com/news/china/diplomacy/article/3021306/canadas-detention-huawei-executive-meng-wanzhou-angered>

China and Arctic economy

Interviews:

Interviewee 1, June 13, 2018

Interviewee 2, June 12, 2018